

**BOOKS 2022-2023**

<b>Department of Chemical Engineering</b>						
<b>S. No.</b>	<b>Book Title</b>	<b>Editor(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>Place</b>	<b>ISBN.</b>
1.	Electron Microscopy in Science and Engineering	Krishanu Biswas, Sri Sivakumar, Nilesh Gurao	Springer Singapore	2022		978981165101 4
<b>Department of Civil Engineering</b>						
2.	Experimental Study on Pressure Flow Due to Vertical Contraction. In <i>Innovative Trends in Hydrological and Environmental Systems</i>	Dikshit, A. K., Narasimhan, B., Kumar, B., & Patel, A. K.	Springer, Singapore	2022		ISBN: 978- 981-19-0304-5
3.	Evaluation of Rainfall Disaggregation Models for the Awash River Basin, Ethiopia. In <i>Innovative Trends in Hydrological and Environmental</i>	Dikshit, A. K., Narasimhan, B., Kumar, B., & Patel, A. K.	Springer, Singapore	2022		ISBN: 978- 981-19-0304-5
4.	Transportation	Akhilesh K.	Springer	2022		978-981-16-

	Research in India, Practices and Future Directions	Maurya, Lelitha Devi Vanajakshi, Shrinivas S. Arkatkar and Prasanta K. Sahu,	Transactions in Civil and Environmental book series			9636-7
5.	Analysis of pavement structures (2 <sup>nd</sup> edition)	NA	CRC Press – Taylor and Francis group	May, 2023		9781032041568
6.	Volume 1, Proceedings of 6th Conference of Transportation Research Group of India (6th CTRG), Lecture Notes in Civil Engineering	Lelitha Vanajakshi, Animesh Das, Prasanta Kumar Sahu, and Debasis Basu	Springer	2023		978-981-19-3505-3
7.	Volume 1, Proceedings of 6th Conference of Transportation Research Group of India (5th CTRG), Lecture Notes in Civil Engineering	Dharamveer Singh, Lelitha Vanajakshi, Ashish Verma and Animesh Das	Springer	2022		978-981-16-9921-4
8.	Volume 2, Proceedings of 6th Conference of	Akhilesh Kumar Maurya, Bhargab Maitra, Rajat Rastogi and	Springer	2022		978-981-16-8259-9

	Transportation Research Group of India (5th CTRG), Lecture Notes in Civil Engineering	Animesh Das				
9.	Volume 3, Proceedings of 6th Conference of Transportation Research Group of India (5th CTRG), Lecture Notes in Civil Engineering	Manoranjan Parida, Avijit Maji, S. Velmurugan, and Animesh Das	Springer	2022		978-981-16-9925-2
10.	A Survey of Machine Learning Techniques in Forestry Applications Using SAR Data”, in: Advances in Scalable and Intelligent Geospatial Analytics	S. S. Durbha, J. Sanyal, L. Yang, S. S. Chaudhari, U. Bhangale, U. Bharambe, K. Kurte	CRC Press	2023		97810032700928
11.	Book title: Cartouche Article title: Observations of	G. Brauen, S. Pyne	Canadian Cartographic Association	2023		1183-2045 <a href="https://cca-acc.org/wp2020/wp-">https://cca-acc.org/wp2020/wp-</a>

	Combining Cartographic Generalization Models on Datasets of Different Mapping Agencies					content/upload s/Cartouche_0 99_Mar2023.p df
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### Department of Computer Science and Engineering

12.	Implementing Enterprise Cyber Security with Open- Source Software and Standard Architecture: Volume II	Anand Handa,Rohit Negi; S. Venkatesan; Sandeep K. Shukla	River Publishers	2023	The Netherla nds	ISBN 978877022795 7
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### Department of Electrical Engineering

13.	Basic Electronic Circuits: Problems & Solutions	K Vasudevan	Springer	2022		978-3-031- 09363-0
14.	BSIM-Bulk MOSFET Model for IC Design- Digital, Analog, RF and High-Voltage	Authors – Harshit Agarwal, Chetan Gupta, Yogesh Singh Chauhan, and Chenming Hu	Woodhead Publishing, Elsevier	2023	Woodhe ad Publishin g, Elsevier	Paperback ISBN: 978032385677 5 eBook ISBN: 978032385678 2

### Department of Industrial & Management Engineering

15.	Studies in Quantitative	Ghosh. D., Khanra, A., Vanamalla, S.	Springer	2022	Singapor e	978-981-16- 5819-8
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	Decision Making.	V., Hamid, F., & Sengupta, R. N.				
<b>Department of Materials Science and Engineering</b>						
16.	High Entropy Materials- Processing Properties and Applications	Krishanu Biswas, Nilesh P. Gurao, Tanmoy Maiti and Rajiv S. Mishra	Springer- Nature	2022		
17.	Fundamentals of Thermal Spraying	Ariharan S., Rubia Hassan, Alok Bhadauria, Ashutosh Tiwari, Ritik Tandon, Anup K. Keshri, Kantesh Balani	CRC Press	2022		
18.	New Horizons in Metallurgy, Materials, and Manufacturing	A. Arora, A. Shrivastava, C. Srivastava, N. Dhawan, S. S. Singh	Springer- Nature	2022		
<b>Department of Mathematics &amp; Statistics</b>						
19.	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R	Christian Heumann , Michael Schomaker , Shalabh	Springer,	2023	Switzerla nd	978-3-031-11832-6
20.	Hybrid Censoring	N. Balakrishnan, Erhard Cramer and	Academic Press,	2023	London, United	978-0-12-398387-9

	Know-How: Design and Implementation,	Debasis Kundu			Kingdom	
21.	<i>Logic and Its Applications.</i> 10th Indian Conference, ICLA 2023, Indore, India, March 3-5, 2023, Proceedings.	Mohua Banerjee, A.V. Sreejith	Springer Nature Switzerland AG	2023	Switzerla nd	978-3-031- 26689-8

#### Department of Mechanical Engineering

22.	Design and Analysis of Thermal Systems	Malay K. Das & P. K. Panigrahi	CRC	2023	USA	978100085331 5
23.	Decarbonization of Maritime Transport	Burak Zincir, Pravesh Chandra Shukla, Avinash Kumar Agarwal	Springer Nature Singapore	2023	Singapor e	978-981-99- 1676-4
24.	Design and Analysis of Thermal Systems	Malay K. Das & P. K. Panigrahi	CRC	2023	USA	978100085331 5
25.	Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor	Kamal K Kar	Springer International Publishing	2023	Switzerla nd	eBook ISBN:978-3- 031-23701-0, Hardcover ISBN: 978-3- 031-23700-3

						DOI: <a href="https://doi.org/10.1007/978-3-031-23701-0">https://doi.org/10.1007/978-3-031-23701-0</a>
26.	Handbook of Fly Ash	Kamal K. Kar	Elsevier	2022	Butterworth-Heinemann	eBook ISBN: 9780128176870, Paperback ISBN: 9780128176863 DOI: <a href="https://doi.org/10.1016/C2018-0-01655-2">https://doi.org/10.1016/C2018-0-01655-2</a>
27.	MEMS Applications in Electronics and Engineering	A Basu, AK Basu, S Ghosh, S Bhattacharya	AIP Publishing LLC	2023	New York	ISBN electronic: 978-0-7354-2439-5 ISBN print: 978-0-7354-2436-4 <a href="https://doi.org/10.1063/9780735424395_001">https://doi.org/10.1063/9780735424395_001</a>
28.	Gas Sensors: Manufacturing, Materials and Technologies	Ankur Gupta, M. Kumar, R.K. Singh, S. Bhattacharya	CRC Press	2022	Florida	ISBN 9781032235172 338 Pages 162 B/W Illustrations
<b>Department of Sustainable Energy Engineering</b>						
29.	Advances in	Ashoke De,	Begell House	2022	United	Print: 978-1-

	Multiphase Flows	Ashwani K. Gupta, Abhijit Kushari, Suresh Aggarwal, Akshai K. Runchal			States	56700-504-2 Online: 978-1-56700-505-9
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### BOOK CHAPTER 2022-2023

Department of Chemical Engineering							
S. No.	Book Title	Author(s)	Publisher	Editor	Year	Page numbers	ISBN.
						(start to end)	
1.	Drug-delivery using Inorganic and Organic Nanoparticles	Juan Luis de la Fuente-Jiménez, Goldie oza, Brian A. Korgel, Abraham Ulises, Ashutosh Sharma	CRC Press	Ashutosh Sharma	2023	194-228	9781003081944
2.	Inorganic Nanoparticles Properties and Applications	Victor Merupo, Jose Carlos Zarate, Alla Abramova, Noé Arjona, José Herrera-Celis, L.G. Arriaga, Ashutosh Sharma, Goldie oza	CRC Press	Ashutosh Sharma	2023	33-65	9781003081944
3.	Morphology of nanoparticle-based polymer composites	Bishwa Ranjan Si, Rahul Mangal	Elsevier	Sanjay Mavinkere Rangappa	2022	151-179	9780128242728
Department of Chemistry							



4.	Potential socioeconomic approaches for commercialized antimicrobial applications	Priyanka Jangra, Geetanjali Negi, Anurag Sharma, and <i>Nagma Parveen*</i>	Elsevier Academic Press <i>https://www.sciencedirect.com/book/9780323991483/smart-nanomaterials-to-combat-the-spread-of-viral-infections</i>	Edited by Raju Khan and Mohd Abubakar Sadique	2023	365-401	978-0-323-99148-3s
5.	Asking Ligands to Lend a Hand	Sayan Mukherjee, Noor U Din Reshi and <i>Jitendra K. Bera</i>	AsiaChem		2023	48-55	<a href="https://doi.org/10.51167/acm00039">https://doi.org/10.51167/acm00039</a>
6.	<i>Adv. Inorg. Chem.</i>	F. S. T. Khan, D. Sil, and <i>S. P. Rath*</i>	Elsevier Inc.	R. van Eldik	2023	95-184	<a href="https://doi.org/10.1016/bs.adioch.2022.08.002">https://doi.org/10.1016/bs.adioch.2022.08.002</a>
7.	Organophosphorus Chemistry	Chakraborty, A.; Ahmed, N.; <i>Chandrasekhar, V.</i>	Royal Society of Chemistry,	Eds. David W. Allen, David Loakes, Lee J. Higham	2022, 51	355-397	

			Cambridge, U. K.	and John C. Tebby.			
8.	Comprehensive Organometallic Chemistry IV	Dey, B.; Chandrasekhar, V.	Elsevier.	Ed. Derek P. Gates.	2022, 14	383-417	
9.	Biological implications of metal-nucleobase complexes.	Joshi, S., Jaiswal, A., Prajapati, R.K., Verma, S.*	Invited book chapter in "Modern Avenues in Metal-Nucleic Acid Chemistry", Guest Ed. Jens Müller, Bernhard Lippert; Metal Ions in Life Sciences Book Series (ISSN: 1559-0836). Ed: Astrid Sigel,		2022	133-158	(DOI:10.1201/9781003270201-6)

			Helmut Sigel, Eva Freisinger, Roland K. O. Sigel(Springer). pp				
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### Department of Cognitive Science

	Towards an Integrative Psychological Science	Thomas, S., & Srinivasan, N.	Springer	R. C. Tripathi, B. R. Kar, & N. Pande	2022	63-79	978-981-16-9564-3
10.	Towards an Integrative Psychological Science	Verma, A., & Kumar, D.	Springer	R. C. Tripathi, B. R. Kar, & N. Pande	2022	19-43	978-981-16-9564-3

### Department of Computer Science and Engineering

11.	Resource-Aware Optimal Scheduling of In Situ Analysis In In Situ Visualization for Computational Science.	Preeti Malakar, Venkatram Vishwanath, Christopher Knight, Todd Munson, Michael E Papka	Springer International Publishing	Childs, H., Bennett, J.C., Garth, C.	2022/5/5	183-202	978-3-030-81627-8
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### Department of Economic Sciences

12.	Thirty Years of ASEAN INDIA RELATIONS Towards Indo Pacific	Archana Srivastava and Somesh K Mathur(2022),	KW publishers Private Limited	Prabir De	2022	93-127	9789394915251
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			New Delhi				
<b>Department of Electrical Engineering</b>							
13.	Nanoelectronics -: Physics, Materials and Devices	MD Salim Equbal and Shubham Sahay	Elsevier	Angsuman Sarkar, Chandan Kumar Sarkar, Arpan Deyasi, Debashis De, Arezki Benfdila	2023	11 to 37	ISBN 97803239 18329,
<b>Department of Industrial &amp; Management Engineering</b>							
14.	Green entrepreneurship: A disruptive mitigation strategy for Climate Change	Potluri, S., Phani, B. V.	Springer, Cham	Dr. Maximilian Lackner, Dr. Baharak Sajjadi, Dr. Wei-Yin Chen	2022	3787-3819	978-3- 030- 72578-5
15.	A Comparison of Performance of Rough Set Theory with Machine Learning Techniques in Detecting Phishing Attack	A. Singh, S. C. Misra	Springer, Cham	Prof. Petros Nicolopolitidi s, Prof. Sudip Misra, Prof. Dr. Laurence T. Yang, Dr. Bernard Zeigler, Prof.	2022	631-650	978-3- 030- 87048-5

				Zhaolng Ning			
16.	Smart Healthcare: Rough Set Theory in Predicting Heart Disease	A. Singh, S. C. Misra, S. Kumar	Springer, Cham	Prof. Petros Nicopolitidis, Prof. Sudip Misra, Prof. Dr. Laurence T. Yang, Dr. Bernard Zeigler, Prof. Zhaolng Ning	2022	155-180	978-3-030-87048-5
17.	Data as Guide to Policy: Bills of Mortality of 17th Century and COVID-19 of 21st Century	Subhankar Mukherjee, Anirban Banerjee, Manisha Chakrabarty	Springer, Singapore	Mousumi Dutta, Prof. Zakir Husain, Anup Kumar Sinha	2022	81-98	978-981-16-8471-5
18.	Agriculture Trade of India and Implications for Current and Future Trade Agreements	Subhankar Mukherjee, Parthapratim Pal	NABARD		2022	58-81	978-93-54357-97-8
19.	Battery Swapping Business Model - The case of Lithion Power	N. Singh, V. Ramani,	IGI Global	Pietro De Giovanni	2022		978-16-68450-01-7

20.	Consumer Investment Behavior”, <i>Forthcoming</i> in "A Research Agenda for Consumer Financial Behavior	Dhanagare, A., Saurabh, S., Roy, P.	Edward Elgar Publishing.		2023		
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**Department of Materials Science and Engineering**

21.	Comprehensive Structural Integrity	R Sarvesha, S. S. Singh and N. Chawla	Elsevier	Ferri Aliabadi, Winston (Wole) Soboyejo	2023		978-0-323-91945-6
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22.	New Horizons in Metallurgy, Materials and Manufacturing	C. Nayak, Kantesh Balani	Springer-Nature	A. Arora, A. Shrivastava, C. Srivastava, N. Dhawan, S. S. Singh	2022		
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**Department of Mathematics & Statistics**

23.	Advanced Mathematical Techniques Applicable in Computational and Intelligent Systems	S.S. Dhar, Shalabh, Prashant Jha, and Aranyak Acharyya	Taylor's & Francis, CRC Press	Sandeep Singh, Aliakbar Montazer Haghghi, and Sandeep Dalal	2023	In press	In press
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24.	Statistical Modeling and Applications on	Shalabh, S.S. Dhar, Chitradeepa	Taylor's &	Chandra	2023	In press	In press
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	Real-Time Problems	Chakroborty and Prashant Jha	Francis, CRC Press	Shekhar and Raghaw Raman Sinha			
25.	Recent Advances in G Families of Probability Distributions	Shalabh and S.S. Dhar	Taylor's & Francis, CRC Press	Mir Masoom Al, Irfan Ali, Haitham M. Youso and Mohamed Ibrahim	2023	In press	In press

**Department of Mechanical Engineering**

26.	Advances in Heat Transfer Chapter 4: Spray Cooling: From Droplet Dynamics to System Level Perspectives	Khandekar S., Jaiswal A., Sahu G. N.	Elsevier Inc.	W.J. Minkowycz	2022	Pages 135-177	0065-2717
27.	Thermal convection studies at the University of Minnesota	R. J. Goldstein and U. Madanan	Elsevier	J. P. Abraham, J. M. Gorman, and W. J. Minkowycz	2022	89-133	9780323989794
28.	Lecture Notes in Mechanical Engineering	Ishita Jain and S. Sarkar	Springer, Singapore	Bhattacharya, S., Chattopadhyay, H. (eds)	2023	185-188	978-981-19-7054-2
29.	Decarbonization of Maritime Transport	Burak Zincir, Pravesh Chandra	Springer Nature	Burak Zincir,	2023	3-7	978-981-99-1676-4

		Shukla, Avinash Kumar Agarwal	Singapore	Pravesh Chandra Shukla, Avinash Kumar Agarwal			
30.	Recycling of supercapacitor materials in Handbook of Nanocomposite Supercapacitor Materials IV: Next- generation supercapacitor	Harish Trivedi and Kamal K. Kar	Springer Internati onal Publishin g	Kamal K. Kar	2023	393-411	eBook ISBN:978- 3-031- 23701-0, Hardcover ISBN: 978-3- 031- 23700-3
31.	Optical revolution with sustainable energy framework in Handbook of Nanocomposite Supercapacitor Materials IV: Next- generation supercapacitor	Ravi Nigam and Kamal K. Kar	Springer Internati onal Publishin g	Kamal K. Kar	2023	379-391	eBook ISBN:978- 3-031- 23701-0, Hardcover ISBN: 978-3- 031- 23700-3
32.	Self-healing supercapacitors in Handbook of Nanocomposite Supercapacitor Materials IV: Next- generation	Kapil Dev Verma, and Kamal K. Kar	Springer Internati onal Publishin g	Kamal K. Kar	2023	357-378	eBook ISBN:978- 3-031- 23701-0, Hardcover ISBN: 978-3-



	supercapacitor						031-23700-3
33.	Shape memory supercapacitors in Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor	Mukesh Kumar, Manas K. Ghorai, and Kamal K. Kar	Springer International Publishing	Kamal K. Kar	2023	331-355	eBook ISBN:978-3-031-23701-0, Hardcover ISBN: 978-3-031-23700-3
34.	High mass loading supercapacitors in Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor	Mukesh Kumar, and Kamal K. Kar	Springer International Publishing	Kamal K. Kar	2023	225-245	eBook ISBN:978-3-031-23701-0, Hardcover ISBN: 978-3-031-23700-3
35.	Binder free supercapacitors in Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor	Kapil Dev Verma, and Kamal K. Kar	Springer International Publishing	Kamal K. Kar	2023	195-223	eBook ISBN:978-3-031-23701-0, Hardcover ISBN: 978-3-031-23700-3
36.	Laser as a tool for fabrication of supercapacitor	Ravi Nigam, Ragesh Kumar, and Kamal K. Kar	Springer International	Kamal K. Kar	2023	89-122	eBook ISBN:978-3-031-

	electrode in Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor		Publishing				23701-0, Hardcover ISBN: 978-3-031-23700-3
37.	Traditional electrode materials for supercapacitor applications in Handbook of Nanocomposite Supercapacitor Materials IV: Next-generation supercapacitor	Saheli Bera, Kapil Dev Verma, and Kamal K. Kar	Springer International Publishing	Kamal K. Kar	2023	19-64	eBook ISBN: 978-3-031-23701-0, Hardcover ISBN: 978-3-031-23700-3
38.	Current prospective of nanomaterials in agriculture and farming in Nanomaterials for Advanced Technologies	Kamla Dhyani, Sobha, Maninder Meenu, Achintya N. Bezbaruah, Kamal K. Kar, and Pankaj Chamoli	Springer International Publishing	Jitendra Kumar Katiyar, Vinay Panwar, and Neha Ahlawat	2022	173-194	eBook ISBN: 978-981-19-1384-6
39.	Nanomaterials and purification techniques for water purification and wastewater treatment in Nanomaterials for Advanced	Twinkle, Krati Saini, Ravi K. Shukla, Achintya N. Bezbaruah, Rajeev Gupta, Kamal K. Kar, K. K. Raina, and Pankaj Chamoli	Springer International Publishing	Jitendra Kumar Katiyar, Vinay Panwar, and Neha Ahlawat	2022	103-125	eBook ISBN: 978-981-19-1384-6

	Technologies						
40.	Ferrites for water purification and wastewater treatment in in Ferrites and Multiferroics: Fundamentals to Applications	Pankaj Chamoli, Ravi K. Shukla, A. N. Bezbaruah, Kamal K. Kar, and K. K. Raina	Springer International Publishing	Gagan Kumar Bhargava, Sumit Bhardwaj, Mahavir Singh, and Khalid Mujasam Batoo	2022	117-127	eBook ISBN: 978-981-16-7454-9
41.	Transition Metal-doped nanocarbon electrocatalysts for oxygen reduction reaction in Noble metal-free electrocatalysts: New trends in electrocatalysts for energy	Alekha Tyagi and Kamal K. Kar	American Chemical Society	Ram K Gupta	2022	133-150	ISBN13: 9780841297357, eISBN: 9780841297340
42.	Electrochemical performance of elements derived from coal combustion fly ash for high performance Lithium-ion battery in Handbook of Fly Ash	Sugandha Singh, Manas K Ghorai, and Kamal K. Kar	Elsevier	Kamal K. Kar	2022	715-727	ISBN:0128176873, ISBN-13:9780128176870
43.	Fly ash mixed	Irfan Ahmad	Elsevier	Kamal K.	2022	681-713	ISBN:012

	media for abrasive flow machining processin Handbook of Fly Ash	Ansari, Gopal A. Gupta, Janakarajan Ramkumar, Kamal K. Kar		Kar			8176873, ISBN-13:9780128176870
44.	Extraction of silicon in the form of nanoparticles and nanorods from coal fly ashin Handbook of Fly Ash	Sugandha Singh, Manas K Ghorai, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	451-474	ISBN:0128176873, ISBN-13:9780128176870
45.	Extraction of unburned carbon from coal fly ashin Handbook of Fly Ash	Sugandha Singh, Manas K Ghorai, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	403-449	ISBN:0128176873, ISBN-13:9780128176870
46.	Fly ash/glass fiber/carbon fiber reinforced thermoset composites in Handbook of Fly Ash	Shania Zehra Naqvi, Janakarajan Ramkumar, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	373-400	ISBN:0128176873, ISBN-13:9780128176870
47.	Fly ash-reinforced polyester compositesin Handbook of Fly Ash	Shania Zehra Naqvi, Janakarajan Ramkumar, and Kamal K. Kar	Elsevier	Kamal K. Kar	2022	357-372	ISBN:0128176873, ISBN-13:9780128176870
48.	Fly ash-reinforced epoxy compositesin Handbook of Fly Ash	Sugandha Singh, Manas K Ghorai, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	335-356	ISBN:0128176873, ISBN-13:9780128176870

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49.	Fly ash reinforced acrylonitrile butadiene styrene composites in Handbook of Fly Ash	Ramdas V. Mangore, Sandeep S. Ahankari, Kapil Dev Verma, and Kamal K. Kar	Elsevier	Kamal K. Kar	2022	301-334	ISBN:012 8176873, ISBN-13:978012 8176870
50.	Fly ash-reinforced polyvinyl chloride composites in Handbook of Fly Ash	Tanvi Pal, P. K. Manna, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	271-290	ISBN:012 8176873, ISBN-13:978012 8176870
51.	Fly ash-reinforced polypropylene composites in Handbook of Fly Ash	Tanvi Pal, Sumit Pramanik, Kapil Dev Verma, P. K. Manna, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	243-270	ISBN:012 8176873, ISBN-13:978012 8176870
52.	Fly ash reinforced polyethylene composites in Handbook of Fly Ash	Sugandha Singh, Manas K Ghorai, Kamal K. Kar	Elsevier	Kamal K. Kar	2022	227-241	ISBN:012 8176873, ISBN-13:978012 8176870
53.	Functionalization of fly ash in Handbook of Fly Ash	Shania Zehra Naqvi, Janakarajan Ramkumar, and Kamal K. Kar	Elsevier	Kamal K. Kar	2022	35-55	ISBN:012 8176873, ISBN-13:978012 8176870
54.	Coal-based fly ash in Handbook of Fly Ash	Shania Zehra Naqvi, Janakarajan Ramkumar, and	Elsevier	Kamal K. Kar	2022	3-33	ISBN:012 8176873, ISBN-13:978012

		Kamal K. Kar					8176870
55.	Lifecycle Assessment of Polymer-Based Nanoscale Materials for Surface Coatings	Kapil Manoharan, Mohit Pandey, Shantanu Bhattacharya	Elsevier		2023	613-631	<a href="https://doi.org/10.1016/B978-0-32-390778-1.00004-9">https://doi.org/10.1016/B978-0-32-390778-1.00004-9</a>
56.	Shape Memory Polymers and Their Emerging Applications	Sanjeet Kumar Singh, Rishi Kant, Shantanu Bhattacharya	AIP Publishing LLC	Vinay Kumar Patel;  Rishi Kant;  Pankaj Singh Chauhan;  Shantanu Bhattacharya	2022	8-1-8-18	ISBN electronic:  978-0-7354-2455-5 ISBN print:  978-0-7354-2452-4 DOI: <a href="https://doi.org/10.1063/9780735424555">https://doi.org/10.1063/9780735424555</a>
57.	Polymer-Based Electrolytes for Solid-State Batteries: Current Status and Future Challenges in Emerging	Mohit Pandey, Poonam Sundriyal, Shreyansh Tatiya, Shantanu Bhattacharya	AIP Publishing LLC		2022	5-1-5-22	

	Applications						
58.	Introduction to Applications of Polymers and Polymer Composites	Vinay Kumar Patel, Rishi Kant, Pankaj Singh Chauhan, Shantanu Bhattacharya	AIP Publishing LLC	V. K. Patel, R. Kant, P. S. Chauhan, and S. Bhattacharya	2022	1-1-1-6.	ISBN electronic: 978-0-7354-2455-5 ISBN print: 978-0-7354-2452-4  DOI: <a href="https://doi.org/10.1063/9780735424555">https://doi.org/10.1063/9780735424555</a>
59.	Stimuli-Responsive Polymeric Materials and Composites for Biomedical Applications	Rishi Kant, Pankaj Singh Chauhan, Shantanu Bhattacharya	AIP Publishing LLC	Vinay Kumar Patel; Rishi Kant; Pankaj Singh Chauhan; Shantanu Bhattacharya	2022	7-1-7-14	ISBN electronic: 978-0-7354-2455-5 ISBN print: 978-0-7354-2452-4  DOI: <a href="https://doi.org/10.1063/9780735424555">https://doi.org/10.1063/9780735424555</a>

60.	Conducting Polymer Composites and Their Application in Gas Sensing	Pankaj Singh Chauhan ;  Poonam Sundriyal ;  Shantanu Bhattacharya	AIP Publishing LLC	Vinay Kumar Patel;  Rishi Kant;  Pankaj Singh Chauhan;  Shantanu Bhattacharya	2022	9-1-9-24	ISBN electronic: 978-0-7354-2455-5  ISBN print: 978-0-7354-2452-4  DOI: <a href="https://doi.org/10.1063/9780735424555">https://doi.org/10.1063/9780735424555</a>
61.	Trends in Applications of Polymers and Polymer Composites	Vinay Kumar Patel, Rishi Kant, Pankaj Singh Chauhan, Shantanu Bhattacharya	AIP Publishing LLC		2022		
62.	Advances in Polymer Materials and Composites for Additive Manufacturing	Rishi Kant, Vinay Kumar Patel, Geeta Bhatt, Shantanu Bhattacharya	AIP Publishing LLC	Vinay Kumar Patel;  Rishi Kant;  Pankaj Singh Chauhan;	2022	4-1-4-22	ISBN electronic:  978-0-7354-2391-6  ISBN print: 978-0-



				Shantanu Bhattacharya			7354-2388-6  DOI: <a href="https://doi.org/10.1063/9780735423916">https://doi.org/10.1063/9780735423916</a>
63.	Polymer Fabrication Using Photochemical Processes—A Review	Kapil Manoharan, Shantanu Bhattacharya	AIP Publishing LLC	Vinay Kumar Patel;  Rishi Kant;  Pankaj Singh Chauhan;  Shantanu Bhattacharya	2022	2-1-2-20	ISBN electronic:  978-0-7354-2391-6 ISBN print:  978-0-7354-2388-6  DOI: <a href="https://doi.org/10.1063/9780735423916">https://doi.org/10.1063/9780735423916</a>
64.	Polymer Microfabrication for Biomedical Applications	Geeta Bhatt ;  Vinay Kumar Patel ;  Rishi Kant ;	AIP Publishing LLC	Vinay Kumar Patel;  Rishi Kant;  Pankaj	2022	5-1-5-24	ISBN electronic:  978-0-7354-2391-6 ISBN

		Shantanu Bhattacharya		Singh Chauhan;  Shantanu Bhattacharya			print:  978-0-7354-2388-6  DOI: <a href="https://doi.org/10.1063/9780735423916">https://doi.org/10.1063/9780735423916</a>
65.	Emulating Chatter with Process Damping in Turning Using a Hardware-in-the-Loop Simulator	253–262	Springer Nature Singapore	Fakher Chaari, Francesco Gherardini, Vitalii Ivanov, Mohamed Haddar	2022	253–262	Electronic ISSN 2195-4364 Print ISSN 2195-4356
66.	Introduction to MEMS application in electronic engineering	1-4	AIP Publishing	A. Basu, A.K. Basu, S. Ghosh, S. Bhattacharya	2023	1-4	ISBN electronic: 978-0-7354-2439-5 ISBN print: 978-0-7354-2436-4 <a href="https://doi.org/10.1063/97">https://doi.org/10.1063/97</a>

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67.	Internet of Things (IoT)-Assisted Gas Sensing Technology	287-302	CRC Press	G Verma, A Gupta, S Bhattacharya	2023	287-302	ISBN 97810322 35172 338 Pages 162 B/W Illustrations

### Department of Physics

68.	"Non-equilibrium Properties of Thin Polymer Films " in Matyjaszewski et al. (Eds.): Macromolecular Engineering: From Precise Synthesis to Macroscopic Materials and Applications	Sivasurender Chandran and G. Reiter	Wiley-VCH Verlag GmbH	N. Hadjichristidis, Y. Gnanou, K. Matyjaszewski and M. Muthukumar	2022	-	97835278 15562
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### Department of Sustainable Energy Engineering

69.	Advances in Bio-Based Fiber	Prateek, R. K. Gupta	Woodhead Publishing	S. M. Rangappa, M. Puttegowda, ... S. Gorbatyuk	2022	159-191	978-0-12-824543-9
70.	Advances in Multiphase Flows	S. Priyadarshini, A. De	Begell house	A. De, A. K. Gupta, A. Kushari, S. Aggarwal,	2022	528-539	978-1-56700-504-2 (Print) 978-1-

				A. K. Runchal			56700-504-2 (Online)
71.	Numerical Fluid Dynamics: Methods and Computations	M. Verma, A. De	Springer	D. Zeidan, J. Merker, E. G. Da Silva, L. T. Zhang	2022	147-175	978-981-16-9664-0 (Print) 978-981-16-9665-7 (Online)

### CONFERENCE 2022-2023

Department of Aerospace Engineering							
S. No.	Conference Name	Conference Title	Author(s)	Year	Volume	Page numbers (start to end)	Location
1.	15 <sup>th</sup> World Congress on Computational Mechanics (WCCM–XV), 8 <sup>th</sup> Asian Pacific Congress on Computational Mechanics (APCOM – VIII)	<u>Wings at low Reynolds numbers and lifting line theory</u>	Jawahar Sivabharathy and Sanjay Mittal	2022	-	1	Japan
2.	13 <sup>th</sup> Asian Computational Fluid Dynamics Conference	<u>Transitions in flow past wings at low Reynolds number</u>	Jawahar Sivabharathy and Sanjay Mittal	2022	-	1-2	Jeju, Korea

3.	13 <sup>th</sup> Asian Computational Fluid Dynamics Conference	<u>Aerodynamic center of a Finite Wing at low Reynolds Number</u>	Arnesh Maji, Jawahar Sivabharathy and Sanjay Mittal	2022	-	1-2	Jeju, Korea
4.	SICE, Advances in Structural Integrity	Homogenization of Transformed $\beta$ Colony of a Titanium Alloy Using CPFEM	S. Mustafa Kazim, Kartik Prasad, Pritam Chakraborty	2022		93-102	Online
5.	14th European Fluid Mechanics Conference (EFMC14)	Evolution of optimally perturbed Wing-Tip vortices	M. Suhail Naim and Navrose	September 13-16, 2022	EFMC14	178	Athens, Greece
6.	1st International Conference on Advances in Heat Transfer and Fluid Dynamics	Long Time Evolution Of Optimally Perturbed Wing-Tip Vortices.	M. Suhail Naim and Navrose	December 01-03, 2022	-	-	Department of Mechanical Engineering, Z.H.C.E T, AMU, Aligarh, India
7.	9th International and	Design and Simulation of	Nitin Singh and	December	-	-	IIT Roorkee,

	49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	Hybrid Airfoils for Wind turbine	Navrose	14-16, 2022			Roorkee-247667, Uttarakhand, India
8.	APS March Meeting 2023	Vortex dynamics in the wake of a finite span wing in stable stratification.	M. Suhail Naim and Navrose	Virtual (March 20-22)	-	-	Las Vegas, Nevada(US)

**Department of Chemical Engineering**

9.	23rd International Conference on Condensed Matter Nuclear Science, ICCF 2021 - Virtual, Online	Low Energy Nuclear Reactions with Emission of Two Photons	Pankaj Jain, Ankit Kumar, K Ramkumar, KP Rajeev, Raj Pala	Publication Year : 2022 Conference Year: 2021	36	302-304	China
10.	ICCF24, The International Conference for Condensed Matter Nuclear Science	Upper Bound in the Fusion Products and Transmutation Enhancement in Alloys	Ankit Kumar, Pankaj Jain, K. P Rajeev, Raj Ganesh Pala	Publication Year: 2022 Conference Year: 2021	36	327-335	California, USA
11.	The 2022 AUA Academic	Influence of pressure in RO	Ramanan C.J.;Garg	Publication Year:	1074	1755-1315	Thailand

	Conference on Sustainable Energy and Green Technology (AUA-SEGT 2022) Science (IOP Conference Series: Earth and Environmental Science)	filtration of crude biodiesel	S.;Bora B.J.;Burad i A.;Roy S.;Sharma P.;Alom N.	2022 Conferen ce Year: 2022			
12.	74th Annual Session of Indian Institute of Chemical Engineers (CHEMCON-2021)	Optimization of Nickel Loading of Ni-Al <sub>2</sub> O <sub>3</sub> Catalyst for Syngas Production by Tri-Reforming of Methane	Satyam Gupta, Goutam Deo	Publicati on Year : 2022 Conferen ce Year: 2021		277-286	Bhubane swar
<b>Department of Chemistry</b>							
13.	Modern Trends in Inorganic Chemistry (MTIC-XIX 2022) Emerging Researcher's Lecture		<i>Ritika Gautam, Kajal Chaudhary</i>	2022			Varanasi
14.	Future Oriented Research Conferences & Exhibitions		<i>Ritika Gautam, Kajal Chaudhary</i>	2022			Agra

	(FORCE) Interdisciplinary Initiatives in Chemical Sciences (IICS)		,				
15.	29th CRSI-NSC and CRSI-ACS Symposium Women in Chemical Science Lecture	Elucidation of Naphthol-Derived 'ONO' Ligands and Their Transition Metal Complexes as a source of Oxidative Stress Induction and Insight into the Mechanism of Action	Ashwini Kumar, Bhumika Agrahari, and <i>Ritika Gautam</i>	2022			IISER Mohali

**Department of Civil Engineering**

16.	EGU General Assembly 2023	A Bayesian Neural Network- based Satellite Fog Detection	Deshpand e, P. J., Tripathi S., and Bhattachar ya A.	2023			Vienna, Austria
17.	IEEE International Geoscience and Remote Sensing Symposium IGARSS 2022	Comparison of in- situ fog observations with INSAT-3D fog observations for North Indian cities	Deshpand e, P. J., Tripathi S., and Bhattachar ya A.	2022			Kuala Lumpur, Malaysia



18.	EGU General Assembly 2022	Analysing the impact of calibrating a low-cost soil moisture sensor on FAO Aquacrop model performance.	Adla S., Bruckmaier F., Arias-Rodriguez L. F., Tripathi S., Disse M. and Pande S.	2022			Vienna, Austria
19.	EGU General Assembly 2022	Modified Aquacrop - Open Source tool for data-scarce regions	Bruckmaier F., Adla S., Tripathi S. and Disse M.	2022			Vienna, Austria
20.	International Airfield & Highway Pavements Conference 2023	Experimental study on effect of geometrical arrangement of aggregates on strength of asphalt mix	Kuity A., and Das, A.	2023	<i>In press</i>	<i>In press</i>	Austin, USA
21.	Roorkee Water Conclave	Methodological considerations for the collection of air moisture for isotopic analysis	B. Singh, Krishan G., M. S. Rao, P. Singh, S. A. Shad, S. Tripathi, R. Ojha, R. Srivastava	2022	-	-	Roorkee

			, and S. Guha				
22.	International conference on Recent advances in water science and technology	Influence of changing isotopic conditions of atmospheric moisture, precipitation, and groundwater on the seasonal variations in the isotopic composition of transpiration	Krishan, Gopal, Singh, Baljinder, Rao, MS, Singh, Parvesh, Shad, SA, Ojha, Richa, Srivastava, R, Tripathi, Shivam, and Guha, S.	2022	-	-	Coimbatore
23.	EGU 2023	Use of scaling to describe temporal variability in soil hydraulic properties	S. Kumar and R. Ojha	2023	Poster	-	Vienna, Austria
24.	Hydro 2022	Investigation of effect of temporal variability in soil hydraulic properties on soil water dynamics modeling	S. Kumar and R. Ojha	2022		10-Jan	PEC Chandigarh
25.	Hydro 2022	Spatial variability	N.	2022		10-Jan	PEC

		in soil hydraulic properties of macropores in an agricultural field	Vashishth and R. Ojha				Chandigarh
26.	The Seventh Annual National Research Conference on Applied Research and Industrial Transformation	Differences in sum-of-hourly and daily reference evapotranspiration in the Indo-Gangetic Plain, India	Yetbarek, E. and R. Ojha	2022		08-Jan	Assosa University, Assosa, Ethiopia
27.	2022 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW)	The 6th AI City Challenge	M. Naphade and S. Wang and D. C. Anastasiu and Z. Tang and M. Chang and Y. Yao and L. Zheng and M. Shaiqur Rahman and A. Venkatachalapathy and A. Sharma	2022		3346-3355	New Orleans, Louisiana, USA

			and Q. Feng and V. Ablavsky and S. Sclaroff and P. Chakraborty and A. Li and S. Li and R. Chellappa				
28.	<i>102<sup>nd</sup> Transportation Research Board (TRB) Annual Meeting</i>	Understanding Failures in Inverted Pavement Test Track having Stabilized Base and Subbase Layers containing Fly ash for Low Volume Road	Khan, S., Nagabhus hana, M.N., <i>Ashish</i> , <i>P.K.</i> , & Ti wari, D.	2023	N/A	N/A	Washing ton D.C., USA
29.	<i>102<sup>nd</sup> Transportation Research Board (TRB) Annual Meeting</i>	Quantitative Analysis of the Role of Temperature in the Mesoscale Damage Process of Semi Flexible Pavement Composite through Finite	Cai, X., Leng, Z., <i>Ashish</i> , <i>P.K.</i> , & Y ang, J	2023	N/A	N/A	Washing ton D.C., USA

		Element Method					
30.	<i>3<sup>rd</sup> Advances in Materials and Pavement Performance Prediction (AM3P)</i>	Influence of Carbon Nano Tube on Compaction Characteristics of Asphaltic Mixture	<i>Ashish, P. K., &amp; Singh, D.</i>	2023	N/A	N/A	Hong Kong
31.	7 <sup>th</sup> International Conference on Sustainable Energy and Environmental Challenges	Impact of treated wastewater agricultural reuse on groundwater quality: a case study in Kanpur, India.	<u>Rajvanshi, K.</u> , Bhatt, M., Upadhyay, M.K., Goemets, J., Campling, P., and Singh, A.	2022	185		IIT BHU, Varanasi
32.	7 <sup>th</sup> International Conference on Sustainable Energy and Environmental Challenges	Impact of treated wastewater agricultural reuse on groundwater quality: a case study in Kanpur, India.	<u>Bhatt, M.</u> , <u>Rajvanshi, K.</u> , Upadhyay, M.K., Goemets, J., Campling, P., and Singh, A.	2022	186		IIT BHU, Varanasi
33.	National Conference on Science for Society,	Assessment of precipitation as arsenic immobilization	Nilling, J., Verma, A., and <u>Singh, A.</u>	2022			CSIR-NEIST, Jorhat, India

	Environment and Sustainability (SSES)	technique in a typical oxidizing groundwater.					
34.	National Conference on Science for Society, Environment and Sustainability (SSES)	Potential role of chloride in controlling arsenic speciation under ambient conditions.	Verma, A., Nilling, J., Chinnasa my, H.V., Matheshw aran, S. and <u>Singh, A.</u>	2022			CSIR-NEIST, Jorhat, India
35.	264 <sup>th</sup> American Chemical Society (ACS) National Meeting	Effect of magnesium on fluorapatite precipitation in groundwater matrix.	<u>Mohapatra</u> , A.K. and Singh, A.	2022			Chicago (Hybrid), USA.
36.	32 <sup>nd</sup> Goldschmidt Conference	Biogeochemical processes governing arsenic release in shallow mixed-oxic state groundwater	<u>Verma, A.</u> , Mohapatra, A.K., Matheshw aran, S. and Singh, A.	2022	13gT1		Hawaii (Hybrid), USA
37.	32 <sup>nd</sup> Goldschmidt Conference	Kinetics of precipitation of barium chromate [BaCrO <sub>4(s)</sub> ] in groundwater.	<u>Singh, A.</u> , Bhattachar ya, M., and Mohapatra	2022	13dP3		Hawaii (Hybrid), USA

			, A.K.				
38.	32 <sup>nd</sup> Goldschmidt Conference	Biogeochemical processes governing arsenic release in shallow mixed-oxic state groundwater	<u>Verma, A.</u> , Mohapatra, A.K., Matheshwaran, S. and Singh, A.	2022	13gT1		Hawaii (Hybrid), USA
39.	18 <sup>th</sup> AEESP Research and Education Conference	Mitigating the impact of legacy industrial solid waste induced chromium pollution on rural habitations through research and practice.	<u>Singh, A.</u> , Bhattacharya, M., Bandyopadhyay, T., Bhojwani, V. and Tejavath, R.	2022			Washington University in Saint Louis, USA
40.	18 <sup>th</sup> AEESP Research and Education Conference	Relative kinetics of uranium mobilization from contaminated sediments from middle Indo-Gangetic plain in the presence of dissolved manganese (II).	Sujathan, S., Mohapatra, A.K., and <u>Singh, A.</u>	2022			Washington University in Saint Louis, USA
41.	18 <sup>th</sup> AEESP Research and Education	Fluoride removal from groundwater by fluorapatite	Mohapatra, A.K. and <u>Singh, A.</u>	2022			Washington University

	Conference	precipitation under approximate in-situ conditions.					y in Saint Louis, USA
42.	18 <sup>th</sup> AEESP Research and Education Conference	Arsenate reduction and mobilization from inorganic arsenic source by a novel bacterial strain isolated from arsenic polluted groundwater.	Verma, A., Chinnasamy, H.V., Matheshwaran, S. and <u>Singh, A.</u>	2022			Washington University in Saint Louis, USA
43.	18 <sup>th</sup> AEESP Research and Education Conference	A comparative study of chemical- and electro-coagulation based household-scale water treatment units for hexavalent chromium removal.	Bandyopadhyay, T., Bhojwani, V., and <u>Singh, A.</u>	2022			Washington University in Saint Louis, USA
44.	18 <sup>th</sup> AEESP Research and Education Conference	Defluoridation of contaminated groundwater using a column packed with calcium phosphate	Misra, T., Mohapatra, A.K., and <u>Singh, A.</u>	2022			Washington University in Saint Louis, USA



		sorbents.					
45.	International Conference on Environmental Science and Engineering (ICESE)	Fluoride remediation by hydroxyapatite coated calcite and brushite in synthetic and real contaminated groundwaters.	Misra, T., Mohapatra, A.K., and Singh, A.	2022			IIT Bombay, India (Virtual)
46.	IEEE International Geoscience and Remote Sensing Symposium-2023 (IGARSS 2023)	Tropical forest height and aboveground biomass estimation using PolInSAR data and machine learning	N. Ramachandran, S. Saatchi, and O. Dikshit	2023	Under preparation	-	Pasadena, California, USA
47.	NISAR Workshop	Tropical Forest Aboveground Biomass Estimation -The Potential of L-band SAR Backscatter Data and Machine Learning Synergy	N. Ramachandran, O. Dikshit, and S. Saatchi	2023	Under preparation	-	Ahmedabad, India
48.	Canadian Cartographic Association (CCA) Annual Conference	Application of cartographic generalization models on datasets of two	J. Boodala, O. Dikshit, N.	2022	-	<a href="https://cca-acc.org/conferences/2022-cca-conference-">https://cca-acc.org/conferences/2022-cca-conference-</a>	Online

		different mapping agencies	Balasubramanian			<u>abstracts</u>	
49.	Advances in Topographic Mapping Symposium conducted at the meeting of the ICA Commission on Topographic Mapping, the ICA Working Group on Digital Transformation of National Mapping Agencies, and the Adam Mickiewicz University in Poznań	Designing generalization strategies using open data	J. Boodala, O. Dikshit, N. Balasubramanian	2022	-	<a href="https://topo.ici.org/wp-content/uploads/2022/10/s2p2_boodala.pdf">https://topo.ici.org/wp-content/uploads/2022/10/s2p2_boodala.pdf</a>	Online
50.	EGU	Retrofitting communication antennas for astronomical and geodetic VLBI applications	A. Laha, A. Tiwari, S. Srivastava, S. Singh, B. C. Joshi, N. Balasubramanian, A. Kumar, Y. Gupta, O. Dikshit	2022	EGU22-13321		Vienna

51.	Determining Favourable Locations for New VGOS Establishment in India	12th International VLBI Service (IVS) General Meeting (GM2022)	S. Dhar, S., Glaser, R., Heinkelmann, H., Schuh, N., Balasubramanian, O. Dikshit	2022			Online - Helsinki
52.	Effect of future intensives on short term UT1 predictions	Committee on Space Research (COSPAR) 2022 – 44 <sup>th</sup> Scientific Assembly	S. Dhar, R., Heinkelmann, S., Glaser, H., Schuh, N., Balasubramanian, O. Dikshit	2022			Athens, Greece
53.	Prediction of Earth Rotation Parameters using Machine Learning Techniques	Frontiers of Geodetic Science (FROGS)	S. Dhar, S., Belda, R., Heinkelmann, S. Modiri, H., Schuh, N., Balasubramanian, O. Dikshit	2022			Essen, Germany
54.	IDS Workshop 2022	DORIS Applications in Geodetic	V. Kumar, O. Dikshit,	2022			Venice, Italy

		Problems	N. Balasubramanian				
55.	ICCC Workshop 2023	DORIS and its Applications in Climatic Change Research	V. Kumar, O. Dikshit, N. Balasubramanian	2023			
56.	AGU2022	Indian gravimetric geoid model using the Stokes-Helmert method: IndGG-SH2021	R. Goyal, S.J. Claessens, O. Dikshit	2022	G42C-0244		Chicago, USA

#### Department of Cognitive Science

57.	Proceedings of the Annual Meeting of the Cognitive Science Society	Sampling-based probability construction explains individual differences in risk preference	Ankoju, B. P., & Srivastava, N.	2022	44	2926-2932	Toronto, Canada
58.	Proceedings of the Annual Meeting of the Cognitive Science Society	Selecting between visuomotor lotteries to measure mental effort in risky decisions	Mehrotra, S., & Srivastava, N.	2022	44	3009-3015	Toronto, Canada
59.	Proceedings of the Annual Meeting of the Cognitive	<b>Attentional bias for self-face: Investigation</b>	Jublie, A. & Kumar, D.	2022	44	586-591	Toronto, Canada

	Science Society	<b>using drift diffusion modelling</b>					
<b>Department of Computer Science and Engineering</b>							
60.	Learning@Scale 2022	LEGenT: Localizing Errors and Generating Testcases for CS1	Nimisha Agarwal, Amey Karkare	2022		102-112	New York
61.	Innovations in Software Engineering Conference	Advances in Automated Pedagogical Compile-time Error Repair	Sharath H. Padmanabha, Fahad Shaikh, Mayank Bansal, Debanjan Chatterjee, Preeti Singh, Amey Karkare, Purushottam Kar:	2023		11:1-11:11	Prayagraj, India
62.	Innovations in Software Engineering Conference	PRIORITY: An Intelligent Problem Indicator Repository	Sharath H. Padmanabha, Fahad Shaikh, Mayank Bansal, Debanjan Chatterjee, Preeti Singh,	2023		9:1-9:10	Prayagraj, India

			Amey Karkare, Purushottam Kar:				
63.	Design, Automation and Test in Europe Conference	Aiding to Multimedia Accelerators: A Hardware Design for Efficient Rounding of Binary Floating Point Numbers	Mahendra Rathore, Vishesh Mishra, Urbi Chatterjee	2023			Antwerp, Belgium
64.	International VLSI Design & Embedded Systems conference	DARK-Adders: Digital Hardware Trojan Attack on Block-based Approximate Adders	Vishesh Mishra, Neelofar Hassan, Akshay Mehta, Urbi Chatterjee	2023		371-376	Hyderabad, India
65.	Smart Card Research and Advanced Application Conference	Time's a Thief of Memory: Breaking Multi-tenant Isolation in TrustZones through Timing based Bidirectional Covert Channels	Nimish Mishra, Anirban Chakraborty, Urbi Chatterjee, Debdeep Mukhopadhyay	2022		3-24	Birmingham, UK
66.	Design, Automation & Test in Europe	DIP Learning on CAS-Lock: Using Distinguishing	Akashdeep Saha; Urbi	2022		688-693	Antwerp, Belgium

	Conference & Exhibition	Input Patterns for Attacking Logic Locking	Chatterjee; Debdeep Mukhopadhyay; Rajat Subhra Chakraborty				
67.	Euromicro Conference on Digital System Design	Is the Whole lesser than its Parts? Breaking an Aggregation based Privacy aware Metering Algorithm	Soumyaduti Ghosh, Urbi Chatterjee, Rumia Masburah, Soumyajit Dey and Debdeep Mukhopadhyay	2022		921-929	Maspaloma, Spain
68.	International Conference on Security, Privacy and Applied Cryptographic Engineering	Machine Learning Attacks on Low-Cost Reconfigurable XRRO and XRBR PUF Designs	Manthan Kojage, Neelofar Hassan, Urbi Chatterjee	2022		204-224	Jaipur, India
69.	International Conference on Security, Privacy and Applied Cryptographic	Dual-Tone Multi-Frequency Assisted Acoustic Side Channel Attack to Retrieve	Abhishek Revskar, Mahendra Rathor, Urbi	2022		185-203	Jaipur, India

	Engineering	Dialled Call Log	Chatterjee				
70.	16th International Conference on COMmunication Systems & NETworkS (COMSNET)	BlockPaaS: Blockchain Platform as a Service.	Yuvaraj Rajendra, Venkatesan Subramanian, Sandeep Kumar Shukla:	2023		204-206	Bangaluru, India
71.	17th ACM ASIA Conference on Computer and Communications Security (ACM ASIACCS 2022)	RBMon: Real Time System Behavior Monitoring Tool	Nitesh Kumar, Anand Handa, Sandeep K. Shukla:	2022		1228-1230	Nagasaki, Japan
72.	4th International Conference on Blockchain Computing and Applications	TrustSim: A Decentralized Reputation and Trust Model Simulator.	Venkatesan Subramanian, Sandeep Kumar Shukla, Yuvaraj Rajendra	2022		181-188	San Antonio, TX
73.	4th International Conference on Blockchain Computing and Applications	DNS based In-Browser Cryptojacking Detection	Rohit Kumar Sachan, Rachit Agarwal, Sandeep Kumar	2022		259-266	San Antonio, TX



			Shukla				
74.	IEEE International Conference on Cyber Security and Resilience	A Comprehensive API Call Analysis for Detecting Windows-Based Ransomware.	P. Mohan Anand, P. V. Sai Charan, Sandeep K. Shukla	2022		337-344	Virtual
75.	Australasian Information Security Conference (AISC 2023), Melbourne, Australia	Early Detection of Ransomware Activity based on Hardware Performance Counters	P. Mohan Anand, P. V. Sai Charan, Sandeep K. Shukla	2023		10-17	Melbourne, Australia
76.	5th IEEE Conference on Dependable and Secure Computing	Security Orchestration, Automation, and Response Engine for Deployment of Behavioural Honeypots.	Upendra Bartwal, Subhasis Mukhopadhyay, Rohit Negi, Sandeep K. Shukla	2022		1-8	Edinburg, UK
77.	European Interdisciplinary Cyber Security Conference (EICC 22)	DARK-KERNEL: Design and Implementation of a Kernel Level Active Darknet Sensor	Venkata Sai Charan Putrevu, Gowtham Ratnakaram, Sandeep K. Shukla	2022		42-48	Barcelona, Spain
78.	IEEE 10th	DOTMUG: A	P. V. Sai	2022		1-8	Tennessee

	International Conference on Digital Forensics and Security (ISDFS 2022)	Threat Model for Target Specific APT Attacks- Misusing Google Teachable Machine	Charan, P. Mohan Anand, Sandeep K. Shukla, Naveen Selvan, Hrushikesh Chunduri				e, USA
79.	29th International Conference on Neural Information Processing (ICONIP)	Commissioning Random Matrix Theory and Synthetic Minority Oversampling Technique for Power System Faults Detection and Classification	Ayush Sinha, Shubham Dwivedi, Sandeep Kumar Shukla, O. P. Vyas	2022	518-529		Indore, India
80.	13th EAI International Conference on Digital Forensics and Cyber Crime (ICDF2C-2022)	Volatility Custom Profiling for Automated Hybrid ELF malware detection	Rahul Varshney, Nitesh Kumar, Anand Handa, Sandeep K. Shukla	Nov. 2022			Boston, USA
81.	Australasian Information Security Conference (AISC)	AProctor - A practical on-device antidote for Android	Akash Patel, Nitesh Kumar,	Jan. 2023		82-91	Melbourne, Australia

	2023), Melbourne, Australia	malware	Anand Handa, Sandeep K. Shukla				
82.	Proceedings of the Thirteenth International Workshop on Programming Models and Applications for Multicores and Manycores	Efficient Data Race Detection of Async-Finish Programs Using Vector Clocks	Kumar, Shivam and Agrawal, Anupam and Biswas, Swarnendu	Apr. 2022		45-4	Seoul, Republic of Korea
83.	Proceedings of the 49th International Colloquium on Automata, Languages, and Programming (ICALP 2022)	Minimum+1 (s,t)-cuts and Dual Oracle	Baswana, Surender and Bhanja, Koustav and Pandey, Abhyuday	2022	229	15:1--15:20	Paris, France
84.	14th Innovations in Theoretical Computer Science Conference (ITCS, 2023)	Certificate games	Sourav Chakraborty, Anna Gál, Sophie Laplante, Rajat Mittal, Anupa Sunny	2023	251	32:1-32:24	Massachusetts, USA

85.	Proceedings of the 49th International Colloquium on Automata, Languages, and Programming (ICALP 2022)	Dynamic Meta-Theorems for Distance and Matching	Samir Datta, Chetan Gupta, Rahul Jain, Anish Mukherjee, Vimal Raj Sharma, Raghunath Tewari	2022	229	118:1-118:20	Paris, France
86.	2022 IEEE/ACM International Workshop on Exascale MPI (ExaMPI) @ SC 2022	IPMPI: Improved MPI Communication Logger	Tushar Agrawal, Preeti Malakar	2022		31-40	Dallas, TX
87.	2022 IEEE/ACM International Workshop on Hierarchical Parallelism for Exascale Computing (HiPar) @ SC 2022	Hierarchical Communication Optimization for FFT	Mohit Kumar, Preeti Malakar	2022		12-21	Dallas, TX
88.	2022 IEEE 29th International Conference on High Performance Computing, Data,	A Deep Learning-Based In Situ Analysis Framework for Tropical	Abir Mukherjee, Preeti Malakar	2022		166-175	Bengaluru, India

	and Analytics (HiPC)	Cyclogenesis Prediction					
89.	IEEE Mobile Cloud 2022	End-to-End Latency Optimization of Multi-view 3D Reconstruction for Disaster Response	Xiaojie Zhang, Mingjun Li, Andrew Hilton, Amitangsh u Pal, Soumyabr ata Dey, and Saptarshi Debroy	2022		17-24	
90.	IEEE ICC 2022	Ultrasonic vs. Magnetic Resonance Communication for Mixed Wearable and Implanted Devices	Rajpreet K Gulati Walia, Krishna Kant and Amitangsh u Pal	2022		5304-5309	
91.	IEEE/ACM CCGrid 2022	Managing Access Control in LargeScale Multi- party IoT System	Pavana Pradeep Kumar, Krishna Kant and Amitangsh u Pal	2022		150-159	
<b>Department of Earth Sciences</b>							
92.	Frontiers in	Stable water	Shaifullah,	2023			PRL

	Geosciences Research Conference	isotope modeling reveals early onset of snowpack melting in the headwaters of the Ganga River	Sen I.S.				Ahmedabad
93.	Frontiers in Geosciences Research Conference	Carbon and Helium Isotopes to Address Himalayan Metamorphic CO <sub>2</sub> fluxes to the Atmosphere	Pradhan, S., Sen, I.S.	2023			PRL Ahmedabad
94.	AGU Fall Meeting	The Magnitude and Implications of Atmospheric CO <sub>2</sub> Released by Metamorphic Processes in the Himalayan-Tibetan Orogen	Pradhan, S., Sen, I.S., Shukla, T., and Nizam, S.,	2022			Chicago, USA
95.	EGU23	Influence of sources in the generation of silicic rocks of the Deccan Traps Continental Flood Basalt	Mahesh Halder, Debajyoti Paul, Shouye Yang	2023	EGU23-341		Vienna, Austria
96.	AGU Fall Meeting	<sup>182</sup> W/ <sup>184</sup> W of Deccan Carbonatites of	Anupam Banerjee, Hanika	2022		DI22B-0008	Chicago, USA

		India and Implications for Deep Carbon Sources	Rizo, Debajyoti Paul				
97.	AGU Fall Meeting	Late Quaternary Drainage Reorganization of Yamuna River in NW Indo-Gangetic Plain Inferred from Sr-Nd Isotope Ratios of Drill Core Sediments	Mohd Amir, Debajyoti Paul, Mohd Tarique, Waliur Rahaman	2022		EP32E-1346	Chicago, USA
98.	Goldschmidt Conference	Pre-Late Accretion <sup>182</sup> W Constraint of Silicate Earth	Seema Kumari, Andreas Stracke, Debajyoti Paul	2022			Honolulu, Hawai'i, USA
99.	EGU General Assembly Conference	Source quantification of PM2.5 using $\delta^{13}C$ values along with corresponding organic carbon, elemental carbon, and select inorganic ions over two COALESCE	Kajal Yadav, Ramya Sunder Raman, Ankur Bhardwaj, Debajyoti Paul, Tarun Gupta, Kaggere	2022		EGU22-260	Vienna, Austria

		network locations	Shivananj aiah Lokesh, Laxmi Prasad Sanyasihal ly Vasanth Kumar				
100.	EGU General Assembly Conference	Magmatic evolution of Girnar volcano- plutonic complex of Deccan Traps, India: Sr-Nd-Pb- Hf isotopic evidence of multiple sources	Mahesh Halder, Debajyoti Paul, Andreas Stracke	2022		EGU22-446	Vienna, Austria
<b>Department of Economic Sciences</b>							
101.	International Association for Applied Econometrics (IAAE) 2022 (Accepted, but could not attend the conference)	Risk>Returns Interdependence between REIT and Stocks: A STVAR- BAGARCH-M Model	Dr. Mahamitra Das, Dr. Srikanta Kundu, and Prof. Nityanand a Sarkar	June 21- 24, 2022	N/A		King's College London, U.K.,
102.	The 16th Australasian Trade Workshop	Trade Workshop	Somesh K Mathur et. al Indias	March,2 023	In press		Cairns, Australia



			Possible Alignment with the RCEP: A Partial and General Equilibrium Impact on Economy Wide Variables and Carbon Emissions (final version)				
103.	ROUND TABLE DISCUSSION ON RELATIVE BENEFITS OF INDIA ALIGNING WITH REGIONAL GROUPINGS, COUNTRIES AND MEMBER STATES, Public Policy Dialogues Bridging Research and Practice ,4 - 6 January 2023, Hyderabad, Bharti	Public Policy Dialogue	Somesh K Mathur et al	January 4th through 6th January 2023	Online		ISB,Hyderabad

	Institute for Public Policy, Indian School of Business						
104.	Delivered online lecture on "Trade modelling through partial and general equilibrium models: Some Applications" at the 55th Refresher Course in Economics through online mode organized by HRDC-JNU: October 3rd, 2022	Academic Programme for teachers of social science and economics	Somesh k mathur	October 3rd 2022	online		HRDC JNU
105.	2022 IEEE Conference on Electronics, Computing and Communication Technologies (CO NECCT)	Reinforcement Learning Framework for Dynamic Power Transmission in Cloud RAN Systems	Vankayala , S.K., Kumar, S., Shah, V., Mathur, A., Thirumulanathan D, and Yoon, S	2022			Online (Virtual conference)
106.	33 <sup>rd</sup> IEEE International Symposium on Personal, Indoor, and Mobile Radio	Deep-Learning Based Beam Selection Technique for 6G Millimeter Wave	Vankayala , S.K., Kumar, S., Thirumulanathan D,	2022			Online (Virtual conference)

	Communications (PIMRC)	Communication	Mathur, A., Yoon, S., and Kommine ni, I.				
107.	<i>International Symposium on Applied Optimization and Game Theoretic Models for Decision Making</i>	Optimal Mechanisms in Two-item Setting for Constant Power Rate Distributions	Thirumulanathan D	2023 (February)			Indian Statistical Institute, Delhi
<b>Department of Electrical Engineering</b>							
108.	National Conference on Communications, 2022	Hybrid Transceiver Design and Optimal Power Allocation in Downlink mmWave Hybrid MIMO Cognitive Radio Systems	Jitendra Singh, Indranil Chatterjee, Suraj Srivastava and Aditya K Jagannatham	2022	DOI: 10.1109/NCC55593.2022.9806757		Mumbai, India
109.	Signal Processing and Communications (SPCOM), 2022	Channel Estimation Techniques for CP-Aided OTFS Systems Relying on Practical Pulse Shapes	A. Mehrotra, R. K. Singh, Suraj Srivastava, and A. K. Jagannatham	2022	DOI: 10.1109/SPCOM55316.2022.9840771		Bangalore, India

110.	Accepted for presentation in IEEE Statistical Signal Processing Workshop (SSP), 2023	Dictionary Learning (DL)-based Sparse Cascaded Channel Estimation in IRS-assisted Terahertz MU-SIMO Systems With Hardware Impairments	P. Maity, S. Khatri, S. Srivastava, and A. K. Jagannatham	2023			Vietnam
111.	Accepted for presentation in IEEE Statistical Signal Processing Workshop (SSP), 2023	Sparse Estimation in mmWave MIMO-OFDM Joint Radar and Communication (JRC) Systems	M. Jafri, S. Anwer, S. Srivastava, and A. K. Jagannatham	2023			Vietnam
112.	IEEE Future Networks World Forum (FNWF), Montreal, QC, Canada	Massive MIMO	Haijian Sun, Chris Ng, Yiming Huo, Rose Qingyang Hu, Ning Wang, Chi-Ming Chen, Kasturi Vasudevan <i>et. al.</i>	2022		1 -- 51	IEEEExplore Contributed section 21.
113.	2022 IEEE Wireless	Secure and Private Fountain	Japneet Singh,	2022	-	-	Austin, TX

	Communications and Networking Conference (WCNC)	Code based Architecture for Blockchains	Adrish Banerjee, and Hamid Sadjadpour				
114.	2022 IEEE International Symposium on Information Theory (ISIT)	On Homopolymers and Secondary Structures Avoiding, Reversible, Reversible-Complement and GC-balanced DNA Codes	Krishna Gopal Benerjee and Adrish Banerjee	2022	-	240-245	Espoo, Finland
115.	2022 IEEE International Symposium on Information Theory (ISIT)	New Family of Cross Z-Complementary Sequences With Large ZCZ Width	Shibsankar Das, Adrish Banerjee, and Zilong Liu	2022	-	558-563	Espoo, Finland
116.	2022 IEEE International Conference on Signal Processing and Communications (SPCOM)	On Effect of Different Sequence Distributions on ISI in an MCvD System	Tamoghno Nath, Krishna Gopal Benerjee, and Adrish Banerjee	2022	-	-	Bangalore, India
117.	58th Allerton Conference on Communication,	Bounds on Reversible, Complement,	Krishna Gopal Benerjee	2022	-	-	Monticello, IL

	Control, and Computing, Sept 2022	Reversible-Complement, Constant Weight Sum Codes	and Adrish Banerjee				
118.	IEEE Information Theory Workshop (ITW)	Design of DNA Codes with Multiple Constraints Over the Ring $Z_4 + uZ_4 + u^2Z_4$ with $u^3 = 1$	Shibsankar Das, Krishna Gopal Benerjee, and Adrish Banerjee	2022	-	-	Mumbai, India
119.	29th National Conference on Communications (NCC)	On Secondary Structure Avoiding DNA Codes with Reversible and Reversible-Complement Constraints	Krishna Gopal Benerjee and Adrish Banerjee	2023	-	-	-
120.	IEEE Wireless Communication and Networking Conference	On Effect of Adversaries in a Cooperative MCvD Network and Filtering Mechanism	Tamoghno Nath and Adrish Banerjee	2023			Glasgow, Scotland, UK
121.	IEEE International Symposium on Information Theory	On Novel ISI-Reducing Channel Codes for Molecular Communication via Diffusion	Tamoghno Nath and Adrish Banerjee	2023			Taipei, Taiwan
122.	IEEE International	Bounds on Size of	Krishna	2023			Taipei,

	Symposium on Information Theory	Homopolymer Free Codes	Gopal Benerjee and Adrish Banerjee				Taiwan
123.	IEEE International Symposium on Information Theory	Two-Dimensional Z-Complementary Array Quads with Low Column Sequence PMEPRs	Shibsankar Das, Adrish Banerjee and Udaya Paramalli	2023			Taipei, Taiwan
124.	2023 IEEE Energy Conversion Congress and Exposition (ECCE)	A Smart Three-Port Converter for Interconnecting Grid, EV, and Solar-PV for Enhancing System Performance	Yash Nikhare, Jalaj Kumar and Suvendu Samanta	2023			Nashville, TN, USA
125.	2023 IEEE Applied Power Electronics Conference and Exposition (APEC)	Design of Different Symmetrical Bidirectional WPT Topologies Based on CC and CV Operating Modes for V2G Applications	R. Gupta, J. Kumar and S Samanta	2023			Orlando, FL, USA
126.	2022 IEEE International Conference on Power Electronics,	An On-Board Integrated Fast Charger Based on Multiphase	M. Singh, S. P. Das and S. Samanta	2022		1-6	Jaipur, India

	Drives and Energy Systems (PEDES)	Machine					
127.	2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)	Design and Control of Three Phase Single Stage Bi-Directional High Frequency Current Source Converter for EV Charging	A. Nath and S. Samanta	2022		1-6	Jaipur, India
128.	IECON 2022 – 48th Annual Conference of the IEEE Industrial Electronics Society	Comprehensive Study on Dynamic on-resistance Evaluation Circuit for Power GaN HEMTs Devices	R. Kumar, S. Samanta and T. -L. Wu	2022		1-6	Brussels, Belgium
129.	2022 IEEE Energy Conversion Congress and Exposition (ECCE)	Modeling, Design, and Control of a Single-Stage AC-AC Converter-based Inductive Power Transfer System with V2G Capability	J. Kumar and S. Samanta	2022		1-8	Detroit, MI, USA
130.	2022 Conference on Empirical Methods in Natural Language Processing (EMNLP)	TransLIST: A Transformer-Based Linguistically Informed Sanskrit Tokenizer	J. Sandhan, L. Behera, S. Samanta et. al.	2022			Abu Dhabi



131.	29th International Conference On Computational Linguistics (COLING22)	A Novel Multi-Task Learning Approach for Context-Sensitive Compound Type Identification in Sanskrit	J. Sandhan, L. Behera, S. Samanta et. al.	2022			Gyeongju, Republic of Korea
132.	2023 International Conference on Power, Instrumentation, Energy and Control (PIECON)	Design of Network Rejoin Policy in Multi-UAVs Flying Ad-hoc Network using Finite Time Convergent Position Control Scheme	S. Gupta, J. K. Mohanta and S. Samanta	2023		1-6	Aligarh, India
133.	2023 5th International Conference on Power, Control & Embedded Systems (ICPCES)	On Sliding Mode based Event-Trigger Control of a Micro Aerial Robot for Perching on Vertical Outdoor Structure	S. Gupta and S. Samanta	2023		1-6	Allahabad, India
134.	2023 National Conference on Communications (NCC)	Meditative State Classification Using Neuronal Multi-IMF Band Power and Complexity Features	S. Singh, V. Gupta, T. K. Reddy, L. Behera and S. Samanta	2023		1-6	Guwahati, India
135.	2022 IEEE Silchar Subsection	Control Design for Vertical Wall-	S. Gupta, J. K.	2022		1-6	Silchar, India

	Conference (SILCON)	perching of Aerial Robot with Event-Triggered Control Approach	Mohanta, L. Behera and S. Samanta				
136.	07 <sup>th</sup> IEEE Electron Devices Technology and Manufacturing (EDTM) Conference	Vanadium Dioxide Series and Shunt RF Switches Synthesized using Low Thermal Budget Process	Abhishek Mishra, Ashok P, Yogesh Singh Chauhan, and Amit Verma	2023			Seoul, Korea
137.	IEEE International Conference on Emerging Electronics (ICEE)	Experimental Demonstration of VO <sub>2</sub> based Lateral/Vertical Devices and Relaxation Oscillator with an Ultra-low Thermal Budget Process	Ashok P, Yogesh Singh Chauhan, and Amit Verma	2022			Bengaluru, India
138.	2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Low Cost Polarization Insensitive L Band FSS Absorber Based on Screen Printing Technique	Rahul Vishwakarma, Jyoti Yadav, Mondeep Saikia, Amit Verma, and K. V. Srivastava	2022			Bengaluru, India
139.	ISITA 2022	2022	Vikrant	2022			Tsukuba,

		Internatuonal Symposium on Information Theory and Applications, Tsukuba, Japan	Malik and Rakesh Kumar Bansal				Japan
140.	IEEE PES General Meeting 2023	A Unique Energy Management Scheme for Harnessing Electric Vehicle Potential to Improve Grid Resiliency	Diksha Singh, Mukesh Maurya, M V Gururaj, L Behera	16-20 July 2023	-	-	Florida, USA
141.	IEEE PES General Meeting 2023	Implementation of a Solar-Wind hybrid Charging Station For Electric Vehicles	Ravikant Yadav, Mukesh Maurya, M.V.Guru raj	16-20 July 2023	-	-	Florida, USA
142.	IEEE PES General Meeting 2023	A New Iterative Mixed Integer Linear Programming Algorithm for Energy Management in Active Unbalanced Distribution Networks	Subho Paul, Gururaj Mirle Vishwanath, Narayana Prasad Padhy	16-20 July 2023	-	-	Florida, USA
143.	IEEE PEDES 2022	Implementation of grid connected	Ravikant Yadav,	Dec 14-17 2022	-	-	MNIT Jaipur

		solar-wind system with charging station for electric vehicles	Mukesh Maurya, M.V. Gururaj				
144.	IEEE GUCON 2022	Simulation of Parallel-Series Converter in Open Loop and Closed Loop for Wireless Power Transfer	Mayank Arora, M V Gururaj, Ankush Sharma	September 23-25, 2022	-	-	India Habitat Centre, New Delhi
145.	International Symposium on Circuits and Systems (ISCAS 2023)	An Automatic Leakage Compensation Technique for Capacitively Coupled class-AB Operational Amplifiers,	Abhishek Kumar, Shubham Sahay and Imon Mondal	2023			Monterey, USA
146.	Proc. of the International Conference on Machine Learning (ICML)	Sharpened Quasi-Newton Methods: Faster Superlinear Rate and Larger Local Convergence Neighborhood	Q. Jin, A. Koppel. K. Rajawat, A. Mokhtari	2022	162	10228-10250	Baltimore, Maryland, USA
147.	Proc. of the International Conference on Machine Learning (ICML)	"FedNew: A Communication-Efficient and Privacy-Preserving Newton-Type Method for	A. Elgabli, C. B. Issaid, A. S. Bedi, K. Rajawat, M.	2022	162	5861-5877	Baltimore, Maryland, USA

		Federated Learning	Bennis, and V. Aggarwal				
148.	Proc. of the International Conference on Automation, Robotics, and Applications	Distributed Optimisation under a Weight-unbalanced Digraph	P. P. Pradhan, A. Sen, M. Kothari and K. Rajawat	2023	9		Abu Dhabi, UAE
149.	Proc. of the Asilomar Conf. on Signals, Systems, and Computers	Fairness Aware Machine Learning Models via Compositional Stochastic Programming	S. Teja T., Harshvardhan, K. Rajawat	2022	56		Pacific Grove, CA, USA
150.	Proc. of the Asilomar Conf. on Signals, Systems, and Computers	A Variance Reduced Nonconvex Stochastic Optimization Framework For Online Kernel Learning	H. Pradhan, K. Rajawat	2022	56		Pacific Grove, CA, USA
151.	IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)	On Submodular Set Cover Problems for Near-Optimal Kernel Basis Selection,	H. Pradhan, K. Rajawat, A. Koppel	2022		4168-4172	Singapore
152.	2022 IEEE 6th International Conference on Condition	Molecular Dynamics Simulations of a Cross-linked	P. Das and N. Gupta	2022	Nil	344-347	Durgapur, India

	Assessment Techniques in Electrical Systems (CATCON)	Epoxy-resin Sample					
153.	2022 IEEE 4th International Conference on Dielectrics (ICD)	A Three-Dimensional Stochastic Model for the Study of Treeing in Epoxy and its Nanocomposites	M. M. Bordeori and N. Gupta	2022	Nil	625-628	Palermo, Italy
154.	2022 IEEE 4th International Conference on Dielectrics (ICD)	Effect of Insulating Binders on the Performance of Supercapacitors	K. Chatterjee and N. Gupta	2022	Nil	189-192	Palermo, Italy
155.	2022 IEEE 4th International Conference on Dielectrics (ICD)	The effect of Surface Traps on the Interfacial Charge Dynamics in Layered Dielectrics	B. Sriram and N. Gupta	2022	Nil	193-196	Palermo, Italy
156.	2022 IEEE 4th International Conference on Dielectrics (ICD)	Electrical Resistance Tomography (ERT) applied to Epoxy composites	R. Phartiyal, P. K. Agnihotri and N. Gupta	2022	Nil	777-780	Palermo, Italy
157.	Conference on Lasers and Electro-Optics (CLEO)	Photonic Chern insulators from two-dimensional atomic lattices interacting with a	Rituraj, Meir Orenstein, Shanhui Fan	2022			San Jose, CA, USA

		single surface plasmon polariton					
158.	National Power Systems Conference (NPSC) (NPSC 2022)	Comprehensive demonstration of man-in-the-middle attack in PDC and PMU network	K. P. Swain, A. Tiwari, A. Sharma, A. Karkare, and S. Chakrabarti	2022			New Delhi
159.	National Power Systems Conference (NPSC) (NPSC 2022)	Key Insights on methods for estimation of decaying DC component in fault currents	B. R. Kumar, A. Mohapatra, and S. Chakrabarti	2022			New Delhi
160.	National Power Systems Conference (NPSC) (NPSC 2022)	State estimation of the transmission system in the presence of unbalanced load at the transmission distribution boundary	N. K. Sharma, S. Chakrabarti, and A. sharma	2022			New Delhi
161.	National Power Systems Conference (NPSC) (NPSC 2022)	An impact study of time of use pricing on voltage control devices	C. L. Dewangan, M. Satapathy, S. Chakrabarti	2022			New Delhi

			ti, and S. N. Singh				
162.	IEEE PES ISGT ASIA 2022	Real time detection and control of loss of synchronism using energy function criterion and phase sequence exchange technique	N. Singh, S. Chakrabarti, and A. Sharma	2022			Singapore
163.	IEEE PES ISGT ASIA 2022	Locating faulty section in tie- line using classification based methods	V. S. Patel, A. Kapoor, A. Sharma, and S. Chakrabarti	2022			Singapore
164.	IEEE Power & Energy Society General Meeting (PESGM)	DPMU-based event classification in microgrids using time domain and spectral features of limited measurements	S. Som, R. Dutta, A. Mitra, S. Chakrabarti, and S. R. Sahoo	2022			Denver, USA
165.	80 <sup>th</sup> Device Research Conference (DRC)	Revisiting GIDL in NWFETs for 1T-DRAM	Anupam Kumar Jaiswal, Sharang Dhar Patel	2022	-	1-2	Ohio, USA



			and Shubham Sahay				
166.	IEEE 22 <sup>nd</sup> International Conference on Nanotechnology (NANO) 2022	Novel 1T-DRAM based on L-BTBT	Anupam Kumar Jaiswal, Sharang Dhar Patel and Shubham Sahay	2022	-	1	Palma de Mallorca , Spain
167.	54 <sup>th</sup> International Conference on Solid State Devices and Materials (SSDM)	Analytical Modeling of Intrinsic Threshold Voltage and Subthreshold Slope for 3D NAND Flash Memory with a Gaussian Doping Profile	Amit Kumar, and Shubham Sahay	2022	-	1-2	Chiba, Japan
168.	56 <sup>th</sup> IEEE International Symposium on Circuits & Systems (ISCAS)	An Automatic Leakage Compensation Technique for Capacitively Coupled class-AB Operational Amplifiers	Abhishek Kumar, Imon Mondal and Shubham Sahay	2023	-	1-4	Montere y, USA
169.	ACA Internation Symposium	Boundary Surveillance Using a Novel	P Shrivastav a, T	2022	-	293-298	Mumbai

		Target Switching Technique	Tripathy, A Sinha				
170.	Indian Control Conference	Nonlinear Opinion Dynamics using Disagreement Laplacian Flows in Antagonistic Networks	A Shrinath, T Tripathy, L Behera	2022	-	278-283	Chennai
171.	American Control Conference	Generation of Range-based Trajectories Using a Unicycle	R. Gupta, T. Tripathy	2023	-		San Diego
172.	ICLR 2023	Wav2Tok: Deep Sequence Tokenizer for Audio Retrieval	Adhiraj Banerjee and Vipul Arora	2023	-	-	Kigali
173.	ICASSP 2023	Simultaneously Learning Robust Audio Embeddings And Balanced Hash Codes For Query-By-Example	Anup Singh, Kris Demuynck and Vipul Arora	2023	-	-	Greece
174.	ICASSP 2023	Balanced Deep CCA for Bird Vocalization Detection	Sumit Kumar, Anshuman B., Linus Ruettimann, Richard Hahnloser and Vipul Arora	2023	-	-	Greece

175.	ICASSP 2023	SyncNet: correlating objective for time delay estimation in audio signals	Akshay Raina and Vipul Arora	2023	-	-	Greece
176.	IEEE National Conference on Communications	Parturition Hindi Speech Dataset for Automatic Speech Recognition	Vansh Bansal, Thishyan Raj T, Nagarathn a Ravi, Shubham Korde, Jaskaran Kalra, Sudha Murugesan, Ramkrishn an B, Aboli Gore and Vipul Arora	2023	-	-	India
177.	Intl. Symp. Music Inf. Retrieval (ISMIR)	Attention-Based Audio Embeddings for Query-by- Example	Anup Singh, Kris Demunych and Vipul Arora	2022	-	-	India
178.	IEEE National Conference on Communications	Comparative Performance Analysis of Scalp	Vartika Gupta, Tushar	2022	-	-	India

		EEG and Ear EEG Based P300 Ambulatory Brain-Computer Interfaces Using Riemannian Geometry and Convolutional Neural Networks	Kendre, Tharun Reddy, Vipul Arora				
179.	Frontiers of Research in Speech and Music Conference	Continual Learning For Singing Voice Separation With Human In The Loop Adaptation	Ankur Gupta, Anshul Rai, Archit Bansal and Vipul Arora	2022	-	-	India
180.	IEEE Electron Devices Technology and Manufacturing Conference (EDTM)	A Width-Scalable SPICE Model of GaN-HEMTs for X-band RF Applications	M. H. Ansari, R. Dangi, A. Pampori, P. Kushwaha , E. Yadav, S. Sinha, and Y. S. Chauhan	2023			Seoul, Korea
181.	IEEE Electron Devices Technology and Manufacturing Conference	Cryogenic Characterization and Model Extraction of 5nm Technology	S. S. Parihar, G. Pahwa, J. Z. Huang, W. Wang,	2023			Seoul, Korea

	(EDTM)	Nodes FinFETs	K. Imura, C. Hu, and Y. S. Chauhan				
182.	IEEE Electron Devices Technology and Manufacturing Conference (EDTM)	Analysis and Modeling of OFF-state Capacitance in LDD MOSFETs	A. Sharma, R. Goel, and Y. S. Chauhan	2023			Seoul, Korea
183.	IEEE Electron Devices Technology and Manufacturing Conference (EDTM)	Vanadium Dioxide Series/Shunt RF Switches Synthesized using Low Thermal Budget Process	A. Mishra, Ashok P, Y. S. Chauhan, and A. Verma	2023			Seoul, Korea
184.	IEEE Electron Devices Technology and Manufacturing Conference (EDTM)	Characterization and Modeling of I-V, C-V and Trapping behaviour of SiC Power MOSFETs	M. S. Nazir, A. Pampori, Y. Hayat, A. Kar, and Y. S. Chauhan	2023			Seoul, Korea
185.	IEEE Electron Devices Technology and Manufacturing Conference (EDTM)	High-Frequency Characterization and Modeling of Low and High Voltage FinFETs for RF SoCs	Y. S. Chauhan, A. Kar, S. S. Parihar, J. Z. Huang, H. Zhang, W. Wang, and K. Imura	2023			Seoul, Korea

186.	IEEE International Conference on Emerging Electronics (ICEE)	Experimental Demonstration of VO <sub>2</sub> based Lateral/Vertical Devices and Relaxation Oscillator with an Ultra-low Thermal Budget Process	Ashok P, Y. S. Chauhan, and A. Verma	2022			Bengaluru
187.	IEEE International Conference on Emerging Electronics (ICEE)	On the Memory Window Variability in a 3-D Multi-Granular Ferroelectric FET Including Grain Boundaries	N. Pandey, A. Phogat, and Y. S. Chauhan	2022			Bengaluru
188.	IEEE International Conference on Emerging Electronics (ICEE)	Improved Surface Potential Based Compact Model for Bulk MOSFETs at Cryogenic Temperatures	W. Manzoor, R. Goel, A. K. Dutta, and Y. S. Chauhan	2022			Bengaluru
189.	IEEE International Conference on Emerging Electronics (ICEE)	Extremely Scaled Silicon Nanosheet Transistors	K. Nandan, A. Agarwal, S. Bhowmick, and Y. S. Chauhan	2022			Bengaluru
190.	IEEE International	Micromagnetic	V. N.	2022			Bengaluru

	Conference on Emerging Electronics (ICEE)	Simulations of Magnetization Dynamics due to Position-dependent Spin-Orbit Torque from Topological Insulator	Bhukya, R. Dey, and Y. S. Chauhan				u
191.	IEEE International Conference on Emerging Electronics (ICEE)	Recent Enhancements in the Standard BSIM-BULK MOSFET Model	A. Sharma, Y. H. Zarkob, R. Goel, C. K. Dabhi, G. Pahwa, C. Hu, and Y. S. Chauhan	2022			Bengaluru
192.	9th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON-2022)	S-Band GaN based Power Amplifier with Symmetric Matching Network	M. Zaid, A. Pampori, R. Dangi, and Y. S. Chauhan	2022			Prayagraj, India
193.	9th IEEE Uttar Pradesh Section International Conference on Electrical Electronics and	16 Watt S-Band GaN Based Power Amplifier Using Replicating Stages	M. Zaid, A. Pampori, and Y. S. Chauhan	2022			Prayagraj, India

	Computer Engineering (UPCON-2022)						
194.	30th IFIP/IEEE International Conference on Very Large Scale Integration	Cross-layer FeFET Reliability Modeling for Robust Hyperdimensional Computing	S. Kumar, S. Chatterjee, S. Thomann, P. R. Genssler, Y. S. Chauhan, and H. Amrouch	2022			Patras, Greece
195.	4th International Workshop on Gallium Oxide and Related Materials (IWGO2022)	Insights from Independent Control of Gallium Precursor and Substrate Temperature during LPCVD of $\beta$ -Ga <sub>2</sub> O <sub>3</sub>	G. Joshi, Y. S. Chauhan, and A. Verma	2022			Nagano, Japan
196.	International Conference on Simulation of Semiconductor Processes and Devices (SISPAD)	Characterization and Modeling of Drain Lag using a Modified RC Network in the ASM-HEMT Framework	M. S. Nazir, A. Pampori, R. Dangi, P. Kushwaha, E. Yadav, S. Sinha, and Y. S. Chauhan	2022			Granada, Spain



197.	International Conference on Simulation of Semiconductor Processes and Devices (SISPAD)	Ferroelectric FDSOI Modeling for Memory and Neuromorphic Applications	S. Chatterjee, S. Kumar, A. D. Gaidhane, C. K. Dabhi, H. Amrouch, and Y. S. Chauhan	2022			Granada, Spain
198.	26th International Symposium on VLSI Design and Test (VDATE-2022)	A GaN based Reverse Recovery Time Limiter Circuit Integrated with A Low Noise Amplifier	N. Bajpai and Y. S. Chauhan	2022			Jammu
199.	IEEE International Symposium on Circuits & Systems (ISCAS)	Novel FDSOI-Based Dynamic XNOR Logic for Ultra-Efficient High-Dense Computing	S. Kumar, S. Chatterjee, C. K. Dabhi, H. Amrouch, and Y. S. Chauhan	2022			Austin, USA
200.	IEEE International Symposium on Circuits & Systems (ISCAS)	Novel FDSOI-Based Dynamic XNOR Logic for Ultra-Efficient High-Dense Computing	S. Kumar, S. Chatterjee, C. K. Dabhi, H. Amrouch, and Y. S. Chauhan	2022			Austin, USA

201.	80th Device Research Conference (DRC)	Self-Heating characterization and modeling of 5nm technology node FinFETs	S. S. Parihar, J. Z. Huang, W. Wang, K. Imura, and Y. S. Chauhan	2022			Ohio, USA
202.	80th Device Research Conference (DRC)	Impact of Corner Rounding on Quantum Confinement in GAA Nanosheet FETs for Advanced Technology Nodes	A. Kar, S. Sarker, A. Dasgupta, and Y. S. Chauhan	2022			Ohio, USA
203.	80th Device Research Conference (DRC)	A geometry-scalable SPICE compact model for self-heating in GaN HEMTs	R. Dangi, A. Pampori, P. Kushwaha, E. Yadav, S. Sinha, and Y. S. Chauhan	2022			Ohio, USA
204.	IEEE Symposium on VLSI Technology and Circuits	Asymmetric Double Gate Ferroelectric FET to Break the Tradeoff Between Thickness Scaling and Memory	Z. Jiang, Y. Xiao, S. Chatterjee, H. Mulaosmanovic, S.	2022			Hawaii, USA

		Window	Duenkel, S. Soss, S. Beyer, R. Joshi, Y. S. Chauhan, H. Amrouch, V. Narayanan , and K. Ni				
205.	2022 International Conference on Software, Telecommunicatio ns and Computer Networks (SoftCOM)	Adaptive Weights-based Dynamic Resource Provisioning in Space Division Multiplexed- Elastic Optical Networks (SDM- EONs)	A. Sharma, B. S. Heera, V. Lohani and Y. N. Singh	2022		1-6	
206.	arXiv preprint arXiv:2206.04933	Availability- Aware Dynamic RSA with Protection using Consecutive Sub- Channels	V Lohani, A Sharma, YN Singh	2022			
207.	2022 Workshop on Recent Advances in Photonics (WRAP)	Fragmentation- Aware Routing, Core and Spectrum Assignment in	A. Sharma, B. S. Heera, V. Lohani	2022			

		Multi-Core Fiber based SDM-EON	and Y. N. Singh				
208.	SSRN	Improving Double Fault Tolerance in Optical Network Using Impact Zone	Athe, Pallavi and Singh, Yatindra Nath	2022			
209.	CEP Course on Signal Processing for RF and Other domains of Communication, DEAL, DRDO	Discrete Time Signal Processing for Digital Communications	K Vasudevan	2023			Dehradun, India
210.	WCAM-2023	OFDM-OQAM using Hilbert Transform	K Vasudevan, Gyanesh Kumar Pathak, Surendra Kota and Lov Kumar,	2023			Tokyo Japan
211.	Digital Holography and Three-Dimensional Imaging, OSA Imaging and Applied Optics Congress	Fringe Pattern Defect Identification Using Kalman Filter and Machine Learning	Dhruvam Pandey and Rajshekhar Gannavarpu	2022		W2A.6	USA
212.	Digital Holography and Three-	Displacement Derivative	Allaparthi Venkata	2022		W2A.7	USA

	Dimensional Imaging, OSA Imaging and Applied Optics Congress	Analysis Using Deep Learning in Digital Holographic Interferometry	Satya Vithin, Jagadesh Ramaiah, Dhruvam Pandey and Rajshekhar Gannavaru				
213.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	A Polarization-Insensitive Dual-Band Frequency Selective Resorber	P. K. Maharana, A. Sharma, S. Ghosh, and K. V. Srivastava	2022		pp. 341-346	Bangalore
214.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Resorber With Wide Absorption Band Before Transmission Band (A-T Type FSR)	A. K. Nigam, A. Sharma, S. Bhattacharya, S. Ghosh, and K. V. Srivastava	2022		pp. 357-362	Bangalore
215.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Design of an Optically Transparent Wideband Absorber With 15 dB Absorption Bandwidth for C,	S. Malik, G. Singh, J. Ramkumar, P. K. Mishra, and K. V.	2022		pp. 336-340	Bangalore

		X and Ku Band	Srivastava				
216.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Low Cost Polarization Insensitive L Band FSS Absorber Based on Screen Printing Technique	R. Vishwakarma, J. Yadav, M. Saikia, A. Verma, and K. V. Srivastava	2022		pp. 115-120	Bangalore
217.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Beam-Forming Antenna Based on Electrically Reconfigurable Frequency Selective Surface	R. K. Dutta, R.K. Jaiswal, M. Saikia, and K. V. Srivastava	2022		pp. 511-515	Bangalore
218.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	In-Band RCS Reduction of Microstrip Patch Antenna Using Artificial Magnetic Conductors at X-Band for Stealth Technology	B. Bandyopadhyay, R. K. Jaiswal, and K. V. Srivastava	2022		pp. 180-185	Bangalore
219.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Wideband Endfire Circularly Polarized Antenna Using Magnetolectric Dipole	R. K. Jaiswal, A. K. Ojha, K. Kumari, G. Das, C. Y. D. Sim, and K. V.	2022		pp. 640-644	Bangalore

			Srivastava				
220.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Enhancement of Oblique Incidence Performance of a Microwave Absorber Using Cylindrical Dielectric Resonator	J. Yadav, R. Vishwakarma, M. Saikia, K. V. Srivastava, and J. Ramkumar	2022		pp. 770-773	Bangalore
221.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	MIMO Dielectric Resonator Antenna with Multiple Diversity Techniques	G. Das, S. Bhattacharya, R.K. Jaiswal, R. Chaudhary, and K. V. Srivastava	2022		pp. 218-222	Bangalore
222.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Analysis of Protective Coating for Optically Transparent Microwave Metamaterial Absorber	K. Chaudhary, A. Bhardwaj, R. Vishwakarma, J. Ramkumar, S. A. Ramakrishna, and K. V. Srivastava	2022		pp. 89-92	Bangalore
223.	IEEE Microwaves, Antennas, and	Time Modulation Using Switchable	M. Saikia and K. V.	2022		pp. 1848-1851	Bangalore

	Propagation Conference (MAPCON)	Frequency Selective Surface	Srivastava				
224.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Energy Optimization in Laser Micro-Machining of Transparent Metamaterial Absorber	S. Bhattacharya, Rajkumar, K. Chaudhary, K. V. Srivastava, and J. Ramkumar	2022		pp. 106-110	Bangalore
225.	URSI Regional Conference on Radio Science (USRI-RCRS)	Design of Two layer Frequency Selective Resorber for Dual Band Absorption and In Band Transmission	A. Dileep, A. Sharma, M. Saikia, S. Paul, R. K. Chaudhary and K. V. Srivastava	2022		pp. 1-4	Indore
226.	52nd European Microwave Conference	A Resorber with a Selective in-Band Transmission Response between Wide Absorption Bands	Aditi Sharma, Mondeep Saikia, Saptarshi Ghosh and Kumar Vaibhav Srivastava	2022		pp. 724-727	Milan, Italy
227.	52nd European	An Optimized	Alok	2022		pp. 460-463	Milan,



	Microwave Conference	Six-Step LOD-FDTD Method using the Artificial Anisotropy Parameters	Kumar Saxena and Kumar Vaibhav Srivastava				Italy
228.	52nd European Microwave Conference	A Dual-Band Millimeter Wave SRR Loaded Printed Monopole with Annular Slot MIMO Antenna for 5G Applications	Priyank Mishra, Maharana Pratap Singh, Aditi Sharma, Kumar Vaibhav Srivastava and Saptarshi Ghosh	2022		pp. 552-555	Milan, Italy
229.	IEEE USNC-URSI Radio Science Meeting (Joint with AP-S Symposium),	Characterization and Reduction of Bistatic Radar Cross Section of Hollow Cylindrical Cavity	Sudeb Bhattacharya and K. V. Srivastava	2022		pp. 42-43	Denver, Colorado, USA
230.	IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT)	A New Grid connected Doubly Grounded PV Micro-inverter with Power Decoupling Capability	A. Jamatia and P. Sensarma	2023			Male, Maldives

231.	IEEE Energy Conversion Congress and Exposition (ECCE)	Design and Analysis of a 54-Pulse Converter and 7-Level Hybrid Inverter for Medium Voltage Induction Motor Drive	Rohit Kumar, Bhim Singh and Piyush Kant	2022		1-7	Detroit, MI, USA
232.	Second International Conference on Power, Control and Computing Technologies (ICPC2T)	Multipulse Converter Fed New 7-Level Cascaded Multilevel Inverter Based Induction Motor Drive	Piyush Kant and Bhim Singh	2022		1-6	Raipur, India
233.	2022 IEEE International Conference on Emerging Electronics (ICEE)	Micromagnetic simulation of magnetization dynamics due to position dependent spin-orbit torque from topological insulator	V. N. Bhukya, R. Dey, Y. S. Chauhan	2022		1-5	Bangalore

**Department of Humanities and Social Sciences**

234.	New Agendas for Design: Principles of Scale, Practices of Inclusion  Seventeenth International	Universal Design Principles for Extreme Users: A Study of Ergonomics for Left Handed Users in	Abhinav Basak, Shatarupa Thakurta Roy	2023	Paper presented		Lisbon
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	<p>Conference on Design Principles &amp; Practices March 29 - 31, 2023</p> <p>Escola Superior de Educação de Lisboa, Campus de Benfica Lisbon, Portugal</p>	Graphical User Interface					
235.	<p>New Agendas for Design: Principles of Scale, Practices of Inclusion</p> <p>Seventeenth International Conference on Design Principles &amp; Practices</p> <p>March 29 - 31, 2023</p> <p>Escola Superior de Educação de Lisboa, Campus de Benfica Lisbon, Portugal</p>	<p>Design Improvement for Value Addition in Local Terracotta Pots (Online Presentation)</p> <p>Black Pottery of Nizamabad, India: Native Indian Techniques for Transforming Red Clay Pots into Black Pottery</p>	<p>Satyaki Roy</p> <p>Shatarupa Thakurta</p> <p>Roy Arman</p> <p>Ovla</p>	2023	Paper presented		
236.	<p>New Agendas for Design: Principles</p>	Re-thinking Through	<p>Tanvi Jain</p> <p>Shatarupa</p>	2023	Paper presented		

	<p>of Scale, Practices of Inclusion</p> <p>Seventeenth International Conference on Design Principles &amp; Practices</p> <p>March 29 - 31, 2023</p> <p>Escola Superior de Educação de Lisboa, Campus de Benfica Lisbon, Portugal</p>	<p>Materials: A move towards Material Literacy through the Practice of Ramkinkar Baij and Mrinalini Mukherjee</p> <p><u>Themed panel: paper presentation in a themed session</u></p>	Thakurta Roy		d		
237.	<p>New Agendas for Design: Principles of Scale, Practices of Inclusion</p> <p>Seventeenth International Conference on Design Principles &amp; Practices</p> <p>March 29 - 31, 2023</p> <p>Escola Superior de</p>	<p>Space Syntax Analysis of Traditional Mishing Architecture: Spatial Transformation and Social Change</p>	<p>Sharat Jyoti Kuli Shatarupa Thakurta Roy</p>	2023	<p>Paper presented</p>		

	Educação de Lisboa, Campus de Benfica Lisbon, Portugal						
238.	New Agendas for Design: Principles of Scale, Practices of Inclusion  Seventeenth International Conference on Design Principles & Practices  March 29 - 31, 2023  Escola Superior de Educação de Lisboa, Campus de Benfica Lisbon, Portugal	Votive Terracotta Idols of Molela : Sustainability of an Ageless Culture	Shatarupa Thakurta Roy	2023	Paper presented		
239.	New Agendas for Design: Principles of Scale, Practices of Inclusion  Seventeenth International Conference on	Design and Development of Graphic Healthcare Information Materials to Assist Health Communication	Rohit Kumar Shatarupa Thakurta Roy	2023	Paper presented		

	Design Principles & Practices  March 29 - 31, 2023  Escola Superior de Educação de Lisboa, Campus de Benfica Lisbon, Portugal	among Semi-literate Rural Population of India					
240.	International Congress of Psychological Science	Dynamic expression of basic emotions: Examining the relative advantage of face and body.	Mishra, R. & Bhushan, B.	9-11 March, 2023	Paper presented		Brussels, Belgium.
241.	32 <sup>nd</sup> Annual Convention of the National Academy of Psychology (NAOP)	Depression and anxiety during the COVID-19 pandemic: A network analysis and machine learning study	Ganai, U.J., Sachdev, S., & Bhushan, B.	3-5 March 2023	Paper presented		Ahmedabad University, Ahmedabad.
242.	IEEE International Conference on Systems, Man, and Cybernetics (SMC)	Maditation and cognitive enhancement: A machine learning based	Singh, S., Gupta, V., Reddy, T., Bhushan, B., &	October 9-12, 2022			Prague, Czech Republic

		classification using EEG	Behera, L.			
243.	The 22nd International Conference on Biomagnetism (BIOMAG)	Valence based emotions altered by emotion judgement taskObserver or expresser effect.	Nara, S., Bois, N.D., Bhushan, B.,, Rathee, D., Molinaro, N., Bigirimana, A.D., Keenan, M., Yogarajah, P., Gallagher, S., & Prasad, G.	BIOMAG, 28 August - 1 September 2022		University of Birmingham, UK.
244.	<b>7th International Conference on Human Interaction &amp; Emerging Technologies: Artificial Intelligence &amp; Future Applications (IHET-AI 2022)</b>	<b>Deep learning based approach for classification of Parkinsonian and essential tremor from convolved 2D image</b>	<b>Ranjan, R., Bhushan, B., &amp; Palaniswami, M.</b>	<b>April 21-23, 2022</b>		<b>Centre Hospitalier Universitaire Vaudois (CHUV), Switzerland</b>

245.	XX World Congress of Sociology, International Sociological Association	Emerging Platform Society: Analysing Prosumption and Digital Payments	Piergiorgio Degli Esposti (University of Bologna), Jillet Sarah Sam (IIT Kanpur)	June 2023			Melbourne, Australia
246.	International Sociological Association	Dealing with Credit Scores: The Work of Microfinance Loan Officers in Rural Gujarat, India	Kalpesh Kumar Ambalal Chauhan (IIT Kanpur), Jillet Sarah Sam (IIT Kanpur)	June 2023			Melbourne, Australia
247.	International Sociological Association	Understanding Cryptocurrencies from the Perspective of Social Institutions	Abhiram AH (IIT Kanpur), Jillet Sarah Sam (IIT Kanpur)	June 2023			Melbourne, Australia
248.	118 <sup>th</sup> Annual Meeting of the American	Platform Exoneration or Multi-Homing?	Shriram Venkatraman	August 2023			Philadelphia, United



	Sociological Association	The Case of WhatsApp as Value Networks in India	(Southern Denmark University), Jillet Sarah Sam (IIT Kanpur) and Rajorshi Ray (IIT Kanpur)				States of America
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**Department of Industrial & Management Engineering**

249.	43rd IAEE International Conference	A Market Simulation Model for Implementation of Market Based Economic Dispatch (MBED) in India	Singh, A., & Anand, H.	2022			Tokyo, Japan
250.	14th International Conference on Applied Energy (ICAE2022)	A Review on Smart Grid: Roadways to Peer-to-Peer Energy Trading	Singh, K., Singh, A.	2022			
251.	POMS India International Conference	Nurse Assignment and Routing Problem in Dynamic Environment	Ansari, Md S., Khanra, A.	2022			IIM Kozhikode

252.	International Conference on Data Analytics in Public Procurement and Supply Chain, (ICDAPS)	Integrated Blockchain architecture for end-to-end Receivables Management of Indian MSMEs	Kumar, D., Phani, B. V., Saurabh, S.	2022			
253.	International Conference on Shaping the Future of Management Education for Sustainable Emerging Economies (SFME )	Crisis Management and Innovation in Indian Manufacturing MSMEs Amidst COVID- 19 pandemic	Kumar, D., Phani, B. V., Saurabh, S.,	2022			
254.	IEOM 2022 Conference	A New Formulation of Multi Item Multi Period Capacitated Lot Sizing Problem With Setup Carryover, Inventory and Backorders (MIMPCLSPWSC)	Sharma, R. R. K., Verma, M, Verma, P., Lai, K. K.	2022			Orlando
255.	IEOM 2022 Conference	Single Vehicle Routing Problem with Quadratic, Cubic Objective	Sharma, R. R. K., Singh, V.	2022			Orlando

		Function and Negative Cost Coefficients And Its Linearization					
256.	IEOM 2022 Conference	Refinements To LP/LDR Model of Aggregate Planning	Sharma, R. R. K., Lai, K. K.	2022			Orlando
257.	IEOM 2022 Conference	A New Approach to Solving Lot Sizing Problem with shortage, inventory and setup cost	Sharma, R. R. K., Singh, V., Sontakke, S., Lai, K. K.	2022			Orlando
258.	IEOM 2022 Conference	HR Analytics for Employee Turnover	Sharma, R. R. K., Niraj K.V., Gunjan, R.	2022			Orlando
259.	IEOM 2022 Conference	Taguchi Methods, Internet of Things (IoT) and Production Planning and Control in Additive Manufacturing (AM): A Brief Literature Review	Sharma, R. R. K., Singh, V., Lai, K. K.	2022		38-39	Rome
260.	IEOM 2022	Holonic (HM), Fractal (FM) And	Sharma, R. R. K.,	2022		40-45	Rome

	Conference	Bionic Manufacturing (BM): A Brief Literature Review and Few Propositions	Singh, V., Lai, K. K.				
261.	IEOM 2022 Conference	Behavioral Finance and Portfolio Optimisation Problem	Sharma, R. R. K., Singh, V., Koveri, P., Lai, K. K.	2022		60-66	Rome
262.	IEOM 2022 Conference	Locating Hospitals in a City	Sharma, R. R. K., Singh, V., Anshhul	2022		53-59	Rome
263.	IEOM 2022 Conference	Locating Fire Stations in a City	Sharma, R. R. K., Singh, V., Uddayan, P.	2022		46-52	Rome
264.	IEOM 2022 Conference	Types of HR Analytics used for the prediction of Employee Turnover in different Strategic Firms with the use of Enterprise Social Media	Gupta, S., Sharma, R. R. K.	2022		1977-1994	Rome
265.	International Conference on	Relating the Use of Different Type	Gupta, S., Sharma,	2022		379-383	Kuala Lumpur,

	Industrial Engineering and Engineering Management	of HR Analytics in Different Strategic Firms with the Use of Social Media within the Organization	R. R. K.				Malaysia
266.	12th Conference on Excellence in Research and Education (CERE)	ESG Disclosure and Firm Risk: A Case of India's Environmentally Sensitive Sector	P. Roy, S. Saurabh	2022			
267.	2nd AIMA-ICRC Case Writing Competition and Conference (CWCC)	Signs of Financial Distress at Jet Airways – The Way Forward	S. Saurabh, P. Roy,	2022			
268.	International Conference on Banking and Finance (ICBF),	Non-financial Disclosure and Firm Risk: A Case of India's Environmentally Sensitive Sector	P. Roy, S. Saurabh	2022			
269.	World Finance and Banking Symposium (WFB S)	Does the ESG Disclosure during uncertain environment offer substantial opportunities in the Indian Stock Market?	S. Saurabh, P. Roy	2022			

270.	India Finance Conference	Does the ESG Disclosure during uncertain environment offer substantial opportunities in the Indian Stock Market?	S. Saurabh, P. Roy,	2022			
271.	International Conference on Sustainable Goals	Does the ESG Disclosure during uncertain environment offer substantial opportunities in the Indian Stock Market?	S. Saurabh, P. Roy	2022			
272.	International conference Net Zero Emission Technologies for Sustainable Development: Challenges and Opportunities (N0ET 2022)	Green steel in India: Opportunity and Uncertainty	Prasad, M., Garg, A.	2022			Dhanbad /online
273.	International Conference on Sustainable Business Management	Completion time minimization in parallel machine scheduling with energy consideration	Keshri, K. Khanra, A.	2023			IIT Roorkee

274.	3rd International Business Analytics Conference (BAC)	Predicting Financially Constrained Firms Using Text Data	Jaydeep Amrutbhai Sarvakar, S. Saurabh	2023			
275.	3rd International Business Analytics Conference (BAC)	Bankruptcy Prediction Using Text-Based Sentiment Analysis on Indian Firms	Saurabh Kumar Gupta, S. Saurabh	2023			
276.	5th International Conference on Financial Markets and Corporate Finance (ICFMCF-2023)	ESG Disclosure and Information Asymmetry: Implications for Market Efficiency scheduled for presentation	P. Yadav, P. Roy, S. Saurabh	2023			
277.	Japan Society for Operations Research, Spring Research Conference 2023	How to dynamically switch dispatching rules in production scheduling	Yosuke Watabe, Yuichi Koga, Shankar Prawesh, Avijit Khanra, Faiz Hamid	2023			Miyagi, Japan
278.	Water-Energy-Food nexus in the	Energy Transition	Mousami Prasad	2023			Kanpur

	India-UK Symposium on Sustainability						
279.	15th International Green Energy Conference (IGEC- XV) organized by International Association for Green Energy	Unraveling India's solar power success in the last decade and its implications for the next decade	Mousami Prasad, Rajeev Jindal, Ankita Bhowmik, Rahul Sarooha, Ashish Garg	2023			Glasgow

**Department of Materials Science and Engineering**

280.	Advances in Materials Processing: Challenges and Opportunities AMPCO-2022	Recycling of E- waste Generated by Photovoltaic Modules	H. Trivedi, A. Meshram, R. Gupta	2022			Roorkee
281.	26th International Conference of Non-Ferrous Metals ICNFM- 2022	Understanding gas evolution from aluminium dross recycling: a review	A. Srivastava , A. Meshram	2022			Nagpur
282.	4th Structural Integrity Conference and Exhibition (SICE 2022)	Establishing process-structure linkages using Generative Adversarial Networks	Mohamma d Safiuddin, CH Likith Reddy, Ganesh Vasantada	2022			IIT Hyderab ad



			, CHJNS Harsha, S. Gangolu				
283.	IEEE ECTC	Thermal cycling induced interconnect stability degradation mechanism in low melting temperature solder joints	K. Young, R. Aspandiar, N. Badwe, S. Walwadkar, Y.W. Lee, T.K. Lee,	2022		1199-1205	San Diego
284.	SMTAI	Low melting temperature solder interconnect thermal cycling performance enhancement using elemental tuning	K. Young, N. Badwe, R. Aspandiar, S. Walwadkar, Y.W. Lee, T.K. Lee,	2022			Minneapolis
285.	NanoSPD 8	HPT studies on medium entropy alloys and understanding the role of GSFE on their deformation behavior	M. K. Das, A. K. Chandan, Swati Kumari, N. P. Gurao, N. Chawake	2023			IISc Bangalore, India
286.	ISNNM	17th International Symposium on Novel and Nano Materials	Shikhar Misra, Leigang Li, Di	2022			Jeju, South Korea

			Zhang, Jie Jian, Zhimin Qi, Meng Fan, Hou- Toung Chen, Xinghang Zhang, Haiyan Wang				
287.	AMPCO	Advances in Materials and Processing: Challenges & Opportunities	Shikhar Misra, Leigang Li, Di Zhang, Jie Jian, Zhimin Qi, Meng Fan, Hou- Toung Chen, Xinghang Zhang, Haiyan Wang	2022			Roorkee
288.	The 8th International Conference on Solid→Solid Phase Transformations in Inorganic Materials	Tailoring microstructure morphology by external Magnetic field in a binary system: Insights from Phase-field	Rupesh Chafle, Somnath Bhowmick , Rajdip Mukherjee	2022		155-157	China

		simulations					
289.	Proceedings of STIS-2022: Science and Technology of Ironmaking and Steelmaking	Numerical Simulation of Temperature Evolution in Refractory Sidewall during the Scrap Melting in a Lab-Scale DC Electric Arc Furnace	Dinesh Nath and Amarendra Kumar Singh	2022		319-323	Mumbai, India
290.	Proceedings of STIS-2022: Science and Technology of Ironmaking and Steelmaking	Study of Slag Formation and Foaming in Early Stages of Direct Reduced Iron (DRI)-Hot Metal (HM) based Electric Arc Furnace (EAF) Operation	Sumanta Maji and Amarendra Kumar Singh	2022		428-431	Mumbai, India
291.	2022 IEEE International Conference on Emerging Electronics (ICEE)	Extremely Scaled Silicon Nanosheet Transistors	K. Nandan, A. Agarwal, S. Bhowmick, Y. Chauhan	2022		1-5	Bangalore
<b>Department of Mathematics &amp; Statistics</b>							
292.	<b>A Conference in honour of Professor Koranyi</b>		Rama Rawat	2022			Dept. of Mathematics, IISc.

293.	<b>IJCAI 2022</b>	"Achieving Envy-Freeness with Limited Subsidies under Dichotomous Valuations"	Siddharth Barman, Anand Krishna, Y. Narahari, and Soumyarup Sadhukhan	2022			Vienna, Austria
294.	<b>WINE 2022</b>	"Nash Welfare Guarantees for Fair and Efficient Coverage"	Siddharth Barman, Anand Krishna, Y. Narahari, and Soumyarup Sadhukhan	2022			NY, USA
295.	<b>AAMAS 2023</b>	"Individual-Fair and Group-Fair Social Choice Rules under Single-Peaked Preferences" (Accepted as Extended Abstract)	Gogulapati Sreedurga, Soumyarup Sadhukhan, Souvik Roy, and Y.	2023			London

			Narahari				
296.	The 25th International Conference on Artificial Intelligence and Statistics	AISTATS	Roy, S., Ray Choudhury, J. and Dutta, S.	2022	151	9943-9968	PMLR
297.	Symposium talk	37th Annual Conference of the Ramanujan Mathematical Society	Kaushik Bal	2022			
<b>Department of Mechanical Engineering</b>							
298.	International Conference on Fluid Mechanics and Fluid Power (FMFP-2022)	Influence of capillary forces on evolving jets during single drop impact and dynamics of two drops falling in tandem on a liquid pool	Gautam Biswas	2022	--	Keynote Address	
299.	International (Indo-French) Research Network WORKSHOP IISc Bangalore	Dynamics of Evolving Jets during Drop Impact on a Deep Liquid Pool	S.K. Das, A. Dalal, G. Biswas	2022	---	Invited Talk	
300.	International Conference on Vibration Problems, ICOVP 2023	Damping chatter vibrations of a boring bar by an integrated impact damper	A Patel, M Law, P Wahi	2023	-	-	Doha, Qatar

301.	International Conference on Vibration Problems, ICOVP 2023	A compressed sensing framework to recover cutting tool modal parameters from aliased video	H S Rajput, M Law	2023	-	-	Doha, Qatar
302.	COPEN12, Manufacturing Technology Today	Machine tool multibody dynamic model updating using vision-based modal analysis	V Singh, M Law	2023	22 (2)	23-28	Kanpur, India
303.	COPEN12, Manufacturing Technology Today	Learning machining stability using a bayesian model	A Pujari, HS Rajput, M Law, MK Singh	2023	22 (2)	10-16	Kanpur, India
304.	COPEN12, Manufacturing Technology Today	Learning machining stability diagrams from data using neural networks	NA Shanavas, M Law, MK Singh	2023	22 (2)	29-41	Kanpur, India
305.	COPEN12, Manufacturing Technology Today	Recovering cutting tool modal parameters from randomly sampled signals using compressed sensing	HS Rajput, M Law	2023	22 (2)	29-41	Kanpur, India
306.	COPEN12, Manufacturing Technology Today	Influence of Process Damping on the	S Singhania, M Law	2023	22	-	Kanpur, India

		Regenerative Instability of Guided Metal Circular Sawing					
307.	COPEN12, Manufacturing Technology Today	Obtaining subpixel level cutting tool displacements from video using a CNN architecture	V Raizada, M Law	2023	22	-	Kanpur, India
308.	COPEN12, Manufacturing Technology Today	Vibration Suppression of a Slender Boring Bar by an Impact Damper	A Patel, M Law, P Wahi	2023	22	-	Kanpur, India
309.	4th International Conference on Machine Learning, Image Processing, Network Security and Data Sciences, MIND 2022	Bayesian Learning Model for Predicting Stability of System with Nonlinear Characteristics	A Pujari, HS Rajput, M Law, M Singh	2023	-	-	Virtual Event
310.	AIMTDR 2021, Advances in Forming, Machining and Automation: Select Proceedings of AIMTDR 2021	Emulating chatter with process damping in turning using a hardware-in-the- loop simulator	GN Sahu, P Jain, M Law, P Wahi	2022	-	-	Hybrid event, Coimbat ore
311.	Select proceedings of FMFP (Fluid Mechanics and	Simulation of Discharge of a Lithium Oxygen	Abhinav Maheshwa ri,	2021 (proceedi ngs	3	515-522	India

	Fluid Power) 2021, Springer Nature Singapore	Battery	Maryam Raza Khan, Himanshu Mishra, Prakhar Mishra, MK Das, M Jithin	published on 2023)			
312.	-do-	Optimization of Depressurization and Injection Pressures for Safe and Sustainable Gas Recovery from Hydrate Reservoirs	Anushka Sreshth, Rahul Yadav, Malay K Das	-do-	2	59-64	India
313.	9th International and 49th National Conference on Fluid Mechanics and Fluid Power.	The effect of riblet shapes on Flow structures	Ishita Jain, Issam Wajih and S. Sarkar	2022		FMFP2022–7818	IIT Roorkee
314.	75th Annual Meeting of the Division of Fluid Dynamics	Large-Eddy Simulation of Vortex-Induced Transition in a Separation Bubble	Sonalika Srivastava and S. Sarkar	2022		Bulletin of the American Physical Society	Indiana Convention Centre, Indiana



315.	9th International and 49th National Conference on Fluid Mechanics and Fluid Power	Transition of the Boundary Layer Subjected to Freestream Turbulence	Ravi Kumar and S. Sarkar	2022		FMFP 2022–7857	IIT Roorkee
316.	9th International and 49th National Conference on Fluid Mechanics and Fluid Power	Control of Flow Separation using Hemispherical Protuberance on the Leading Edge	Pradeep Singh, Ravi Kumar and S. Sarkar	2022		FMFP 2022-4913	IIT Roorkee
317.	ASME Turbo Expo 2022	Transition of a Laminar Separated Boundary Layer Under Varying Adverse Pressure Gradient	R. Kumar, P. Singh and S. Sarkar	2022	Procd. ASME Turbo-Expo	10-D, V10DT37A0 29	The Netherlands
318.	ASME Turbo Expo 2022	Effects of Freestream Turbulence on Air-Mist Film	Dwivedi, A, and S. Sarkar	2022	Procd. ASME Turbo-Expo	6-A, V06AT12A0 19	The Netherlands

		Cooling: Two-Phase Flow Simulations					
319.	ASME Turbo Expo 2022	Effect of Surface Corrugations on Laminar and Transitional Flows	Jain, Ishita, and S. Sarkar	2022	Procd. ASME Turbo-Expo	11, V011T38A007	The Netherlands
320.	75th Annual Meeting of the Division of Fluid Dynamics	Investigation of Separated and Reattached Flow on a Blunt Flat Plate	Arun K Saha	2022			Indianapolis, Indiana
321.	48th National Conference on Fluid Mechanics and Fluid Power (FMFP)	Downwash Flow for Neutrally Buoyant Jet in Crossflow	Jyoti Gupta, Malkeet Singh & Arun K. Saha	2023	1	417–422	BITS Pilani, Pilani Campus, Rajasthan
322.	WCX SAE World Congress Experience	Potential of Di-Ethyl Ether in Reducing Emissions from Heavy-Duty Tractors	Ankur Kalwar, Akhilendra Singh, Avinash Kumar Agarwal	2023		10	Detroit Michigan, United States
323.	WCX SAE World Congress Experience	Influence of Fuel Injection Pressure on Spray	Utkarsha Sonawane, Ashutosh	2023		12	Detroit Michigan, United States

		Characteristics of Diesel-Diethyl Ether Blends for Diesel Engine Applications: An Experimental Study	Jena, Avinash Kumar Agarwal				States
324.	Active and Passive Smart Structures and Integrated Systems XVII;	Wave propagation study in metamaterial sandwich structure with periodically inserted hourglass resonators	Vivek Gupta, Amanpreet Singh, Bishakh Bhattacharya	2023	12483	57-64	Long Beach, California, United States
325.	Active and Passive Smart Structures and Integrated Systems XVII	Dispersion characteristics of a ZPR hourglass lattice structure	Amanpreet Singh, Vivek Gupta, Bishakh Bhattacharya	2023	12483	22-29	Long Beach, California, United States
326.	Active and Passive Smart Structures and Integrated Systems XVII	Design and development of novel rotary actuation system based on shape memory alloy springs driven mechanism arranged in bipennate muscle architecture	Yashaswi Sinha, Kanhaiya Lal Chaurasiya, Yash Ashok Kumar Patel, Tanuj Gupta,	2023	12483	498-510	Long Beach, California, United States

			Bishakh Bhattachar ya, Amanpre t Singh				
327.	Health Monitoring of Structural and Biological Systems XVII	Investigation of mode conversion of SH waves at the welded tabular ends of a fuel storage tank	Ambuj K Gautam, Wen Chuan Wu, Ching- Chung Yin, Bishakh Bhattachar ya	2023	12488	61-70	Long Beach, Californi a, United States
328.	Health Monitoring of Structural and Biological Systems XVII	An innovative method and apparatus for speed control of pipe health monitoring robot during gas pipeline inspection	Kanhaiya Lal Chaurasiy a, Varun Pawar, Bishakh Bhattachar ya	2023	12488	372-379	Long Beach, Californi a, United States
329.	6th International Conference on System-Integrated Intelligence (SysInt 2022),	Design and Development of a Tomato Picking Soft Robotic Gripper with a Separator and Mechanical Iris Based Pedicel	Shahid Ansari, Bishakh Bhattachar ya	2022	546	276-286	Genova, Italy

		Cutting Mechanism					
330.	Active and Passive Smart Structures and Integrated Systems XVI	Vibration attenuation in graded meta-sandwich beam	Amanpreet Singh, Bishakh Bhattacharya, Arnab Banerjee	2022	12043	65-70	Long Beach, California, United States
331.	Active and Passive Smart Structures and Integrated Systems XVI	A study on bandgap attenuation in metamaterials by varying the shape of cross-section	Kumar Gourav, Amanpreet Singh, Bishakh Bhattacharya	2022	12043	71-77	Long Beach, California, United States
332.	Active and Passive Smart Structures and Integrated Systems XVI	Interface modes in topologically protected edge states using hourglass based metastructures	Harsh Mirani, Vivek Gupta, Sondipon Adhikari, Bishakh Bhattacharya	2022	12043	473-480	Long Beach, California, United States
333.	Active and Passive Smart Structures and Integrated Systems XVI	Voltage modulation of elastic properties of asymmetric hybrid lattice structure	Amanpreet Singh, Tanmoy Mukhopadhyay, Sondipon Adhikari, Bishakh Bhattachar	2022	12043	197-207	Long Beach, California, United States

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334.	Active and Passive Smart Structures and Integrated Systems XVI	Dispersion analysis of periodic hourglass-shaped metamaterials for wave propagation	Vivek Gupta, Rajendra Kumar Munian, Bishakh Bhattacharya	2022	12043	78-83	Long Beach, California, United States
335.	Microactuators, Microsensors and Micromechanisms: MAMM 2022	Compliant Finger Gripper Based on Topology Optimization	Estefania Hermoza Llanos, Mathias Hüsing, Burkhard Corves, Anupam Saxena	2022	1	31-45	Indian Institute of Technology Hyderabad
336.	2022 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM)	A Simplified Scan Sequence Optimization Approach for PBF Additive Manufacturing of Complex Geometries	Chuan He, Keval S. Ramani, Yueh-Lin Tsai, Chinedum E. Okwudire	2022			Sapporo, Japan
337.	12th INTERNATIONAL CONFERENCE ON PRECISION, MICRO, MESO AND NANO ENGINEERING	Towards faster and precise cable-driven parallel robots for large-scale manufacturing	Keval S. Ramani	2022			IIT Kanpur, India

338.	8th Thermal and Fluids Engineering conference (TFEC 2023)	Experimental investigation of CO <sub>2</sub> hydrate formation in the presence of Zn-Al LDH nanofluid	Ayaj Ahamad Ansari, Randeep Ravesh, Malay Kumar Das and Pradipta Kumar Panigrahi	March, 2023			University of Maryland, College Park, USA
339.	9th International and 49th National conference of Fluid Mechanics and Fluid Power (FMFP2022)	A computational analysis of the impact of blood's viscoelastic properties on the hemodynamics of a stenosed artery	Sourabh Dhawan, Pawan Kumar Pandey, Malay Kumar Das and Pradipta Kumar Panigrahi	December 2022			IIT Roorkee
340.	9th International and 49th National conference of Fluid Mechanics and Fluid Power (FMFP2022)	Multi-Needle Ionic Wind Generator for Thermal Management	Multi-Needle Ionic Wind Generator for Thermal Management	December 2022			IIT Roorkee
341.	1st International Conference on	Effect of Perforation	Pawan Kumar	,June 2022			NIT Calicut

	Fluid Thermal and Energy Systems	Interval Design on Gas Production from Hydrate Reservoir	Pandey, Malay K. Das, P. K. Panigrahi				
342.	The 9th National Conference on Wind Engineering	Implementation of delta wing and DBD plasma actuator on a wind turbine blade	G Likhit, B K Mishra, and P. K. Panigrahi	March 2023			BITS Pilani, Hyderabad Campus
343.	9th International and 49th National Conference of Fluid Mechanics and Fluid Power (FMFP-2022)	Real-time strengthening of natural convection and dendrite fragmentation during binary mixture freezing	Virkeshwar Kumar, Shyamprasad Karagadde, and Kamal Kumar Meena	2022		The proceeding is under press.	IIT Roorkee
344.	Complex fluid Symposium (CompFlu 2022)	Lift-off crystalline deposits in heated hydrophobic surfaces	Pranjal Agrawal, Virkeshwar Kumar, and Susmita Dash	2022			IIT Kharagpur
345.	75th Annual Meeting of the Division of Fluid Dynamics, DFD	Out-of-Plane Formation of Crystal Deposits on Heated Hydrophobic Surfaces	Pranjal Agrawal, Virkeshwar Kumar, Susmita Dash	2022			Indiana, USA



346.	The 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	Effect of flexible flap length on flow generation by an airfoil pitching in quiescent fluid	Harisri M. Thulasi, Akshay B. Menon, Prashant K. Jaiswara, Sachin Yashavant malay	December 14-16, 2022	--	FMFP2022-2051	IIT Roorkee, Roorkee-247667, Uttarakhand, India
347.	2022 Eighth Indian Control Conference (ICC)	Tracking Consensus for Linear Multi-Agent Systems with Exponential Convergence Rate	Souradip De, Soumya Ranjan Sahoo, Pankaj Wahi	14-16 December 2022			Chennai, India
348.	4 th Singapore International Non-destructive Testing Conference and Exhibition	Modified Polar Grid-based Accelerated Image Reconstruction Technique for X-ray CT	Sudhir Kumar Chaudhary, Pankaj Wahi, Prabhat Munshi	November 2022	27(12)		Singapore
349.	INTER-NOISE and NOISE-CON Congress and Conference Proceedings	Flat Fresnel-spiral acoustic metamaterials composed of several arms	Sanjeet Kumar Singh, Shantanu Bhattachar	January 2023		DOI: <a href="https://doi.org/10.3397/IN_2022_0058">https://doi.org/10.3397/IN_2022_0058</a>	UK

		ventilated metamaterials for simultaneous broadband sound absorption and air circulation	ya				
350.	ASME, AM-3D Aero, 2022	3-D printed Acoustic Metamaterials and their aerospace applications	Shantanu Bhattacharya (Was the Technical Chair of this ASME conference)	December 2022		<a href="https://www.am3d.org.in/Advisory.php">https://www.am3d.org.in/Advisory.php</a>	India

**Department of Physics**

351.	SPIE	Women in Optics and Photonics in India in 2022	Sumedha Chanda, Nishkarsh Kumar and Asima Pradhan	2023	12638	38-41	Bangalore
352.	SPIE	Women in Optics and Photonics in India in 2022	Bhaswati Singha Deo, Mayukha Pal and Asima Pradhan	2023	12638	25-28	Bangalore
353.	(DIS2021) SciPost Phys. Proc.	Proton gravitational form	D. Chakrabar	2022	8	113	Online (hosted

		factors in a light-front quark-diquark model	ti, C. Mondal, A. Mukherjee, S. Nair, X. Zhao				by Stony Brook Univ, USA)
354.	8 <sup>th</sup> International Conference on Antennas and Electromagnetic Systems (AES-2022)	THz range perforated metasurface-integrated multiband Fabry-Perot microstrip patch antenna	Garima Joshi and R.Vijaya	2022	--	201-202	Marrakesh-Morocco (hybrid)
355.	Optical Interference Coatings Conference (OIC 2022)	Improving antireflection by double-sided coating on common substrates for NIR range	Linu George, Sumedha and R. Vijaya	2022	--	--	British Columbia, Canada (hybrid)
356.	IEEE Conecct 2022	Photonics in visible, near-IR and terahertz range using patterned surfaces	R. Vijaya (invited talk)	2022	--	--	Bangalore (online)
357.	International Conference on Optical MEMS and Nanophotonics (OMN 2022)	Dielectric and Plasmonic Metasurfaces for Refractive Index Sensing in the NIR Range	Dhananjay De and R.Vijaya	2022	--	--	online

358.	IEEE Photonics Conference	Large-period Sinusoidal Plasmonic Grating for High Sensitivity in Refractive Index Sensing	Vaswati Biswas and R. Vijaya	2022	--	1-2	Vancouver, Canada (hybrid)
359.	Women in Optics and Photonics (WOPI)	Plasmonic gratings for refractive index sensing	Vaswati Biswas and R. Vijaya	2022	--	--	Bangalore
360.	IEEE MAPCON	Transparent and Flexible Single-layer Metasurface with Specially Chosen Unit Cell for Multi-band Operation in X-K Band	Bhavya S. Sanghavi, Garima Joshi and R. Vijaya	2022	--	368-371	Bangalore
361.	SYMPHY-2023	Broadband laser and UV-visible light generation using nonlinear photonics	R. Vijaya (invited talk)	2023	--	--	Mumbai
362.	International conference on advanced materials (ICAM-2023)	Patterned surfaces and metasurfaces for Photonics	R. Vijaya (invited talk)	2023	--	--	Goa
363.	15 <sup>th</sup> International Conference on	Plasma parameters and	Deepika Behmani	2022		C1-13B	Gauhati University

	Plasma Science and Applications (ICPSA 2022)	electric field fluctuations in an atmospheric pressure micro plasma jet interacting with substrates of varying permittivity	and Sudeep Bhattacharjee				y, Guwahati, India (E-Conference)
364.	15 <sup>th</sup> International Conference on Plasma Science and Applications (ICPSA 2022)	Temperature anisotropy governed current density profiles in a plasma confined by a dipole magnet driven at steady state	Ayesha Nanda and Sudeep Bhattacharjee	2022		C2-7A	Gauhati University, Guwahati, India (E-Conference)
365.	37 <sup>th</sup> National Symposium on Plasma Science & Technology (PLASMA 2022)	Interaction of an atmospheric pressure plasma jet with substrates: copper, silicon, biological skin, quartz, and teflon	Deepika Behmani and Sudeep Bhattacharjee	2022		130	Indian Institute of Technology Jodhpur, Jodhpur, India
366.	37 <sup>th</sup> National Symposium on Plasma Science & Technology (PLASMA 2022)	Temperature Anisotropy Governed Current Density Profiles In A Compact Dipole Plasma Device Driven At	Ayesha Nanda and Sudeep Bhattacharjee	2022		94	Indian Institute of Technology Jodhpur, Jodhpur,

		Steady State					India
367.	37 <sup>th</sup> National Symposium on Plasma Science & Technology (PLASMA 2022)	Focusing of High Current Plasma Ion Beams Using Sheath Nonlinearity: Quantum Beams for Physics and Applications	Sushanta Barman and Sudeep Bhattacharjee	2022		53	Indian Institute of Technology Jodhpur, Jodhpur, India
368.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2022)	Optical tuning of metallic thin films using microwave generated low energy plasma ion beams	Krishn Pal Singh and Sudeep Bhattacharjee	2022		A-I19	Chiba University, Japan (E-Conference)
369.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2022)	Using atmospheric pressure plasma jet as a tool for surface modification of screen-printed carbon electrodes for electrochemical applications	Kalyani Barman, Sunil Luhar, Ramkrishna Rane, Divesh N. Srivastava, Sudhir K. Nema and Sudeep Bhattacharjee	2022		AP-5	Chiba University, Japan (E-Conference)
370.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP	Interaction of an atmospheric pressure micro plasma jet with	Deepika Behmani and Sudeep	2022		AP-3	Chiba University, Japan (E-

	2022)	various substrates: copper, silicon, Teflon, quartz, and biological skin	Bhattacharjee				Conferen ce)
371.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2022)	Conical pattern formation on atomically heterogeneous surface by microwave plasma generated low energy ion irradiation for field emission study	Jayashree Majumdar and Sudeep Bhattacharjee	2022		AP-2	Chiba Universit y, Japan (E- Conferen ce)
372.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2022)	Temperature anisotropy directed current profiles and effect of adiabatic invariants on plasma heating in a dipole plasma: Spatially-resolved experiments and power balance modeling	Ayesha Nanda and Sudeep Bhattacharjee	2022		BP-5	Chiba Universit y, Japan (E- Conferen ce)
373.	6 <sup>th</sup> Asia-Pacific Conference on	Molecular dynamics	Swati Swagatika	2022		BP-6	Chiba Universit

	Plasma Physics (AAPPS-DPP 2022)	simulations of gas and plasma transport under confinement and in the cryogenic limit	Mishra and Sudeep Bhattacharjee				y, Japan (E-Conference)
374.	6 <sup>th</sup> Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2022)	Controlled guiding and focusing of high current plasma ion beams by micro-glass capillaries: Quantum beams for physics and applications	Sushanta Barman and Sudeep Bhattacharjee	2022		BP-7	Chiba University, Japan (E-Conference)
375.	In 2022 IEEE Workshop on Recent Advances in Photonics (WRAP), IEEE (2022)	Topological Surface State by Hierarchical Concatenation of Photonic Stopbands	Nitish Kumar Gupta, Harshawar dhan Wanare, Aditi Chopra, Mukesh Kumar, Sudipta Sarkar Pal, Anjani Kumar Tiwari, and S. Anantha	2022		pp. 1-2.	



			Ramakrishna				
376.	Frontiers in Optics, FM3E. 2 (2022)	Graded-Azimuthal-Index-Fiber-Based Realization of All-Transformations on Higher-Order Poincaré Sphere of Vector Vortex Beams,	S Srinivasu, Harshawar dhan Wanare	2022			
377.	In: ICOL-2019 258 (pp. 857-860), Springer Proceedings in Physics (2022)	Engineering spatial field distribution of modes in photonic crystal cavities	G. Kaur, Harshawar dhan Wanare	2022		857-860	

**Department of Space, Planetary & Astronomical Sciences & Engineering**

378.	2023 International Applied Computational Electromagnetics Society Symposium (ACES	Design of a Multilayer Microstrip Delay Line on a Water Based Composite Dielectric Medium	Raghunathan Agaram, Keerthipriya Sathish, Nagaraj, H. N., Avinash A Deshpande, Shiv Sethi	2023/3/26		1-2	( <a href="https://ieeexplore.ieee.org/document/10114724/">https://ieeexplore.ieee.org/document/10114724/</a> )
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<b>Department Sustainable Energy Engineering</b>							
379.	2023 IEEE 3 <sup>rd</sup> International Conference on Sustainable Energy and Future Electric Transportation (SeFeT)	Solar PV Assisted Charging System for Electric Vehicles	Kundan Sahare, V Siddharth, M Satapathy, A Edpuganti, R Jindal	2023	NA	1-6	Bhubaneswar, India
380.	AIAA SCITECH 2023 Forum	Shock Interference Patterns on Double- Wedge Configurations for Pure CO <sub>2</sub> Flows	A. Ray, A. De	2023	NA	2115	National Harbor, Maryland
381.	AIAA SCITECH 2023 Forum	Enhancing Energy Harvesting from 2-DOF Flow-Induced Vibrations of a Circular Cylinder via Means of a Slit Offset	M. Verma, A. De	2023	NA	1721	National Harbor, Maryland
382.	Proceedings of the 1st International Conference on Advances in Heat Transfer and Fluid Dynamics (AHTFD-2022)	Numerical Investigation of Atomization and Evaporation of a Liquid Jet in a Crossflow at Elevated	T. Johny, B. Bhatia, A. De	2022	NA	43	AMU, Aligarh, India

		Conditions					
383.	Proceedings of the 1st International Conference on Advances in Heat Transfer and Fluid Dynamics (AHTFD-2022)	Computational study of the Primary breakup and atomization of a co-axial liquid jet	Z. Alam, B. Bhatia, A. De	2022	NA	42	AMU, Aligarh, India
384.	Proceedings of the 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	Numerical Investigation of Combustion Dynamics in a Multi-Element Combustor using Flamelet approach	A. Sharma, A. De, V. M. Thannicka l, T. J. Tharakan, S Sunil Kumar	2022	NA	7397	IIT Roorkee, India

#### JOURNAL 2022-2023

<b>Department of Aerospace Engineering</b>							
<b>S. No.</b>	<b>Journal Name</b>	<b>Title of the Paper/Publication</b>	<b>Authors</b>	<b>Year</b>	<b>Volume</b>	<b>Page numbers (start to end)</b>	
1.	Physics of fluids	Unsteady pulsating flowfield over spiked axisymmetric forebody at hypersonic flows	Mohammed Ibrahim. S, R. Sriram, S. K. Karthick and Jagadeesh. G	2022	34	016104	
2.	<i>European Journal of Mechanics – B Fluids.</i>	Effect of Shock Strength on the Radiation of	Saranyamol. V. S and Mohammed	2022	97	128-135	

		Focusing Shock Wave	Ibrahim. S			
3.	<i>Physics of Fluids</i>	A numerical study on high temperature effects of exploding shock waves	Saranyamol. V. S, Talluri Vamsi Krishana and Mohammed Ibrahim. S,	2023	35	046115
4.	<i>Journal of Spacecrafts and Rockets</i>	Effect of plate distance on steady and unsteady characteristics of impinging rectangular jet	Nageshwara Rao, Talluri Vamsi Krishna, M. Bharathwaj and Mohammed Ibrahim. S	2023		In press
5.	AIAA Journal	Transonic Buffet Characteristics Under Conditions of Free and Forced Transition	Pradeep Moise, Markus Zauner, Neil D. Sandham, Sebastian Timme and Wei He	2023	61	1061-1076
6.	Flow, Turbulence and Combustion	On the co-existence of transonic buffet and separation-bubble modes for the OALT25 laminar-flow wing section	Markus Zauner, Pradeep Moise and Neil D. Sandham	2023	0	1-35
7.	International Journal of Plasticity	Effect of notch severity and crystallographic texture on local deformation and damage in commercially pure titanium	Vivek Kumar Sahu, Manasij Yadava, Pritam Chakraborty, Nilesh Prakash	2022	155	103318

			Gurao			
8.	Metals and Materials International	Influence of Scanning and Building Strategies on the Deformation Behavior of Additively Manufactured AlSi10Mg: CPFEM and Finite Element Studies	Aniket Chakrabarty, Pritam Chakraborty, Roopam Jain, Vivek Kr. Sahu, N. P. Gurao, H. N. Bar, Niloy Khutia	2023		<a href="https://doi.org/10.1007/s12540-023-01418-6">https://doi.org/10.1007/s12540-023-01418-6</a>
9.	Physics of Fluids	Laminar separation bubble on a rotating cylinder in uniform flow	Gaurav Chopra and Sanjay Mittal	2023	35	1-12
10.	Theoretical and Computational Fluid Dynamics	Vortex-induced vibration and flutter of a filament behind a circular cylinder	Mohd Furquan, Sanjay Mittal	2023	-	1-14
11.	Journal of Fluid Mechanics	Streamwise vortices, cellular shedding and force coefficients on finite wing at low Reynolds number	Jawahar Sivabharathy and Sanjay Mittal	2023	A10	1-40
12.	Journal of Fluid Mechanics	Effect of free stream turbulence on the topology of laminar separation bubble on a sphere	Aditya Desai and Sanjay Mittal	2022	A28	1-33
13.	Physics of Fluids	The effect of trip wire on transition of boundary layer on a cylinder	Gaurav Chopra and Sanjay Mittal	2022	34	1-19
14.	Journal of Fluid Mechanics	Secondary vortex, laminar separation bubble and vortex shedding in flow past a low aspect	Gaurav Chopra and Sanjay Mittal	2022	A12	1-38

		ratio circular cylinder				
15.	<i>Computers and Fluids</i>	Stabilized finite element computations with a two-dimensional continuum model for disorderly traffic flow	Durgesh Vikram, Sanjay Mittal and Partha Chakroborty	2022	232	1-17
16.	Journal of Fluid Mechanics	Shocked Confined-Granular Flow over Obstacles	Jaiswal, Y., Khan, A., Kumar, R., Kumar, S.	2023	960	A21-1 to A21-15
17.	Physics of Fluids	Rarefied Gas Effects on Hypersonic Flow over a Transpiration-Cooled Flat Plate	Appar, A., Bajpai, A., Sivakumar, U., Naspoori, S., Kumar, R.	2023	35	016109-1 to 016109-17
18.	European Journal of Mechanics / B Fluids	Bulk Viscosity of Dilute Monatomic Gases Revisited.	Sharma, B., Pareek, S., Kumar, R.	2023	98	32-39
19.	Fluids	Bulk Viscosity of Dilute Gases and their Mixtures	Sharma, B., Kumar, R., Pareek, S.	2023	8	28-1 to 28-13
20.	Physics of Fluids	Conjugate Flow-Thermal Analysis of a Hypersonic Reentry Vehicle in the Rarefied Flow Regime	Appar, A., Kumar, R., Naspoori, S.K.	2022	34	026107-1 to 026107-20
21.	Physics of Fluids	On the Estimation of Bulk Viscosity of Dilute Nitrogen Gas using Equilibrium	Sharma, Kumar, R., Gupta, P., Pareek, S.,	2022	34	057104-1 to 057104-19

		Molecular Dynamics Approach	Singh, A.			
22.	Physics of Fluids	Parametric Study and Scaling of Mach 1.5 Jet Manipulation using Steady Fluidic Injection	Khan, A., Rao, N., Baghel, T., Perumal, A.K., Kumar, R.	2022	34	036107-1 to 036107-17
23.	Journal of Fluid Mechanics	A Numerical Investigation of Granular Shock Waves over a Circular Cylinder using the Discrete Element Method	Mathews, A.K., Khan, A., Sharma, B., Kumar, S., Kumar, R.	2022	936	A11-1 to A11-17
24.	Journal of Fluid Mechanics	Detachment of Strong Shocks in Confined Granular Flows	Khan, A., Hankare, P., Verma, S., Jaiswal, Y., Kumar, R., Kumar, S.	2022	935	A13-1 to A13-37
25.	Computational Material Science	In-depth Analysis of Reaction Kinetics Parameters of Phenolic Resin using Molecular Dynamics and Unsupervised Machine Learning Approach	Bhesania, A.S., Kamboj, P., Peddakotla, S.A., Kumar, R.	2022	206	111215-1 to 111215-15
26.	Journal of Thermophysics and Heat Transfer	Extraction of Thermal properties of Organic Ablative Materials using the Molecular Dynamics Simulations	Bhesania, A.S., Kumar, R., Arghode, V.K.	2022	36(4)	824-835
27.	Journal of Thermophysics and Heat Transfer	Ablative Thermal Response for Two-Dimensional Axisymmetric	Bhesania, A.S., Kumar, R., Arghode, V.K.	2022	36(2)	377-388

		Problems				
28.	Journal of Flow Visualization and Image Processing	Shock Profiles and Wake Structures in Granular Flow Past Obstacles	Patel, P., Tiwari, R., Khan, A., Verma, S., Kumar, R., Kumar, S.	2022	29(4)	63-80
29.	The Aeronautical Journal	Orbital Decay Simulation of a Spacecraft due to Aerodynamic Drag in the Low Earth Orbit	Kumar, R., Singh, R., Chinnappan, A.K., Appar, A.	2022	126	565-583
30.	Journal of Fluid Mechanics	Bubble dynamics and atomization in evaporating polymeric droplets	KS Raghuram Gannena, D Chaitanya Kumar Rao, Durbar Roy, Aloke Kumar, Saptarshi Basu	2022	951	A48
31.	Scientific Reports	Controlling bubble generation by femtosecond laser-induced filamentation	D Chaitanya Kumar Rao, Veena S Mooss, Yogeshwar Nath Mishra, Dag Hanstorp	2022	12	15742

**Department of Biological Sciences and Bioengineering**

32.	Cells	Chondrocyte Hypertrophy in Osteoarthritis: Mechanistic Studies and Models for the Identification of New Therapeutic	Shikha Chawla, Andrea Mainardi, Nilotpal Majumder, Laura	2022	11(24):4 034.	doi: 10.3390/cells1 1244034
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		Strategies	Dönges, Bhupendra Kumar, Paola Occhetta, Ivan Martin, Christian Egloff, Sourabh Ghosh, Amitabha Bandyopadhyay, Andrea Barbero			
33.	Nature Communications	Allosteric modulation of GPCR-induced $\beta$ -arrestin trafficking and signaling by a synthetic intrabody.	Baidya M, Chaturvedi M, Dwivedi-Agnihotri H, Ranjan A, Devost D, Namkung Y, Stepniewski TM, Pandey S, Baruah M, Panigrahi B, Sarma P, Yadav MK, Maharana J, Banerjee R, Kawakami K, Inoue A, Selent J, Laporte SA, Hébert TE and Shukla AK	2022	8;13(1)	4634
34.	Antioxidants	Maqui Berry and Ginseng Extracts Reduce Cigarette Smoke-Induced Cell Injury in a 3D Bone Co-Culture Model.	Guo, H., Weng, W., Zhang, S., Rinderknecht, H., Braun, B., Breinbauer,	2022	11(12)	2460

			R., ...Kumar, A., Ehnert, S., Histing, T., Nussler A. K. & Aspera-Werz, R. H.			
35.	Biomaterials Advances	Anti-infective composite cryogel scaffold treats osteomyelitis and augments bone healing in rat femoral condyle	Qayoom, I., Srivastava, E., &Kumar, A.	2022	142	213133
36.	Journal of Water Process Engineering,	Three staged integrated community-based water filter system for potable water by effective removal of contaminants from ground water.	Singh, P., Andrabi, S. M., Raina, D. B., &Kumar, A	2022	48	103044
37.	Journal of Magnesium and Alloys	Bioresorbable magnesium-based alloys containing strontium doped nanohydroxyapatite promotes bone healing in critical sized bone defect in rat femur shaft.	Shaikh, S., Qayoom, I., Sarvesha, R., &Kumar, A.	2022	11(1)	270-286
38.	Soft Materials	pH modulating agar dressing for chronic wounds.	Tyeb, S., Kumar, N., Kumar, A., & Verma, V.	2022	20(4)	379-393
39.	Colloids and Surfaces B: Biointerfaces,	Preparation of thermo-responsive polymer encapsulated exosomes and its	Das, A., Nikhil, A., &Kumar, A.	2022	216	112580

		role as a therapeutic agent for blood clot lysis.				
40.	Chemical Engineering Journal	Oxygen releasing and antioxidant breathing cardiac patch delivering exosomes promotes heart repair after myocardial infarction.	Shiekh, P. A., Mohammed, S. A., Gupta, S., Das, A., Meghwani, H., Maulik, S. K., ... & Kumar, A.	2022	428	132480
41.	Colloids and Surfaces A: Physicochemical and Engineering Aspects,	Progressive cryoaggregation of gold nanoparticles: Physicochemical characterization, effect on biological interactions and use in coldness indicators.	Mishra, A., Shaikh, S., & Kumar, A.	2022	636	128158
42.	Tuberculosis	Amyloid deposition in granuloma of tuberculosis patients: A single-center pilot study	Ghosh, S.; Kala, C.; Garg, A.; Thakur, A. K.,	2022	136	102249
43.	Neuroscience	Digital health and neuroscience: Recent history, current trends, and future developments, Frontiers in Integrative	M Pais-Vieira, A Ramakrishnan, E Rocon, M Lebedev, OAD Cruz-e-Silva.	2022		
44.	PsyArXiv	Attention Deficits Linked with Proclivity to Explore while Foraging.	D. L. Barack*, V. U. Ludwig*, F. Parodi, N. Ahmed, E. M. Brannon, A. Ramakrishna	2022		

			n#& M. L. Platt			
45.	Biomaterials Advances.	Red-emitting polyaniline-based nanoparticle probe for pH-sensitive fluorescence imaging.	Yadav L, Yadav A, Chatterjee S, Tyeb S, Gupta RK, Sen P, Ateeq B, Verma V, Nalwa KS	2022	140:213088. doi: 10.1016/j.bioadv.	213088
46.	NMR in Biomedicine	Nuclear magnetic resonance spectroscopy reveals dysregulation of Monounsaturated fatty acids metabolism upon SPINK1 attenuation in colorectal cancer.	Nigam S, Ranjan R, Sinha N, Ateeq B*	2022	35(7):e4705. doi: 10.1002/nbm	4705
47.	ALTEX-Alternatives to animal experimentation	A human osteoarthritis mimicking goat cartilage explant-based disease model for drug screening.	Bhattacharjee, A., & Katti, D.S	2022	39 (3)	427-441
48.	International Journal of Biological Macromolecules	Sulfated carboxymethylcellulose-based scaffold mediated delivery of Timp3 alleviates osteoarthritis.	Bhattacharjee, A., & Katti, D.S	2022	212	54-66
49.	JOVE	Isolation, expansion, and differentiation of mesenchymal stem cells from the infrapatellar fat pad of the goat stifle joint.	Mahajan, A., Hazra, S., Arora A., Katti, D.S.	2022	e63617	

50.	Molecular Pharmaceutics, .	A stable recombinant Invasion Plasmid Antigen C (IpaC)- based single dose nanovaccine for shigellosis.	Baruah, N., Halder, P.,Koley, H., & Katti, D. S.	2022		3884-3893
51.	European Polymer Journal.	Polyketal-based nanocarriers: A new class of stimuli- responsive delivery systems for therapeutic applications.	Rajagopal P, Jayandharan GR, Krishnan UM.	2022	173	111290
52.	Cell Rep Med.	Gene therapy for female infertility: A farfetched dream or reality?	Pathak S, Sarangi P, Jayandharan GR.	2022	3(5)	100641
53.	Mol Ther.	Gene therapy access: global challenges, opportunities and views from Brazil, South Africa, and India.	Cornetta K, Bonamino M, Mahlangu J, Mingozi F, Rangarajan S, Rao J.	2022	30(6)	2122-2129.
54.	Nucleic Acids Research	Inference of cell state transitions and cell fate plasticity from single-cell with MARGARET	Pandey, Kushagra, and Hamim Zafar	2022	50.15	e86-e86.
55.	Bioinformatics 38	Phylovar: toward scalable phylogeny- aware inference of single-nucleotide variations from single-cell DNA sequencing data	Edrisi, Mohammada min, Monica V. Valecha, Sunkara BV Chowdary, Sergio Robledo, Huw A. Ogilvie, David Posada,	2022		i195-i202

			Hamim Zafar, and Luay Nakhleh.			
56.	bioRxiv	scDREAMER:atlas-level integration of single-cell datasets using deep generative model paired with adversarial classifier.	Shree, Ajita, Musale Krushna Pavan, and Hamim Zafar.	2022		2022-07.
57.	<u>iScience</u>	Mechanisms of olfactory receptor evolution in <i>Drosophila suzukii</i> and the subgenus <i>Sophophora</i> .	Keesey IW, Zhang J, Depetris-Chauvin A, Obiero GF, Gupta A, Gupta N, Knaden M, Hansson BS	2022	25	104212
58.	<u>iScience</u>	Mosquito Olfactory Response Ensemble (MORE): a curated database of behavioral and electrophysiological responses enables pattern discovery.	Gupta A, Singh SS, Mittal AM, Singh P, Goyal S, Kannan KR, Gupta AK, Gupta N	2022	25	103938
59.	Mitochondrion.	TRPV4 acts as a mitochondrial Ca <sup>2+</sup> -importer and regulates mitochondrial temperature and metabolism. Mitochondrion	Acharya TK, Kumar A, Majhi RK, Kumar S, Chakraborty R, Tiwari A, Smalla KH, Liu X, Chang YT, Gundelfinger ED, Goswami	2022	67	38-58

60.	Front Cell Dev Biol.	TRPV1 channel in spermatozoa is a molecular target for ROS-mediated sperm dysfunction and differentially expressed in both natural and ART pregnancy failure	Swain N, Samanta L, Goswami C, Kar S, Majhi RK, Kumar S, Dixit A.	2022	10	
61.	ACS Appl. Bio Mater	Polyphenol-Based Nanoscale Iron Exchangers for Regulating Anticancer Chemotherapy by Modulating the Activity of Intracellular Glutathione,	Aishwarya Naik, Krishan Kumar, Niranjana Chatterjee, and Santosh K. Misra*	2022		
62.	Autophagy	Use of acidic nanoparticles to rescue macrophage lysosomal dysfunction in atherosclerosis	Xiangyu Zhang,1 Santosh Kumar Misra,1 Parikshit Moitra, Xiuli Zhang, Se-JinJeong, Jeremiah Stitham, Astrid Rodriguez-Velez, Arick Park, Yu-Sheng Yeh, William E Gillanders, Daping Fan, Abhinav Diwan, Jaehyung Cho, Slava	2022	16.2	44944

			Epelman, Irfan J Lodhi, Dipanjan Pan, Babak Razani			
63.	ACS Biomater. Sci. Eng.	Role of Biomaterials in Cardiac Repair and Regeneration: Therapeutic Intervention for Myocardial Infarction.	Ubaid Tariq <sup>1</sup> , Mahima Gupta <sup>1</sup> , Subhajit Pathak <sup>1</sup> , Ruchira Patil <sup>1</sup> , Akanksha Dohare, Santosh K Misra	2022	8	3271–3298
64.	Nanoscale Horizons, 2022	Hitchhiking Probiotic Vectors to Deliver Ultra-Small Hafnia Nanoparticles for ‘Color’ Gastrointestinal Tract Photon Counting X-ray Imaging.	Fatemeh Ostadhossein, Parikshit Moitra, NivethaGuna seelan, Michael Nelappana, Chiara Lowe, MahdiehMog hisch, Anthony Butler, Niels Deruiter, Harish Mandalika, Indu Tripathi, Santosh K Misra, Dipanjan Pan,	2022	(IF: 10.9)	
65.	WIREs Nanomedicine & Nanobiotechnology	What Makes Carbon Nanoparticle a Potent Material for	Nirajan Chatterjee, Piyush	2022	(IF: 9.2)	



		Biological Application?	Kumar, Krishan Kumar, Santosh K. Misra			
66.	Mol Neurobiol. 2022	Age-Dependent Reduction in the Expression Levels of Genes Involved in Progressive Myoclonus Epilepsy Correlates with Increased Neuroinflammation and Seizure Susceptibility in Mouse Models.	Sinha P, Verma B, Ganesh S*	2022	Sep;59(9)	5532-5548.
67.	J Ayurveda Integr Med.	Ayurvedic formulations amalakirasayana and rasa sindoor improve age-associated memory deficits in mice by modulating dendritic spine densities	Verma B, Sinha P, Ganesh S*	2022	13(4)	100636
68.	ACS Omega.	Zn <sup>2+</sup> induced conformational change affects the SAM binding in a mycobacterial SAM-dependent methyltransferase.	Soneya Majumdar, Umang Gupta, Hariharan Chinnasamy, Sathishkumar Laxmipathy, Saravanan Matheshwaran	2022	7	35901–35910.
69.	Chem. Comm.	Nitroisobenzofurane, a small molecule inhibitor of multidrug-	Viral Rawat, Sona Tiwari, Shweta Khanna,	2022	58,	11669–11672.

		resistant Staphylococcus aureus targets peptidoglycan biosynthesis.	Umang Gupta, S. N. C. Sridhar, Dharmendra Yadav, Grace Kaul, Abdul Akhir, Deepanshi Saxena, Saravanan Matheshwaran, Sidharth Chopra, Dharmaraja Allimuthu			
70.	Environmental Science and Pollution Research	Antibacterial (E.coli/S.aureus) and Arsenic (III/V) Remediation Insights in Aqueous Systems onto Heterogeneous metal oxide (Cu <sub>0.52</sub> Al <sub>0.1</sub> Fe <sub>0.47</sub> O <sub>4</sub> )/rGO: Hybrid Approach towards Airborne Microbial Degradation.	Yaswanth K. Penke, Prem anand Murugan, Iram Malik, Saravanan Matheshwaran*, Janakarajan Ramkumar, Kamal K. Kar	2022	<a href="https://doi.org/10.1007/s11356-022-22169-8">https://doi.org/10.1007/s11356-022-22169-8</a>	
71.	Biomed Research International	Identification and Genome Analysis of an Arsenic-Metabolizing Strain of Citrobacter youngae IITK SM2 in Middle Indo-Gangetic Plain Groundwater	Akshat Verma, Prem Anand Murugan, Hariharan VediChinnasamy, Abhas Singh and Saravanan Matheshwaran#	2022	<a href="https://doi.org/10.1155/2022/6384742">https://doi.org/10.1155/2022/6384742</a>	
72.	bioRxiv	NaCl Triggers the Sessile-to-Motile Transition	Prem Anand Murugan, Manish	2022	doi: <a href="https://doi.org/10">https://doi.org/10</a>	

		of <i>Bacillus subtilis</i>	Kumar Gupta, T. Sabari Sankar, Sivasurender Chandran, and Saravanan Matheshwaran		.1101/2022.02.15.480532	
73.	Biomaterial Advances	An injectable cryogel with shape memory and antimicrobial property as an efficient haemostatic dressing for rapid blood clotting in compressible and lethal non-compressible hemorrhages.	Andrabi, S. M., Kumar, A	2023	(Accepted).	
74.	ACS Applied Materials & Interfaces	Exosome-Functionalized, Drug-Laden Bone Substitute along with an Antioxidant Herbal Membrane for Bone and Periosteum Regeneration in Bone Sarcoma.	Gupta, S., Qayoom, I., Gupta, P., Gupta, A., Singh, P., Singh, S., &Kumar, A.	2023	15(7)	8824-8839
75.	Chemical Engineering Journal	Functionally multifaceted scaffolds delivering bioactive compounds for treatment of infectious chronic and ischemic wounds.	Singh, P., Andrabi, S. M., Tariq, U., Gupta, S., Shaikh, S., &Kumar, A.	2023	141359	

76.	Critical Reviews in Biotechnology	Advent of phytobiologics and nano-interventions for bone remodeling: a comprehensive review.	Gupta, A., Mehta, S. K., Kumar, A., & Singh, S	2023	43(1),	142-169.
77.	Environmental Advances	Microplastics in the Ganga-Brahmaputra delta: Sources and Pathways to the Sundarbans Biosphere Reserve - an UNESCO World Heritage Centre.	Neelavannan, K.; Sen, I. S.; Sinha, N.; Thakur, A. K.; Misra, S.,	2023	11	100350
78.	Semin Cancer Biol	Transcription networks rewire gene repertoire to coordinate cellular reprogramming in prostate cancer.	Manzar N, Ganguly P, Khan UK, Ateeq B	2023	10.1016/j.semcancer.2023.01.004.	23:S1044-579X(23)00004-4. doi:
79.	Proc Natl Acad Sci USA.	Human ERG Oncoprotein Suppresses Chip LIM-Domain Binding Gene in Drosophila inducing notum-to-wing transdetermination.	Bharti M, Bajpai A, Rautela U, Manzar N, Ateeq B*, Sinha P	2023	10;120(2):e2211189119	
80.	Journal of Nanobiotechnology,	Facile synthesis of multi-faceted, biomimetic and cross-protective nanoparticle-based vaccines for drug-resistant Shigella: a choice for all settings.	Baruah, N., Ahamad N., Halder, P., Koley, H., & Katti, D. S.	2023	21 (1),	1-18.
81.	Development 2023	CNKS2R2, a downstream mediator of retinoic	Udaykumar, N., Zaidi, M.A.A., Rai,	2023	dev200857.	150

		acid signaling, modulates Ras/Raf/MEK pathway to regulate patterning and invagination of the chick forebrain roof plate.	A. and Sen, J.		doi:10.1242/dev.200857.	
82.	J Physiol.	Piezo1 activation by stretching of uterine myometrium supports pregnancy and prevents preterm labour	Majhi RK, Pourteymour S.	2023	601(4)	719-721
83.	Sci Adv	A microbiota and dietary metabolite integrates DNA repair and cell death to regulate embryo viability and aneuploidy during aging	Sonowal R, Swimm AI, Cingolani F, Parulekar N, Cleverley TL, Sahoo A, Ranawade A, Chaudhuri D, Mocarski ES, Koehler H, Nitsche K, Mesiano S, Kalman D.	2023	24	
84.	Proteins: Structure, Function, and Bioinformatics	.Molecular dynamics studies of CED-4/CED-9/EGL-1 ternary complex reveal CED-4 release mechanism in the linear apoptotic pathway of <i>Caenorhabditis elegans</i>	C. N. Reddy and R. Sankararama krishnan	2023	91	679-693
85.	The Journal of Biological Databases and Curation	.dbAQP-SNP: A database of missense single nucleotide polymorphisms in	R. Dande and R. Sankararama	2023	12	

		human aquaporins.	krishnan			
86.	Dalton Transactions	Antimicrobial efficacy of a hemilabile Pt(II)-NHC compound against drug-resistant S. aureus and Enterococcus.	Mandeep Kaur, Ritesh Thakare, Arindom Bhattacharya, Prem Anand Murugan, Grace Kaul, Manjula Shukla, Alok Kr. Singh, Saravanan Matheshwaran,* Sidharth Chopra* and Jitendra K. Bera	2023	52	1876-1884

**Department of Chemical Engineering**

87.	Current Opinion in Colloid & Interface Science	Self-propelled swimming droplets	Prateek Dwivedi, Dipin Pillai, Rahul Mangal	2022	61	101614 (1-16)
88.	Langmuir	Interaction of Active Janus Colloids with Tracers	Karnika Singh, Ankit Yadav, Prateek Dwivedi, Rahul Mangal	2022	38 (8)	2686-2698
89.	ACS Applied Polymer Materials	Biomimetic Polymer Adhesives	Prateek Dwivedi, Karnika Singh, Kartik Chaudhary, Rahul	2022	4(7)	4588-4608

			Mangal			
90.	Current Opinion in Electrochemistry	Practical Semiconductor Physics Perspective of Materials Photoelectrochemistry	A Verma, RGS Pala	2022	36	101160 (1-7)
91.	International Journal of Hydrogen Energy	Even partially amorphous Pd <sub>2</sub> Ni <sub>2</sub> P metallic glass significantly promotes hydrogen evolution electrocatalysis	A Sahu, P Rani, A Subramaniam, RG Pala	2022	47 (56)	23540-23551
92.	Pramana-J. Phys.	Photon-induced low-energy nuclear reactions	P Jain, A Kumar, R Pala, KP Rajeev	2022	96	1-14
93.	Journal of Catalysis	Influence of tetraethylammonium cation on electrochemical CO <sub>2</sub> reduction over Cu, Ag, Ni, and Fe surfaces	AK Ummireddi, SK Sharma, RGS Pala	2022	406	213-221
94.	J. Condensed Matter Nucl. Sci	Upper Bound in the Fusion Products and Transmutation Enhancement in Alloys	A Kumar, P Jain, KP Rajeev, RG Pala	2022	36	327-335
95.	CrystEngComm	Stabilizing nonnative polymorphs at the nanoscale as surface energy is inversely correlated to bulk energies	A Bhandari, PK Gupta, J Bhattacharya, RGS Pala	2022	24 (19)	3603-3611
96.	Journal of Condensed	Low Energy Nuclear fusion with Two	P Jain, A Kumar, K	2022	35	1

	Matter Nuclear Science	Photon Emission	Ramkumar, KP Rajeev, R Pala			
97.	Catalysis Science & Technology	Ammonium ionic liquid cation promotes electrochemical CO <sub>2</sub> reduction to ethylene over formate while inhibiting the hydrogen evolution on a copper electrode	AK Ummireddi, SK Sharma, RGS Pala	2022	12 (2)	519-529
98.	Molecular Systems Design & Engineering	A facile synthesis of novel polyaniline/graphene nanocomposite thin films for enzyme-free electrochemical sensing of hydrogen peroxide	S Verma, DS Mal, PR de Oliveira, BC Janegitz, J Prakash, RK Gupta	2022	7 (2)	158-170
99.	Biomaterials and Polymers Horizon	Synthesis of Biogenic silver nanoparticles using plant growth-promoting bacteria: Potential use as biocontrol agent against phytopathogens	D Mittal, A Kumar, B Balasubramaniam, R Thakur, SS Siwal, RV Saini, RK Gupta, AK Saini	2022	1 (1)	22-31
100.	Journal of Materials Chemistry C	Engineering metal oxide semiconductor nanostructures for enhanced charge transfer: Fundamentals and emerging SERS applications	V Rajput, RK Gupta, J Prakash	2022	10 (1)	73-95
101.	Organic & Biomolecular	Visible-light-mediated synthesis	T Singh, P Panday, GC	2022	20 (22)	4522-4525



	Chemistry	of $\alpha$ , $\beta$ -diamino esters via coupling of N, N-dimethylanilines and glyoxalic oxime ethers	Upreti, S Ranjan, RK Gupta, A Singh			
102.	Journal of Environmental Chemical Engineering	Integration of biological control with engineered heterojunction nano-photocatalysts for sustainable and effective management of water hyacinth weed	A Jawed, P Kar, R Verma, K Shukla, P Hemanth, VK Thakur, LM Pandey, RK Gupta	2022	10 (1)	106976 (1-13)
103.	Materials Chemistry and Physics	Hydrothermal synthesis and Ta doping of TiO <sub>2</sub> nanorods: Effect of soaking time and doping on optical and charge transfer properties for enhanced SERS activity	MC Joshi, RK Gupta, J Prakash,	2022	278	125642 (1-10)
104.	ACS Applied Energy Materials	Low-Temperature Microwave Processed TiO <sub>2</sub> as an Electron Transport Layer for Enhanced Performance and Atmospheric Stability in Planar Perovskite Solar Cells	S Ranjan, R Ranjan, A Tyagi, KS Rana, A Soni, HK Kodali, V Dalal, A Singh, A Garg, KS Nalwa, RK Gupta	2022	5 (3)	2679-2696
105.	Journal of Polymer Science	In-situ fabrication of barium titanate@polyvinyl pyrrolidone in polyvinylidene	R Bhunia, S Gupta, A Garg, RK Gupta	2022	60 (6)	961-967

		fluoride polymer nanocomposites for dielectric capacitor applications				
106.	Advanced NanoBiomed Research	Electrically Conductive MoS <sub>2</sub> Reinforced Polyacrylonitrile Nanofibers for Biomedical Applications	B Balasubramaniam, S Arun Kumar, KA Singh, S Bhunia, K Verma, L Tian, RK Gupta, AK Gaharwar	2022	2 (4)	2100105 (1-11)
107.	Renewable and Sustainable Energy Reviews	Recent advances in the modeling of fundamental processes in liquid metal batteries	D Agarwal, R Potnuru, C Kaushik, VR Darla, K Kulkarni, A Garg, RK Gupta, N Tiwari, KS Nalwa	2022	158	112167 (1-23)
108.	Advanced Energy and Sustainability Research	Defect State Modulation of TiO <sub>2</sub> Nanostructures for Photocatalytic Abatement of Emerging Pharmaceutical Pollutant in Wastewater Effluent	P Kar, D Aggarwal, K Shukla, RK Gupta	2022	3 (5)	2100162 (1-12)
109.	Industrial & Engineering Chemistry Research	Reaction Performance and Flow Behavior of Isobutane/1-Butene and H <sub>2</sub> SO <sub>4</sub> in the Microreactor Configured with the Micro-mixer	X Wang, T Zhang, L Lv, W Tang, RK Gupta, S Tang	2022	61 (25)	9122-9135

110.	Biomaterials and Polymers Horizon	Application of Novel Biogenic nanoparticles for antimicrobial traits	A Kumar, D Sharma, B Balasubramaniam, R Thakur, RV Saini, RK Gupta, D Mittal, AK Saini	2022	1 (2)	
111.	Nanofabrication	Investigation of Ag doping and ligand engineering on green synthesized CdS quantum dots for tuning their optical properties	N Singh, S Prajapati, RK Gupta	2022	7	89-103
112.	ACS omega	Visible-Light-Mediated Three-Component Cascade Sulfonylative Annulation	GC Upreti, T Singh, S Ranjan, RK Gupta, A Singh	2022	7 (34)	29728-29733
113.	Environmental Research	TiO <sub>2</sub> nanoflower photocatalysts: Synthesis, modifications and applications in wastewater treatment for removal of emerging organic pollutants	A Chakraborty, O Ruzimuradov, RK Gupta, J Cho, J Prakash	2022	212	113550 (1-24)
114.	Biomaterials Advances	Red-emitting polyaniline-based nanoparticle probe for pH-sensitive fluorescence imaging	L Yadav, A Yadav, S Chatterjee, S Tyeb, RK Gupta, P Sen, B Ateeq, V Verma, KS Nalwa	2022	140	213088 (1-12)
115.	Colloids and Surfaces A: Physicochemical and	Enhancing the synergism of Fe <sub>3</sub> O <sub>4</sub>	D Ye, W Tang, T	2022	654	130145 (1-14)

	Engineering Aspects	and Fe <sub>5</sub> C <sub>2</sub> to improve the process of CO <sub>2</sub> hydrogenation to olefines	Zhang, L Lv, Z Zou, RK Gupta, S Tang			
116.	Environmental Science and Pollution Research	Highly efficient visible light active doped metal oxide photocatalyst and SERS substrate for water treatment	K Shukla, R Gupta, RK Gupta, J Prakash	2022	30	34054-34068
117.	Biochimica et Biophysica Acta - Reviews on Cancer	Homeostases of epidermis and hair follicle, and development of basal cell carcinoma	Jaiswal A, Singh R	2022	1877 (5)	188795
118.	Stem Cell Reviews and Reports	Basal Cells in the Epidermis and Epidermal Differentiation	Singh R	2022	18	1883
119.	Stem Cell Reviews and Reports	Loss of Epidermal Homeostasis Underlies the Development of Squamous Cell Carcinoma	Jaiswal A, Singh R	2022		
120.	Chemical Engineering and Processing - Process Intensification	Laser Induced Graphene and Cu Nanoparticles Functionalized Microtextured Chemiresistive Sensor for the Fast Detection of Aqueous Hg <sup>2+</sup>	Haider Ali, Dhananjay Gupta, Rahul Gupta, Nishith Verma	2022	181	109146 (1-9)
121.	Electrochimica Acta	A Hybrid UV-Vis Spectroelectrochemical Approach for Measuring Folic	Haider Ali, Nishith Verma	2022	428	140920 (1-8)

		Acid using a Novel Ni-CNF/ITO Electrode				
122.	Chemical Engineering Journal	Conversion of CO <sub>2</sub> to Formate using Activated Carbon Fiber – supported g-C <sub>3</sub> N <sub>4</sub> -NiCoWO <sub>4</sub> photoanode in a Microbial Electrosynthesis System	Priyanka Gupta, Nishith Verma	2022	446 (2)	137029 (1-14)
123.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Stable immobilization of bacterial endospores in reusable g-C <sub>3</sub> N <sub>4</sub> pellets at room temperature	Rishabh Anand Omar, Bhaskar Bhaduri, Verma Nishith	2022	654	130161 (1-9)
124.	Reaction Chemistry & Engineering	Catalytic Reduction of In-Flow Aqueous Cr(VI) using a Slurry of Activated Carbon Fibers-Supported Ni Nanoparticles in a Coiled Flow Inverter	R Kajala, SS Tomar, N Verma, KDP Nigam	2022	7	2508-2517
125.	Industrial & Engineering Chemistry Research	A Review of Adsorptive Desulfurization of Liquid Fuels and Regeneration Attempts	RA Omar, N Verma	2022	61 (25)	8595-8606
126.	Journal of Membrane Science	Super-hydrophobic/Super-oleophilic carbon nanofiber-embedded resorcinol-formaldehyde composite membrane for	JK George, N Verma	2022	654 (15)	120538 (1-10)

		effective separation of water-in-oil emulsion				
127.	ACS Agricultural Science & Technology	Iron-carbon nanofibers coated with acylated homoserine lactone enhance plant growth and suppress Fusarium wilt disease in Cicer arietinum by modulating soil microbiome	K Pandey, N Verma, G Gupta	2022	2	311-322
128.	Chemosphere	Photocatalytic Oxidation of Glyphosate and Reduction of Cr(VI) in Water over ACF-supported CoNiWO <sub>4</sub> -gCN Composite under Batch and Flow Conditions	U Alam, K Pandey, N Verma	2022	297	134199 (1-11)
129.	Journal of Materials Science	A Cu-CNF-rGO Functionalized Carbon Film Indicated as a Versatile Electrode for Sensing of Biomarkers using Electropolymerized Recognition Elements	H Ali, N Verma	2022	57	6345-6360
130.	Reaction Chemistry & Engineering	Coiled Flow Inverter Mediated Synthesis of Activated Carbon Fibers-Supported Ni Nanoparticles	A Pophali, R Kajala, H Ali, N Verma, KDP Nigam	2022	7	719-729

131.	Fuel	Successive Bacterial Desulfurization and Regeneration of Liquid Fuel over Ni-doped Carbon Beads using a Single Enterococcus Faecium Strain Isolated from an Industrial Wastewater	RA Omar, N Verma, PK Arora	2022	309	122209 (1-11)
132.	Chemical Engineering and Processing - Process Intensification	Facile Measurement of Cortisol using Microchannel Embedded Cu-rGO-polymer Composite Chemiresistive Sensor	H Ali, A Yadav, N Verma	2022	180	108656 (1-8)
133.	Journal of Industrial & Engineering Chemistry	Oxidation of VOCs on a Highly Stabilized Furfuryl Alcohol-Based Activated Carbon Supported Nickel Oxide Catalyst	M Yadav, A Pophali, N Verma, T Kim	2022	105	313-323
134.	Chemical Engineering Journal	Augmented Complete Mineralization of Glyphosate in Wastewater via Microbial Degradation post CWAO over Supported Fe-CNF	P Gupta, K Pandey, N Verma	2022	428	132008 (1-11)
135.	ACS Sustainable Chemistry & Engineering	Direct Air Capture and Sequestration of CO <sub>2</sub> by Accelerated Indirect Aqueous Mineral Carbonation under Ambient	R Ragipani, K Sreenivasan, RP Anex, H Zhai, B Wang	2022	10 (24)	7852-7861

		Conditions				
136.	Physics of Fluids	Thin film dynamics using lattice Boltzmann method: Role of aspect ratio and surface wettability gradient	Garima Singh and Naveen Tiwari	2022	34	072104 (1-14)
137.	European Journal of Mechanics - B/Fluids	Spatiotemporal stability of a thin film in the presence of thermal and solutal Marangoni stresses	Divij Kishal, Raj Nandini, Naveen Tiwari	2022	98 (1)	64-79
138.	Journal of Engineering Mathematics	Thick film flowing down a non-isothermal vertical cylinder	Divij Kishal, Naveen Tiwari	2022	137 (1)	1-17
139.	ACS Applied Polymer Materials	Two-Phase Composite Adhesive with Viscoelastic Inclusion	Kuldeep Kuhar, Animangsu Ghatak	2022	4 (12)	9095-9102
140.	Chemical Engineering Journal Advances	Gecko-inspired hierarchically rough surface used as a reprintable paper	Nitish Singh, Animangsu Ghatak	2022	12	100420 (1-9)
141.	Science	How does a lizard shed its tail?	Animangsu Ghatak	2022	375 (6582)	721
142.	ACS Applied Bio Materials	Versatile carbon nanofiber-based sensors	A Kundu, NP Shetti, S Basu, K Mondal, A Sharma, TM Aminabhavi	2022	5 (9)	4086-4102
143.	Physical Review E	Instability and rupture of ultrathin freestanding viscoelastic solid	S Sekhar, A Sharma, V Shankar	2022	106 (2)	024803 (1-13)



		films				
144.	Micromachines	Fabrication of High Surface Area Microporous ZnO from ZnO/Carbon Sacrificial Composite Monolith Template	K Mondal, M Islam, S Singh, A Sharma	2022	13 (2)	335 (1-10)
145.	ACS Sustainable Chemistry & Engineering	Versatile graphitized carbon nanofibers in energy applications	S Sharma, S Basu, NP Shetti, K Mondal, A Sharma, TM Aminabhavi	2022	10 (4)	1334-1360
146.	Journal of Engineering Mathematics	Effect of low-frequency AC forcing on the morphological instability arising in electrodeposition	A Ganesh, DS Pillai, R Narayanan	2022	132 (Article No: 16)	1-18
147.	Journal of Statistical Mechanics: Theory and Experiment	Cooperative freezing of the L12 ordered domains at the critical cooling temperature of Ni <sub>3</sub> Fe alloy	A Mangla, G Deo, PA Apte	2022	2022 (9)	093204 (1-23)
148.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Influence of particle size and metal-support interaction on the catalytic performance of Ni-Al <sub>2</sub> O <sub>3</sub> catalysts for the dry and oxidative-dry reforming of methane	PK Chaudhary, G Deo	2022	646	128973 (1-13)
149.	Journal of Petroleum Science and	Modelling of low salinity waterflooding in	H Sharma, KK Mohanty	2022	208	109624 (1-16)

	Engineering	carbonates: Effect of rock wettability and organic acid distribution				
150.	Journal of Petroleum Science and Engineering	Reducing surfactant retention using polyacrylate in Berea sandstone	GB Koparal, H Sharma, PJ Liyanage, KK Panthi, KK Mohanty	2022	208	109228 (1-8)
151.	Energy & Fuels	Effect of Brine and Organic Acids on Initial Wettability of Carbonate Rocks	S Bind, H Sharma	2022	36 (17)	10123-10132
152.	Phys. Chem. Chem. Phys.	The pressure induced phase diagram of double-layer ice under confinement: a first-principles study	Jyothirmai, M. V. and Abraham, B. Moses and Singh, Jayant K	2022	24 (27)	16647-16654
153.	ACS Applied Materials & Interfaces	Efficient CO2 capture and activation on novel two-dimensional transition metal borides	Mir, Showkat; Yadav, Vivek; Singh, Jayant	2022	14 (26)	29703-29710
154.	Journal of Materials Chemistry C	A strategic review of MXenes as emergent building blocks for future two-dimensional materials: recent progress and perspectives	B. Moses Abraham, Vanshree Parey, Jayant K. Singh	2022	10 (11)	4096-4123
155.	Journal of Molecular Liquids	Effect of salt on the adsorption of ionic surfactants at the air-water interface	Shubham Tiwari, Sadanandam Namsani Jayant K.Singh	2022	360	119498 (1-11)

156.	The Journal of Physical Chemistry B	Insights into the Phase Diagram of Pluronic L64 Using Coarse-Grained Molecular Dynamics Simulations	Bhendale, Mangesh; Srivastava, Arpita; Singh, Jayant	2022	126 (25)	4731-4744
157.	Journal of Computational Chemistry	Mechanistic insights of key host proteins and potential repurposed inhibitors regulating SARS-CoV-2 pathway	Debabrata Pramanik, Aiswarya B. Pawar, Sudip Roy, Jayant Kumar Singh	2022	43 (18)	1237-1250
158.	Catal. Sci. Technol	Mechanistic Insights for Electrochemical Reduction of CO <sub>2</sub> into Hydrocarbon Fuels over O-Terminated MXenes	Parey, V, Abraham, B, Jyothirmai, and Singh J K	2022	12 (7)	2223-2231
159.	Applied Surface Science	Tuning the structural properties and chemical activities of graphene and hexagonal boron nitride for efficient adsorption of steroidal pollutants	Abraham M, Parey V, Jyothirmal MV, Singh J K	2022	580	152110 (1-8)
160.	Journal of Biomolecular Structure and Dynamics	Integrated docking and enhanced sampling-based selection of repurposing drugs for SARS-CoV-2 by targeting host dependent factors	Amit Kumawat, Sadanandam Namsani, Debabrata Pramanik, Sudip Roy and Jayant K Singh	2022	40 (20)	9897-9908
161.	Journal of Biomolecular Structure and Dynamics	Metadynamics-based enhanced sampling protocol for virtual screening: case study for 3CL <sub>pro</sub> protein	Sadanandam Namsani, Debabrata Pramanik, Mohd Aamir	2022	40 (15)	7002-7017

		for SARS-CoV-2	Khan, Sudip Roy, Jayant Kumar Singh			
162.	Powder Technology	A particle location based multi-level coarse-graining technique for Discrete Element Method (DEM) simulation	Tarun De, Jayanta Chakraborty Jitendra Kumar, Anurag Tripathi Maitraye Sen , William Ketterhagen	2022	398	117058 (1-8)
163.	Chemical Engineering and Processing-Process Intensification	Study of capture efficiency utilizing passive mixing in heterogeneous microfluidic immunosensors	S Verma, S Panda	2022	180	108708 (1-13)
164.	Flexible and Printed Electronics	Mechanism of NH <sub>3</sub> gas sensing by SnO <sub>2</sub> /PANI nanocomposites: charge transport and temperature dependence study	SK Gautam, NA Gokhale, S Panda	2022	7 (3)	035022 (1-18)
165.	Nanotechnology	A simple, robust and scalable route to prepare sub-50 nm soft PDMS nanoparticles for intracellular delivery of anticancer drugs	AK Maparu, P Singh, B Rai, A Sharma, S Sivakumar	2022	33 (49)	495102 (1-15)

166.	The Journal of Physical Chemistry C	Deconvoluting Photoelectrochemical Activity in Monoclinic–Scheelite BiVO <sub>4</sub> Facet Selected Thin Films	Rashmi, MD Gyanprakash, M Gadhewal, RGS Pala, S Sivakumar	2022	126 (38)	16477-16491
167.	Combinatorial Chemistry & High Throughput Screening	Therapeutic Properties of PDMS Nanoparticles: A Promising New Drug Delivery Vehicle Against Inflammatory Conditions	Aiswarya A Ajitha, Sri Siva Kumar, Gayathri Viswanathan, Sabulal Baby, Prabath Gopalakrishnan Biju	2022	25 (10)	1672-1681
168.	Dalton Transactions	Quaternary Ru (ii) complexes of terpyridines, saccharin and 1, 2-azoles: effect of substituents on molecular structure, speciation, photoactivity, and photocytotoxicity	P Kumar, P Singh, S Saren, J Sayala, S Sivakumar, AK Patra	2022	51 (48)	18416-18437
169.	Dalton Transactions	Investigating the photosensitivity of koneramines for cell imaging and therapeutic applications	S Ghosh, A Akhir, D Saxena, S Singh, S Sivakumar, S Chopra	2022	51 (41)	15659-15668
170.	New Journal of Chemistry	An emissive dual-sensitized bimetallic Eu <sup>2+</sup> III-bioprobe: design strategy, biological interactions, and nucleolus staining	U Yadav, M Verma, Z Abbas, S Sivakumar, AK Patra	2022	46 (33)	16007-16018

		studies				
171.	ChemPhysChem	Oxygen Healing and CO <sub>2</sub> /H <sub>2</sub> /Anisole Dissociation on Reduced Molybdenum Oxide Surfaces Studied by Density Functional Theory	A Lal Bose, V Agarwal	2022	23	e202200510 (1-12)
172.	The Journal of Physical Chemistry A	Nascent Decomposition Pathways of CH <sub>4</sub> Pyrolysis in Gas-Phase Metal Halides	SK Dutta, S Ghosh, H Metiu, V Agarwal	2022	126 (35)	5900-5910
173.	Physical Review Fluids	Perspectives on viscoelastic flow instabilities and elastic turbulence	SS Datta, AM Ardekani, PE Arratia, AN Beris, I Bischofberger, V Shankar et. al.	2022	7 (8)	080701 (1-80)
174.	Rheologica Acta	Dynamics and shear banding in stress-controlled start-up shear flow of a model aging soft materials: the role of inertia and thixotropy	L Kushwaha, V Shankar, YM Joshi	2022	61 (6)	355-371
175.	Journal of Non-Newtonian Fluid Mechanics	Understanding viscoelastic flow instabilities: Oldroyd-B and beyond	HAC Sánchez, MR Jovanović, S Kumar, A Morozov, V Shankar	2022	302	104742 (1-39)

176.	Journal of Rheology	Kramers–Kronig relations for nonlinear rheology. Part I: General expression and implications	S Shanbhag, YM Joshi	2022	66 (5)	973-982
177.	Journal of Rheology	Kramers–Kronig relations for nonlinear rheology. Part II: Validation of medium amplitude oscillatory shear (MAOS) measurements	S Shanbhag, YM Joshi	2022	66 (5)	925-936
178.	Physics of Fluids	Effect of thermal and mechanical rejuvenation on the rheological behavior of chocolate	T Bhattacharyya, YM Joshi	2022	34 (3)	037111
179.	Journal of Rheology	Thixotropy, nonmonotonic stress relaxation, and the second law of thermodynamics	YM Joshi	2022	66 (1)	111
180.	J. Fluid Mech.	Particle force-based density segregation theory for multi-component granular mixtures in a periodic chute flow	Vishnu Kumar Sahu, Soniya Kumawat, Shivani Agarwal, and Anurag Tripathi*,	2023	A8	956
181.	Journal of Fluid Mechanics	Equilibrium shapes of liquid drops on pre-stretched nonlinear elastic membranes	V. Nair, I. Sharma, and V. Shankar,	2023	A21	961
182.	Journal of Rheology	Viscoelasticity and rheological	Shweta Sharma; V.	2023	67	139-155

		hysteresis	Shankar; Yogesh M. Joshi			
183.	arXiv	Transient shear banding during startup flow: Insights from nonlinear simulations	Sharma S., Joshi Y. M., Shankar V.	2023		
184.	Physics of Fluids	Gel-Sol Transition of Thermoresponsive Poly (vinyl alcohol) Solution: Validation of the Universal Critical Scaling Relations	Bhattacharyya, T., Suman, K., Joshi Y. M.	2023	35	027120
185.	J. Chem. Phys	Large Amplitude Oscillatory Shear Study of a Colloidal Gel at the Critical State	Suman, K., Shanbhag, S., Joshi Y. M.	2023	158	054907
186.	Journal of Rheology	On the Nature of Flow Curve and Categorization of Thixotropic Yield Stress Materials	Bhattacharyya, T., Jacob, A. R., Petekidis G., Joshi Y. M.	2023	67	461
187.	Journal of Rheology	Viscoelasticity and Rheological Hysteresis	Sharma S., Shankar V., Joshi Y. M.	2023	67	139
188.	arXiv	The Method of Harmonic Balance for the Giesekus Model under Oscillatory Shear	Mittal S., Joshi Y. M., Shanbhag S.	2023		
189.	Chemical Engineering Science	Process and catalyst improvements for the dry reforming of methane	Chaudhary P.K., Deo G	2023	276	



190.	Sustainable Chemical, Mineral and Material Processing	Optimization of Nickel Loading of Ni-Al <sub>2</sub> O <sub>3</sub> Catalyst for Syngas Production by Tri-Reforming of Methane	Gupta S, Deo G.	2023		277–286
191.	Asian Journal of Chemistry	Enhancement in Activity and Reusability of Dry Amberlyst-15 Catalyst by Thermal Treatment for Production of Biodiesel from Karanja Oil	Arun Kumar Gupta., Goutam Deo.	2023	35	62-68
192.	Energy & Fuels	Screening of Hypothetical Metal–Organic Frameworks for Xylene Isomers and Ethylbenzene Separation	Halder P.;Singh J.K.	2023	37	2230–2236
193.	Langmuir	<i>Molecular Insights on Morphology, Composition, and Stability of Mixed Micelles Formed by Ionic Surfactant and Nonionic Block Copolymer in Water Using Coarse-Grained Molecular Dynamics Simulations</i>	Bhendale M.;Singh J.K.	2023		
194.	Journal of Materials	<i>Fusing a machine learning strategy</i>	Abraham B.M.;Sinha	2023	11	8091-8100

	Chemistry A	<i>with density functional theory to hasten the discovery of 2D MXene-based catalysts for hydrogen generation</i>	P.;Halder P.;Singh J.K.			
195.	ACS Physical Chemistry Au	Dynamics of Active SiO <sub>2</sub> -Pt Janus Colloids in Dilute Poly(ethylene oxide) Solutions	Harishwar Raman, Sneham Das, Hrithik Sharma, Karnika Singh, Shruti Gupta, Rahul Mangal	2023	11	
196.	Royal Society of Chemistry	Deforming active droplets in viscoelastic solutions	Prateek Dwivedi, Atishay Shrivastava, Dipin Pillai, Naveen Tiwari, Rahul Manga	2023	11	
197.	Fuel	Preparation adjacent Ni-Co bimetallic nano catalyst for dry reforming of methane	Zongpeng Zou, Tao Zhang, Li Lv, Wenxiang Tang, Guoquan Zhang, Raju Kumar Gupta, Yan Wang, Shengwei Tang	2023	13	
198.	ACS Sustainable Chemistry & Engineering	Preparing a Zr-Doped CeO <sub>2</sub> Nanorod to Improve the Catalytic	Zongpeng Zou, Tao Zhang, Li Lv, Wenxiang	2023	11	

		Performance of the Ni-Based Catalyst for Dry Reforming of Methane by Enhancing Oxygen Supply	Tang, Guoquan Zhang, Raju Kumar Gupta, Yan Wang, Shengwei Tang			
199.	Journal of Power Sources	Enroute to sub-300° C operating Sn–Zn   Pb–Bi liquid metal battery by compositional engineering	M Dinachandra Singh, Chiranjeev Kaushik, Joseph Nishanth, Ajay Vijay Shinde, Raju Gupta, Naveen Tiwari, Kanwar S Nalwa	2023	7	
200.	Industrial & Engineering Chemistry Research	Controllable Preparation of Nano-Ni to Eliminate Step Edges of Carbon Deposition on Ni-Based Catalysts for Methane Dry Reforming	Zongpeng Zou, Tao Zhang, Li Lv, Wenxiang Tang, Guoquan Zhang, Raju Kumar Gupta, Yan Wang, Shengwei Tang	2023	13	
201.	Environmental Science and Pollution Research	Highly efficient visible light active doped metal oxide photocatalyst and SERS substrate for water treatment	Komal Shukla, Rajeev Gupta, Raju Kumar Gupta, Jai Prakash	2023	30	

202.	RSC Sustainability	Devising a people-friendly test kit for overcoming challenges in the assessment of water quality and analysis of water pollution in the river Ganga	Shraddha Chauhan, Anjali Yadav, Premnadh M Kurup, Xia Li, Pradip Swarnakar, Raju Kumar Gupta	2023	14	
203.	Elsevier	Highly sensitive Cu-ethylenediamine/PANI composite sensor for NH <sub>3</sub> detection at room temperature	Shivam Kumar Gautam, Siddhartha Panda	2023	258	124418
204.	Chemical Engineering Journal Advances	Analysis of mixed prostate specific antigen and Tween-20 sessile droplets for the reduction in interfacial PSA adsorption	Vidisha Singh Rathaur, Siddhartha Panda	2023		100492
205.	Springer Nature Singapore	Comparative Performance of Coal-Fired Power Plants Using Fuzzy AHP and TOPSIS	Soumik Das, Manik Chandra Das, Bivash Mallick	2023		305-318
206.	ACS Applied Energy Materials	Upconverted Nanophosphors for Increasing Efficiency in a Dye-Sensitized Solar Cell	Yogendra Nath Chouryal, Rahul Kumar Sharma, Neeraj Tomar, Neelam Yadav, Heera Lal Kewat, Ishfaq Abdullah Wani, Sandeep	2023		

			Nigam, Praveen Kumar Surolia, Sri Sivakumar, Pushpal Ghosh			
207.	Journal of Power Sources	Enroute to sub-300 °C operating Sn–Zn  Pb–Bi liquid metal battery by compositional engineering	Singh M.D.;Kaushik C.;Nishanth J.;Shinde A.V.;Gupta R.;Tiwari N.;Nalwa K.S	2023	564	232855 (1-7)
208.	Chemical Engineering Journal	A Sustainable Approach for the Production of Formate from CO2 using Microalgae as a Clean Biomass and Improvement using Potassium-Doped g-C3N4	A Singha, U Alam, P Chakraborty, B Sundararaju, N Verma	2023	454 (Part 2)	140303 (1-10)
209.	Catalysis Letters	Carbon Nanofiber-Bridged Carbon Nitride-Fe2O3 Photocatalyst: Hydrogen Generation and Degradation of Aqueous Organics	JK George, A Bhagat, B Bhaduri, N Verma	2023	153	419-431
210.	Chemical Engineering Science	Synthesis of Internally Carbon-Sourced Carbon Nanofiber Forming Ni-Graphitic Carbon	B Bhaduri, RA Omar, N Verma	2023	274	118655 (1-11)

		Nitride				
211.	Journal of Materials Chemistry A	Degradation of phenolic compounds in wastewater using a conical packed bed microbial fuel cell in continuous flow with recycling	S Singh, K Pandey, N Verma	2023	11	3942-3948
212.	International Journal of Hydrogen Energy	An anthraquinone-integrated S-scheme-based NiTiO <sub>3</sub> -g-C <sub>3</sub> N <sub>4</sub> composite with enhanced hydrogen production activity	U Alam, A Pandey, N Verma	2023	48 (7)	2532-2541
213.	Chemical Engineering Research and Design	Compact process for cumene manufacture: Synthesis, design and control	Prakhar Srivastava, Aayush Gupta, Nitin Kaistha	2023	190	220-232
214.	Biochimica et Biophysica Acta (BBA) - Reviews on Cancer	CtBP: A global regulator of balancing acts and homeostases	Alok Jaiswal, Raghvendra Singh	2023	1878 (3)	188886 (1-11)
<b>Department of Chemistry</b>						
215.	J. Comput. Chem. 30	All-Atom Simulations of the Trimeric Spike Protein of SARS-CoV-2 in Aqueous	B. Panthi, S. Dutta, and A. Chandra	2023		1560-1577

		Medium: Nature of Interactions, Conformational Stability and Free Energy Diagrams for Conformational Transition of the Protein				
216.	J. Chem. inf. Model. 63	A Multiple Proton Transfer Mechanism for the Charging Step of the Aminoacylation Reaction at the Active Site of Aspartyl tRNA Synthetase	S. Dutta and A. Chandra	2023		1819-1832
217.	J. Phys. Chem. B, 127	Temperature dependence of non-Condon effects in two-dimensional vibrational spectroscopy of water	R. Malik, Abhilash Chandra, B. Das and A. Chandra	2023		2488-2498
218.	ChemPhysChem <a href="http://dx.doi.org/10.1002/cphc.202200604">http://dx.doi.org/10.1002/cphc.202200604</a>	Vibrational Sum Frequency Generation Spectra of Water-Vapor Interfaces Covered by Alcohols: Effects of Surface Coverage and Coupling between Oscillators	B. Das and A. Chandra			
219.	J. Phys. Chem. B 126	Free Energy Landscape of the Adenylation Reaction of the Aminoacylation Process at the Active Site of Aspartyl	S. Dutta and A. Chandra	2022		5821-5831

		tRNA Synthetase				
220.	J. Phys. Chem. B. 126	All-Atom Simulations of Human ACE2-Spike Protein RBD Complexes for SARS-CoV-2 and Some of its Variants: Nature of Interactions and Free Energy Diagrams for Dissociation of the Protein Complexes	S. Dutta, B. Panthi and A. Chandra	2022		5375-5389
221.	Asian J. Org. Chem. 2022	Metal-Catalyzed Divergent Synthetic Methods for Pyrrolocoumarins and Furocoumarins	<i>Maddali L. N. Rao,*</i> Sachchida Nand, Venneti N Murty	2022	11	e202100604
222.	Org. Bio. Chem.	Pd-Catalyzed cross-coupling synthesis of 4-aryl-3-formylcoumarins	<i>Maddali L. N. Rao,*</i> Sachchida Nand	2022	20	1053-1057
223.	Angew. Chemie Int., Ed.	Formation and Reactivity of a Fleeting Ni(III) Bisphenoxy Diradical Species	A. Awasthi, I. F. Leach, S. Engbers. R. Kumar, R. Eerlapally, S. Gupta, J. E. M. N. Klein, A. <i>Draksharapu</i>	2022	61	e202211345
224.	Dalton Trans.,	Spectroscopic characterization of a Ru(III)-OCl intermediate: a structural mimic of haloperoxidase	R. Kumar, A. Awasthi, S. Gupta, R. Eerlapally, A. <i>Draksharapu</i>	2022	51	12848-12854



225.	ACS Chemical Biology	Enhancers of human and rodent oligodendrocyte formation predominantly induce cholesterol precursor accumulation	Joel L Sax, Samantha N Hershman, Zita Hubler, <i>Dharmaraja Allimuthu</i> , Matthew S Elitt, Ilya Bederman, Drew J Adams	2022	17	218-2200
226.	Chemical Communications	Nitroisobenzofurane, a small molecule inhibitor of multidrug-resistant <i>Staphylococcus aureus</i> , targets peptidoglycan biosynthesis	Viral Rawat, Sona Tiwari, Shweta Khanna, Umang Gupta, SNC Sridhar, Dharmendra K Yadav, Grace Kaul, Abdul Akhir, Deepanshi Saxena, Saravanan Matheshwaran, Sidharth Chopra, <i>Dharmaraja Allimuthu</i>	2022	58	11669-11672
227.	Journal of Materials Chemistry A	Facile synthesis of nitroamino-1, 3, 4-oxadiazole with azo linkage: a new family of high-performance and biosafe energetic materials	Shreyasi Banik, Pradeep Kumar, Vikas D Ghule, Shweta Khanna, <i>Dharmaraja Allimuthu</i> , Srinivas	2022	10	22803-22811

			Dharavath			
228.	Journal of Physical Chemistry Letters	Internal Electric Field-Induced Formation of Exotic Linear-Acetonitrile Chains	D. Mani, T. K. Roy, J. Khatri, G. Schwaab, S. Blach, C. Hölzl, H. Forbert, D. Marx, M. Havenith	2022	13	6852-6858
229.	Physical Review Letters	Zwitter Ionization of Glycine at Outer Space Conditions due to Microhydration by Six Water Molecules	G. Schwaab, R.P. de Tudela, D. Mani, N. Pal, T. K. Roy, F. Gabas, R. Conte, L. D. Caballero, M. Ceotto, D. Marx, M. Havenith	2022	128	033001-1 - 033001-6
230.	ACS Infectious Diseases (ACS)	SARS-CoV-2 Binding to Terminal Sialic Acid of Gangliosides Embedded in Lipid Membranes	Geetanjali Negi#, Anurag Sharma#, Monika Chaudhary, Divya Gupta, Krishnan H. Harshan, and Nagma Parveen*	2023	Just accepted	Cover art has been selected for the next issue
231.	Biophysical Reviews (Springer-Nature)	Membrane Attachment and Fusion of HIV-1, Influenza A, and SARS-CoV-2: Resolving the Mechanisms with	Geetanjali Negi#, Anurag Sharma#, Manorama Dey#, Garvita Dhanawat,	2022	11	1109-1140

		Biophysical Methods	and <i>Nagma Parveen*</i>			
232.	mBio (ASM)	Single-Cell Imaging Shows that The Transcriptional State of the HIV-1 Provirus and Its Reactivation Potential Depend on the Integration Site	Julie Janssens, Flore De Wit, <i>Nagma Parveen</i> , and Zeger Debyser	2022	13	e00007-22
233.	Langmuir (ACS)	Dissimilar Deformation of Fluid- and Gel-Phase Liposomes upon Multivalent Interaction with Cell Membrane Mimics Revealed Using Dual-Wavelength Surface Plasmon Resonance	Karin Norling, Mattias Sjöberg, Marta Bally, Vladimir P. Zhdanov, <i>Nagma Parveen*</i> , and Fredrik Höök*	2022	38	2550–2560
234.	Angew. Chem. Int. Ed,	Simultaneous Harvesting of Multiple Hot-Holes via Visible Light Excitation of Plasmonic Gold Nanospheres for a Selective Oxidative Bond Scission of Olefins to Carbonyls	Swathi Swaminathan, <i>J. K. Bera</i> and Manabendra Chandra	2023	135	e202215933
235.	Dalton Trans.	Antimicrobial efficacy of a hemilabile Pt(II)-NHC compound against drug-resistant <i>S. aureus</i> and <i>Enterococcus</i>	Mandeep Kaur, Ritesh Thakare, Arindom Bhattacherya, Prem Anand Murugan, Grace Kaul, Manjulika Shukla, Alok	2023	52	1876-1884

			Kr. Singh, Saravanan Matheshwara n, Sidharth Chopra, <i>Jitendra K. Bera</i>			
236.	ACS Catalysis	Understanding the Visible Light Initiated Manganese Catalyzed Synthesis of Quinolines and Naphthyridines under Ambient and Aerobic Conditions	Kamaless Patra, Arindom Bhattacherya, Chenfei Li, <i>J. K. Bera</i> and Han Sen Soo	2022	12	15168-15180
237.	Organometallics	Cyclic Amide-Anchored NHC-Based Cp*Ir Catalysts for Bidirectional Hydrogenation-Dehydrogenation with CO <sub>2</sub> /HCO <sub>2</sub> H Couple	Babulal Maji, Abhishek Kumar, Arindom Bhattacherya, <i>J. K. Bera</i> and Joyanta Choudhury	2022	41	3589–3599
238.	ChemSusChem	Recent Advances in Carbon Dioxide Adsorption, Activation and Hydrogenation to Methanol using Transition Metal Carbides	Prabodh Ranjan, Vitthal B. Saptal, and <i>J.K. Bera</i>	2022	15	e202201183
239.	Organometallics	A Protic Mn(I) Complex Based on a Naphthyridine-N-oxide Scaffold: Protonation/Deprotonation Studies and Catalytic Applications for Alkylation of	Kamaless Patra, Roshayed Ali Laskar, Anubhav Nath and <i>J.K. Bera</i>	2022	14	1836-1846

		Ketones				
240.	Appl. Organomet. Chem.	Switchable Activity of a Ru Catalyst bearing an Annulated Mesoionic Carbene (MIC) ligand for Oxidation of Primary Amines	Suman Yadav, Saikat Pal, Nilay Kumar Pal, N. U. D. Reshi, Sourav Pal and <i>J.K. Bera</i>	2022		e6594
241.	Advanced Optical Materials	Flexible molecular electrochromic devices run by low-cost commercial cells	R. K. Parashar, S. Kandpal, P. Bandyopadhyay, <i>M. Sadhukhan</i> , R. Kumar, and P. C. Mondal	2023	-	Just accepted
242.	Theoretical Chemistry Accounts	Quantum chaos in atoms and molecules under strong external fields	<i>M. Sadhukhan</i> and B. M. Deb	2023	142	47
243.	Journal of Computational Chemistry	Modeling coarse-grained van der Waals interactions using dipole-coupled anisotropic quantum Drude oscillators	Prasanta Bandyopadhyay and <i>M. Sadhukhan</i>	2023	44	1164-1173
244.	Molecular Physics	Kinetic energy density for open-shell systems: analysis and development of a	Priya and <i>M. Sadhukhan</i>	2022	DOI: <a href="https://doi.org/10.1080/00268976.2022.2132611">https://doi.org/10.1080/00268976.2022.2132611</a> 4	-

		novel technique				
245.	Physical Chemistry Chemical Physics	A simple fragment-based method for van derWaals corrections over density functional theory	Prasanta Bandyopadhyay, Priya and <i>M. Sadhukhan</i>	2022	24	8508–8518
246.	<i>Dalton Trans.</i>	Modulation of iron spin states in highly distorted iron(III)porphyrin: H-bonding interactions and implications for the hemoproteins	D. Sahoo, R. Mazumdar, S. Pramanik, S. Banerjee, R. Patra, and <i>S. P. Rath*</i>	2023	52	0000
247.	<i>Coord. Chem. Rev.</i>	Binuclear Complexes with Single M-F-M Bridge (M: Fe, Mn, and Cu): A Critical Analysis of the Impact of Fluoride for Isoelectronic Hydroxide Substitution	S. Sarkar, F. S. T. Khan, T. Guchhait and <i>S. P. Rath*</i>	2023	479	215003
248.	<i>Adv. Inorg. Chem.</i>	Effect of heme-heme interaction: modulation of metal spin state in oxo/hydroxo/fluoro bridged diiron(III)/dimanganese(III) porphyrin dimers	F. S. T. Khan, D. Sil, and <i>S. P. Rath*</i>	2023	81	95-184
249.	<i>J. Inorg. Biochem.</i>	Diheme Cytochromes: Effect of Mixed-Axial Ligation on the Electronic Structure and Electrochemical	S. Sanfui, S. Sarkar, and <i>S. P. Rath*</i>	2023	240	112109

		Properties with Cobaltic Heme				
250.	<i>J. Porphyrin and Phthalocyanines</i>	Induction and Rationalization of Supramolecular Chirality in a Zn(II)porphyrin Dimer using Chiral Substrates: Role of Substrates in the Architectural Selectivity	B. Saha, D. Chandel, C. Pal, and <i>S. P. Rath*</i>	2023	26	A-M
251.	<i>Dalton Trans.</i>	Control of Spin Coupling Through Redox-active Bridge in Dinickel(II) Porphyrin Dimer: Step-wise Oxidations Enable Isolations of the Chlorin-porphyrin Heterodimer and Dication Diradical with Singlet Ground State	Y. A. Pandit, M. Usman, A. Sarkar, S. J. Shah, and <i>S. P. Rath*</i>	2023	52	877-891.
252.	<i>ACS Catal.</i>	Cooperativity in Diiron(III)porphyrin Dication Diradical-Catalyzed Oxa-Diels-Alder Reactions: Spectroscopic and Mechanistic Insights	S. Sarkar, P. Sarkar, D. Samanta, S. K. Pati and <i>S. P. Rath*</i>	2022	12	9589-9601.
253.	<i>Dalton Trans.</i>	Induction and Rationalization of Supramolecular Chirality in Highly-Flexible	D. Chandel, C. Pal, B. Saha, and <i>S. P. Rath*</i>	2022	51	14125-14137

		Zn(II)porphyrin Dimer: Structural, Spectroscopic and Theoretical Investigations				
254.	<i>Inorg. Chem.</i>	Hydrogen Bonding Interactions Trigger Induction of Chirality <i>via</i> Formation of a Cyclic Dimer	B. Saha, D. Chandel, and <i>S. P. Rath*</i>	2022	61	2154-2166
255.	<i>Inorg. Chem.</i>	Highly Oxidized Cobalt Porphyrin Dimer: Control of Spin Coupling <i>via</i> Bridge	S. Sanfui, M. Usman, S. Sarkar, E. Garribba and <i>S. P. Rath*</i>	2022	61	8419-8430
256.	<i>Inorg. Chem.</i>	Long-Range Intramolecular Spin Coupling Through-Redox-Active Bridge Upon Step-wise Oxidations: Control and Effect of Metals	Y. A. Pandit, S. J. Shah, M. Usman, S. Sarkar, and <i>S. P. Rath*</i>	2022	61	5270-5282
257.	<i>Appl. Surf. Sci.</i>	Meta-Stable Initial Condition for Improving the Switching Probability in Azobenzene Derivatives on Surface	Khushboo Yadav, Hariom Birla, Showkat H. Mir, Thomas Halbritter, Alexander Heckel, Jayant K. Singh, <i>Thiruvancheril G.</i>	2023	612	155747



			<i>Gopakumar</i>			
258.	<i>Dalton Trans.</i>	Lanthanide and transition metal complexes as molecular magnets	<i>Chandrasekhar, V.</i>	2022	51	4199-4201
259.	<i>RSC Advances</i>	Aluminium alkyl complexes supported by imino-phosphanamide ligand as precursors for catalytic guanylation reactions of carbodiimides	Karmakar, H.; Anga, S.; Panda, T. K.; <i>Chandrasekhar, V.</i>	2022	12	4501-4509
260.	<i>Adv. Syn. Cat.</i>	Palladium-Catalyzed Synthesis of $\alpha$ -Methyl Ketones from Allylic Alcohols and Methanol.	Biswal, P.; Samser, S.; Meher, S. K.; <i>Chandrasekhar, V.</i> ; Venkatasubbiah, K.	2022	364	413-419
261.	<i>J. Org. Chem.</i>	Ligand-Controlled Ruthenium-Catalyzed Borrowing-Hydrogen and Interrupted-Borrowing-Hydrogen Methodologies: Functionalization of Ketones Using Methanol as a C1 Source.	Biswal, P.; Subramani, S.; Samser, S.; Venkatasubbiah, K.; <i>Chandrasekhar, V.</i>	2022	<i>In print</i>	
262.	<i>Materials Advances</i>	<i>Tetra-coordinated boron-appended zinc(II)-salen: a highly selective fluorescence-based</i>	Nayak, P; Murali, A.C.; <i>Chandrasekhar, V.</i> ; Venkatasubb	2022	3	5893-5899.

		<i>sensor for Sm<sup>3+</sup> ions via sensitization.</i>	aiyah, K.			
263.	<i>ACS Omega</i>	<i>Rigid N<sub>3</sub>O<sub>2</sub>-Pentadentate Ligand-Assisted Octacoordinate Mononuclear Ln(III) Complexes: Syntheses, Characterization, and Slow Magnetization Relaxation.</i>	Singh, V.; Das, D.; Anga, S.; Sutter, J.-P.; Chandras ekhar, V.; Bar, A. K.	2022	7	25881-25890.
264.	<i>Inorg. Chem.</i>	Synthesis, Structure, and Zero-Field SMM Behavior of Homometallic Dy <sub>2</sub> , Dy <sub>4</sub> , and Dy <sub>6</sub> Complexes.	Kumar, P.; Swain, A.; Acharya, J.; Li, Y.; Kumar, V.; Rajaraman, G.; Colacio, E.; Chandras ekhar, V.	2022	61	11600-11621.
265.	<i>Inorg. Chem. Front.</i>	<i>Magnetocaloric effect and slow magnetic relaxation in peroxide-assisted tetranuclear lanthanide assemblies.</i>	Kumar, P.; Flores G. J.; Sahu, P.P.; Ahmed, N.; Acharya, J.; Kumar, V.; Cador, O.; Pointillart, F.; Singh, S. K.; Chandras ekhar, V.	2022	9	5072-5092.
266.	<i>Dalton Trans.</i>	Fe <sup>II</sup> spin crossover complexes containing N <sub>4</sub> O <sub>2</sub>	Dey, B.; Chandras	2022	51	13995-14021.

		donor ligands.	<i>ekhar, V.</i>			
267.	<i>Inorg. Chem.</i>	Tetra-Coordinated Boron-Functionalized Phenanthroimidazole-Based Zinc Salen as a Photocatalyst for the Cycloaddition of CO <sub>2</sub> and Epoxides.	Nayak, P.; Murali, A. C.; Pal, P. K.; Priyakumar, U. D.; <i>Chandrasekhar, V.</i> ; Venkatasubbiah, K	2022,	61	14511-14516.
268.	○ Dalton Trans.	Exchange-driven slow relaxation of magnetization in Ni <sup>II</sup> <sub>2</sub> Ln <sup>III</sup> <sub>2</sub> (Ln <sup>III</sup> = Y, Gd, Tb and Dy) butterfly complexes: experimental and theoretical studies.	Chakraborty, A.; Ahmed, N.; Ali, J.; Moorthy, S.; Goura, J.; Singh, S. K. Rogez, G.; <i>Chandrasekhar, V.</i>	2022,	51	14721-14733.
269.	<i>ACS Omega</i>	<i>Push and Pull Effect of Methoxy and Nitro Groups Modifies the Spin-State Switching Temperature in Fe(III) Complexes.</i>	Dey, B.; Mehta, S.; Mondal, A.; Cirera, J.; Colacio, E.; <i>Chandrasekhar, V</i>	2022,	7	39268-39279.
270.	Dalton Trans.	Slow magnetic relaxation in a homoaxially phosphine oxide coordinated pentagonal bipyramidal Dy(III) complex	Kalita, P.; Ahmed, N.; Moorthy, S.; Bereau, V.; Bar, A. K.; Kumar, P.;	2023	52	2804-2815

			Nayak, P.; Sutter, J-P; Singh, S. K.; <i>Chandrasekhar, V.</i>			
271.	<i>Adv. Syn. Cat.</i>	B-N Coordinated Phenanthroimidazole-Based Zinc-Salen as a Photocatalyst for the Synthesis of Oxazolidinones using Carbon Dioxide as a C1 Source under Mild Reaction Conditions	Nayak, P.; Chandrasekar, M. A.; Rao, V. V.; <i>Chandrasekhar, V.</i> ; Venkatasubbiah, K.	2023	365	230-237
272.	Dalton Trans.	<ul style="list-style-type: none"> <li>○ <i>Four-membered CN chelation in main-group organometallic chemistry</i></li> </ul>	Kannan, R.; <i>Chandrasekhar, V.</i>	2023	52	1159-1176
273.	Journal of Chemical Sciences	Introduction to quantum thermodynamic cycles	Samarth Kumar, Nikhil Gupta, Shuvadip Ghosh, <i>Arnab Ghosh</i>	2023	135	36

274.	Entropy	<u>Quantum Advantage of Thermal Machines with Bose and Fermi Gases</u>	Saikat Sur, <i>Arnab Ghosh</i>	2023	25	372
275.	Entropy	Universal Behavior of the Coulomb-Coupled Fermionic Thermal Diode	Shuvadip Ghosh, Nikhil Gupt, <i>Arnab Ghosh</i>	2022	24	1810
276.	Physical Review E (Featured in Physics)	<u>Floquet quantum thermal transistor</u>	Nikhil Gupt, Srijan Bhattacharyya, Bikash Das, Subhadeep Datta, Victor Mukherjee and <i>Arnab Ghosh</i>	2022	106	024100
277.	Inorganic Chemistry	Poly tetrazole containing thermally stable and insensitive alkali metals-based 3D energetic Metal-Organic Frameworks (EMOFs)	Richa R., Parasar K., Vikas D. G., <i>Srinivas D.</i>	2023		<i>(Just accepted)</i>
278.	Chemical Physics	Design and computational studies on energetic compounds composing bridged bis triazolo-triazine framework	Anjali M., Rimpi D., Vikas D. G., <i>Srinivas D.</i>	2023	571	111939– 111946
279.	Materials Chemistry and Physics	Synthesis, characterization, testing, and detonation performance studies of fused pyrazole-	Shreyasi. B., Vikas D. G., <i>Srinivas D.</i>	2023	301	127678– 127687

		based fluorescent energetic materials				
280.	Chemical communications	High-performing, insensitive and thermally stable energetic materials from zwitterionic gem-dinitromethyl substituted C-C bonded 1,2,4-triazole and 1,3,4-oxadiazole	Abhishek K. Y., Manojkumar. J., Vikas D. G., <i>Srinivas D.</i>	2023	59	4324–4327
281.	Crystal Growth Design	Thermally stable and insensitive energetic cocrystals comprising nitrobarbituric acid coformer	Abhishek K. Y., Vikas D. G., <i>Srinivas D.</i>	2023	23	2826–2836
282.	Dalton trans	Facile synthesis of thermally stable tetrazolo[1,5-b][1,2,4]triazine substituted energetic materials: Synthesis and characterization	Parasar K., Vikas D. G., <i>Srinivas D.</i>	2023	52	747–753
283.	ACS Applied Materials & Interfaces	Promising thermally stable energetic materials with the combination of pyrazole-1,3,4-oxadiazole and pyrazole-1,2,4-triazole backbones: facile synthesis and energetic	Abhishek K. Y., Vikas D. G., <i>Srinivas D.</i>	2022	14	49898–49908

		performance				
284.	Journal of Materials Chemistry A	Facile synthesis of nitroamino-1,3,4-oxadiazole with azo linkage: a new family of high-performance and biosafe energetic materials	Shreyasi B., Pradeep K., Vikas D. G., Shweta K., Dharmaraja A., and <i>Srinivas D.</i>	2022	10	22803–22811
285.	Polycyclic Aromatic Compounds	Computational Evaluation of Polycyclic Bis-oxadiazolo-pyrazine Backbone in Designing Potential Energetic Materials	Anjali Maan, Vikas D. G., <i>Srinivas D.</i>	2022		<a href="https://doi.org/10.1080/10406638.2022.2124282">https://doi.org/10.1080/10406638.2022.2124282</a>
286.	Journal of Materials Chemistry A	Facile fabrication of functionalized pyrimidine derivatives: Constructing a new family of high performance and less sensitive Energetic compound	Abhishek K. Y., Vikas D. G., <i>Srinivas D.</i>	2022	10	12702–12712
287.	Organic letters	1,3,5-Tris[(2H-tetrazol-5-yl)methyl] isocyanurate and Its Tricationic Salts as Thermostable and Insensitive Energetic Materials	Parasar K., Vikas D. G., <i>Srinivas D.</i>	2022	24	3555–3559
288.	Energetic Materials Frontiers	Potential energetic salts of 5,5'-methylenedi(4H-1,2,4-triazole-3,4-diamine) cation: Synthesis,	Mathpati R. S., Abhishek K. Y., Vikas D., G. <i>Srinivas D.</i>	2022	3	90–96

		characterization and detonation performance				
289.	Asian Journal of Organic Chemistry	Unexpected Synthesis of Oxadiazole Analogues: Characterization and Energetic Properties	Abhishek K. Y., Parasar K., Vikas D. G., <i>Srinivas D.</i>	2022	11	e202100779
290.	Energetic Materials Frontiers	Computational assessment of nitrogen-enriched, stable and insensitive tris(1,2,4,5-tetrazin-3-yl)amine building block for energetic applications	Anjali Maan, Vikas D. G., <i>Srinivas D.</i>	2022	3	47–52
291.	Chemical Engineering Journal	Unfolding the chemistry of FOX-7: Unique energetic material and precursor with numerous possibilities	Shreyasi B., Abhishek K. Y., Parasar K., Vikas D. G., <i>Srinivas D.</i>	2022	431	133378–133389
292.	ChemBioChem	Inhibiting erastin-induced ferroptotic cell death by purine-based chelators.	Joshi, S., Agarwal, S., Panjla, A., Valiyaveetil, S., Ganesh, S., <i>Verma, S.*</i>	2022	23	e202100654 (DOI:10.1002/cbic.202100654).
293.	ACS Applied Nano Materials	Microwave assisted solid-state synthesis of dichalcogenide nanostructures and their electrocatalytic hydrogen evolution activity	Bajpai, R., <i>*Roy, S., *Verma, S.*</i>	2022	5	8511-8525



294.	ACS Chem. Neurosci.	Multiple actions of H <sub>2</sub> Sreleasing peptides inhuman b-amyloidexpressing C. elegans.	Ali, R., Hameed,R., Chauhan, D.,Sen, S.,Wahajuddin, M.,Nazir, A., <i>Verma,S.*</i>	2022	13	3378–3388.
295.	Chem Bio Chem	Strategies for interference of insulin fibrillogenesis: Challenges and advances.	Sen, S., Ali, R.,Onkar, A., Ganesh,S., <i>Verma, S.*</i>	2022	23	e202100678 (DOI:10.1002/cbic.202100678).
296.	Chem Cat Chem	Covalent Organic Framework: An Emerging Catalyst for Renewable Ammonia Production	I. H. Chowdhury, S. Gupta, and <i>V. G. Rao</i>	2023		e202300243
297.	ACS Energy Letters	Design Principle of a Water-Dispersed Photocatalytic Perovskite through Ligand Deconstruction	M. Ahlawat, Neelakshi, R. Ramapanicker and <i>V. G. Rao</i>	2023	8	2159–2168
298.	ACS Energy Letters	Energy Funneling from Water-Dispersed Perovskites to Chromophores	P. Aggarwal, A. Halder, Neelakshi, R. Ramapanicker and <i>V. G. Rao</i>	2023	8	1520-1528
299.	Advanced Materials Interfaces	Engineering Water Stable Nanocomposites: A Step toward Unleashing the True Potential of Perovskite Catalysis Perovskite and Plasmonic-	P. Aggarwal, M. Ahlawat, and <i>V. G. Rao</i>	2023	10	2202029

		Perovskite				
300.	Journals of Material Chemistry A	Perovskite photocatalysis: realizing long-lived charge-separated states at the interface of CsPbBr <sub>3</sub> nanocrystals and functionalized ferrocene molecules	S. Singh, D. Mittal, V. Gurunaran, A. Sahu, R. Ramapanicker, and <i>V. G. Rao</i>	2022	10	21112-21123
301.	The Journal of Physical Chemistry C	Photocatalytic NADH Regeneration Employing Au–Pd Core-Shell Nanoparticles: Plasmonic Modulation of Underlying Reaction Kinetics	S. Singh, S. Kumari, M. Ahlawat, and <i>V. G. Rao</i>	2022	126	15175-15183
302.	Advanced Materials Interfaces	Recent Progress and Challenges in Plasmon-Mediated Reduction of CO <sub>2</sub> to Chemicals and Fuels	D. Mittal, M. Ahlawat, and <i>V. G. Rao</i>	2022	9	2102383
303.	ChemNanoMat	Efficient extraction of energetic charge carriers from engineered plasmonic nanocomposite to perform cascade reaction	M. Ahlawat, A. Roy, and <i>V. G. Rao</i>	2022	8	e202100416
304.	J. Phys. Chem. C	Shape dependency of the plasmon–exciton interaction at the nanoscale: interplay between the plasmon local density of states and the	M Kumar, J Dey, S Swaminathan, <i>M Chandra*</i>	2022	126	7941- 7948

		plasmon decay rate				
305.	Angewandte Chemie Int. Ed.	Simultaneous Harvesting of Multiple Hot Holes via Visible-Light Excitation of Plasmonic Gold Nanospheres for Selective Oxidative Bond Scission of Olefins to Carbonyls	S Swaminathan, JK Bera, <i>M Chandra*</i>	2023	62	e202215933
306.	Journal of Materials Chemistry A	Perovskite photocatalysis: realizing long-lived charge-separated states at the interface of CsPbBr <sub>3</sub> nanocrystals and functionalized ferrocene molecules	Siddharth Singh, Diksha Mittal, Vinithra Gurunaran, Ankita Sahu, <i>Ramesh Ramapanicker</i> and Vishal Govind Rao	2022	10	21112-21123
307.	ACS Energy Letters	Energy Funneling from Water-Dispersed Perovskites to Chromophores	Pooja Aggarwal, Anubhab Halder, Neelakshi, <i>Ramesh Ramapanicker</i> , and Vishal Govind Rao	2023	8	1520-1528
308.	ACS Energy Letters	Design Principle of a Water-Dispersed Photocatalytic Perovskite through Ligand Deconstruction	Monika Ahlawat, Neelakshi, <i>Ramesh Ramapanicker</i> , and Vishal Govind Rao*	2023	8	2159-2168

309.	Asian Journal of Organic Chemistry	Cobalt Catalyzed N-Methylation of Amides using Methanol	Bhaskar Paul, Milan Maji, Dibyajyoti Panja, <i>Sabuj Kundu</i>	2022	11	e202100678
310.	The Journal of Organic Chemistry	Reductive Alkylation of Azides and Nitroarenes with Alcohols: A Selective Route to Mono- and Dialkylated Amines	Ishani Borthakur, Milan Maji, Abhisek Joshi, and <i>Sabuj Kundu</i>	2022	87	628–643
311.	Dalton Transactions	Cyclometalated (NNC)Ru(ii) complex catalyzed $\beta$ -methylation of alcohols using methanol	Kasturi Ganguli, Natalia V. Belkova and <i>Sabuj Kundu</i>	2022	51	4354-4365
312.	The Journal of Organic Chemistry	Regio-Selective C3- and N-Alkylation of Indolines in Water under Air Using Alcohols	Milan Maji, Ishani Borthakur, Sameer Srivastava, <i>Sabuj Kundu</i>	2022	87	5603–5616
313.	The Journal of Organic Chemistry	Well-Defined Phosphine-Free Manganese(II)-Complex-Catalyzed Synthesis of Quinolines, Pyrroles, and Pyridines	Ankur Maji, Shivangi Gupta, Milan Maji, <i>Sabuj Kundu</i>	2022	87	8351–8367
314.	Dalton Transactions	Water as a solvent: transition metal catalyzed dehydrogenation of alcohols going green	Ishani Borthakur, Saloni Kumari, <i>Sabuj Kundu</i>	2022	51	11987-12020
315.	Chemical Communications	Tandem synthesis of N-methylated tertiary amines via	Ishani Borthakur, Sameer	2022	58	9822-9825

		three-component coupling of carbonyl compounds, amines, and methanol	Srivastava, Saloni Kumari, <i>Sabuj Kundu</i>			
316.	Journal of Catalysis	CuO NPs catalyzed synthesis of quinolines, pyridines, and pyrroles via dehydrogenative coupling strategy	Shivangi Gupta, Ankur Maji, Dibyajyoti Panja, Mita Halder, <i>Sabuj Kundu</i>	2022	413	1017-1027
317.	Journal of Catalysis	Selective reductive $\alpha$ -methylation of chalcone derivatives using methanol	Anirban Sau, Dibyajyoti Panja, Sadhan Dey, Rahul Kundu, <i>Sabuj Kundu</i>	2022	414	225-235
318.	ACS Catalysis	Well-Defined Bis(NHC)Mn(I) Complex Catalyzed Tandem Transformation of $\alpha,\beta$ -Unsaturated Ketones to $\alpha$ -Methylated Ketones Using Methanol	Kasturi Ganguli, Adarsha Mandal, <i>Sabuj Kundu</i>	2022	12	12444–12457
319.	Advanced Synthesis & Catalysis	Photoredox (NN)Mn(I) Catalysed Acceptorless Dehydrogenation: Synthesis of Amides, Aldehydes and Ketones	Abhisek Joshi, Saloni Kumari, <i>Sabuj Kundu</i>	2022	364	4371-4383
320.	Journal of Environmental Chemical Engineering	Heterogeneous cobalt-catalyzed degradation of azo compounds using alcohols as the	Dibyajyoti Panja, Sadhan Dey, <i>Sabuj Kundu</i>	2023	11	109607-109619

		stoichiometric hydrogen source				
321.	Organic Chemistry Frontiers	Utilization of methanol for condensation interrupted chemoselective transfer hydrogenation of C=C, C=O, and C=N bonds under low catalyst loading	Anirban Sau, Divya, Dahapatra, Sadhan Dey, Dibyajyoti Panja, Saghnik Saha, <i>Sabuj Kundu</i>	2023	10	2274-2286
322.	Adv. Optical Mater.	Flexible Molecular Electrochromic Devices Run by Low-Cost Commercial Cells	R. K. Parashar, S. Kandpal, P. Bandyopadhyay, M. Sadhukhan, R. Kumar,* and <i>P. C. Mondal*</i>	2023		2202920
323.	New Journal of Chemistry	Covalent surface modification of nickel ferrite nanoparticles for electrochemical supercapacitor performance	N Singh, A Malik, S Nowar, R Jana, <i>P. C. Mondal*</i>	2023	47	5308-5315
324.	Materials Advances	Classical nexus between chiral inducers and achiral silver nanoparticles and integration of digital XOR logic gate	M Mandal, A Malik, <i>P. C. Mondal*</i>	2023	4	256-264
325.	Nature Reviews Chemistry	Nanoscale molecular rectifiers	R Gupta, JA Fereiro*, A Bayat, A Pritam, M Zharnikov*,	2023	7	106-122

			<i>P. C. Mondal*</i>			
326.	Coordination Chemistry Reviews	Ferrocene as an iconic redox marker: From solution chemistry to molecular electronic devices	G Roy, R Gupta, SR Sahoo, S Saha, D Asthana*, <i>P. C. Mondal*</i>	2022	473	214816
327.	Journal of Materials Chemistry C	Coordination-driven opto-electroactive molecular thin films in electronic circuits	P Sachan, <i>P. C. Mondal*</i>	2022	10	14532-14541
328.	Advanced Functional Materials	The Importance of Electrical Impedance Spectroscopy and Equivalent Circuit Analysis on Nanoscale Molecular Electronic Devices	P Jash, RK Parashar, C Fontanesi, <i>P. C. Mondal*</i>	2022		2109956
329.	Phys. Chem. Chem. Phys	Time-Resolved Dynamics of Stable Open- and Closed-Shell Neutral Radical and Oxidized Tripyrrindione Complexes.	Cho, B; Swain, A.; Gautam, R; Tomat, E., Huxter, V.	2022	24	15718-15725
330.	Clinical and Experimental Immunology	Chronic administration of morphine provokes the generation of anti-morphine antibodies and immunosuppression in individuals with opioid use disorder.	Nanda, Sidhanta; Zafar, Mohammad Adeel ; Singh, Sanpreet ; Gautam Ritika; Ghosh, Abhishek; Basu, Debasish	2023	Submitted	

			; Agrewala, Javed			
331.	Chem. Commun.	Triazine based eccentric Piedfort units towards a single source hydrogen bonded network	S. Mehrotra, S. Raje, A. K. Jain, R. J. Butcher and <i>R. Angamuthu</i>	2022	58	11815-11818
332.	Dalton Trans.	Investigating the photosensitivity of koneramines for cell imaging and therapeutic applications	Ghosh, S., Akhir, A., Saxena, D., Singh, S., Sivakumar, S., Chopra, S., <i>Angamuthu, R.</i>	2022	51	15659-15668
333.	Helvetica Chimica Acta	Mechanochemical Synthesis and Reactivity of a Stable Nickel Borohydride	Raje, S., Mani, K., Dinesh, S., Yadav, A., Chahal, M., Butcher, R. J., <i>Angamuthu, R.</i>	2023	1-10	1-10
334.	J. Appl. Phys.	Role of deposition noise in nanostructure formation: A theoretical study of quantum dots and quantum dot molecules	Monika Dhankhar and <i>Madhav Ranganathan</i>	2022	131	024302(1-7)
335.	J. Cryst. Growth	Study of intermixing effects in Ge/Si(001) growth using kinetic Monte Carlo simulations	Nidhi Gupta and <i>Madhav Ranganathan</i>	2022	583	126555(1-6)



<b>Department of Civil Engineering</b>						
336.	Environmental Science & Technology	Investigation of potential drivers of elevated uranium prevalence in Indian groundwaters with a unified speciation model.	Sujathan, S. and <u>Singh, A.</u>	2023	57(5)	1970-1986
337.	New Journal of Chemistry	Ultra-fast and robust capture of fluoride by an amino terephthalic acid-facilitated lanthanum-based organic framework: insight into performance and mechanisms.	Singh N., Srivastava, I., Mohapatra, A.K., <u>Singh, A.</u> , Dwivedi, J., Sankararama krishnan, N.	2023	47(4)	2026-2039
338.	Groundwater for Sustainable Development	Identification of potential artificial groundwater recharge sites in an alluvial setting: A coupled electrical resistivity tomography and sediment characterization study.	Mishra U., Mohapatra, A.K., Mandal, A., and <u>Singh, A.</u>	2023	February	100875
339.	Geochimica et Comochimica Acta	Precipitation of arsenic-bearing solids as a secondary control on arsenic speciation in groundwater: Evidence from field study and	Nilling, J.J., Verma, A., and <u>Singh, A.</u>	2022	333	308-332

		geochemical analysis.				
340.	Biomed Research International	Identification and genome analysis of an arsenic-metabolizing strain of <i>Citrobacter youngae</i> IITK SM2 in middle Indo-Gangetic plain groundwater.	Verma, A., Murugan, P.A., Hariharan V.C., <u>Singh, A.</u> and Matheshwaran, S.	2022	6384742	19 pages
341.	Environmental Development	Assessment of the natural flow regime and its variability in a tributary of Ganga River: Impact of land use and land cover change	Gurjar, S.K., Shrivastava, S., Suryavanshi, S., Tare, V.	2022	44	
342.	Water, Air, and Soil Pollution	Hydro-Energy Potential Assessment in the Context of E-Flows for Himalayan Upland Rivers	Modi, A., Tare, V., Sharma, D.	2022	233(8),304	
343.	Modeling Earth Systems and Environment	Assessment of irrigation requirement and scheduling under canal command area of Upper Ganga Canal using CropWat model	Sharma, D.N., Tare, V.	2022	8(2)	1863-1873
344.	Science of the Total Environment	River space: A hydro-bio-geomorphic framework for sustainable river-floodplain management	Modi, A., Kapoor, V., Tare, V.	2022	812	

345.	Journal of Applied Water Engineering and Research	Baseflow index assessment for agriculture-industry led Ramganga river basin	Modi, A., Tare, V.	2022		
346.	Journal of Water Resources Planning and Management	Anthropogenic Interventions in Watersheds on River Flow Health: Assessment Using Bootstrapped Principal Component Analysis	Mohanty, M., Tare, V.	2022	148(1)	
347.	ACS Earth and Space Chemistry	Inter- versus Intracity Variations in the Performance and Calibration of Low-Cost PM2.5 Sensors: A Multicity Assessment in India	Sreekanth, V., Ajay, R.B., Kulkar ni, P., (...), Tripathi, S.N., Singh, P.	2022	6(12)	3007-3016
348.	Aerosol and Air Quality Research	Insights into the Regional Transport and Local Formation of Secondary Organic Aerosol in Delhi, India	Bhowmik, H.S., Tripathi , S.N., Sahu, R., (...), Tripathi, N., Sahu, L.	2022	22(12)	
349.	Scientific Reports	Increased aerosols can reverse Twomey effect in water clouds through radiative pathway	Khatri, P., Hayasaka, T., Holben, B.N., (...), Letu, H., Tripathi, S.N.	2022	12(1)	
350.	Environmental Science and Technology	Effect of Biomass Burning, Diwali Fireworks, and Polluted Fog Events on the Oxidative Potential of Fine	Puthussery, J.V., Dave, J., Shukla, A., (...), Tripathi, S.N., Verma,	2022	56(20)	14605-14616

		Ambient Particulate Matter in Delhi, India	V.			
351.	Atmospheric Environment	Seasonal variability and source apportionment of non-methane VOCs using PTR-TOF-MS measurements in Delhi, India	Jain, V., Tripathi, S.N., Tripathi, N., (...), Bhattu, D., Ganguly, D.	2022	283	
352.	Measurement: Journal of the International Measurement Confederation	Response of PDPA to optical materials and thickness of test section window	Kumar, S., Mishra, G., Kumar, M., (...), Kumar, S., Tripathi, S.N.	2022	197	
353.	Journal of Geophysical Research: Atmospheres	Characteristics of VOC Composition at Urban and Suburban Sites of New Delhi, India in Winter	Tripathi, N., Sahu, L.K., Wang, L., (...), Prévôt, A.S.H., Tripathi, S.N.	2022	127(12)	
354.	Atmospheric Chemistry and Physics	Highly time-resolved chemical speciation and source apportionment of organic aerosol components in Delhi, India, using extractive electrospray ionization mass spectrometry	Kumar, V., Giannoukos, S., Haslett, S.L., (...), Prévôt, A.S.H., Slowik, J.G.	2022	22(11)	7739-7761
355.	Atmospheric Pollution Research	Chemical speciation and source apportionment of ambient PM <sub>2.5</sub> in New Delhi before,	Manchanda, C., Kumar, M., Singh, V., (...), Rastogi,	2022	13(6)	

		during, and after the Diwali fireworks	N., Tripathi, S.N.			
356.	Progress in Nuclear Energy	Experimental estimates of hygroscopic growth of particulate fission product species (mixed CsI–CsOH) with implications in reactor accident safety research	Mariam, Joshi, M., Khan, A., (...), Tripathi, S.N., Sapra, B.K.	2022	148	
357.	Atmospheric Measurement Techniques	Inter-comparison of online and offline methods for measuring ambient heavy and trace elements and water-soluble inorganic ions (NO <sub>3</sub> <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , NH <sub>4</sub> <sup>+</sup> , and Cl <sup>-</sup> ) in PM <sub>2.5</sub> over a heavily polluted megacity, Delhi	Bhowmik, H.S., Shukla, A., Lalchandani, V., (...), Singh, V., Tripathi, S.N.	2022	15(9)	2667-2684
358.	IEEE Sensors Letters	Few-Shot Calibration of Low-Cost Air Pollution (PM <sub>2.5</sub> ) Sensors Using Meta Learning	Yadav, K., Arora, V., Kumar, M., (...), Motghare, V.M., Rajput, K.A.	2022	6(5)	
359.	Atmospheric Environment	Current status of source apportionment of ambient aerosols in India	Yadav, S., Tripathi, S.N., Rupakheti, M.	2022	274	
360.	Atmospheric Chemistry and Physics	Observations of aerosol-vapor pressure deficit- evaporative fraction coupling over India	Sarangi, C., Chakraborty, T.C., Tripathi, S.,	2022	22(5)	3615-3629

		Open Access	(...), Evans, J., Mercado, L.M.			
361.	Journal of Geophysical Research: Atmospheres	Effect of Biomass Burning on PM2.5 Composition and Secondary Aerosol Formation During Post-Monsoon and Winter Haze Episodes in Delhi	Lalchandani, V., Srivastava, D., Dave, J., (...), Gargava, P., Tripathi, S.N.	2022	127(1)	
362.	Scientific Reports	Author Correction: Increased aerosols can reverse Twomey effect in water clouds through radiative pathway	Khatri, P., Hayasaka, T., Holben, B.N., ...Letu, H., Tripathi, S.N.	2023	13(1)	822
363.	Atmospheric Chemistry and Physics,	Real-time measurements of non-methane volatile organic compounds in the central Indo-Gangetic basin, Lucknow, India: source characterisation and their role in O3 and secondary organic aerosol formation	Jain, V., Tripathi, N., Tripathi, S.N., ...Shukla, A.K., Prevot, A.S.H.	2023	23(5)	3383 - 3408
364.	Journal of Geophysical Research: Planets,	The Low-Altitude Ionosphere of the Ice Giant Planets	Molina-Cuberos, G.J., Witasse, O., Toledo, D., Tripathi, S.N.	2023	128(3)	
365.	Nature Geoscience	Rapid night-time nanoparticle growth in Delhi driven by biomass-burning	Mishra, S., Tripathi, S.N., Kanawade, V.P., ...El-	2023	16(3)	224–230

		emissions	Haddad, I., Prevot, A.S.H.			
366.	Atmospheric Environment	Spatio-temporal variation of C-PM2.5 (composition based PM2.5) sources using PMF*PMF (double-PMF) and single-combined PMF technique on real-time non-refractory, BC and elemental measurements during post-monsoon and winter at two sites in Delhi, India	Shukla, A.K., Tripathi, S.N., Canonaco, F., ...Singh, V., Rastogi, N.	2023	293	
367.	Environmental Science and Technology Letters,	New Delhi Air Potentially Chokes from Groundwater Conservation Policies in Adjoining Regions	Mukherjee, A., Tripathi, S.N., Ram, K., Saha, D.	2023	10(1)	3–5
368.	Geoscientific Model Development,	Towards an improved representation of carbonaceous aerosols over the Indian monsoon region in a regional climate model: RegCM	Ghosh, S., Dey, S., Das, S., ...Gadhavi, H., Srivastava, A.K.	2023	16(1)	1–15
369.	Environmental Pollution	Light absorption potential of water-soluble organic aerosols in the two polluted urban locations in the central Indo-	Rajeev, P., Choudhary, V., Chakraborty, A., Singh, G.K., Gupta, T.	2022	314	

		Gangetic Plain				
370.	Chemosphere	Tracing the predominant sources of carbon in PM <sub>2.5</sub> using $\delta^{13}\text{C}$ values together with OC/EC and select inorganic ions over two COALESCE locations	Yadav, K., Sunder Raman, R., Bhardwaj, A., ..Tarun Gupta, Lokesh, K.S., Venkatesh, P.,	2022	308	
371.	Environmental Science: Atmospheres	Year-long evaluation of aerosol chemistry and meteorological implications of PM <sub>2.5</sub> in an urban area of the Brahmaputra Valley, India	Rabha, S., Islam, N., Saikia, B.K., ...Srivastava, V., Gupta, T.	2022	3(1)	196–206
372.	Environmental Research	Variabilities of $\delta^{13}\text{C}$ and carbonaceous components in ambient PM <sub>2.5</sub> in Northeast India: Insights into sources and atmospheric processes	Qadri, A.M., Singh, G.K., Paul, D., Gupta, T, Islam, N., Saikia, B.K.	2022	214	
373.	ACS Earth and Space Chemistry	Evolution of Brown Carbon Aerosols during Atmospheric Long-Range Transport in the South Asian Outflow and Himalayan Cryosphere	Choudhary, V., Gupta, T., Zhao, R.	2022	6(10)	2335–2347
374.	Energy for Sustainable Development	Effect of processing on emission characteristics of coal briquettes in cookstoves	Das, D., Qadri, A., Tak, P., Gupta, T.	2022	69	77–86



375.	Wiedensohler, A. Viruses	Impact of Chemical Properties of Human Respiratory Droplets and Aerosol Particles on Airborne Viruses' Viability and Indoor Transmission	Ahlawat, A., Mishra, S.K., Herrmann, H., Gupta, T,...Sun, Y.	2022	14(7)	
376.	Frontiers in Earth Science	Long-Term Trends in Black Carbon and Aerosol Optical Depth Over the Central Himalayas: Potential Causes and Implications	Joshi, H., Naja, M., Srivastava, P., ..Gupta, T, Gogoi, M.M., Suresh Babu, S.	2022	10	
377.	Journal of Geophysical Research: Atmospheres	Understanding the Influence of Meteorology and Emission Sources on PM2.5 Mass Concentrations Across India: First Results From the COALESCE Network	Maheshwarkar, P., Ralhan, A., Sunder Raman, R., ...Gupta, T, Najjar, T.A., Jehangir, A.	2022	127(4)	
378.	ACS Earth and Space Chemistry	Alternative Approach for the In Situ Measurement of Absorption Enhancement of Atmospheric Black Carbon Due to Atmospheric Mixing	Soni, A., Gupta, T.	2022	6(2)	261–267
379.	Atmospheric Environment	Insights into sources and atmospheric processing at two polluted urban locations in the Indo-Gangetic plains from stable carbon and nitrogen isotope	Singh, G.K., Rajeev, P., Paul, D., Gupta, T.	2022	271	

		ratios and polycyclic aromatic hydrocarbons in ambient PM2.5				
380.	ACS Omega,	Emerging Major Role of Organic Aerosols in Explaining the Occurrence, Frequency, and Magnitude of Haze and Fog Episodes during Wintertime in the Indo Gangetic Plain	Gupta, T., Rajeev, P., Rajput, R.	2022	7(2)	1575–1584
381.	Energy, Environment, and Sustainability	Preface	Singh, S.P., Maliyekkal, S.M., Gupta, T., Agarwal, A.K.	2022	~	v–vii
382.	Energy, Environment, and Sustainability	Introduction of New Trends in Emerging Environmental Contaminants	P. Singh, S., Maliyekkal, S.M., Gupta, T., Agarwal, A.K.	2022	~	3–8
383.	Fuel	Assessment of entrainment of key PAHs emanating from major combustion sources into the ambient air	Rajeev, P., Shukla, P.C., Singh, G.K., Das, D., Gupta, T.	2023	347	
384.	Chemosphere	Investigation of sources and atmospheric transformation of carbonaceous aerosols from Shyamnagar, eastern Indo-Gangetic	Singh, G.K., Qadri, A.M., Paul, D., Gupta, T, Mukherjee, S., Chatterjee, A.	2023	326	

		Plains: Insights from $\delta^{13}\text{C}$ and carbon fractions				
385.	Science of the Total Environment	Wintertime aerosol properties of urban desert region of western India: Implications in regional climate assessment	Roy, S., Habib, G., Dev, R., (...), Gupta, T., Raman, R.S	2023	868	
386.	Groundwater for Sustainable Development	Water stress and the expenditure in zoning violated areas of Chennai: An empirical investigation	Panta, M.P., Gupta, M., Gupta, T., Narayanan, B.	2023	20	
387.	Environmental Science: Atmospheres	Aqueous-phase photochemical oxidation of water-soluble brown carbon aerosols arising from solid biomass fuel burning Open Access	Choudhary, V., Roson, M.L., Guo, X., (...), Gupta, T., Zhao, R.	2023	Article in Press	
388.	Journal of Environmental Management	Reassessing the availability of crop residue as a bioenergy resource in India: A field-survey based study	Taveen S. Navinya, Chimurkar, Anurag, Gupta, Lokhande, Pradnya, Rathi, Shubham, Goel, Anubha	2023	341	
389.	Heart Lung and Circulation	Rationale and Design of a Study to Test the Effect of Personal Protective Aids on	Barbhaya, Dweep, Tran, Jennifer, Khetan, Aditya,	2023	32(1)	124 - 130

		Hypertension and Diabetes in People Living With High Levels of Air Pollution—Study Protocol	Hejjaji, Vittal, Jain, Supreme, Chan, Chee, Goel, Anubha			
390.	Environmental Research Communications	Heating and lighting: understanding overlooked energy-consumption activities in the Indian residential sector	Barbhaya, D., Tran, J., Khetan, Chan, C., Goel, Anubha	2023	5(4)	
391.	Science Advances	Global importance of Indigenous Peoples, their lands, and knowledge systems for saving the world's primates from extinction	Abhishek Chaudhary, Kone, I., Volampeno, S.	2022	8(32)	
392.	Frontiers in Sustainable Food Systems	Dietary Change and Global Sustainable Development Goals	Chen, Canxi, Chaudhary Abhishek, Mathys, Alexander	2022	6	
393.	PLoS Pathogens	One Health: A new definition for a sustainable and healthy future	Abhishek Chaudhary	2022	18(6)	
394.	Environmental Research Letters	Subnational assessment of threats to Indian biodiversity and habitat restoration opportunities	Abhishek Chaudhary	2023	17(5)	
395.	Global Food Security	Conceptualising the drivers of ultra-processed food production and	Abhishek Chaudhary	2023	37	

		consumption and their environmental impacts: A group model-building exercise				
396.	Environmental Research Letters	The missing markets link in global-to-local-to-global analyses of biodiversity and ecosystem services	Abhishek Chaudhary	2023	18(4)	
397.	ACS Environmental Au	Template for Evaluating Cradle-to-Site Environmental Life Cycle Impacts of Buildings in India	Abhishek Chaudhary	2023	3(2)	94-104
398.	The Lancet	One Health action for health security and equity	Abhishek Chaudhary	2023	401	530-533
399.	Journal of Hydrology	Depth-averaged coupling of submerged granular deformation with fluid flow: An augmented HLL scheme	Gourabanand a Pahar, N.U.H. Bhat	2022	606	
400.	Journal of Fluid Mechanics	Leakage dynamics of fault zones: Experimental and analytical study with application to CO <sub>2</sub> storage	Chunendra Kumar sahu, Graham P. Benham, , Kieran A. Gilmore,	2022	931	359-380
401.	Journal of Fluid Mechanics	Experimental insights into gravity-driven flows and mixing in layered porous media	Jerome A. Neufeld, Chunendra Kumar sahu,	2023	956	

402.	Environmental Forensics	Simultaneous identification of groundwater pollution source location and release concentration using Artificial Neural Network	Jyoti Chaubey and R. Srivastava	2022	23 (3-4)	293-300
403.	Journal of Hydro-environment Research	Impact of renewed solar dimming on streamflow generation in monsoon dominated tropical river basins	Pramod Soni, S. Tripathi, and R. Srivastava	2022	41	45627
404.	Journal of Hydraulic Engineering	Experimental Study of Pressure Flow due to Vertical Contraction Using Particle Image Velocimetry.	Majid, S. A., Tripathi, S., & Das, D.	2023	149(7)	04023016 (14 pages)
405.	Journal of Hydro-Environment Research	Impact of renewed solar dimming on streamflow generation in monsoon dominated tropical river basins.	Soni, P., Tripathi, S., & Srivastava, R.	2022	41	45627
406.	Frontiers in Water	Agricultural advisory diagnostics using a data-based approach: test case in an intensively managed rural landscape in the Ganga River Basin, India.	Adla, S., Gupta, S., Karumanchi, S. H., Tripathi, S., Disse, M., & Pande, S.	2022	3	798241 (14 pages)
407.	International Geoscience and Remote Sensing Symposium (IGARSS)	Forest Aboveground Biomass Estimation from Airborne L-Band SAR Data Using Machine	Ramachandra n, N., Onkar	2022	2022- July	6403 - 6405

		Learning	Dikshit			
408.	Current Science	Draft National Geospatial Policy: a few salient observations	Goyal Ropesh, Ashutosh Tiwari, Onkar Dikshit, Nagarajan Balasubramanian	2022	123(3)	256-258
409.	Current Science	Stable and upgraded horizontal datum for India	Dhar Sujata; Nagarajan Balasubramanian, Onkar Dikshit, Harald Schuh	2022	123(1)	43-51
410.	Remote Sensing Applications: Society and Environment	Analysis of groundwater storage (GWS) dynamics and its temporal evolution for The Indo-Gangetic plain using GRACE data	Saurabh Srivastava; Onkar Dikshit,	2022	25	
411.	Survey Review	Empirical comparison between stochastic and deterministic modifiers over the French Auvergne geoid computation test-bed	Goyal R., Ågren J., Onkar Dikshit, Nagarajan Balasubramanian, Sjöberg L.E., Featherstone W.E.,	2022	54(382),	57–69
412.	Geocarto International	Combined radiometer and scatterometer derived soil moisture product for the Indo-Gangetic basin	Sure, Anudeep, Onkar Dikshit,	2022	37(2)	456 - 473

413.	Earth, Planets and Space	Favorable locations for new VGOS antennas in India depending on the assessment of geodetic parameters and environmental factors	Dhar Sujata; Nagarajan Balasubramanian, Onkar Dikshit, Glaser, Susanne, Heinkelmann, Robert, Harald Schuh	2023	75(1)	
414.	Scientific Reports	Mapping tropical forest aboveground biomass using airborne SAR tomography	Naveen Ramachandran, Saatchi, Sassan	2023	13(1)	
415.	Journal of Surveying Engineering	Investigating the Congruence between Gravimetric Geoid Models over India	Goyal R., Claessens S.J., Featherstone W.E., Onkar Dikshit	2023	149(3)	
416.	Remote Sensing	General Five-Component Scattering Power Decomposition with Unitary Transformation (G5U) of Coherency Matrix	Onkar Dikshit, Rashmi Malik, Gulab Singh, Yoshio Yamaguchi	2023	15(5)	
417.	Journal of Hydrologic Engineering	Development of a Physics-Guided Neural Network Model for Effective Urban Flood Management	Balakrishna Madayala, A. Jain, A. Lohani, B.	2022	27(9)	
418.	Geocarto International	Geometric and radiometric constraints-based extraction of urban road manhole covers	Balakrishna Madayala, A., Jain, A., Lohani,	2022	37(27)	16716 - 16735



		and their maintenance-related information using mobile laser scanning data	B.			
419.	AIP Conference Proceedings	Soil Erosion Risk Assessment and its Impact on Landslides – A Study on Parts of Himalayan Region, India	Prakasam, C., Aravinth, R. Kanwar, V.S., Nagarajan, B.	2022	2451	
420.	Materials Today: Proceedings	Estimating NDVI and LAI as a precursor for monitoring air pollution along the BBN industrial corridor of Himachal Pradesh, India	Prakasam, C., Aravinth, R., Nagarajan, B.	2022	61	593–603
421.	International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives	A COMPARISON BETWEEN UWB AND LASER-BASED PEDESTRIAN TRACKING	Masiero, A., Dabove, P., Di Pietra, V., Gabela, J., Salil Goel	2022	43(B2-2022)	839-844
422.	Geocarto International	Geometric and radiometric constraints-based extraction of urban road manhole covers and their maintenance-related information using mobile laser scanning data	Yadav, M., Lohani, B., Goel, S., Salil Goel	2022	37(27)	16716-16735
423.	International Association of Geodesy Symposia	A Benchmarking Measurement Campaign to Support Ubiquitous	Salil Goel, Retscher, G., Kealy, A., Gikas, V.,	2023	152	123-128

		Localization in GNSS Denied and Indoor Environments	Koppanyi, Z., Grejner-Brzezinska, D.			
424.	Frontiers in Water	Challenges in Understanding the Variability of the Cryosphere in the Himalaya and Its Impact on Regional Water Resources	Balaji Devaraju, B.D. Vishwakarma , Ramsankaran, R.A.A.J., Azam, M.F.,	2022	4	
425.	Computers and Fluids	Stabilized finite element computations with a two-dimensional continuum model for disorderly traffic flow	Vikram, D., Mittal, S., Partha Chakroborty	2022	232	
426.	Traffic Injury Prevention	An exploratory study of pedestrian crossing speeds at midblock crossing in India using LiDAR	Vasudevan, V., Tiwari, A., Partha Chakroborty,	2022	23(1)	61-66
427.	Transportation Research Record	Study of Overtaking Maneuvers on Wide One-Way Roads in Weak Lane-Disciplined Traffic Using Naturalistic Driving Data	B.Dutta, Partha Chakroborty,, Vasudevan, V.	2023	2677(3)	565 - 582
428.	Lecture Notes in Civil Engineering	Preface	Singh, D., Vanajakshi, L., Verma, A., Animesh Das	2022	218	v - vi
429.	Lecture Notes in Civil Engineering	Preface	Parida, Manoranjan,	2022	220	v - vi

			Avijit Maji, S. Velmurugan, Animesh Das			
430.	Lecture Notes in Civil Engineering	Preface	Maurya, A.K., Maitra, B., Rastogi, R., Animesh Das	2022	219	v - vi
431.	RILEM Bookseries	A Method to Reduce Occlusion While Measuring Pavement Surface Profiles Using Triangulation Based Laser Scanners	Animesh Das, Jain, S., Venkatesh, K.S.	2022	27	97-102
432.	Road Materials and Pavement Design	New Delhi Air Potentially Chokes from Groundwater Conservation Policies in Adjoining Regions	Bora, B., Animesh Das	2022	23(11)	2607-2621
433.	International Journal of Pavement Engineering	Development of ternary binder mixing formulation for asphalt pavement recycling	Animesh Das, Savarnya, A., Saboo, N., Makowska, M., Pellinen, T.	2022	23(13)	4739-4747
434.	International Journal of Pavement Engineering	Design of an active triangulation based measurement device for pavement surfaces	Jain, S., Venkatesh , K.S., Animesh Das	2022	23(8)	2846-2855
435.	European Journal of Environmental and Civil Engineering	Shape characterisation of aggregates in three dimension	Animesh Das, Janardhana Reddy, K.R.,	2022	26(1)	345-359

436.	Lecture Notes in Civil Engineering	Preface	Animesh Das, Devi, L., Sahu, P.K., Basu, D.	2023	271	v
437.	Lecture Notes in Civil Engineering	Evaluation of Bid in Construction Industry Based on Multi-criteria Approach Using TOPSIS	Gupta, S., Syam Nair	2022	172	139-151
438.	Materials Today: Proceedings	A review of the emerging role of UAVs in construction site safety monitoring	Gupta, S., Syam Nair	2023	Article in Press	
439.	Lecture Notes in Civil Engineering	Activity Time Variations and Its Influence on Realization of Different Critical Paths in a PERT Network: An Empirical Study Using Simulations	Gupta, S., Syam Nair, George, R.C., Philip, D.,	2023	279	674 - 680
440.	Physica A: Statistical Mechanics and its Applications	Understanding the mechanism of lane changing process and dynamics using microscopic traffic data	Chauhan, P., Venkatesan Kanagaraj, Asaithambi, G.	2022	593	
441.	Transportation Letters	Investigation of car-following models in disordered traffic using trajectory data obtained from unmanned aerial vehicles	Kashyap N R, M., Sivagnanasundaram, K., Venkatesan Kanagaraj, Asaithambi, G., Toledo,	2022	Article in Press	

			T.			
442.	IEEE Transactions on Automatic Control	Optimal Repair Policies for Systems Deteriorating After Disruptions	Hemant Gehlot, S. Sundaram, S. Ukkusuri,	2022	67(7)	3426-3441
443.	Journal of Combinatorial Optimization	Algorithms for influence maximization in socio-physical networks	Gehlot, H., Sundaram, S., Ukkusuri, S.V.	2023	45(1)	
444.	Construction and Building Materials- Elsevier	Potential application of over-burnt brick and fly ash for sustainable inverted pavement structure	Khan, S., <i>Ashish, P. K.</i> , Kannelli, V., Hossain, K., Nagabhushana, M. N., & Tiwari, D.	2022	345	41275
445.	Road Materials and Pavement Design-T&F	Effect of Warm Mix Additives and Hydrated Lime on Viscosity and Bonding-Debonding Behaviour of RET and PPA Modified Asphalt Binder with Aggregates	Singh, D., Habal, A., Ashish, P. K., & Kataware, A.	2022	Vol no. not yet assigned.	Page no. not yet assigned.
446.	Theoretical and Applied Fracture Mechanics- Elsevier	Quantitative Analysis of the Role of Temperature in the Mesoscale Damage Process of Semi Flexible Pavement Composite through Finite Element Method	Cai, X., Leng, Z., <i>Ashish, P.K.</i> , & Yang, J.	2023	124	42005
447.	International Journal of Pavement Engineering-	Temperature dependency analysis of the fracture	Cai, X., Leng, Z., <i>Ashish,</i>	2023	24	41640

	T&F	characteristics of semi-flexible pavement (SFP) mixtures using acoustic emission technique	P.K., Shi, C., Yang, J., & Gong, M.			
448.	Journal of Intelligent Transportation Systems	Massively parallelizable approach for evaluating signalized arterial performance using probe-based data	Subhadipto Poddar, Pranamesh Chakraborty, Anuj Sharma, Skylar Knickerbocker & Neal Hawkins	2022	-	-
449.	Accident Analysis & Prevention	Sugar and stops in drivers with insulin-dependent type 1 diabetes	Ashirwad Barnwal, Pranamesh Chakraborty, Anuj Sharma, Luis Riera-Garcia, Koray Ozcan, Sayedomidreza Davami, Soumik Sarkar, Matthew Rizzo, Jennifer Merickel	2022	173	-
450.	International Journal of Transportation Science and Technology	Deep convolutional generative adversarial networks for traffic data imputation encoding time series as images	Tongge Huang, Pranamesh Chakraborty, Anuj Sharma	2023	12(1)	43101
451.	Indian Geotechnical Journal	A Constitutive Model for Cyclic Loading Response of	Saqib, M., Das, A., Patra,	2022	52(6)	1253-1266

		Crushable Sand	N.R.			
452.	International Journal of Geo-Engineering	Cyclic behavior of late quaternary alluvial soil along Indo-Gangetic Plain: Northern India	Naik, S.P., Patra, N.R., Malik, J.N.	2022	13(1)	
453.	Geosynthetics International	Undrained response of geocell-confined pond ash samples under static and cyclic loading	Chowdhury, S., Patra, N.R.	2022	29(3)	229-240
454.	Journal of Earthquake Engineering	Lateral Dynamic Response of Tapered Pile Embedded in a Cross-Anisotropic Medium	Singh, S., Patra, N.R.	2022	26(11)	5826-5847
455.	International Journal of Geotechnical Engineering	Creep settlement analysis of pile foundations using viscoelastic model by incorporating nonlinear soil behaviour	Mishra, A., Patra, N.R.	2022	16(10)	1234-1252
456.	Journal of Earthquake Engineering	Earthquake Response Analysis of Soils from Rudrapur and Khatima Sites Adjacent to Himalayan Frontal Thrust (HFT) using Field and Laboratory-Derived Dynamic Soil Properties	Naik, S.P., Kundu, A., Patra, N.R., Bandopadhaya, S., Reddy, G.R.	2022	26(2)	949-979
457.	Journal of Hazardous, Toxic, and Radioactive Waste	Applicability of Clay Soil Stabilized with Red Mud, Bioenzyme, and Red	Parik, P., Nihar Ranjan Patra,	2023	27(2)	

		Mud-Bioenzyme as a Subgrade Material in Pavement				
458.	International Journal of Civil Engineering	Effect of Bio-enzyme on Strength and Microstructure of Banda Clay Soil, India	Parik, P.,Nihar Ranjan Patra,	2023	21(1)	135-148
459.	Lecture Notes in Civil Engineering	A Simple Analytical Model of the Damping Ratio Considering Effect of Particle Breakage	Saqib, M., Das, A.,Nihar Ranjan Patra,	2023	288	126-133
460.	Geomechanics and Engineering	Assessment of seismic stability of finite slope in c- $\phi$ soils-a plasticity approach	Nandi, S., Santhoshkumar, G., Priyanka Ghosh,	2022	31(5)	439-452
461.	International Journal of Geosynthetics and Ground Engineering	Impact of Footing Shape on Dynamic Properties and Vibration Transmission Characteristics of Machine Foundations	Surapreddi, S., Priyanka Ghosh,	2022	8(1)	
462.	Lecture Notes in Civil Engineering	Ultimate Bearing Capacity of Strip Footing on Reinforced Embankment Using Upper Bound Limit Analysis	Manna, D., Santhoshkumar, G., Priyanka Ghosh,	2022	167	543-551
463.	Geomechanics and Geoengineering	Experimental and numerical investigations on attenuation response of machine foundations under	Surapreddi, S., Priyanka Ghosh,	2022	17(6)	1865-1886



		vertical excitation				
464.	Soil Dynamics and Earthquake Engineering	Active vibration screening characteristics of bamboo in-filled wave barriers	Surapreddi, S., Priyanka Ghosh,	2023	171	
465.	Rock Mechanics and Rock Engineering	Seismic Stability Assessment of Rock Slopes Using Limiting Slope Face Concept	Nandi, S., Priyanka Ghosh,	2023	Article in Press	
466.	Lecture Notes in Civil Engineering	Effect of Footing Size on the Dynamic Behaviour of Cohesionless Soil-Foundation System	Das, G., Priyanka Ghosh,	2023	300	505-513
467.	Lecture Notes in Civil Engineering	Analysis and Design of Foundation System for the Horizontal Solar Axis Tracker	Sinchith, M., Nandi, S., Priyanka Ghosh,	2023	295	1-12
468.	International Journal of Geomechanics	Critical Stability Analysis of Slopes Using Stress Characteristics in Purely Cohesive Soil	Sinchith, M., Nandi, S., Priyanka Ghosh,	2023	23(1)	
469.	Structure and Infrastructure Engineering	Estimation of response reduction factor for Indian standard code designed reinforced concrete frames considering nonlinear soil-structure interaction effects	Prishati Raychowdhury, Panda, J., Ray-Chaudhuri, S.	2022	Article in Press	
470.	Journal of Earthquake	Soil-Structure Interaction Study on	Prishati Raychowdhury	2022	26(8)	3977-3999

	Engineering	3D SMRFs of Indo-Gangetic Plain Using Resonant Vibration Tests	ry, Vivek, B.			
471.	Applied Ocean Research	State-of-the-art review of composite caisson-pile foundation (CCPF)	Prishati Raychowdhury, KC, R., Sharma, K., Burnwal, M.L., Misra, J.	2023	136	
472.	Lecture Notes in Civil Engineering	Sensitivity Study of the Pressure-Dependent Soil Model Based on the Abutment-Backfill Pushover Behaviour	Bagchi, A., Prishati Raychowdhury,	2023	300	129-139
473.	Springer Tracts in Civil Engineering	Seismic Response of Shallow Foundations on Reinforced Sand Bed	Burnwal, M.L., Prishati Raychowdhury,	2023		163-176
474.	Journal of Earthquake Engineering	Rocking Shallow Foundations on Geogrid-reinforced Ganga Sand Bed: An Experimental Study	Burnwal, M.L., Prishati Raychowdhury,	2023	27(2)	434-450
475.	Geotextiles and Geomembranes	Numerical investigation on hydraulic and gas flow response of MSW landfill cover system comprising a geosynthetic clay liner under arid climatic conditions	Khan, V., Roy, S., Rajesh, S.	2022	50(6)	1159-1171
476.	Transportation Geotechnics	Time-Dependent Behavior of Embankment Resting on Soft clay	Pandey, B.K., Rajesh, S., Chandra, S.	2022	36	

		Reinforced with Encased Stone Columns				
477.	International Journal of Geomechanics	Coupled Effect of Suction Stress and Unit Weight on the Active Earth Pressure of Unsaturated Backfills	Ganesh, R., Rajesh, S.	2022	22(8)	
478.	International Journal of Geosynthetics and Ground Engineering	Performance of Soft Clay Reinforced with Encased Stone Column: A Systematic Review	Pandey, B.K., Rajesh, S., Chandra, S.	2022	8(3)	
479.	Geosynthetics International	Air and hydraulic flow characteristics of polymer amended bentonite based unsaturated GCLs	Rajesh, S., Jain, A.	2022	29(3)	282-298
480.	Geosynthetics International	Geosynthetic encased column-supported embankment: Behavior with and without basal geogrid	Zhang, X., Rajesh, S., Chen, J.-F., Wang, J.-Q.	2022	29(3)	312-325
481.	Geotextiles and Geomembranes	Reply to discussion by Mirmoradi on “Physical and numerical modelling of strip footing on geogrid reinforced transparent sand”	Chen, J., Guo, X., Sun, R., (...), Jiang, S., Xue, J.	2022	50(1)	199-201
482.	Lecture Notes in Civil Engineering	Numerical Analysis of Soft Soil Reinforced with Geogrid Encased Stone Column	Pandey, B.K., Rajesh, S., Chandra, S.	2022	195	65-72

483.	Geotechnical Special Publication	Effect of Addition of Phosphogypsum on Strength and Deformation Behavior of Expansive Soils	Mudliar, R., Rajesh, S.	2022	2022- March(G SP 335)	189-198
484.	Lecture Notes in Civil Engineering	Analytical Solution for the Action of Seismic Active Earth Pressures of Unsaturated Backfills Behind Inclined Walls	Rajesh, S., Ganesh, R.	2022	187	17-31
485.	Lecture Notes in Civil Engineering	Effect of Lignosulfonate on Strength and Deformation Behavior of Swelling Soil	Mudliar, R., Rajesh, S.	2022	152	257-269
486.	Geomechanics and Geoengineering	Passive resistance of unsaturated backfill under steady state flow conditions	Ganesh, R., Sahoo, J.P., Rajesh, S.	2022	17(5)	1653-1669
487.	International Journal of Geomechanics	Tensile Strength Framework for Unsaturated Coarse- and Fine-Grained Soils	Roy, S., Rajesh, S.	2023	23(7)	
488.	Geosynthetics International	Gas flow characteristics of GCL under distortions, wet-dry cycles, and hydrating fluids	Khan, V., Rajesh, S.	2023	Article in Press	
489.	Lecture Notes in Civil Engineering	A State-of-the-Art Review on Electro-osmotic Treatment for Stabilization of Soft Soils	Pandey, B.K., Rajesh, S., Chandra, S.	2023	297	225-234

490.	Lecture Notes in Civil Engineering	Influence of Conductive Jute Geotextile-Encased Stone Column in Soft Clay	Pandey, B.K., Rajesh, S., Chandra, S.	2023	298	41-50
491.	Journal of Hydrology	An advanced pore-scale model for simulating water retention characteristics in granular soils	Mufti, S., Arghya Das	2022	615	
492.	Geomechanics for Energy and the Environment	A DEM study on microstructural behaviour of soluble granular materials subjected to chemo-mechanical loading	Alam, M., Parol, V., Arghya Das	2022	32	
493.	Indian Geotechnical Journal	A Constitutive Model for Cyclic Loading Response of Crushable Sand	Saqib, M., Arghya Das., Patra, N.R.	2022	52(6)	1253-1266
494.	Journal of Rock Mechanics and Geotechnical Engineering	Rate-dependent mechanical behavior of jointed rock with an impersistent joint under different infill conditions	Kumar, S., Tiwari, G., Parameswaran, V., Arghya Das	2022	14(5)	1380-1393
495.	Geotechnique Letters	Evolution of earth pressure coefficient of sand undergoing varying rate of dissolution	Viswanath, P., Arghya Das Buscarnera, G.	2022	12(1)	74-79
496.	Soils and Foundations	A critical state based viscoplastic model for crushable granular materials	Das, S.K., Arghya Das	2022	62(1)	
497.	Geotechnique Letters	Numerical assessment of effects of strain rate on the	Das, S.K., Verma, S.K.,	2022	12(1)	1-6

		critical state of crushable sand	Arghya Das			
498.	E3S Web of Conferences	Numerical implementation of BBM in FE package for solving unsaturated soil boundary value problems	Prajapati, V., Arghya Das	2023	382	
499.	E3S Web of Conferences	Pore network modeling approach for simulating soil water retention curve under different stress conditions	Mufti, S., Arghya Das	2023	382	
500.	Advances in Water Resources	Multiscale pore network construction for two phase flow simulations in granular soils	Mufti, S., Arghya Das	2023	173	
501.	Acta Geotechnica	Modeling unsaturated hydraulic conductivity of granular soils using a combined discrete element and pore-network approach	Mufti, S., Arghya Das	2023	18(2)	651-672
502.	IOP Conference Series: Earth and Environmental Science	Experimental assessment of dynamic loading response of grouted non-persistent jointed rock	Kumar, S., Tiwari, G., Arghya Das	2023	1124(1)	
503.	Lecture Notes in Civil Engineering	An Optimized Pore Network Model for Unsaturated Soil Permeability Determination	Mufti, S., Arghya Das	2023	288 LNCE	185-192

504.	Lecture Notes in Civil Engineering	A Simple Analytical Model of the Damping Ratio Considering Effect of Particle Breakage	Saqib, M., Arghya Das Patra, N.R.	2023	288 LNCE	126-133
505.	Drug Research	Nrf2 Mediated Heme Oxygenase-1 Activation Contributes to Diabetic Wound Healing - An Overview	Gaurav Tiwari, Ramachandran, V., Mohanasundaram, T., R. Bhongiri, B., Xavier, R.M.	2022	72(9)	487-495
506.	Research Journal of Pharmacy and Technology	A review on antitumor action of amygdalin on various types of cancers	Gaurav Tiwari, Ramachandran, V., Hosalli, K.R., Vijayakumar,	2022	15(11)	5373-5380
507.	Research Journal of Pharmacy and Technology	Development and qualitative evaluation of periodontal gel containing an antibacterial agent for periodontal disease	Gaurav Tiwari, Singh, G., Shekhar, R., Tiwari, R.	2022	15(11)	5225-5231
508.	Current Drug Research Reviews	Biochanin-A: A Bioactive Natural Product with Versatile Therapeutic Perspectives	Gaurav Tiwari, Ramachandran, V., Inba Kumar, V., Kumar Hr, K., Tiwari, R.,	2022	14(3)	225-238
509.	Natural Products Journal	Melittin: A Natural Peptide with Expanded Therapeutic	Gaurav Tiwari, Lahiri, A., Ramachandra	2022	12(2)	

		Applications	n, V., Rai, A.			
510.	Drug Research	Resveratrol: A Vital Therapeutic Agent with Multiple Health Benefits	Gaurav Tiwari, Ramachandran, V.	2022	72(1)	5-17
511.	Current Drug Delivery	Pharmaceutical Considerations of Translabial Formulations for Treatment of Parkinson's Disease: A Concept of Drug Delivery for Unconscious Patients	Gaurav Tiwari, Tiwari, R., Kaur, A.	2023	20(8)	1163-1175
512.	Pharmaceutical Nanotechnology	An Exploration of Herbal Extracts Loaded Phospholipid Complexes (Phytosomes) Against Polycystic Ovarian Syndrome: Formulation Considerations	Gaurav Tiwari, Sharma, S., Ramachandran, V.	2023	11(1)	44-55
513.	Current Molecular Pharmacology	Preventive and Therapeutic Aspects of Migraine for Patient Care: An Insight	Gaurav Tiwari, Mishra, S., Ramachandran, V.	2023	16(2)	147-160
514.	Computers and Geotechnics	Dynamic pile-head stiffness of laterally loaded end-bearing pile in linear viscoelastic soil – A comparative study	Bipin K. Gupta	2022	145	
515.	Geomechanics and Engineering	Analysis of circular tank foundation on multi-layered soil	Elhuni, H.F., Gupta, B.K.,	2023	32(6)	553-566



		subject to combined vertical and lateral loads	Basu, D.			
516.	Proceedings of the Institution of Civil Engineers: Geotechnical Engineering	Active thrust of sand with anisotropic seepage: a generalised limit equilibrium approach	Jagdish Prasad Sahoo,	2022	175(5)	495-506
517.	Journal of Materials in Civil Engineering	Experimental Modeling for Time-Dependent Strength Behavior of Lignosulfonate-Treated High Plasticity Clay	Jagdish Prasad Sahoo,	2022	34(7)	
518.	Lecture Notes in Civil Engineering	Stability Analysis of a Debris Slope by Micropile Reinforcement Technique: A Case Study from the North-Western Himalayas	Jagdish Prasad Sahoo,	2022	205	459-468
519.	Lecture Notes in Civil Engineering	Seismic Pullout Capacity of Strip Plate Anchors Embedded in Sandy Slopes	Jagdish Prasad Sahoo,	2022	187	45-53
520.	Lecture Notes in Civil Engineering	Seismic Stability Evaluation of an Indian Himalayan Slope: A Case Study	Jagdish Prasad Sahoo,	2022	187	519-528
521.	International Journal of Geomechanics	Prediction Models for Computation of Deformations and Interface Stresses in a Two-Layered Pavement Structure	Jagdish Prasad Sahoo,	2022	22(1)	

522.	Lecture Notes in Civil Engineering	Settlement of a Square Footing on Dry Sand Bed Reinforced with Stone Columns Under Seismic Conditions: Effect of Frequency	Jagdish Prasad Sahoo,	2022	152	29-39
523.	Journal of Earthquake Engineering	Vertical Uplift Capacity of Rectangular and Square Plate Anchors in Granular Soil under Seismic Forces	Jagdish Prasad Sahoo,	2022	26(14)	7366-7383
524.	Geomechanics and Geoengineering	Passive resistance of unsaturated backfill under steady state flow conditions	Jagdish Prasad Sahoo,	2022	17(5)	1653-1669
525.	Geomechanics and Geoengineering	Reinforcement strength and length requirement of each layer in a nailed slope subjected to seismic loading	Jagdish Prasad Sahoo,	2022	17(4)	1320-1337
526.	Geomechanics and Geoengineering	Uplift resistance of strip plate anchors in cohesive-frictional sloping ground	Jagdish Prasad Sahoo,	2022	17(4)	1168-1183
527.	Computers and Geotechnics	Kinematic horizontal slice method for uplift capacity analysis of plate anchors in nonhomogeneous soils with a nonlinear failure criterion	Jagdish Prasad Sahoo, Ganesh, R.,	2023	159	

528.	Environmental Earth Sciences	Stability assessment of unlined real horseshoe-shaped tunnels in anisotropic and heterogeneous undrained clay	Jagdish Prasad Sahoo, Kumar, B.,	2023	82(9)	
529.	Soil Dynamics and Earthquake Engineering	Stability evaluation of circular tunnels in cohesive frictional soil under earthquake loading using the modified pseudo-dynamic approach	Jagdish Prasad Sahoo, Gowtham, G.	2023	166	
530.	International Journal of Geomechanics	Undrained Cyclic Loading Response of Subgrade Soil Subjected to Varying Moisture Content and Stress Level	Jagdish Prasad Sahoo, Singh, A.K.,	2023	23(2)	
531.	Acta Geotechnica Article in Press	Uplift capacity of strip plate anchors in unsaturated clay	Jagdish Prasad Sahoo, Mushtaq, M.,	2023		
532.	International Journal of Geomechanics	Support Pressure for Stability of Horseshoe-Shaped Tunnels in Undrained Clay Using Lower-Bound Finite-Element Limit Analysis	Jagdish Prasad Sahoo, Kumar, B.,	2023	23(1)	
533.	Geomechanics and Geoengineering	Lining pressure for circular tunnels in two layered clay with anisotropic undrained shear strength	Jagdish Prasad Sahoo, Kumar, B.,	2023	18(2)	91-104

534.	Materials and Structures/Materiaux et Constructions	Corrosion behavior of bent plain reinforcing bars used in concrete	Sudhir Misra, Behera, P.K., Mondal, K.	2022	55(2)	
535.	Engineering, Construction and Architectural Management	Understanding the components and magnitude of the cost of quality in building construction	Sudhir Misra, Garg, S.,	2022	29(1)	26-48
536.	Proceedings of International Structural Engineering and Construction	STRENGTHENING OF CONTRACTUAL PROVISIONS FOR CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT	Sudhir Misra, Sonkar, P.K.,	2022	9(1)	SUS-18-1-SUS-18-6
537.	Proceedings of International Structural Engineering and Construction	FINANCIAL SUSTAINABILITY OF CONSTRUCTION AND DEMOLITION WASTE RECYCLING PLANTS	Sudhir Misra, Thakur, A., Singh, A.	2022	9(1)	SUS-07-1-SUS-07-6
538.	Sustainability (Switzerland)	A Methodological Framework for Life Cycle Sustainability Assessment of Construction Projects Incorporating TBL and Decoupling Principles	Sudhir Misra, Srivastava, S., Raniga, U.I.	2022	14(1)	
539.	Journal of Construction Engineering and Management	Framework for Estimating Quality-Related Incentive and Disincentive in	Sudhir Misra,	2023	149(5)	

		Construction Projects				
540.	Journal of Composites for Construction	Effect of In-Plane Damage on Out-of-Plane Response of FRCM Strengthened Masonry Infilled RC Frames	Durgesh C. Rai, Selvaraj, B.R.,	2022	26(6)	
541.	Earthquake Spectra	Experimental testing on nonstructural continuous plasterboard suspended ceiling systems under shake table-generated motion	Durgesh C. Rai, Patnana, V.,	2022	38(3)	1918-1945
542.	Earthquake Engineering and Structural Dynamics	Experimental testing of aluminum-core buckling restrained knee braced Truss moment frames for earthquake resistance	Durgesh C. Rai,	2023	52(3)	660-680
543.	Earthquake Spectra	Behavior of unreinforced dry-jointed masonry walls at corners under lateral loads	Durgesh C. Rai,	2023	39(1)	100-125
544.	Journal of Structural Engineering (United States)	Experimental and Numerical Study of a Plasterboard Suspended Ceiling System with "Free" Perimeter Supports	Durgesh C. Rai,	2023	149(1)	
545.	Journal of Structural Engineering (United States)	Seismic Performance Enhancement of Unreinforced Brick Masonry Buildings by Retrofitting with	samit ray chaudhuri	2022	148(12)	

		Reinforced Concrete Bands: Full Scale Experiments				
546.	Structural Control and Health Monitoring	Development and performance evaluation of a robust suboptimal $H_{\infty}$ -based proportional–integral controller–observer system with target tracking for better control of seismic responses	samit ray chaudhuri	2022	29(11)	
547.	JVC/Journal of Vibration and Control	A novel tuned mass-conical spring system for passive vibration control of a variable mass structure	samit ray chaudhuri	2022	28(13-14)	1565-1579
548.	JVC/Journal of Vibration and Control	Mathematical modeling and experimental study of damping behavior of a cantilever carbon fiber–reinforced polymer composite hollow member with metal inserts	samit ray chaudhuri	2022	28(7-8)	915-931
549.	Current Science	A new optimization approach to enhance seismic performance of lead rubber bearing-isolated steel moment-resisting frames under extreme events	samit ray chaudhuri	2022	122(1)	77-86
550.	Structure and Infrastructure	Estimation of response reduction	samit ray	2022	Article	

	Engineering	factor for Indian standard code designed reinforced concrete frames considering nonlinear soil-structure interaction effects	chaudhuri		in Press	
551.	Structural Design of Tall and Special Buildings	A tuned liquid mass damper implemented in a deep liquid storage tank for seismic vibration control of short period structures	Sudib Kumar Mishra,	2022	31(8)	
552.	Recent Developments In Structural Health Monitoring And Assessment - Opportunities And Challenges: Bridges, Buildings And Other Infrastructures	Bayesian updating of structures based on a metropolis-hastings-based heteroscedastic hierarchical model ( Book Chapter)	Sudib Kumar Mishra,	2022		111-136
553.	Bulletin of Earthquake Engineering	Implications of inter-storey-isolation (ISI) on seismic fragility, loss and resilience of buildings subjected to near fault ground motions	Sudib Kumar Mishra,	2022	20(2)	899-939
554.	Thin-Walled Structures	Reliability analysis and design of randomly imperfect thin cylindrical shells against post-critical drops	Sudib Kumar Mishra, Majumder, R., Chakraborty,	2023	185	
555.	Journal of Engineering Mechanics	Postcritical Behavior of Nonlocal Strain Gradient Arches: Formulation and	Sudib Kumar Mishra, Dhanoriya,	2023	149(2)	

		Differential Quadrature Solution	A., Alam, M.,			
556.	European Journal of Mechanics, A/Solids	A boundary layer solution for the post-critical thermo-electro-mechanical stability of nonlocal-strain gradient Functionally Graded Piezoelectric cylindrical shells	Sudib Kumar Mishra, Alam, M.,	2023	97	
557.	Materials Today: Proceedings	Effect of rice husk ash on permeation characteristic of cementitious mortar	Vishavkarma, A., Harish, K.V.	2022	61	406-412
558.	Lecture Notes in Civil Engineering	Using Isothermal Calorimetry to Predict Setting Time of Cement-Based Materials (CBMs)	Vishavkarma, A., Harish, K.V.	2022	172	341-349
559.	Journal of Structural Engineering (United States)	Seismic Performance Enhancement of Unreinforced Brick Masonry Buildings by Retrofitting with Reinforced Concrete Bands: Full Scale Experiments	Suparno Mukhopadhyay	2022	148(12)	
560.	Structural Control and Health Monitoring	Fisher information-based optimal sensor locations for output-only structural identification under base excitation	Suparno Mukhopadhyay	2022	29(10)	
561.	Engineering Structures	Proportional flexibility-based damage detection for buildings in unknown mass	Suparno Mukhopadhyay	2022	259	



		scenarios: The case of severely truncated modal spaces				
562.	CIRP Annals	Modal parameter recovery from temporally aliased video recordings of cutting tools	Suparno Mukhopadhyay	2022	71(1)	329-332
563.	Structural Design of Tall and Special Buildings	Optimal parameters for tall buildings with a single viscously damped outrigger considering earthquake and wind loads	Chinmoy Kolay, Malik, F.N.,	2023	32(7)	
564.	Structures	Nonlinear static analysis of extreme structural behavior: Overcoming convergence issues via an unconditionally stable explicit dynamic approach	Chinmoy Kolay, Xie, S.-C., Feng, D.-C., Ricles, J.M.	2023	49	58-69

### Department of Cognitive Science

565.	Frontiers in Psychology	Editorial: Insights in Consciousness Research 2021	Srinivasan, N., Simione, L., Arsiwalla, X. D., Kleiner, J., & Raffone, A.	2023	14	1182690
566.	Cerebral Cortex	Distinct neural activations correlate with maximization of reward magnitude versus frequency	Balasubramani P.P., Diaz-Delgado J., Grennan G., Alim F., Zafar-Khan	2023	33	6038-6050

			M., Maric V., Ramanathan D., & Mishra J.			
567.	Group Processes and Intergroup Relations	Disgust sensitivity relates to attitudes toward gay men and lesbian women across 31 nations	Van Leewen, F., ..., Srinivasan, N., ..., & Tybur, J.	2023	26	629-651
568.	Behavioural Brain Research	Parietal alpha underlies slower cognitive responses during interference processing in adolescents	Mo, Z., Grennan, G., Kulkarni, A., Ramanathan, D., Balasubramani, P.P., & Mishra J.	2023	443	114356
569.	Scientific Reports	A generalized reinforcement learning based deep neural network agent model for diverse cognitive constructs	Nair, S.S., Muddapu, V.R., Balasubramani, P.P., Mishra, J., Ramanathan, D.S., & Chakravarthy, V.S.	2023	13	5928
570.	Frontiers in Psychology	Self-prioritization effect in children and adults	Singh, D., & Karnick, H.	2022	13	726230
571.	Brain Sciences	Dynamic functional connectivity of emotion processing in beta band with naturalistic emotion stimuli.	Mishra, S., Srinivasan, N., & Tiwary, U.S.	2022	12	1106
572.	Nature Human Behaviour	The Blursday database as a resource to study	Chaumon, M., ..., Mudumba,	2022	6	1587-1599

		subjective temporalities during Covid-19.	R., ..., Srinivasan, N., ..., & van Wassenhove, V			
573.	Philosophy and the Mind Sciences	In search of lost time: Integrated information theory needs constraints from temporal phenomenology	Singhal, I., Mudumba, R., & Srinivasan, N.	2022	3	13
574.	Brain Sciences	Cardiac-brain dynamics depend on context familiarity and their interaction predicts experience of emotional arousal.	Mishra, S., Srinivasan, N., & Tiwary, U.S.	2022	12	702
575.	Cognition	A wrinkle in and of time: Contraction of felt duration with a single perceptual switch	Singhal, I., & Srinivasan, N.	2022	225	105151
576.	Encyclopedia of computational neuroscience	Basal ganglia system as an engine for exploration	Chakravarthy, V.S., & Balasubramani, P.P.	2022		353-365
577.	Sensors	Utility of cognitive neural features for predicting mental health behaviors	Kato, R., Balasubramani, P.P., Ramanathan, D., & Mishra, J.	2022	22	3116
578.	Sensors	Simultaneous Gut-Brain Electrophysiology Shows Cognition and Satiety Specific Coupling	Balasubramani, P.P., Walke, A., Grennan, G., Perley, A., Purpura, S., Ramanathan,	2022	22	9242

			D., Coleman, T.P. and Mishra, J.			
579.	Psychology and Aging	Dissociable neural mechanisms of cognition and well-being in youth versus healthy aging.	Grennan, G., Balasubramani P.P., Vahidi, N., Ramanathan, D., Jeste, D.V., & Mishra J.	2022	37	827-842
580.	Frontiers in Human Neuroscience	Neural dynamics during emotional video engagement relate to anxiety	Nan, J., Balasubramani, P.P., Ramanathan, D., & Mishra, J.	2022	16	993606
581.	Cerebral Cortex	Distinct neural activations correlate with maximization of reward magnitude versus frequency	Balasubramani P.P., Diaz-Delgado J., Grennan G., Alim F., Zafar-Khan M., Maric V., Ramanathan D., & Mishra J.	2023	33	6038-6050
582.	Journal of Experimental Psychology	Event segmentation and event boundary advantage: Role of attention and post encoding processing	Pradhan, R., & Kumar, D.	2022	151	1542–1555
583.	Computational Brain & Behavior	Over-precise predictions cannot identify good choice models	Sifar, A., & Srivastava, N.	2022	5	378-396
584.	Behavior Research Methods	Shabd: A psycholinguistic database for Hindi	Verma A., Sikarwar V., Yadav H.,	2022	54	830-844

			Jaganathan R., & Kumar, P.			
<b>Department of Computer Science and Engineering</b>						
585.	Communications of the ACM	Prutor: an intelligent learning and management system for programming courses.	Amey Karkare, Purushottam Kar	2022	65	62-64
586.	Blockchain: Research and Applications	Identifying malicious accounts in blockchains using domain names and associated temporal properties	RK Sachan, R Agarwal, SK Shukla	2023		<a href="https://doi.org/10.1016/j.bcra.2023.100136">https://doi.org/10.1016/j.bcra.2023.100136</a>
587.	ACM Digital Threats: Research and Practice	InviSeal: A Stealthy Dynamic Analysis Framework for Android Systems	Saurabh Kumar, Debadatta Mishra, Biswabandan Panda, Sandeep Kumar Shukla	2023	4(1)	1-31
588.	ACM Distributed Ledger Technologies: Research and Practice	Analyzing malicious activities and detecting adversarial behavior in cryptocurrency based permissionless blockchains: An Ethereum use case	Rachit Agarwal, Tanmay Thapliyal, Sandeep Shukla	2022	1(2)	1-21
589.	Cluster Computing	Storage efficient blockchain models for constrained applications	Yuvaraj Rajendra, Sachin Sahu, Venkatesan Subramanian, Sandeep	2022		1-19

			Kumar Shukla			
590.	Security and Privacy	Automated Windows behavioral tracing for malware analysis	Shubham Rana, Nitesh Kumar, Anand Handa, Sandeep K Shukla	2022	5(6)	<a href="https://doi.org/10.1002/spy2.253">https://doi.org/10.1002/spy2.253</a>
591.	IEEE Transaction on Information Forensics and Security	Physically Related Functions: Exploiting Related Inputs of PUFs for Authenticated-Key Exchange	Durba Chatterjee, Harishma Boyapally, Sikhar Patranabis, Urbi Chatterjee, Aritra Hazra, Debdeep Mukhopadhyay	2022	17	<a href="https://doi.org/10.1109/TIFS.2022.3214089">https://doi.org/10.1109/TIFS.2022.3214089</a>
592.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	An MILP Encoding for Efficient Verification of Quantized Deep Neural Networks	Mistry, Samvid and Saha, Indranil and Biswas, Swarnendu	2022	41	<a href="https://doi.org/10.1109/TCAD.2022.3197697">https://doi.org/10.1109/TCAD.2022.3197697</a>
593.	Springer Journal of Hardware and Systems Security	PAKAMAC: A PUF-based Keyless Automotive Entry System with Mutual Authentication.	Swapnil Gade, Urbi Chatterjee, Debdeep Mukhopadhyay	2022	6	<a href="https://doi.org/10.1007/s41635-022-00126-8">https://doi.org/10.1007/s41635-022-00126-8</a>
594.	IEEE Transactions on Computers	Birds of the Same Feather Flock Together: A Dual-Mode Circuit Candidate for Strong	Kuheli Pratihari, Urbi Chatterjee, Manaar Alam, Rajat	2022		<a href="https://doi.org/10.1109/TC.2022.3218986">https://doi.org/10.1109/TC.2022.3218986</a>

		PUF-TRNG Functionalities	Subhra Chakraborty, Debdeep Mukhopadhyay			
595.	IEEE Transactions on Dependable and Secure Computing	CheckShake: Passively Detecting Anomaly in Wi-Fi Security Handshake using Gradient Boosting based Ensemble Learning	Anand Agrawal, Urbi Chatterjee, Rajib Ranjan Maiti	2023		<a href="https://doi.org/10.1109/TDSC.2023.3236355">https://doi.org/10.1109/TDSC.2023.3236355</a>
596.	IEEE Internet of Things Journal	Area-Time Efficient Implementation of NIST Lightweight Hash Functions Targeting IoT Applications	Safiullah Khan, Wai-Kong Lee, Angshuman Karmakar, Jose Maria Bermudo Mera, Abdul Majeed, Seong Oun Hwang.	2023	10	8083-8095 <a href="https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9991841">https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9991841</a>
597.	IEEE Transactions on Emerging Topics in Computing	A fast RLWE-based IPFE library and its application to privacy-preserving biometric authentication	Supriya Adhikary, Angshuman Karmakar	2023	14	<a href="https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=10106755">https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=10106755</a>
598.	IEEE Journal of Solid-State Circuits	A 334 - $\mu$ W 0.158 - mm <sup>2</sup> ASIC for Post-Quantum Key-Encapsulation Mechanism Saber With Low-Latency Striding Toom-Cook	Archisman Ghosh, Jose Maria Bermudo Mera, Angshuman Karmakar, Debayan	2023	16	<a href="https://ieeexplore.ieee.org/document/10079217">https://ieeexplore.ieee.org/document/10079217</a> doi={10.1109/JSSC.2023.3253425}}

		Multiplication	Das, Santosh Ghosh, Ingrid Verbauwhede, Shreyas Sen			
599.	○ <i>Internet of Things</i>	MagLoc: A magnetic induction based localization scheme for fresh food logistics	Amitangshu Pal, and Krishna Kant	2022	19	
600.	ACM Transactions on Sensor Networks	Communication for Underwater Sensor Networks: A Comprehensive Summary	Amitangshu Pal, Filippo Campagnaro, Khadija Ashraf, MD Rashed Rahman, Ashwin Ashok, and Hongzhi Guo	2023	19	22:1--22:44
601.	IEEE Transactions on Big Data	Social Media Driven Big Data Analysis for Disaster Situation Awareness: A Tutorial	Amitangshu Pal, Junbo Wang, Yilang Wu, Krishna Kant, Zhi Liu, and Kento Sato	2023	9	1-21
602.	IEEE Transactions on Intelligent Transportation Systems	C-FAR: A Compositional Framework for Anomaly Resolution in Intelligent Transportation Systems	Pavana Pradeep Kumar, Krishna Kant, and Amitangshu Pal	2023	24	1015-1024
<b>Department of Earth Sciences</b>						
603.	Environmental Advances	Microplastics in the Ganga-Brahmaputra delta: Sources and	Neelavannan, K., Sen, I.S., Sinha, N.,	2023	11, 100350	



		Pathways to the Sundarbans Biosphere Reserve- an UNESCO World Heritage Centre	Thakur A. K., Misra, S			
604.	Environmental Geochemistry and Health	Occurrence, Sources, Spatial Distribution of High Level of Fluoride and Associated Health Risks in Shallow Groundwater of Ganga Basin, India	Nizam, S., Acharya, T., Sen, I.S., Dutta, S.	2022	June 26	
605.	Applied Geochemistry	Geogenic controls on the high levels of uranium in alluvial aquifers of the Ganga Basin	Nizam S., Dutta, S., Sen, I.S.	2022	143, 105374	
606.	Journal of Asian Earth Sciences	A 51 Ka sedimentary sequence in a seamount basin, Eastern Arabian Sea: Records for palaeoceanographic and paleoclimatic conditions	Neelavannan, S., Hussain, S.M., Sangode, S.J., Prakasam, M., Sen, I.S., Veerasingam, S., Tyagi, A., Kumar, P., Singh, P	2022	226, 105086	
607.	Environmental Advances	High levels of fluoride in groundwater from Northern parts of Indo-Gangetic Plains reveals detrimental fluorosis health risks	Nizam, S., Virk, H.S., Sen, I.S.	8, 10020 0		
608.	Chemosphere	Microplastics in the high-altitude Himalayas: Assessment of	Neelavannan, K., Sen, I.S., Lone, A.M.,	290		Art no. 133354

		microplastic contamination in freshwater lake sediments, Northwest Himalaya, India	Gopinath, K.			
609.	Water, Air, and Soil Pollution	Time-Series Record of Ambient Platinum Group Elements over a Remote Himalayan Station: Insights over the Baseline Estimate to Judge Future Changes	Nizam, S., Mitra, A., Shukla, S., Misra, S., Sen, I.S	233 ( 1 )		Art no. 10
610.	American Journal of Science	Paleo- to Mesoarchean crustal growth in the Karwar block, southern India: Constraints on TTG genesis and Archean tectonics	Ishwar-Kumar, C.; Sajeev, K.; Satish-Kumar, M.; Williams, I.S.; Wilde, S.A.; Hokada, T.; Windley, B. F.	2022	322 (2)	108-163
611.	Precambrian Research	Major, trace element, and Nd isotopic compositions of banded iron formation and shales from the Sirsi Shelf, Dharwar Craton, India: Implications for paleo-seawater chemistry, post-depositional alteration, and provenance	Basu, P.; Ishwar-Kumar, C.; Choudhary, S.; Chakrabarti, R.; Satish-Kumar, M.; Sajeev, K.	2022	382	106882
612.	Journal of Petrology	Zircon as a Recorder of Trace Element Changes during	Harlov, D.E.; Dunkley, D.J.; Hansen,	2022	63 (5)	1-44

		High-Grade Metamorphism of Neoproterozoic Lower Crust, Shevaroy Block, Eastern Dharwar Craton, India	E.C.; Ishwar-Kumar, C.; Samuel, V.; Hokada, T.			
613.	<i>Physics and Chemistry of Minerals</i>	Nano-mechanics of minerals: understandings and developments through instrumented nanoindentation techniques	Rajiv Mukherjee and Santanu Misra	2023		
614.	<i>Journal of Structural Geology</i>	Deformation mechanisms and characteristics of the meta-BIFs from an early Proterozoic shear system of the Southern Granulite Terrane (SGT), India	Dripta Dutta, Santanu Misra and Shreya Karmakar	2022	156	1-15
615.	<i>Journal of Earth System Sciences</i>	Effect of displacement rates on the mechanical integrity of soft-porous rock analogue containing non-persistent joints/cracks of variable lengths	Gaurav K Mathur, Vikram Maji, Santanu Misra and Gaurav Tiwari	2022	131	1-15
616.	<i>Chemosphere</i>	Investigation of sources and atmospheric transformation of carbonaceous aerosols from Shyamnagar, eastern Indo-Gangetic Plains: Insights from	Gyanesh Kumar Singh, Adnan Mateen Qadri, Debajyoti Paul, Tarun Gupta, Sauryadeep	2023	326	138422

		$\delta^{13}\text{C}$ and carbon fractions	Mukherjee, Abhijit Chatterjee			
617.	Lithos	Sm-Nd isotope systematics of Indian shales constrain the growth of continental crust: Implication for supercontinent cycle and mantle plume activity	E Ray, D. Paul, R Bhutani, R Chakrabarti, S Yang	2023	442	107051
618.	Geochemistry	Origin of silicic rocks of the Deccan Traps continental flood basalt province: Inferences from field observations, petrography, and geochemistry	M Halder, D. Paul, S Yang	2023		125958
619.	Chemosphere	Tracing the predominant sources of carbon in $\text{PM}_{2.5}$ using $\delta^{13}\text{C}$ values together with OC/EC and select inorganic ions over two COALESCE locations	K Yadav, RS Raman, A Bhardwaj, D. Paul, T Gupta, D Shukla, SVL Prasad, KS Lokesh, P Venkatesh	2022	308	136420
620.	Chemical Geology	Open-system $^{182}\text{W}$ - $^{142}\text{Nd}$ isotope evolution of the Earth	S Kumari, A Stracke, D. Paul	2022	611	121104
621.	Environmental Research	Variabilities of $\delta^{13}\text{C}$ and carbonaceous components in ambient $\text{PM}_{2.5}$ in Northeast India: Insights into sources	AM Qadri, GK Singh, D. Paul, T Gupta, S Rabha, N Islam, BK	2022	214	113801

		and atmospheric processes	Saikia			
622.	Journal of Earth System Science	Petrography and geochemistry of carbonatite breccia from Amba Dongar carbonatite complex, Gujarat in the Deccan Large Igneous Province suggest mantle origin	J Chandra, D. Paul, A Uniyal	2022	131(2)	116
623.	Lithos	Secular evolution of the subcontinental lithospheric mantle beneath Indian cratons: Insights from geochemistry and geochronology of the Precambrian mafic dykes	O.P. Pandey, D. Paul	2022	422-423	106729
624.	Quaternary International	Mineralogical, geochemical, and magnetic susceptibility variations in the loess-paleosol sequence from Pattan, Kashmir Valley, India record an enhanced Indian summer monsoon around 35 ka	M Tauseef, E Ray, D. Paul, JN Malik, I Ahmad	2022	616	55-66
625.	Atmospheric Environment	Insights into sources and atmospheric processing at two polluted urban locations in the Indo-Gangetic plains from stable carbon and nitrogen isotope	G. K. Singh, P Rajeev, D. Paul, T Gupta	2022		118904

		ratios and polycyclic aromatic hydrocarbons in ambient PM <sub>2.5</sub>				
<b>Department of Economic Sciences</b>						
626.	Canadian Journal of Economics	Pandemics through the lens of occupations	Chopra, Anand Devereux, Michael  Lahiri, Amartya	2022	55 (S1)	540 - 580
627.	Journal of Environmental Economics and Management	Risk, informal institutions, and index insurance	Francis Annan, Bikramaditya Datta	2022	113	
628.	Social Indicators Research	Caste, Awareness and Inequality in Access to Maternal and Child Health Programs: Evidence From India.	Pakrashi, Debayan & Maiti, Surya & Saha, Sarani	2022	163	1301-1321
629.	Journal of Economic Behavior & Organization	Don't judge a book by its cover: The role of intergroup contact in reducing prejudice in conflict settings	Maiti, Surya & Pakrashi, Debayan & Saha, Sarani & Smyth, Russell.	2022	202	533-548
630.	Journal of Asian Economic Integration,	Evaluation of ASEAN–India Free Trade Regime: A General Equilibrium Approach	Archana Srivastava, Rachna Mathur and Somesh K Mathur	2022	Volume 4, Number 2, Sage Publication,	
631.	Artnet working paper number 212, Bangkok, UNESCAP	Digital economies and evolving regulations: A parametric and	Sila Mishra, Manish Chauhan and Somesh K	2022	AWP no. 212 Bangkok	

		nonparametric approach with bad output across countries	Mathur			
632.	Economic & Political Weekly	An Ex Ante Evaluation of Indo-Pacific Economic Framework A General Equilibrium Analysis	Archana Srivastava, Somesh K Mathur and Prabir De (2023	2023	JANUARY 28, 2023 vol LVIII no 4	
633.	Foreign Trade Review	An Ex Ante Evaluation of Indo-Pacific Economic Framework A General Equilibrium Analysis	Archana Srivastava, Somesh K Mathur and Prabir De	2023	Volume 58, no 2	
634.	Energy Economics	What do we know about the idiosyncratic risk of clean energy equities?	Roy, P., Ahmad, W., Sadorsky, P., & Phani, B. V	2022	112	1-18
635.	Finance Research Letters	Fresh evidence on the relationship between market power and default risk of Indian banks	Khan, M. A., & Ahmad, W	May 2022	46 (A)	102360
636.	Journal of Economic Studies	Competition, concentration and default-risk in the Indian banking industry	Khan, M. A., & Ahmad, W	2022	50	268-282
637.	International Journal of Emerging Markets	Are emerging economies' credit cycles synchronized? Fresh evidence from time–frequency analysis	Saini, S., Kumar, U., & Ahmad, W	2022	Ahead-of-print	Ahead-of-print

638.	Economic and Political Weekly	Words that send waves to the Indian stock market: investigating RBI's communication	Shrimali, S., & Ahmad, W.	2022	57	10-13
639.	Economic and Political Weekly	On the Dynamics of Time-varying Fiscal Multipliers	Sachdeva, P., Ahmad, W., & Bhanumurthy, N. R	2022	57	30-33
640.	International Journal of Energy Sector Management	By-production of electricity and particulates: Efficiency of Indian thermal power plants revisited	Debarun Sengupta, Deep Mukherjee	2022	16	265-283

**Department of Electrical Engineering**

641.	IEEE Transactions on Communications	Centralized and Distributed Millimeter Wave Massive MIMO based Data Fusion with Perfect and Bayesian Learning (BL)-based Imperfect CSI	Apoorva Chawla, Palla Siva Kumar, Suraj Srivastava, Aditya K. Jagannatham and Lajos Hanzo	2022	70	1777-1791
642.	IEEE Signal processing Letters	Joint Transmit and Reflective Beamformer Design for Secure Estimation in IRS-Aided WSNs	Mohammad Faisal Ahmed, Kunwar Pritiraj Rajput, Naveen K. D. Venkategowda, Kumar Vijay Mishra and Aditya K.	2022	29	692 - 696



			Jagannatham			
643.	IEEE Transactions on Vehicular Technology	SWIPT-enabled Cognitive Overlay-Based Non-Orthogonal Multi-User MIMO Cooperative Communication with Battery-Equipped Energy Harvesting Nodes	Akash Agarwal and Aditya K. Jagannatham	2022	71	8457 - 8473
644.	IEEE Transactions on Communications	Sparse Bayesian Learning Aided Estimation of Doubly-Selective MIMO Channels for Filter Bank Multicarrier Systems	Prem Singh, Suraj Srivastava, Amrita Mishra, Aditya K. Jagannatham and Lajos Hanzo	2022	70	4236 - 4249
645.	IEEE Transactions on Wireless Communications.	OTFS Transceiver Design and Sparse Doubly-Selective CSI Estimation in Analog and Hybrid Beamforming Aided mmWave MIMO Systems	Suraj Srivastava, R. K. Singh, A. K. Jagannatham, A. Chockalingam and L. Hanzo	2022	21	10902 - 10917
646.	IEEE Transactions on Vehicular Technology	Delay-Doppler and Angular Domain 4D-Sparse CSI Estimation in OTFS Aided MIMO Systems	Suraj Srivastava, Rahul Kumar Singh, Aditya K. Jagannatham and Lajos Hanzo	2022	71	13447 - 13452
647.	IEEE Transactions on Wireless	Hybrid Transceiver Design for Tera-	Suraj Srivastava,	2022	22	2231 - 2245

	Communications	Hertz MIMO Systems Relying on Bayesian Learning Aided Sparse Channel Estimation	A. Tripathi, N. Varshney, Aditya K. Jagannatham and Lajos Hanzo			
648.	IEEE Transactions on Communications.	Robust Distributed Hybrid Beamforming in Coordinated Multi-user Multi-cell mmWave MIMO Systems Relying on Imperfect CSI	Meesam Jafri, Amrit Anand, Suraj Srivastava, Aditya K. Jagannatham and Lajos Hanzo	2022	70	8123 - 8137
649.	IEEE Access	Dictionary-Learning (DL)-Based Sparse CSI Estimation in Multiuser Terahertz (THz) Hybrid MIMO Systems Under Hardware Impairments and Beam-Squint Effect	Priyanka Maity, Suraj Srivastava, Sunaina Khatri and Aditya K. Jagannatham	2022	10	113699 - 113714
650.	IEEE Transactions on Vehicular Technology	Cooperative Hybrid Transmit Beamforming in Cell-free mmWave MIMO Networks	Meesam Jafri, Suraj Srivastava, Naveen K. D. Venkategowda, Aditya K. Jagannatham and Lajos Hanzo	2023		1 - 16
651.	IEEE Internet of Things Journal	Robust Linear Hybrid Beamforming Designs Relying on Imperfect CSI in mmWave MIMO IoT Networks	Rajput, Kunwar; Maity, Priyanka; Srivastava, Suraj; Sharma, Vikas; Venkategowd	2023	10	8893 - 8906

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652.	<i>IEEE Transactions on Power Electronics</i>	Threshold Voltage Instability Measurement Circuit for Power GaN HEMTs Devices	R. Kumar, S. Samanta and T. -L. Wu	2023	38	6891-6896
653.	IEEE Transactions on Sustainable Energy	Model Free Adaptive Neural Controller for Standalone Photovoltaic Distributed Generation Systems With Disturbances	M. P. Korukonda, R. Prakash, S. Samanta and L. Behera		13	653-667
654.	Japanese Journal of Applied Physics	Investigation of growth dynamics of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> LPCVD by independently controlling Ga precursor and substrate temperature	Gavax Joshi, Yogesh Singh Chauhan, and Amit Verma	2023	62	SF1017
655.	IEEE Journal of Emerging and Selected Topics in Power Electronics	Multiple Points Measurement Based Junction Temperature Estimation of IGBT Module	Abhinav Arya, Abhishek Chanekar, Amit Verma, and Sandeep Anand	2023		
656.	Current Opinion in Electrochemistry	Practical semiconductor physics perspective of materials photoelectrochemistry	Amit Verma and Raj Ganesh Pala	2022	36	101160
657.	Optical Materials	Multi spectral switchable infra-red	Ashok P, Yogesh	2022	132	112854

		reflectance resonances in highly subwavelength partially oxidized vanadium thin films	Singh Chauhan, and Amit Verma			
658.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	A Computationally Efficient Compact Model for Ferroelectric Switching with Asymmetric Non-Periodic Input Signals	Amol D. Gaidhane, Raghvendra Dangi, Shubham Sahay, Amit Verma, and Yogesh Singh Chauhan	2023	42	1634 - 1642
659.	Solar Energy Materials and Solar Cells	Optoelectronic modeling of all-perovskite tandem solar cells with design rules to achieve >30% efficiency	Shreyansh Yadav, Maarooof Abdul Kareem, Hari Krishna Kodali, Daksh Agarwal, Ashish Garg, Amit Verma, and Kanwar Singh Nalwa	2022	242	111780
660.	IEEE Transactions on Industrial Electronics	H-Bridge Derived Topology for Dynamic on-resistance Evaluation in Power GaN HEMTs	Rustam Kumar, Arnab Sarkar, Sandeep Anand, Amit Verma, and Tian-Li Wu	2022	70	1532
661.	IEEE Journal of Solid-State Circuits (IEEE JSSC)	Analysis and Design of a Discrete-Time Delta-Sigma Modulator Using a Cascoded Floating-	R. S. Ashwin Kumar, Nagendra Krishnapura,	2022	57	3384-3395

		Inverter-Based Dynamic Amplifier	P. Banerjee			
662.	Electric Power System Research (EPSR), Elsevier	A Novel Decentralized Inverter Control Algorithm for Loss Minimization and LVRT Improvement	Ilgiz Murzakhanov a, Gururaj Mirle Vishwanath, Kasi Vemalaiah , Garima Prashal , Spyros Chatzivasileiadis , Narayana Prasad Padhy	April 2023	-	-
663.	IEEE Transactions on Transportation Electrification.	A Fuel-Efficient BLDC Motor-Driven Light Electric Vehicle with Single Stage On-board Charging System	Anjane K Mishra, Ankit Singh, M.V. Gururaj	2022	-	-
664.	IEEE Transactions on Signal Processing	Stochastic Compositional Gradient Descent under Compositional Constraints	S Teja T., Harshvardhan, K. Rajawat	2023	71	1115-1127
665.	IEEE Transactions on Signal Processing	Projection-free Stochastic Bi-level Optimization,	Z. Akhtar, A. S. Bedi, S. Teja T., and K. Rajawat	2022	70	6332-6347
666.	Robotics and Autonomous Systems	A Generalized Framework for Autonomous Calibration of Wheeled Mobile Robots	N. Mohan Krishna, L. Arora, A. Bose, K. Rajawat, R. M. Hegde	2022	158	1-21
667.	IEEE Transactions on Signal Processing	Sparse Representations of	A. Chakraborty,	2022	70	3148-3164

		Positive Functions via First and Second-Order Pseudo-Mirror Descent	K. Rajawat, and A. Koppel			
668.	IEEE Transactions on Signal Processing	Zeroth and First Order Stochastic Frank-Wolfe Algorithms for Constrained Optimization,	Z. Akhtar and K. Rajawat	2022	70	2119-2135
669.	IEEE Transactions on Signal Processing	Escaping Saddle Points with Successive Convex Approximation	A. Bedi, K. Rajawat, V. Aggarwal, and A. Koppel	2022	70	307-321
670.	IEEE Transactions on Intelligent Transportation Systems	Traffic Estimation and Prediction via Online Variational Bayesian Subspace Filtering	C. Paliwal, U. Bhatt, P. Biyani, and K. Rajawat	2022	23	4674-4684
671.	IEEE Transactions on Dielectrics and Electrical Insulation	The Effect of Filler Material on the Interface around a Nanoparticle in a Nanocomposite	A. Sharma and N. Gupta	2023	-	
672.	IEEE Transactions on Dielectrics and Electrical Insulation	Electrochemical Changes in Epoxy Resin Due to Thermal Aging and Their Effect on Electrical Tree Growth	M. M. Bordeori and N. Gupta	2022	29	1940-1947
673.	SAE International Journal of Sustainable Transportation, Energy, Environment, & Policy	"Energy Efficiency of Battery Electric Vehicles with In-Wheel Motors."	Kumar, Dileep, Vasu Jain, and Ramprasad Potluri.	2022	4	1-21

674.	Physical Review A	Efficient biphoton emission in semiconductors by single-photon recycling	Rituraj, S. Fan, Z. Yu, P. Boieriu, S. Krishnamurthy	2023	107	
675.	Physical Review Applied	Parametric Mie Resonances and Directional Amplification in Time-Modulated Scatterers	V. Asadchy, A.G. Lamprianidis, G. Ptiteyn, M. Albooyeh, Rituraj, T. Karamanos, R. Alae, S.A. Tretyakov, C. Rockstuhl, and S. Fan	2022	18	
676.	Optics Express	Lineshape study of optical force spectra on resonant structures	L. Fan, Z. Zhao, Rituraj, W. Jin, Meir Orenstein, and S. Fan	2022	30	
677.	International Journal of Electrical Power and Energy Systems	High-speed sub-cycle algorithm for estimation of decaying DC component in current measurements	B. R. Kumar, A. Mohapatra, S. Chakrabarti, and A. Kumar	2023		
678.	IET Energy Conversion and Economics	Taxonomy of outlier detection methods for power system measurements	V. Patel, A. Kapoor, S. Chakrabarti, and A. Sharma	2023		
679.	IEEE Transactions on Sustainable Energy	BESS reserve-based frequency support during emergency in islanded residential microgrids	S. Som, S. Chakrabarti, S. R. Sahoo, A. Ghosh, and X. Liang	2023		

680.	IEEE Transactions on Industry Applications	A hierarchical voltage control scheme for wind power plants through enhanced reactive power support	M. N. S. K. Shabbir, X. Liang, and S. Chakrabarti	2022	58	5776-5791
681.	IEEE Transactions on Power Delivery	Phase angle-based subcycle algorithm for high-speed digital relaying of transmission lines	B. R. Kumar, A. Mohapatra, R. Gokaraju, and S. Chakrabarti	2022	37	3416-3419
682.	IEEE Systems Journal	Multi-objective multiscenario framework for RCS placement in unbalanced distribution systems considering uncertainty	P. Gangwar, S. Keshewani, S. Chakrabarti, and S. N. Singh	2022	16	2811-2821
683.	Electric Power Systems Research	Peak-to-average ratio incentivescheme to tackle the peak-rebound challenge in TOU pricing	C. L. Dewangan, S. N. Singh, S. Chakrabarti, K. Singh	2022		
684.	Electric Power Systems Research	An optimization-based topologyerror detection method for power system state estimation	A. Srivastava, S. Chakrabarti, J. Soares, and S. N. Singh	2022		
685.	IEEE Transactions on Industrial Informatics	Protection of networked microgridsusing relays with multiple setting groups	M. N. Alam, S. Chakrabarti, and A. K. Pradhan	2022	18	3713-3723
686.	IEEE Transactions on Device and Materials Reliability	A 10T Soft-Error-Immune SRAM With Multi-Node	S. Pal, S. Sahay, W. - H. Ki and C.	2022	22	85-88



		Upset Recovery for Low-Power Space Applications	-Y. Tsui			
687.	IEEE Transactions on NanoBioscience	Dielectric Modulated Nanotube Tunnel Field-Effect Transistor as a Label Free Biosensor: Proposal and Investigation	D. Sen, S. D. Patel and S. Sahay	2022	22	163-173
688.	IEEE Transactions on Electron Devices	Charge Injection into Electrodeposited Cu <sub>2</sub> O From Metallic Stacks and Graphene	Amit Kumar, Himanshu Singh, Shubham Sahay, K. Balasubramanian	2022	69	5755-5759
689.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	A Computationally Efficient Compact Model for Ferroelectric FinFETs Switching with Asymmetric Non-Periodic Input Signals	Amol Gaidhane, Raghvendra Dangi, Shubham Sahay, Amit Verma, and Yogesh Singh Chauhan	2022	42	1634-1642
690.	IEEE Access	Analytical Modeling of 3D NAND Flash Cell with a Gaussian Doping Profile	Amit Kumar, Raushan Kumar and Shubham Sahay,	2022	10	85854-85863
691.	IEEE Journal on Emerging and Selected Topics in Circuits and Systems	Muller C-Element Exploiting Programmable Metallization Cell for Bayesian Inference	Jasmine Kaur, Sneha Saurabh and Shubham Sahay	2022	12	750-761

692.	IEEE Transactions on Electron Devices	Efficient Implementation of Max-Pooling Algorithm Exploiting History-effect in Ferroelectric-FinFETs	Musaib Rafiq, Yogesh Chauhan and Shubham Sahay	2022	69	6446-6452
693.	IEEE Transactions on Electron Devices	MD Salim Equbal, Tejas Ketkar and Shubham Sahay	MD Salim Equbal, Tejas Ketkar and Shubham Sahay	2023	70	1061-1066
694.	Performance Evaluation	Low-complexity scheduling algorithms with constant queue length and throughput guarantees	Subrahmanya Swamy Peruru, Aravind Srinivasan, Radha Krishna Ganti, Krishna Jagannathan	2022		1-22
695.	IEEE Networking Letters	Fast Link Scheduling in Wireless Networks Using Regularized Off-Policy Reinforcement Learning	Sagnik Bhattacharya; Ayan Banerjee; Subrahmanya Swamy Peruru; Kothapalli Venkata Srinivas	2023		1-5
696.	D. Dovrat, T. Tripathy and A. Bruckstein	On Tracking and Capture in Proportional Control Bearing Only Unicycle Pursuit	IEEE Control System Letters	2022	6	2132-2137
697.	Physical Review D	Conditional Normalizing flow for	Ankur Singha,	2023	107-1	1- 8

		Monte Carlo sampling in lattice scalar field theory	Dipankar Chakrabarti and Vipul Arora			
698.	Scipost Physics Core	Generative Learning For The Problem Of Critical Slowing Down In Lattice Gross Neveu Model	Ankur Singha, Dipankar Chakrabarti and Vipul Arora	2022	5-52	1-22
699.	IEEE Sensor Letters	Few-shot calibration of low-cost air pollution PM2.5 sensors using meta-learning	Kalpita Yadav, Vipul Arora, Sonu Kumar Jha, Mohit Kumar, Sachchida Nand Tripathi, Vidyanand Motiram Motghare, and Karansingh A. Rajput	2022	6-5	1-4
700.	IEEE Transactions on Neural Networks and Learning Systems	SCANet: Securing the Weights with Superparamagnetic-MTJ Crossbar Array Networks	D. Rajasekharan, N. Rangarajan, S. Patnaik, O. Sinanoglu, and Y. S. Chauhan	2022		
701.	IEEE Transactions on Emerging Topics in Computing	FerroCoin: Ferroelectric Tunnel Junction-based True Random Number Generator	S. Chatterjee, N. Rangarajan, S. Patnaik, D. Rajasekharan, O. Sinanoglu, and Y. S.	2023		

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702.	IEEE Transactions on Electron Devices	Di-Metal Chalcogenides: A New Family of Promising 2-D Semiconductors for High-Performance Transistors	A. Naseer, K. Nandan, S. Bhowmick, A. Agarwal, and Y. S. Chauhan		70, 5	2445-2452
703.	IEEE Transactions on Electron Devices	Multi-Domain Interactions in Perpendicular Magnetic Tunnel Junction (p-MTJ): Enabling Multi-State MRAM	N. Pandey and Y. S. Chauhan	2023	70, 5	2304-2311
704.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	A Computationally Efficient Compact Model for Ferroelectric FinFETs Switching with Asymmetric Non-Periodic Input Signals	A. Gaidhane, R. Dangi, S. Sahay, A. Verma, and Y. S. Chauhan	2023	42, 5	1634-1642
705.	IEEE Transactions on Electron Devices	A Physics-Based Compact Model for Silicon Cold Source Transistors	A. Kar, K. Nandan, and Y. S. Chauhan	2023	70, 4	1580-1588
706.	Transactions of the Indian National Academy of Engineering	Field-Effect Transistors based on Two-dimensional Materials	K. Nandan, A. Naseer and Y. S. Chauhan	2023	8, 1	1-14
707.	IEEE Transactions on Circuits and Systems I	An Ultra-Low Noise Figure and Multi-band Re-configurable Low Noise Amplifier	N. Bajpai, Paramita Maity, Manish Shah, Amitava Das, and Y. S. Chauhan	2023	70, 3	1006-1016

708.	Solid State Electronics	Ferroelectric FDSOI FET Modeling for Memory and Logic Applications	S. Chatterjee, S. Kumar, A. Gaidhane, C. K. Dabhi, Y. S. Chauhan, and H. Amrouch	2023	200, -	108554
709.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	Robust Compact Model of High Voltage MOSFETs' Drift Region	G. Pahwa, A. Sharma, R. Goel, G. Gill, H. Agarwal, Y. S. Chauhan, and C. Hu	2023	42, 1	337-340
710.	Computational Materials Science	Easily exfoliable monolayer of GdTe <sub>3</sub> : ab initio study	I. Ahamed, Y. S. Chauhan, S. Bhowmick, and A. Agarwal	2023	216	111869
711.	Solid State Electronics	Characterization and Modeling of Drain Lag using a Modified RC Network in the ASM-HEMT Framework	M. S. Nazir, A. Pampori, R. Dangi, P. Kushwaha, E. Yadav, S. Sinha, and Y. S. Chauhan		199, -	108490
712.	IEEE Transactions on Electron Devices	Dynamics and modeling of Multi-Domains in Ferroelectric Tunnel Junction- Part-II: Electrostatics and Transport	N. Pandey and Y. S. Chauhan	2023	70, 1	327-334
713.	IEEE Transactions on Electron Devices	Dynamics and modeling of Multi-Domains in Ferroelectric Tunnel Junction- Part-I: Mathematical	N. Pandey and Y. S. Chauhan	2022	69, 12	7147-7155

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714.	IEEE Journal of Exploratory Solid-State Computational Devices and Circuits	Leveraging Ferroelectric Stochasticity and In-Memory Computing for DNN IP Obfuscation	L. Mankali, N. Rangarajan, S. Chatterjee, S. Kumar, Y. S. Chauhan, O. Sinanoglu, and H. Amrouch	2022	8, 2	102-110
715.	International Journal of RF and Microwave Computer-Aided Engineering	A Multi-Variable Double Impedance Matching Network Design Algorithm with Design Example of A Low Noise Amplifier	N. Bajpai and Y. S. Chauhan	2022	32, 12	23462
716.	IEEE Electron Device Letters	Impact of Domain Wall Motion on the Memory Window in a Multi-Domain Ferroelectric FET	N. Pandey and Y. S. Chauhan	2022	43, 11	1854-1857
717.	Microelectronics Journal	Analytical Approximation of Surface Potential and Analysis of C-V Characteristics of Bulk MOSFETs at Cryogenic Temperatures	W. Manzoor, A. K. Dutta and Y. S. Chauhan	2022	129, -	105586
718.	IEEE Transactions on Electron Devices	Electrical Characterization and Modeling of GaN HEMTs at Cryogenic Temperatures	M. S. Nazir, P. Kushwaha, A. Pampori, S. A. Ahsan, and Y. S. Chauhan	2022	69, 11	6016 - 6022
719.	IEEE Transactions on Electron Devices	Efficient Implementation of Max-Pooling	M. Rafiq, S. S. Parihar, Y. S. Chauhan,	2022	69, 11	6446 - 6452

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720.	Optical Materials	Multi Spectral Switchable Infra-Red Reflectance Resonances in Highly Subwavelength Partially Oxidized Vanadium Thin Films	Ashok P, Y. S. Chauhan, and A. Verma	2022	132, -	112854
721.	IEEE Transactions on Electron Devices	Analysis and Modeling of Current Mismatch in Negative Capacitance Field Effect Transistor	R. Goel, A. Sharma and Y. S. Chauhan	2022	69, 9	5337-5344
722.	Nanoscale	Large and anisotropic carrier mobility in monolayers of the MA <sub>2</sub> Z <sub>4</sub> series (M=Cr, Mo, W; A=Si, Ge; Z=N, P)	A. Priyadarshi, Y. S. Chauhan, S. Bhowmick, and A. Agarwal	2022	14, 33	11988-11997
723.	IEEE Transactions on Electron Devices	Comprehensive Variability Analysis in Dual-Port FeFET for Reliable Multi-Level-Cell Storage	S. Chatterjee, S. Thomann, K. Ni, Y. S. Chauhan, H. Amrouch	2022	69, 9	5316-5323
724.	IEEE Transactions on Electron Devices	Physics and modeling of multi-domain FeFET with domain wall induced Negative Capacitance	N. Pandey and Y. S. Chauhan	2022	69, 8	4659 - 4666

725.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	Ferroelectric FET-based Implementation of FitzHugh-Nagumo Neuron Model	D. Rajasekharan , A. Gaidhane, A. R. Trivedi, and Y. S. Chauhan	2022	41, 7	2107 - 2114
726.	<i>Pramana</i>	To purchase or to pirate: Investigating the role of social influence on digital piracy contagion	K Gaurav, S Bhattacharya, YN Singh, S Ghosh	2022	96	1-12
727.	<i>IEEE Internet Of Things</i>	Network Robustness Analysis for IoT Networks using Regular Graphs	Dhuli, Sateeshkrishna; Kouachi, Said; Chhabra, Anamika; Singh, Yatindra Nath	2022	9	8809-8819
728.	<i>IETE Journal of Research</i>	Double-Link Failure Protection Using a Single p-Cycle	Pallavi Athe & Yatindra Nath Singh	2022	-	-
729.	Surface Topography: Metrology and Properties	Nanoscale surface profile measurement using state space approach in digital holographic microscopy	Dhruvam Pandey and Rajshekhar Gannavarpu	2023	11 (2)	024001
730.	Journal of the Optical Society of America A	Quantitative phase gradient metrology using diffraction phase microscopy and deep learning	Allaparthi Venkata Satya Vithin and Rajshekhar Gannavarpu	2023	40 (3)	611-619
731.	Optics and Lasers in Engineering	Deep learning based single shot multiple phase derivative retrieval method in	Allaparthi Venkata Satya Vithin, Jagadesh	2023	162	107442



		multi-wave digital holographic interferometry	Ramaiah, and Rajshekhar Gannavarpu			
732.	Optics and Lasers in Engineering	Quantitative flow visualization by hidden grid background oriented schlieren	Jagadesh Ramaiah, Tullio de Rubeis, Rajshekhar Gannavarpu and Dario Ambrosini	2023	160	107307
733.	Optik	Subspace analysis based machine learning method for automated defect detection from fringe patterns	Dhruvam Pandey, Jagadesh Ramaiah, Sreeprasad Ajithaprasad and Rajshekhar Gannavarpu	2022	270	170026
734.	Applied Optics	Multiple phase extraction using graphics processing unit assisted unitary transformation method in digital holographic interferometry	Jagadesh Ramaiah and Rajshekhar Gannavarpu	2022	61 (28)	8180-8189
735.	Applied Optics	Phase derivative estimation in digital holographic interferometry using a deep learning approach	Allaparthi Venkata Satya Vithin, Ankur Vishnoi, and Rajshekhar Gannavarpu	2022	61 (11)	3061-3069
736.	IEEE Access	Wideband Monopole Eight-Element MIMO Antenna for 5G Mobile Terminal	A. K. Rai, R. K. Jaiswal, K. Kumari, K. V. Srivastava	2023	11	pp. 689-696

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737.	IEEE Transactions on Antennas and Propagation	A Time Modulated Polarization Rotating Frequency Selective Surface	M. Saikia and K. V. Srivastava	2022	71	pp. 1506-1515
738.	International Journal of RF and Microwave Computer-Aided Engineering	Wideband Low- Profile Endfire Circularly Polarized Antenna using Mode Superposition Technique	R. K. Jaiswal, A. K. Ojha, K. Kumari, K. V. Srivastava and C. -Y. - D. Sim	2022	32	e23471
739.	IEEE Transactions on Electromagnetic Compatibility	Screen Printed Polarization Independent Microwave Absorber for Wideband RCS Reduction	A. Dhumal, M. S. Bisht, A. Bhardwaj, M. Saikia, S. Malik, and K. V. Srivastava	2022	65	pp. 96-103
740.	IEEE Antennas and Wireless Propagation Letters	Singular-Phase Characteristics of Electromagnetic Absorbers and a Framework for Low- RCS Target Detection	Nitish Kumar Gupta, Gaganpreet Singh, Sapireddy Srinivasu, Harshawardh an Wanare, Kumar Vaibhav Srivastava, J. Ramkumar, and S. Anantha Ramakrishna	2022	22	pp. 134-138
741.	Journal of Electromagnetic Waves and Applications	Analytical analysis of Inhomogeneous and Anisotropic Metamaterial Cylindrical Waveguide using	Abhinav Bhardwaj, Dheeraj Pratap, Kumar Vaibhav	2022	37	Pages 53-68

		Transformation Matrix Method	Srivastava and S. Anantha Ramakrishna			
742.	IEEE Transactions on Components, Packaging and Manufacturing Technology	Optically Transparent Adhesives for Microwave Metamaterial Absorber with PET-PDMS Interface	K. Chaudhary, V. K. Singh, M .S Bisht, J. Ramkumar, S. A. Ramakrishna, and K. V. Srivastava	2022	12	pp. 1253-1261
743.	IEEE Access	Wideband Bidirectional Same Sense Endfire Circularly Polarized Antenna	R. K. Jaiswal, A. K. Ojha, K. Kumari, K. V. Srivastava and C. -Y. - D. Sim	2022	10	pp. 65801-65808
744.	IEEE Antennas and Wireless Propagation Letters	A Compact, Low Profile Shorted TM <sub>1/2,0</sub> Mode Planar Co-Polarized Microstrip Antenna for Full-Duplex Systems	K. Kumari, M. Saikia, R. K. Jaiswal, S. Malik and K. V. Srivastava	2022	21	pp. 1887-1891
745.	Journal of Optics	A Low-Profile Consolidated Metastructure for Multispectral Signature Management	N. Kumar, G. Singh, H. Wanare, S.A. Ramakrishna, K. Vaibhav Srivastava and J. Ramkumar	2022	24	pp. 035102
746.	Microwave and Optical Technology Letters	A Compact Triband Circularly Polarized Meander-Loaded Monopole Antenna	Maharana Pratap Singh, Rahul Jaiswal, Kumar	2022	64	pp. 382-388

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747.	IEEE Antennas and Wireless Propagation Letters	A Miniaturized Frequency Selective Resorber with Independently Regulated Selective Dual-Transmission Response	A. Sharma, S. Malik, S. Ghosh and K. V. Srivastava	2022	21	pp. 257-261
748.	IET Microwaves, Antennas and Propagation	A Polarization Insensitive Time Modulated Frequency Selective Surface for Broad Frequency Range	M. Saikia, K. V. Srivastava and S. A. Ramakrishna	2022	16	pp. 37-45
749.	IEEE Antennas and Wireless Propagation Letters	Polarization Insensitive Optically Transparent Microwave Metamaterial Absorber using a Complementary Layer	Abhinav Bhardwaj, Gaganpreet Singh, Kumar Vaibhav Srivastava, J. Ramkumar and S. Anantha Ramakrishna	2022	21	pp. 163-167
750.	Microwave and Optical Technology Letters	An in-band Full-duplex Antenna for Dual-band Application	Kahani Kumar, Rahul Kumar Jaiswal and Kumar Vaibhav Srivastava	2022	64	pp. 130-136
751.	<i>IEEE Transactions on Power Electronics</i>	Digital Peak Current Program Mode Controller for Switched Reluctance	R. Banerjee and P. Sensarma	2023	38	5230-5239

		Machines				
752.	<i>IEEE Transactions on Power Electronics</i>	Low-Cost Realization of Feature Position Estimation Scheme for Switched Reluctance Motor	R. Banerjee and P. Sensarma	2023	38	2850-2854
753.	IEEE Transactions on Industry Applications	An 18-Pulse Converter and 4-Level Cascaded Inverter Based Induction Motor Drive	Rohit Kumar, Piyush Kant and Bhim Singh	2022	58	4122-4133
754.	IEEE Transactions on Industry Applications	Adjustable Speed Induction Motor Drive Fed by 13-Level Cascaded Inverter and 54-Pulse Converter	Bhim Singh, Rohit Kumar and Piyush Kant	2022	58	890-900
755.	IEEE Transactions on Industry Applications	High Reliable Medium Voltage Drive with Reduced Component Count of Converters	Rohit Kumar, Bhim Singh and Piyush Kant	2023		
756.	IEEE Transactions on Industry Applications	Assessment of Multi-Phase Conversion and Modified PWM Strategy for Power Converters of Medium-Voltage Induction Motors Drive	Rohit Kumar, Bhim Singh and Piyush Kant	2023		
757.	<i>arXiv:2302.02145</i>	Monolayer CrTe: a room temperature ferromagnetic half-metal	I. Ahamed, A. Chakraborty, R. Dey, Y. S. Chauhan, S. Bhowmick,	2023		1-8

			A. Agarwal.			
<b>Department of Humanities and Social Sciences</b>						
758.	Special Article in Economic & Political Weekly	"To Write was to Cense: Kavyasastra and Creative Freedom in pre-modern India"	Mini Chandran and Sreenath V S.	August 20, 2022	Vol. 57, Issue no: 34	
759.	Third Text Taylor & Francis	Mapping the Agency of Trash: A New Materialist Re-Reading of Contemporary Indian Art	Tanvi Jain, Shatarupa Thakurta Roy	October 2022	Vol 36 Issue 5	429-454
760.	AI & SOCIETY Published by Springer Nature  DOI <a href="https://doi.org/10.1007/s00146-022-01409-y">https://doi.org/10.1007/s00146-022-01409-y</a>	Reflections on emerging HCI–AI research	Swaroop Panda, Shatarupa Thakurta Roy	March 2022	-	-
761.	The International Journal of Visual design  Design Principles and Practices  Common Ground	Visual Ergonomics for Colorblindness: Providing Affordance in a Desktop Graphical User Interface	Abhinav Basak, Shatarupa Thakurta Roy	January 2022	Vol 16 Issue 2	1-17

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762.	<p>Interactions</p> <p>Published by Association for Computing Machinery</p>	Guerrilla visualization	<p>Swaroop Panda, Shatarupa Thakurta Roy</p>	<p>January 2022</p>	<p>Vol 29 Issue 1</p>	<p>68-71</p>
763.	<i>PLOS ONE</i>	Neural response to sad autobiographical recall and sad music listening post recall reveals distinct brain activation in alpha and gamma bands.	<p>Gupta A. Bhushan B Behera, L.</p>	<p>2023</p>	<p>18</p>	<p>e0279814</p>
764.	<i>IEEE Transactions on Human-Machine Systems</i>	Detection of dyslexic children using machine learning and multimodal Hindi language eye-gaze assisted learning system	<p>Meena Y.K., Cecotti, H., Bhushan, B., Dutta, A., &amp; Prasad, G.</p>	<p>2023</p>	<p>53</p>	<p>122-131</p>
765.	<i>Psychological Trauma: Theory, Research, Practice, &amp; Policy</i>	Associations between posttraumatic stress symptoms and posttraumatic growth elements: A network analysis	<p>Ganai, U.J., Sachdev, S., Bhat, N.A., Bhushan, B.</p>	<p>2022</p>		<p><a href="https://doi.org/10.1037/tra0001411">https://doi.org/10.1037/tra0001411</a></p>

766.	PLoS ONE	Creative problem solving and facial expressions: A stage based comparison	Kumar, M., Roy, S., Bhushan, B., & Sameer, A.	2022	17	e0269504
767.	<i>Frontiers in Psychology</i>	Posttraumatic stress and growth among children and adolescents in the aftermath of Covid-19	Bhushan, B., Basu, S., & Ganai, U.J.	2022	12	791263
768.	Conference Proceeding  IEEE International Conference on Systems, Man, and Cybernetics (SMC)	Maditation and cognitive enhancement: A machine learning based classification using EEG	Singh, S., Gupta, V., Reddy, T., Bhushan, B., & Behera, L.	2022		1973- 1978
769.	Journal of South Asian Dvelopment	Essential networks sustaining platform-based gig-work during the COVID-19 pandemic in India	Rajorshi Ray, Jillet Sarah Sam			Accepted on April 21, 2023, forthcoming
770.	Urban Climate	Urban Climate Change Experiments in Gandhinagar City, India	Thounaojam Somokanta	2022	43	1-12

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771.	Applied Economics	Liquidity commonality in the cryptocurrency market	Tripathi, A., Dixit, A., & Vipul.	2022	54(15)	1727-1741
772.	Finance Research Letters	The impact of banking regulations and accounting standards on estimating discretionary loan loss provisions	Pandey, A., Tripathi, A., & Guhathakurta, K.	2022	44	102068
773.	The Indian Journal of Industrial Relations	Virtual Meeting Platforms for Online Activities during Covid-19: An Empirical Evidence	Shukla, A., Arora, V., & Reddy, G.	2022	57(4)	572-585
774.	International Journal of Hospitality and Tourism Administration.	Facilitators of online hotel booking through third party aggregators: Measurement and validation in the Indian context	Shukla, A., & Rodrigues, R. H.	2022	23(4)	723-753
775.	Applied Energy	Behavioural modelling for personal and societal benefits of V2G/V2H integration on EV adoption	Singh, K., & Singh, A.	2022	319	119265
776.	Utilities Policy	Estimating the cost of equity for the regulated energy and infrastructure sectors in India	Singh, K., Singh, A., & Prakash, P.	2022	74	101327
777.	DIW Berlin: Politikberatung kompakt, German Institute for Economic	LNG Price Responsiveness in Asia	Karplus, V., Kim, Y. G., Agosti, L., Moselle, B.,	2022	127 (pbk178)	

	Research		Neuhoff, K., Singh, A., & Yamada, H.			
778.	Energy Proceedings	Building Blocks of Peer-to-Peer Energy Trading in a Smart Grid	Singh, K., & Singh, A.	2022	28	ISSN 2004-2965
779.	Applied Energy	Design of an optimal P2P energy trading market model using bilevel stochastic optimization	Singh, K., Gadh, R., Singh, A., & Dewangan, C. L.	2022	328	120193
780.	Journal of Public Affairs	Policy actions for developing the infrastructure sector: Learnings from the Indian experience	Singh, K., Singh, A., & Prakash, P.	2022	23(1)	
781.	RBI Working Paper Series No. 01	Stock Price Reaction on the Announcement of Basel Implementation: Evidence from Indian Banks	Seth, G., Katti, S., & Phani, B. V.	2022		
782.	Managerial and Decision Economics	Corporate social responsibility spending as a building block for sustainable corporate ethical identity: Lessons from Indian business groups	Dutta, S., Katti, S., Phani, B. V., & Zhu, P.	2022	43(3)	696-717
783.	Energy Economics	What do we know about the idiosyncratic risk of clean energy equities?	Roy, P., Ahmad, W., Sadorsky, P., & Phani, B. V.	2022	112	106167

784.	Defence Science Journal	Sensor Based System Identification in Real Time for Noise Covariance Deficient models	Kumar, P., Sonkar, S., Ghosh, A. K., & Philip, D.	2022	72(5)	665-678
785.	Safety and Security Engineering IX	Iterative Outlier Analysis Heuristic to Study High Impact Terror Attacks of the Mena Region and Europe	Singh, P. P., & Philip, D.	2022	206	93-103
786.	IEEE Sensors Journal	Detection and Estimation of Natural Gas Leakage Using UAV by Machine Learning Algorithms	Sonkar, S. K., Kumar, P., George, R. C., Philip, D., & Ghosh, A. K.	2022	22(8)	8041-8049
787.	Global Business Review	Extraction and Analysis of High Impact Attacks for Insights in Global Terrorism	Singh, P. P., & Philip, D.	2022		
788.	Transportation Research Part A: Policy and Practice	An optimization model to assign seats in long distance trains to minimize SARS-CoV-2 diffusion	Haque, M. T., & Hamid, F.	2022	162	104-120
789.	Journal of Product & Brand Management	Understanding the ties between brand gender and brand engagement in online brand communities: the moderating role of consumers' biological sex	Kumar, J.	2022	31(5)	761-779

790.	Journal of Strategic Marketing	Psychological ownership towards online brand communities driving brand engagement: a visitors' perspective	Kumar, J.	2022	30(4)	355-388
791.	Applied Energy	'Clean'hydrogen?– Comparing the emissions and costs of fossil fuel versus renewable electricity based hydrogen	Longden, T., Beck, F. J., Jotzo, F., Andrews, R., & Prasad, M.	2022	306	118145
792.	RAIRO-Operations Research	Optimal inventory strategies for an imperfect production system with advertisement and price reliant demand under rework option for defectives	Gautam, P., Maheshwari, S., Hasan, A., Kausar, A., & Jaggi, C. K.	2022	56(1)	183-197
793.	Journal of Cleaner Production	Sustainable production inventory model with greening degree and dual determinants of defective items	Gautam, P., Maheshwari, S., & Jaggi, C. K.	2022	367	132879
794.	Annals of Operations Research	Impact of dynamic flexible capacity on reverse logistics network design with environmental concerns	Shukla, M., Vipin, B., & Sengupta, R. N.	2022		1-26
795.	International Journal of Quality & Reliability Management	A robust multiobjective solution approach for mean-variance optimisation of correlated multiple quality	Sharma, A. K., Mukherjee, I., Bera, S., & Sengupta, R. N.	2022	39(9)	2205-2232

		characteristics				
796.	Sankhya B	Reliability in Portfolio Optimization using Uncertain Estimates	Sengupta, R. N., Seth, R., & Winker, P.	2022		S199-S233
797.	Research Unit for Political Economy	Public Private Partnerships – Subsidy and Impunity for Private Corporations	Varman, R.	2022		
798.	Research Unit for Political Economy	Ease of Doing Violations: Collective Delhi’s Report on the Mundka Factory Fire and the Pattern of Criminal Negligence in Delhi’s Industrial Areas	Varman, R.	2022		
799.	Economic and Political Weekly	Revisiting Friedman’s Construct of Corporations: Corporate Irresponsibility and Smokescreen of the Corporate Veil	Varman, R.	2022	57(50)	47-54
800.	Global Business Review	Cluster and DEMATEL analysis of key RFID implementation factors across different organizational strategies	Vishvakarma, N. K., Singh, R. K., & Sharma, R. R. K.	2022	23(1)	176-191
801.	The TQM Journal	Critical Success Factors for Open-Source Innovation in Pharma Industry:	Jha, A., Sharma, R. R. K., &	2022		

		Learnings from Two Case Studies	Kumar, V.			
802.	Supply Chain Management	Designing supply chain performance system: a strategic study on Indian manufacturing sector	Jha, A., Sharma, R. R. K., Kumar, V., & Verma, P.	2022	27(1)	66-88
803.	Benchmarking: An International Journal	Identifying organizational variables to the implementation of horizontal strategy in conglomerates	Verma, P., Sharma, R. R. K., Kumar, V., Hsu, S. C., & Lai, K. K.	2022	29(5)	1703-1733
804.	IEEE Engineering Management Review	What does it take for your organization to institutionalize product lifecycle management	Singh, S., Misra, S. C., & Kumar, S.	2022	50(1)	132-137
805.	Computer Communications	Softwarized management of 6G network for green Internet of Things	Shukla, A., Ahmed, N., Roy, A., & Misra, S. C.	2022	187(1)	103-114
806.	Engineering, Construction and Architectural Management	A Framework for Continuation of Digitalization in Construction: A PLS-SEM Approach	Bajpai, A., & Misra, S. C.	2022		
807.	Construction Innovation	Evaluation of success factors to implement digitalization in the construction industry.	Bajpai, A., & Misra, S. C.	2022		ISSN: 1471-4175
808.	Benchmarking: An International Journal,	Does capacity utilization influence financial performance? A study of Indian public bus transport	Kushwaha, S., Prawesh, S., & Venkatesh, A.	2022	29(4)	1241-1263

		companies				
809.	Journal of Industrial and Production Engineering	Airline revenue management with preference based flexible products.	Duduke, A. S., & Venkataraman, S. V.	2022	39(2)	128-145
810.	Annals of Operations Research	Optimal order quantity in the presence of strategic customers	Mishra, N., & Venkataraman, S. V.	2022	315(2)	1871-1894
811.	Annals of Operations Research	A violent market price contract for agribusiness supply chain	Rajput, R., & Venkataraman, S. V.	2022	315	1971-1996
812.	Computers & Industrial Engineering	Strategic control of carbon emissions through taxation in a remanufacturing system	Sharma, D., & Venkataraman, S. V.	2022	174	108797
813.	Applied Economics	A pandemic and economic slowdown: the case of India	Chakrabarty, M., & Mukherjee, S.	2022	54(19)	2214-2230
814.	Journal of Economics and Finance	Predicting distress: a post Insolvency and Bankruptcy Code 2016 analysis	Arora, P., & Saurabh, S.	2022	46	604-622
815.	Tehnički glasnik	A Personalized and Scalable Machine Learning-Based File Management System	Veena, B., & Dhiraj, S.	2022	16(2)	288-292
816.	International Journal of Production Research	Closed-loop supply chain models with coopetition options	Jalali, H., Ansariipoor, A., Ramani, V., & De Giovanni, P.	2022	60(10)	3078-3106

817.	Dynamic Games and Applications	An Evolutionary Approach to Pollution Control in Competitive Markets.	Lahkar, R., & Ramani, V.	2022	12	872–896
818.	Omega	Understanding Systemic Disruption from the Covid-19-induced Semiconductor Shortage for the Auto Industry.	Ramani, V., Ghosh, D., & Sodhi, M. S.	2022	113	102720
819.	Informs Transactions on Education	GAP: A humanitarian initiative of Ramakrishna Mission for underprivileged children.	Ramani, V., Dalal, J., & Dayakarananda, S.	2022	Article in Advance	
820.	Studies in Higher Education.	A Holistic Approach to Student Empowerment and Assessment of its Impact on Educational Outcomes through Psychological Ownership.	Shukla, A., & Arora, V.	2023		
821.	Journal of Global Marketing	The Effect of Green Marketing Strategy on the Firm's Performance in the Context of Developing Country	Shukla, A., & Demessie, T. G.	2023		
822.	Global Business Review	Identification and risk profiling of major stressors in the Indian IT sector	Chatterjee, S., & Shukla, A.	2023	24(1)	121-136.



823.	International Journal of Managerial Finance	Testing factor models in an emerging market: evidence from India	Singh, K., Singh, A., & Prakash, P.	2023	19(1)	203-232
824.	ISPRS International Journal of Geo-Information	Modelling & Analysis of High Impact Terrorist Attacks in India & Its Neighbors.	Singh, P. P., & Philip, D.	2023		
825.	Methodological Innovations	An Innovative Color-Coding Scheme for Terrorism Threat Advisory System	Singh, P. P., & Philip, D.	2023	16(1)	38-56
826.	Tourism Planning & Development	Just Survive or Thrive? Effect of Psychological and Organizational Resilience on Adoption of Innovative Strategies by Hospitality Sector Post Covid-19	Barbhuiya, M. R., & Chatterjee, D.	2023	20	188-211
827.	International Journal of Bank Marketing.	Income Shock and Financial Wellbeing in the COVID-19 Pandemic: Financial Resilience and Psychological Resilience as Mediators.	Kulshreshtha, A., Raju, S. K., Muktineni, S. M., & Chatterjee, D.	2023		
828.	Safety Science	Another Side of Industrial Growth in India: Environmental Damage from Industrial Accidents	Prasad, M., & Suresh, L.	2023	164	106152
829.	Journal of Cleaner Production	Sustainable retail model with preservation	Gautam, P., Maheshwari, S., Kausar,	2023	390	136128

		technology investment to moderate deterioration with environmental deliberations	A., & Jaggi, C. K.			
830.	Asian Pacific Journal of Cancer Prevention: APJCP	Operations Management Interventions in Cancer Care Delivery in LMICs: The Way Forward	Gautam, P., & Shankar, A.	2023	24(1)	1-7
831.	International Journal of Systems Science: Operations & Logistics	Optimal inventory replenishment policies for deteriorating items with preservation technology under the effect of advertisement and price reliant demand	Maheshwari, S., Gautam, P., Kausar, A., & Jaggi, C. K.	2023	10(1)	
832.	International Journal of Quality & Reliability Management	Post-implementation challenges of ERP system in pharmaceutical companies	Singh, S., Singh, S., & Misra, S. C.	2023	40(4)	889-921
833.	Computer and Industrial Engineering	Resilience and Sustainability Enhancements in Food Supply Chains using Digital Twin technology: A Grey Causal Modeling Approach.	Singh, G., Rajesh, R., Daultani, Y., & Misra, S. C.	2023	179	
834.	International Journal of Productivity and Performance Management	A fuzzy multi-criteria framework to identify barriers and enablers of the next-generation vaccine	Chandra, D., Vipin, B., & Kumar, D.	2023	72(3)	827-847

		supply chain				
835.	Managerial and Decision Economics	Social performance versus relative performance evaluation, asymmetric costs, and quantity competition under managerial delegation.	Hamamura, J., & Ramani, V.	2023	44(3)	1706-1719
836.	Aspects of India's Economy	Indian Telecom's Spectacular Rise and the Nature of Monopoly Capital in India,	Varman, R.	2023	80	3-64
837.	Monthly Review	The Telecom Industry in India: Free Market or Monopoly-Finance Capital?	Varman, R.	2023	75(1)	
838.	Journal of Operations Management.	Impact of working capital on firm performance: Does IT matter?	Deb, P., Naskar, S., Devaraj, S., & Basu, P.	2023		
839.	The International Review of Retail, Distribution and Consumer Research	Role of e-service quality, brand commitment and e-WOM trust on e-WOM intentions of millennials	Jain, M., Dixit, S., & Shukla, A.	2023	33(1)	23-43
840.	Computers & Industrial Engineering	Strategies in supply chain competition: A game theoretic approach	Patare, S., & Venkataraman, S. V.	2023	180	109242
841.	Omega	Social Distancing and Revenue	Haque, M. T., & Hamid,	2023	114	102737

		Management—A Post-pandemic Adaptation for Railways	F.			
842.	International Journal of Revenue Management,	Nash equilibrium computation in airline frequency game	Singh, D., & Venkataraman, S. V.	2023	13(3)	166-186
<b>Department of Materials Science and Engineering</b>						
843.	Process Safety and Environmental Protection	On trending technologies of aluminium dross recycling: a review	A. Srivastava, A. Meshram	2023	171	38-54
844.	Journal of Environmental Chemical Engineering	A review on recycling of lithium-ion batteries to recover critical metals	G. Mishra, R. Jha, A. Meshram, K. K. Singh	2022	10	108534, <a href="https://doi.org/10.1016/j.jece.2022.108534">https://doi.org/10.1016/j.jece.2022.108534</a>
845.	Canadian Metallurgical Quarterly	Opportunities for and en-route to polymer inclusion membrane approach from conventional hydrometallurgical recycling of WPCBs: a mini review	R. Jha, G. Mishra, M. Agrawal, A. Meshram, K. K. Singh	2022		<a href="https://doi.org/10.1080/00084433.2022.2126576">https://doi.org/10.1080/00084433.2022.2126576</a>
846.	Journal of Environmental Chemical Engineering	Recycling of photovoltaic modules for recovery and repurposing of materials	H. Trivedi, A. Meshram, R. Gupta	2023	11	<a href="https://doi.org/10.1016/j.jece.2023.109501">https://doi.org/10.1016/j.jece.2023.109501</a>
847.	Materialia	Effect of pressure on stacking fault energy and deformation behavior of face-centered cubic	Albert Linda, Pawan Kumar Tripathi, Sainyam Nagar,	2022	26	101598

		metals	Somnath Bhowmick			
848.	Nanoscale	Large and anisotropic carrier mobility in monolayers of the MA <sub>2</sub> Z <sub>4</sub> series (M= Cr, Mo, W; A= Si, Ge; and Z= N, P)	Achintya Priydarshi, Yogesh Singh Chauhan, Somnath Bhowmick, Amit Agarwal	2022	14	11988-11997
849.	Materials Letters	Domain boundary assisted spinodal decomposition in magnetic materials	Rupesh Chafle, Somnath Bhowmick, Rajdip Mukherjee	2022	324	132630
850.	Computational Materials Science	Easily exfoliable monolayer of GdTe <sub>3</sub> : ab initio study	Imran Ahamed, Yogesh Singh Chauhan, Somnath Bhowmick, Amit Agarwal	2023	216	111869
851.	Materials Horizons	Designing Rare Earth Free High Entropy Oxide with Tungsten Bronze Structure for Thermoelectric Application	Subhra Sourav Jana and Tanmoy Maiti	2023	7	229
852.	Small	Enhanced thermoelectric performance of rare-earth-free n-type oxide perovskite composite with graphene analogous	Pragya Dixit, Subhra Sourav Jana and Tanmoy Maiti	2023		

		2D MXene				
853.	Carbon	Rare earth free Oxide nano-composite of SrTi <sub>0.85</sub> Nb <sub>0.15</sub> O <sub>3</sub> and CNT for potential n-type Thermoelectrics	Subhra Sourav Jana and Tanmoy Maiti	2023	202	207-213
854.	Journal of Applied Physics	Study of charge transport mechanism in Ba doped Sr <sub>2</sub> CrMoO <sub>6</sub> double perovskite mixed ionic electronic conductor	Vivek Kumar, Sudha Saini and Tanmoy Maiti	2023	133	164104
855.	Ceramics International	A facile pot synthesis of (Ti <sub>3</sub> AlC <sub>2</sub> ) MAX phase and its derived MXene (Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> ) Thermoelectrics	P. Dixit and T. Maiti	2022	48	36156-36165
856.	ACS Applied Materials & Interfaces	Enhanced Thermoelectric Performance in Oxide Composites of La and Nb Codoped SrTiO <sub>3</sub> by Using Graphite as the Electron Mobility Booster	Subhra Sourav Jana and Tanmoy Maiti	2022	14	14174–14181
857.	Physical Chemistry Chemical Physics (PCCP)	Temperature-dependent excitonic emission characteristics of lead-free inorganic double perovskites and their third-order optical nonlinearities	A. Singh, P. Dey, A. Kumari, M. K. Sikdar, P. K. Sahoo, R. Das and T. Maiti	2022	24	4065

858.	Journal of Physics D: Applied Physics	Enhanced thermoelectric power factor led by isovalent substitution in Sr <sub>2</sub> CrMoO <sub>6</sub> double perovskite	S. Saini, M. Saxena, T. Bhattacharya, A. Saha and T. Maiti	2022	55	415501
859.	ACS Applied Materials & Interfaces	Low Lattice Thermal Conductivity in a Wider Temperature Range for Biphasic-Quaternary (Ti,V)CoSb Half-Heusler Alloys	N. S. Chauhan, D. Bhattacharjee, T. Maiti, Y. V. Kolen'ko, Y. Miyazaki, A. Bhattacharya	2022	14	54736–54747
860.	Sadhana	Effect of calcium addition on the microstructure evolution, work hardening rate and wear resistance of the magnesium-calcium binary alloy at room temperature	Sharath Babu, S Gangolu and M A Joseph	2023	48	<a href="https://doi.org/10.1007/s12046-023-02082-7">https://doi.org/10.1007/s12046-023-02082-7</a>
861.	Thermal Science and Engineering Progress	Influence of alumina nanoparticle concentrations on quenching characteristics of cylindrical Al7075	A.Inbaoli, Akhil Krishnan, V.Jehana, C.S.Sujith Kumar, S Gangolu	2023	39	<a href="https://doi.org/10.1016/j.tsep.2023.101687">https://doi.org/10.1016/j.tsep.2023.101687</a>
862.	Surface and Coatings Technology	Effects of HVOF spray parameters on porosity and hardness of 316L SS coated Mg AZ80 alloy	Kalaiselvan Palaniswamy, S Gangolu and M A Joseph	2022	448	<a href="https://doi.org/10.1016/j.surfcoat.2022.128898">https://doi.org/10.1016/j.surfcoat.2022.128898</a>
863.	Journal of the Mechanical Behavior of Biomedical Materials	Multi-Length Scale Strengthening of Ultra High Molecular Weight	C. Nayak, P. Kushram, M.A.A. Zaidi, I.	2023	140	105694 (16 pp), <a href="https://doi.org/10.1016/j.jmbb">https://doi.org/10.1016/j.jmbb</a>

		Polyethylene Bio-Composites with Functionalized Carbon Nanotube and Hydroxyapatite Reinforcement	Singh, J. Sen, Kantesh Balani			m.2023.105694
864.	Advanced Materials Technologies	Zn-loaded SBA-1 and SBA-15 molecular sieves for combined antimicrobial and osteogenic activity	H. T. Trinh, T.K.A. Tran, S. Arora, S.M. George, J. Sheri, J.H. Yang, P. Naruphontjirakul, Kantesh Balani, A. Karakoti, and A. Vinu	2023		2201169 (15 pp) <a href="https://doi.org/10.1002/admt.202201169">https://doi.org/10.1002/admt.202201169</a>
865.	Journal of the Mechanical Behavior of Biomedical Materials	Contact Stress and Tribological Damage Tolerance of Hydroxyapatite and Carbon Nanotube Reinforced Polyethylene Cup Liner Against Zirconia Femoral Head	C. Nayak, P. Singh, Kantesh Balani	2023	136	105435 (13 pp).
866.	Wear	Understanding the Influence of Graphene-Based Lubricant/Coating During Fretting Wear of Zircaloy	D. Mishra, R. Maurya, V. Verma, Kantesh Balani, K.V. M. Krishna, D. Srivastava, G. N. Ganesha, U. Singha, A. Mukhopadhyay	2023	512-513	204527 (8 pp).



867.	ACS Biomaterials Science and Engineering	Multifunctional Hydroxyapatite Composites for Orthopedic Applications: A Review	S.M. George, C. Nayak, I. Singh, Kantesh Balani	2022	8	pp.3162–3186, DOI: 10.1021/acsbio materials.2c00140.
868.	Materials Characterization	Heterogeneous Solid Solutioning in Carbon Nanotube Reinforced HfB <sub>2</sub> -ZrB <sub>2</sub> -SiC Ultra High Temperature Ceramic Composites	R. Hassan, S. Swamy, and Kantesh Balani	2023	201	112941 (11 pp)
869.	Journal of Materials Science	Crossover of Thermal Conductivity in SiC Reinforced ZrB <sub>2</sub> -HfB <sub>2</sub> Composites at Elevated Temperatures	R. Hassan, V. Xavier, T. Venkateswaran, S. Omar, Kantesh Balani	2023	58	1505-1522.
870.	International Journal of Refractory Metals and Hard Materials	Isolating Strengthening Contributions in Multiphase High Entropy (Zr-Ta-W-Ti)C-SiC Based Carbide Ceramics	D. Rana, Kantesh Balani	2023	110	pp 106024 (12 pp).
871.	Ceramics International	Mechanical and oxidation behavior of HfB <sub>2</sub> -ZrB <sub>2</sub> -SiC-B <sub>4</sub> C-CNT composites joined with and without Ni interlayer	S. Bajpai, P. Setia, A. Bhadauria, T. Venkateswaran, Kantesh Balani	2022	48 (21)	pp. 31827-31842, <a href="https://doi.org/10.1016/j.ceramint.2022.07.112">https://doi.org/10.1016/j.ceramint.2022.07.112</a>
872.	Scripta Materialia	Domination of Phononic Scattering in Solid Solutioning and Interfaces of HfB <sub>2</sub> -ZrB <sub>2</sub> - SiC - Carbon Nanotube	S. Dubey, Ariharan S., A. Nisar, S. Saini, S.S. Jana, B. Wangaskar,	2022	218	114776 (6pp)

		Based Ultra High Temperature Composites	A. Das, S. Khandekar, T. Maiti, S. Omar, Kantesh Balani			
873.	Surface & Coatings Technology	Enhanced reliability with bimodal microstructure and transformation-induced toughening in Al <sub>2</sub> O <sub>3</sub> -YSZ based thermal barrier coatings	S. Ponnareddy, A. Bhadauria, S. Bajpai, A. Tiwari, K. K. Pandey, A. K. Keshri, and Kantesh Balani	2023	462 (15)	129488 (13 pp) <a href="https://doi.org/10.1016/j.surfcoat.2023.129488">https://doi.org/10.1016/j.surfcoat.2023.129488</a>
874.	Ceramics International	Bimodal Microstructure Toughens Plasma Sprayed Al <sub>2</sub> O <sub>3</sub> -YSZ-CNT Coatings	A. Bhadauria, S. Bajpai, A. Tiwari, S.K. Mishra, A. Nisar, S. Dubey, N. Chavan, A.K. Keshri, Kantesh Balani	2023	49	12348–12359
875.	Surface & Coatings Technology	Effect of Carbonaceous Reinforcements on Anticorrosive and Magnetic Properties of Ni-Cu Based Electrochemical Composite Coatings	Z. Firdouz, P. Tripathi, K. Mondal, Kantesh Balani	2022	441	128560 (15 pp)
876.	Journal of Materials Engineering and Performance	Heat-treatment Design of LATZ9531 Alloy and Ensuing structure Properties Correlation	R. Maurya, S. Panwar, Kantesh Balani	2023	32	2569–2576

877.	Materials Science and Engineering A	Evolution of Kink Bands and Nanocrystalline microstructure during High Pressure Torsion of Nonequiatomic MoNbTaVW Refractory High Entropy Alloy	A Raturi, N Chawake, K Biswas, N.P. Gurao	2023	864	144530
878.	Electrochimica Acta	Elucidation of intercalation-pseudocapacitor mechanism in Binder-free Bi <sub>2</sub> S <sub>3</sub> @Ni foam electrodes towards high-performance supercapattery	Lichchhavi Sinha, Sarvesh Kumar, Alok Kumar Srivastava, Shikhar Krishn Jha	2023	-	142438
879.	J of American ceramic society	On the confluence of ultrafast high-temperature sintering and flash sintering phenomena	Rishi Raj, Dietrich E Wolf, Carolina N Yamada, Shikhar K Jha, Jean-Marie Lebrun	2023	-	-
880.	Ceramic international	Novel processing route for design and manufacturing of metal toughened nanoceramics: Al–Al <sub>2</sub> O <sub>3</sub> nanocermet	Nidhi Sharma, Raushan Kumar, Rahul Mitra, Harry Charalambous, Andrew Chihpin Chuang, Krishanu Biswas, Shikhar	2022	48	17

			Krishn Jha			
881.	Wear	Dry sliding wear behaviour of metal toughened nanoceramics: A case study of aluminium-alumina nanocermet	Nidhi Sharma, Krishanu Biswas, Shikhar Krishn Jha	2022	502	204389
882.	Materials Today Communications	Ceramic-based nanocomposites: A perspective from carbonaceous nanofillers	Nidhi Sharma, Tuhina Saxena, Syed Nasimul Alam, Bankim Chandra Ray, Krishanu Biswas, Shikhar Krishn Jha	2022		103764
883.	Advanced Energy Materials	High-Throughput Screening of High-Entropy Fluorite-Type Oxides as Potential Candidates for Photovoltaic Applications	Mukesh Kumbhakar, Anurag Khandelwal, Shikhar Krishn Jha, Monaha Verraju Kante, Pirmin Keßler, Uli Lemmer, Horst Hahn, Jasmin Aghassi-Hagmann, Alexander Colsmann, Ben Breitung, Leonardo	2023		2204337

			Velasco, Simon Schweidle			
884.	IEEE Transactions on Applied Superconductivity	Optimization of BaHfO <sub>3</sub> Additions to YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> Thin Films Over a Wide Temperature and Field Range	Mary Ann Sebastian, Charles Ebbing, Di Zhang, Shikhar Misra, Jjie Huang, Han Wang, Haiyan Wang, Mohan Panth, Victor Ogunjimi, Judy Wu, Timothy Haugan	2023	33 (5)	
885.	Materials Letters	Domain boundary assisted spinodal decomposition in magnetic materials,	Rupesh Chafle, Somnath Bhowmick, Rajdip Mukherjee	2022	324	132630
886.	Materials Characterization	Outstanding improvement in the CSL distribution in interstitial free (IF) steel via strain annealing route	D. Rath, P. Setia, N. Tripathi, S. Shekhar	2022	186	111817
887.	Tribology International	Cushioning effect of austenite in silicon stainless steels (SiSS) leading to improved wear resistance	P. Setia, K. Viswanath, K. Mondal, T. Venkateswaran, S.S. Singh, S. Shekhar	2022	173	107678

888.	Defence Technology	Applicability of unique scarf joint configuration in friction stir welding of AA6061-T6: Analysis of torque, force, microstructure and mechanical properties	Durjyodhan Sethi, Uttam Acharya, Shashank Shekhar, Barnik Saha Roy	2022	18(4)	567 - 582
889.	Materials Letters	Green, economical synthesis of nitrogen enriched carbon nanoparticles from seaweed extract and their application as invisible ink and fluorescent film	V Singh, B Gorbel, S Chatterjee, P Sen, V Verma		309	131446
890.	Journal of The Electrochemical Society	Green synthesis and thermal encapsulation of organic cathode for aqueous Zn battery	NM Chola, V Singh, V Verma, RK Nagarale		169(2)	20503
891.	Polymer	Chemically stable and high acid recovery anion exchange membrane	Chetan M Pawar, Sooraj Sreenath, Vidhiben Dave, Priyanka P Bavdane, Vikram Singh, Vivek Verma, Rajaram K Nagarale		251	124915
892.	Biomaterials Advances	Red-emitting polyaniline-based nanoparticle probe for pH-sensitive fluorescence	Lokesh Yadav, Anjali Yadav, Shovon Chatterjee,		140	213088

		imaging	Suhela Tyeb, Raju Kumar Gupta, Pratik Sen, Bushra Ateeq, Vivek Verma, Kanwar S Nalwa			
893.	Soft Materials	pH modulating agar dressing for chronic wounds	S Tyeb, N Kumar, A Kumar, V Verma		20(4)	379-393
894.	Journal of the Mechanical Behavior of Biomedical Materials	Halloysite nanoclay reinforced hydroxyapatite porous scaffold for hard tissue regeneration	U Yadav, V Verma		140	105626
895.	Journal of Alloys and Compound	A study on selective laser melting (SLM) of TiC and B4C reinforced IN718 metal matrix composites (MMCs)	Vijay Mandal, Pragya Tripathi, Ashwani Kumar, Sudhanshu S Singh, J Ramkumar		901	163527
896.	Materials Science and Engineering: A	Processing and properties of yttria and lanthana dispersed ODS duplex stainless steels	Ashwani Kumar, Bhagyaraj Jayabalan, Chetan Singh, Jayant Jain, Subrata Mukherjee, Krishanu Biswas, Sudhanshu S Singh		837	142746

897.	Metals and Materials International	Role of Chromium Content on the Microstructure and Mechanical Properties of Lanthana Based Ferritic ODS Steels	Ashwani Kumar, Bhagyaraj Jayabalan, Chetan Singh, Jayant Jain, Subrata Mukherjee, Krishanu Biswas, Sudhanshu S Singh		29	1067-1078
898.	Materials Science and Engineering: A	Elucidating the deformation behavior of as-cast B2 CoTi intermetallic using in-situ tensile testing	Subha S Panda, R Sarvesha, Jayant Jain, Sudhanshu S Singh		871	144901
899.	Materials Science and Engineering: R: Reports	Machine-learning and high-throughput studies for high-entropy materials	E-Wen Huang, Wen-Jay Lee, Sudhanshu Shekhar Singh, Poresh Kumar, Chih-Yu Lee, Tu-Ngoc Lam, Hsu-Hsuan Chin, Bi-Hsuan Lin, Peter K Liaw		147	100645
900.	ACS Applied Nano Materials	NiMn-Layered Double Hydroxide Porous Nanoarchitectures as a Bifunctional Material for Accelerated p-Nitrophenol Reduction and Freestanding	V Sharma, M Aman, S Omar	2022	5	15651-15664



		Supercapacitor Electrodes				
901.	Ionics	Recent advances in NASICON-type oxide electrolytes for solid-state sodium-ion rechargeable batteries	K Singh, A Chakraborty, R Thirupathi, S Omar	2022	28	5289-5319
902.	Scripta Materialia	Domination of phononic scattering in solid solutioning and interfaces of HfB <sub>2</sub> -ZrB <sub>2</sub> -SiC-carbon nanotube based ultra high temperature composites	Shruti Dubey, S Ariharan, Ambreen Nisar, Sudha Saini, Subhra S Jana, Bhimashankar Wangaskar, Amit Das, Sameer Khandekar, Tanmoy Maiti, Shobit Omar, Kantesh Balani	2022	218	114776
903.	ACS Applied Energy Materials	Electrochemical Performance of SrMg <sub>0.1</sub> Mo <sub>0.9</sub> O <sub>3</sub> -Based Composites for Solid Oxide Fuel Cell Anodes	A Das, S Kumar, B Jana, MB Suresh, C Prashanthi, S Omar	2022	5	1607-1617
904.	J. Mater. Chem. A	Highly Stretchable and super tough healable polyurethane elastomers with mechanoresponsive property for flexible capacitor application	Amir Khan, Chuan-Fu Wang, Ravinder Reddy Kisannagar, Pham Quoc Nhien, Sadiq Mahmood, Monica	2023	11	305-315

			Katiyar, Dipti Gupta, Hong- Cheu Lin			
905.	Carbon	Facile Formation of Porous, Multilayer Reduced Graphene Oxide Electrodes using Electrophoretic Deposition and Flash Sintering	Sangha Mitra, Chaitanya Krishna Kamaja, and Monica Katiyar		202(3)	186-195
906.	Adv. Mater. Interfaces	Transparent, Stretchable, and Self-Healable Gas Barrier Films with 2-D Nanoplatelets for Flexible Electronic Device Packaging Applications	Sadiq Mahmood, Amir Khan, Chandra Kant, Chih Wei Chu, Monica Katiyar, Hong-Cheu Lin			220209
907.	Adv. Mater. Technol	Large-Area Inkjet-Printed OLEDs Patterns and Tiles Using Small Molecule Phosphorescent Dopant	Chandra Kant, Sadiq Mahmood, Monica Katiyar			2201514
908.	Materials Chemistry and Physics	Evaluation of encapsulation strategies for solution-processed flexible organic light-emitting diodes	Sadiq Mahmood, Chandra Kant, Aman Raja, Hong-Cheu Lin, Monica Katiyar		292	126808
909.	ChemistrySelect	Ligand-Free Suzuki Coupling for the Practical Synthesis of 4-(Triphenylen-2-	Vijaykumar B.V.D., Nalluri S., Uppada		7	

		yl) dibenzothiophene for Solution-Processed OLEDs	M.K., Sen S., Ulla H., Krishnamanohara, Kamaja C.K., Balakrishnan M., Katiyar M., Oruganti S.			
910.	Organic Electronics	Enhanced light extraction from organic light emitting diodes using a flexible polymer-nanoparticle scattering layer	Sajeev, A.K., Agarwal, N., Soman, A., Gupta, S., Katiyar, M., Ajayaghosh, A., Narayanan Unni, K.N		100	106386
911.	Metals and Materials International	Influence of Scanning and Building Strategies on the Deformation Behavior of Additively Manufactured AlSi10Mg: CPFEM and Finite Element Studies	A. Chakrabarty., P. Chakraborty., R. Jain., V.K.Sahu., N.P.Gurao., H.N. Bar., N.Khutia.,			
912.	Journal of Materials Engineering and Performance	In-Situ Electron Backscatter Diffraction Study of Deformation Behavior of Fine-grained Dual Phase Steel Subjected to Uniaxial Tension	S. Nagarajan., R. Jain., S. Jha., V.K. Sahu., N.P. Gurao.,			
913.	Transactions of the Indian Institute of Metals	Texture Evolution During Hot Compression of CoCuFeMnNi Complex	R. Sonkusare., K. Biswas., W. Gan., H.G.		75 (12)	3061-3066.

		Concentrated Alloy Using Neutron Diffraction and Crystal Plasticity Simulations	Brokmeier., N.P. Gurao.,			
914.	Acta Materialia	The effect of Al addition on solid solution strengthening in CoCrFeMnNi: Experiment and modelling	J. Kumar., A. Linda., M. Sadhasivam., K.G. Pradeep., N.P. Gurao., K. Biswas.,		238	118208
915.	Materialia	Ratcheting behavior of non-equiatomic TRIP dual-phase high entropy alloy	F. Bahadur., M. Sadhasivam., K.G. Pradeep., N.P. Gurao., K. Biswas.,		24	101512
916.	International Journal of Plasticity	Effect of notch severity and crystallographic texture on local deformation and damage in commercially pure titanium	V.K. Sahu., M. Yadava., P. Chakraborty., N.P. Gurao.,		155	103318
917.	Frontiers in Materials	Microstructure and Mechanical Properties of High-Carbon-Containing Fe-Ni-Mn-Al-Cr High-Entropy Alloy: Effect of Thermomechanical Treatment	S. Mohanty., A. Kothari., R. Raghavan., V.K. Sahu., N.P. Gurao., K.K. Sahu., B.K. Dhindaw., L. Zeng., M. Xia., S. Gollapudi.,		9	915278

918.	Materials Characterization	Implications of slip transition on the work hardening and texture evolution of nickel tungsten iron ternary alloy	M. Kumar., N.P. Gurao., A. Upadhyaya.,		189	112010
919.	Frontiers in Materials	Novel Alloy Design Concepts Enabling Enhanced Mechanical Properties of High Entropy Alloys	J.Kumar., S.Jha., A. Raturi., A. Bajpai., R. Sonkusare., N.P. Gurao., K. Biswas.,		9	868721
920.	International Journal of Refractory Metals and Hard Materials	Evolution of microstructure and crystallographic texture during cold rolling of liquid phase sintered tungsten heavy alloy	M. Kumar., N.P. Gurao., A. Upadhyaya.,		105	105849
921.	Materialia	Combinatorial synchrotron diffraction-constitutive modelling-crystal plasticity simulation framework for direct metal laser sintered AlSi10Mg alloy	Jain, R., Yadava, M., Nayan, N., Gurao, N.P.		22	101395
922.	Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science	Effect of Tungsten Content and Compression on Microstructure and Texture Evolution in Liquid Phase Sintered Heavy Alloy	M. Kumar., N.P. Gurao., A. Upadhyaya.,		53 (4)	1253-1266.
923.	Journal of Alloys and Compounds	Elastic and plastic anisotropy in a refractory high	A. Raturi., K. Biswas., N.P.		896	162902

		entropy alloy utilizing combinatorial instrumented indentation and electron backscatter diffraction	Gurao.,			
924.	International Journal of Fatigue	Low cycle fatigue behaviour of non-equiatomic TRIP dual-phase Fe <sub>50</sub> Mn <sub>30</sub> Co <sub>10</sub> Cr <sub>10</sub> high entropy alloy	F. Bahadur., R. Jain., K. Biswas., N.P. Gurao.,		155	106545
925.	Materials Science and Engineering A	Effect of heat treatment on the ratcheting behaviour of additively manufactured and thermo-mechanically treated Ti-6Al-4V alloy	A. Ghosh., V.K. Sahu., N.P. Gurao.,		833	142345
926.	Journal of Physics: Conference Series	Microstructure-texture-micro-strain evolution during tensile deformation of $\alpha+\beta$ titanium alloy using in-situ Synchrotron X-ray diffraction and CPFEM simulation	A. Ghosh., R. Jain., H.G. Brokmeier., N.P. Gurao.,		2380 (1)	12137
927.	Philosophical Magazine	A new approach to design multicomponent metallic glasses using the mendelev number	A. Bajpai., J. Bhatt., N.P. Gurao., K. Biswas.,		102 (24)	2554-2571.
928.	Metals and Mater. Int.	Influence of deaeration, Cl <sup>-</sup> ion and strong oxidizer on the active	Nisheeth K. Prasad, A.S. Pathak, S. Sundu and K.		28	2083-2102

		behavior of the high phosphorus containing pig iron and subsequent effect on the sacrificial anode behavior	Mondal			
929.	Metals and Mater. Int.	Role of Synthetic Slag Treatment on the Morphology of Non-Metallic Inclusions and Subsequent Cold Drawability of the High Carbon Wire Rod Steel	Alok Srivastava, Ashok kamaraj, Durbadal Mandal, K. Mondal, Gopi K Mandal		28	1763-1777
930.	J. Mater. Eng. Perform.	Cavitation resistance of a Cr-Mn stainless steel, a mild steel, and a high carbon steel based on rust protectivity and corrosion behavior	Arun Rajput, J. Ramkumar and K. Mondal		31	439-447
931.	Mater. Sci. Engg. A	Role of Synthetic Slag Treatment on the Morphology of Non-Metallic Inclusions and Subsequent Cold Drawability of the High Carbon Wire Rod Steel	A. Varshney, K. Mondal and S. Sangal		832	142455
932.	Wear	Effect of addition of strong oxidizer and temperature on the cavitation erosion resistance of different microstructures made from a high	Arun Rajput, J. Ramkumar and K. Mondal		494-495	204245

		carbon steel				
933.	Materials and Structures	Corrosion behavior of bent plain reinforcing bars used in concrete	Prasanna Kumar Behera, Sudhir Misra and K. Mondal		55	37
934.	Metals and Mater Inter.	Electroless amorphous NiP coatings over API X70 steel (2022): resistance to wear and hydrogen embrittlement	Santigopal Samanta, K. Vishwanath, K. Mondal, Monojit Dutta, Shiv Brat Singh		28	397–411
935.	Surf. Coat. Tech.	Effect of strip entry temperature on the interfacial layer and corrosion behavior of galvanized steel	Harikrishna Kancharla, G.K. Mandal, S. S. Singh, K. Mondal		433	128071
936.	J. Mat. Eng. Perform.	High phosphorus pig iron as sacrificial anode in seawater	Nisheeth Kr. Prasad, A.S. Pathak, S. Kundu, Pankaj Panchal, K. Mondal		31	2690 - 2707
937.	J. Mat. Eng. Perform.	Effect of vibratory tip amplitude on the erosion rate of various microstructures of high carbon steel	Arun Rajput, J. Ramkumar and K. Mondal		31	4257-4271
938.	J. Mat. Eng. Perform.	Effect of salinity, total dissolved solids, conductivity, and pH on corrosion behavior of different microstructures made from high-	Kirtiratan Godbole and K. Mon		31	5630-5640



		carbon rail steel				
939.	Surf. Coat. Tech.	Effect of prior copper-coating on the microstructural development and corrosion behavior of hot-dip galvanized Mn containing high strength steel sheet	Harikrishna Kancharla, G.K. Mandal, S. S. Singh and K. Mondal		437	128347
940.	Mater. Res. Lett.	Harmonic structure, a promising microstructure design	Kei Ameyama, Fabien Cazes, Hervé Couque, Guy Dirras, Shoichi Kikuchi, Jia Li, F. Momprou, K. Mondal, D. Orlov		10	440 - 471
941.	Mechanics of Materials	Thermal diffusion coupled quantitative phase-field simulations with large undercooling	Avisor Bhattacharya, Kallol Mondal, C.S. Upadhyay and Sandeep Sangal		170	104298
942.	Corrosion Sci.	Effect of various phase fractions of bainite, retained austenite, intercritical ferrite and pearlite on the wear behaviour of multiphase steels	Neetu, S. Sangal and K. Mondal		500–501	204355
943.	Mater. Sci. Eng. A	Enhancement of mechanical properties of	Satish Kumar, A. Varshney, S.		844	143177

		modified 9Cr-1Mo (P91) steel using the thermomechanical processing and smart heat treatment protocol	Sangal and K. Mondal			
944.	Surf. Coat. Tech.	Effect of Carbonaceous Reinforcements on Anticorrosive and Magnetic Properties of Ni-Cu Based Composite Coatings Prepared by Pulsed Electrodeposition	Zuveria Firdouz, Pragya Tripathi, K. Mondal, Kantesh Balani		441	128560
945.	Tribo. Inter.	Cushioning effect of austenite in silicon stainless steels (SiSS) leading to improved wear resistance	Prince Setia, K. Vishwanath, K. Mondal, T. Venkateswaran, Sudhanshu S. Singh and Shashank Shekhar		173	107678
946.	Mater. Today Comm.	Enhancement of mechanical properties and corrosion resistance of bainitic Elastic Rail Clip (ERC) with finer microstructural morphology	Neetu, J. Bhagyaraj, S. Mukherjee, S. Sangal, K. Mondal		33	104425
947.	J. Appl. Electrochem.	Effect of Al and Zn addition on the active behavior of the high P pig iron-based composite anodes	Nisheeth Kr. Prasad, Harikrishna Kancharla, B. Bhushan, S. Kundu and		53	141 – 165

			K. Mondal			
948.	Surf. Coat. Tech.	Electrochemical response and passivation affinity of Fe-based amorphous HVOF coatings prepared from pig iron on mild steel	B. Bhushan, A. Banerjee, Subodh Nath Patel, Debdipt Banik, Kirtiratan Godbole, K.Vishwanath, Saikat Mandal, K.Mondal		452	129082
949.	J. Non-Cryst. Sol.	Prolong passivation of a novel Fe-based amorphous coating derived from high P pig iron	B. Bhushan, A. Banerjee, P.K. Bijalwan, S.N. Patel, A.N. Bhagat, D. Banik, N.K. Prasad, H. Kancharla, K. Mondal		601	122051
950.	Mater Chem Phys	Effect of harmonic structure on the electrochemical behavior of high entropy Cantor alloy in NaCl solution	Debdipta Banik, B. Bhushan, S. Mukherjee, J. Bhagyaraj, Hiroshi Fujiwara, Kei Ameyama, and K. Mondal		298	127414
951.	Solar Energy	Properties of Cu <sub>2</sub> ZnSnS <sub>4</sub> films obtained by sulfurization under different sulfur-vapor pressures in a	Neha Kumari, S. Ingole		231	484-495

		sealed ambient				
952.	Solar Energy	Enhancement of CZTS photovoltaic device performance with silicon at back-contact: A study using SCAPS-1D	Neha Kumari, S. Ingole		236	301-307
953.	Materials Science in Semiconductor Processing	Enhancement of solution-processed Cu <sub>2</sub> ZnSnS <sub>4</sub> film properties via a facile approach of sodium incorporation	Neha Kumari, S. Ingole		146	106660 (Page 1 to 8)
954.	Journal of Physics and Chemistry of Solids	Reduction in Urbach energy and density of states for pyrite (FeS <sub>2</sub> ) thin films: Healing of sulfur vacancies during hematite to pyrite transformation	Ravi P. Srivastava, S. Ingole		167	110752 (Page 1 to 10)

### Department of Mathematics and Statistics

955.	<i>Journal of Number Theory</i>	Multiplicities in Selmer groups and root numbers for Artin twists	S. Jha, S. Shekhar, T. Mandal	2022	238	147-182
956.	<i>New York Journal of Mathematics</i>	Von Neumann's inequality for the Hartogs triangle	S. Chavan, S. Jain and P. Pramanick	2022	28	791-799
957.	<i>Studia Mathematica</i>	The Cauchy dual subnormality problem via de Branges-Rovnyak spaces	S. Chavan, S. Ghara and Md R. Reza	2022	265	315-341

958.	<i>New York Journal of Mathematics</i>	The Eigensheaf of an Operator	S. Chavan, A. Morye	2022	28	868-883
959.	<i>Banach J. Math. Anal.</i>	Dirichlet polynomials and a moment problem	S. Chavan, C. K. Sahu	2022	16	Paper No. 63, 23 pp
960.	<i>Complex Anal. Oper. Theory</i>	Weighted join operators on directed trees	S. Chavan, R. Gupta and K. B. Sinha	2023	17	Paper No. 36, 1-102
961.	<i>Linear algebra and its applications</i>	Bi-isometries reducing the hyper-ranges of the coordinates	S. Chavan, Md. R. Reza	2023	668	51-63
962.	<i>Extremes</i>	A combined statistical and machine learning approach for spatial prediction of extreme wildfire frequencies and sizes	Daniela Cisneros, Yan Gong, Rishikesh Yadav, Arnab Hazra* & Raphaël Huser	2023	26	301-330
963.	<i>Journal of Graphical and Computational Statistics</i>	Globally Centered Autocovariances in MCMC	Medha Agarwal, Dootika Vats	2022	31	629-638
964.	<i>Biometrika</i>	Lugsail lag windows for estimating time-average covariance matrices	Dootika Vats, James Flegal	2022	109	735-750
965.	<i>Biometrika</i>	Efficient Bernoulli factory Markov chain Monte Carlo for intractable posteriors	Dootika Vats, Flavio Goncalves, Krzysztof Łatuszyński, Gareth Roberts	2022	109	369-385
966.	<i>Methodology and Computing in Applied</i>	Batch Size Selection for Variance Estimators in	Ying Liu, Dootika Vats & James M.	2022	24	65-93

	<i>Probability</i>	MCMC	Flegal			
967.	<i>Electronic Journal of Statistics</i>	A principled stopping rule for importance sampling	Medha Agarwal, Dootika Vats, Víctor Elvira	2022	16	5570-5590
968.	<i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i>	Dimension-Free Mixing for High-Dimensional Bayesian Variable Selection	Quan Zhou, Jun Yang, Dootika Vats, Gareth O. Roberts, Jeffrey S. Rosenthal	2022	84	1751–1784
969.	<i>Advances in Applied Probability</i>	Optimal scaling of MCMC beyond Metropolis	Sanket Agrawal, Dootika Vats, Krzysztof Łatuszyński, Gareth O. Roberts	2022	55	492 - 509
970.	<i>Lobachevskii Journal of Mathematics</i>	Multiplication Operators Between Discrete Hardy Spaces on Rooted Trees	P. Muthukumar and P. Shankar	2022	43	3252--3263
971.	<i>Canadian Mathematical Bulletin</i>	Model spaces invariant under composition operators	P. Muthukumar and Jaydeb Sarkar	2023	66	204--217
972.	<i>Mediterranean Journal of Mathematics</i>	Weighted Composition Operators Between Weighted Hardy Spaces on Rooted Trees	P. Muthukumar, Ajay K. Sharma and Vivek Kumar	2023	20 (Article No: 61)	20 pages
973.	<i>Nature Scientific Reports</i>	GIVE Statistic for Goodness of Fit in Instrumental	S.S. Dhar and Shalabh	2022	12	

		Variables Models with Application to COVID Data				
974.	<i>Journal of the Indian Society for Probability and Statistics, (Special Issue of the 40th Convention of ISPS)</i>	A Note on Asymptotic Distribution of Trimmed mean	Subhra Sankar Dhar, Udit Chatterjee and Shalabh	2022	23	327-335
975.	<i>Teoriya Veroyatnostei i Matematicheskaya Statistika</i> (Russian version) / <i>Theory of Probability and Mathematical Statistics</i> (English version)	Characterization of the least squares estimator : <i>mis-specified</i> multivariate isotonic regression model with dependent error	Bagchi, P. and <b>Dhar, S. S.</b>	2023		
976.	<i>Bernoulli</i>	Comparing time varying regression quantiles under shift invariance.	Dhar, S. S. and Wu, W.	2023	29	1527--1554
977.	<i>Teoriya Veroyatnostei i Matematicheskaya Statistika</i> (Russian version) / <i>Theory of Probability and Mathematical Statistics</i> (English version)	The Trimmed Mean in Non-parametric Regression Function Estimation.	Dhar, S. S., Jha, P. and Rakshit, P.	2022	107	133--158
978.	<i>Journal of Mathematics Economics</i>	"Probabilistic Fixed Ballot Rules and Hybrid Domains"	Shurojit Chatterji, Souvik Roy, Soumyarup Sadhukhan, Arunava Sen and Huaxia Zeng	2022	100	
979.	<i>Communications in Algebra</i>	On Lie algebroid over algebraic spaces	Ashis Mandal and Abhishek Sarkar	2023	51 no. 4	1594 -- 1613

980.	<i>International Journal of Algebra and Computation</i>	On metric Leibniz algebras and deformations	Alice Fialowski and Ashis Mandal	2022	32 no.3	597 -- 616
981.	<i>Statistical Papers</i>	Optimal design of experiments for hypothesis testing on ordered treatments via intersection-union tests	Belmiro P. M. Duarte, Anthony C. Atkinson, Satya P. Singh & Marco S. Reis	2022	64	587-615
982.	<i>Journal of Statistical Computation and Simulation</i>	Optimal design of multivariate acceptance sampling plans by variables	<u>B elmiro P. M. Durate, Satya P. Singh and Maria J. Moura</u>	2022	92	3129-3149
983.	<i>Communications in Statistics - Theory and Methods</i>	Meta analysis of exponential lifetime data from type-I hybrid censored samples	K. Prajapat, S. Mondal, Sharmistha Mitra and D. Kundu	2023	<a href="https://doi.org/10.1080/03610926.2023.2169048">https://doi.org/10.1080/03610926.2023.2169048</a>	
984.	<i>Applied Stochastic Models in Business and Industry</i>	Order restricted inference for a multiple step-stress model with long-term survivors for a general family of distributions	A. Pal, Sharmistha Mitra and D. Kundu	2023	<a href="https://doi.org/10.1002/asmb.2754">https://doi.org/10.1002/asmb.2754</a>	
985.	<i>Communications in Statistics - Simulation and Computation</i>	A consistent method of estimation for three-parameter generalized exponential	K. Prajapat, Sharmistha Mitra and D. Kundu	2023	<a href="https://doi.org/10.1080/03610918.2023.2169048">https://doi.org/10.1080/03610918.2023.2169048</a>	



		distribution			021.19 08557	
986.	<i>Journal of Statistical Computation and Simulation</i>	Optimal Bayesian Sampling Plan for Competing Risks Data	D. Prajapati, Sharmistha Mitra, D. Kundu and A. Pal	2023	93(5)	775-799
987.	<i>Journal of Statistical Theory and Practice</i>	Bayesian Sampling Plan for the Exponential Distribution with Generalized Type - I Hybrid Censoring Scheme	D. Prajapati, Sharmistha Mitra and D. Kundu	2023	17	Article No. 5
988.	<i>New York Journal of Mathematics</i>	Fourier theoretic inequalities for inclusions of simple C*-algebras	<u>Keshab Chandra Bakshi,</u> <u>Satyajit Guin</u> and <u>Sruthymurali</u>	2023	19	335-362
989.	<i>Nonlinear Analysis</i>	2. On fractional Poincaré inequality for unbounded domains with finite ball conditions: Counter example	Indranil Chowdhury and Prosenjit Roy	2023	Volume 228, 113189	(113189) pages 1-16
990.	<i>Journal of Machine Learning Research</i>	On Generalizations of Some Distance Based Classifiers for HDLSS Data	S Roy, S Sarkar, S Dutta, AK Ghosh	2022	23	1-41

991.	<i>Journal of Nonparametric Statistics</i>	Some multivariate goodness of fit tests based on data depth	R Singh, S Dutta, N Misra	2022	34	428-447
992.	<i>Journal of Multivariate Analysis</i>	Sub-dimensional Mardia measures of multivariate skewness and kurtosis	J Chowdhury, S Dutta, RB Arellano-Valle, MG Genton	2022	192	105089
993.	<i>Stat</i>	On a new higher order kernel for density estimation	S Das, S Dutta, R Srivastava	2023	12	e526
994.	<i>Proceedings of the American Mathematical Society</i>	Large Turing independent sets	A. Kumar and S. Shelah	2023	151	355-367
995.	<i>Topology and its Applications</i>	Supersaturated ideals	A. Kumar and D. Raghavan	2023	323	108-289
996.	<i>Journal of the Royal Statistical Society Series B</i>	Efficient manifold approximation with spherelets	Didong Li, Minerva Mukhopadhyay, David Dunson	2022	84 (Issue 4)	1057-1585
997.	<i>Journal of Mathematical Analysis and Applications</i>	On Simplicity of Lie Algebras of Compact Operators: A Direct Approach	Sasmita Patnaik	2022	510	1 to 8
998.	<i>Zeitschrift für angewandte Mathematik und Physik</i>	Axisymmetric indentation of a Periodically Layered, Viscoelastic Half-Space	Deepak Sachan, Ishan Sharma and T. Muthukumar	2022	73(222)	1—35

999.	<i>Multiscale Modeling and Simulation (A SIAM Interdisciplinary Journal)</i>	Homogenization of the Stokes System in a Domain with an Oscillating Boundary	T. Muthukumar and K. Sankar	2022	20 (4)	1361—1393
1000.	<i>Math. Phys. Anal. Geom.</i>	Equivariant spectral triples for homogeneous spaces of the compact quantum group $U_q(2)$	Satyajit Guin and Bipul Saurabh	2022	Paper no. 21	15pp
1001.	<i>J. Geom. Phys.</i>	Equivariant spectral triple for the quantum group $U_q(2)$ for complex deformation parameters	Satyajit Guin and Bipul Saurabh	2023	Paper No. 10474 8,	22 pp.
1002.	<i>Journal of Geometric Analysis</i>	On a spectral version of Cartan's theorem	Vikramjeet Singh Chandel, Sayani Bera and Mayuresh Londhe	2022	2	1-27
1003.	<i>Algebra and representation theory</i>	Brylinski filtration of affine Kac-Moody algebras and representations of W-algebras	Suresh Govindarajan , Sachin S. Sharma, and Sankaran Viswanath	2023	26	491-512
1004.	<i>Journal of Statistical Planning and Inference</i>	U-statistic based on overlapping sample spacings.	Rahul Singh and Neeraj Misra	2023	224	98-108
1005.	<i>Brazilian Journal of Probability and</i>	Componentwise equivariant estimation of order	Naresh Garg and Neeraj Misra	2023	37(1)	101-123

	<i>Statistics</i>	restricted location and scale parameters in bivariate models: a unified study				
1006.	<i>Japanese Journal of Statistics and Data Science</i>	Estimation of order restricted location/scale parameters of a general bivariate distribution under general loss function: some unified results	Naresh Garg and Neeraj Misra	2022	5(2)	553-576
1007.	<i>TEST</i>	Some parametric tests based on sample spacings	Rahul Singh and Neeraj Misra	2022		1-21
1008.	<i>Journal of Nonparametric Statistics</i>	Some multivariate goodness of fit tests based on data depth	Rahul Singh, S Dutta and Neeraj Misra	2022	34(2)	428-447
1009.	<i>J. Funct. Anal</i>	Weak type bounds for rough maximal singular integrals near $L^1$	Ankit Bhojak & Parasar Mohanty	2023	284	
1010.	<i>Banach J. Math. Anal</i>	Equality in Hausdorff- Young in hypergroup	Bandyopadhyay, Choiti; Mohanty, Parasar	2022	16	
1011.	<i>Expo. Math.</i>	Weighted inequalities for higher dimensional one-sided Hardy-Littlewood maximal function in Orlicz spaces.	Ghosh, Abhishek; Mohanty, Parasar	2022	40	

1012.	<i>Journal of Computational Physics</i>	A fast rapidly convergent method for approximation of convolutions with applications to wave scattering and some other problems	Awanish Kumar Tiwari, Ambuj Pandey, Jagabandhu Paul, Akash Anand	2022	459	
1013.	<i>Forum Mathematicum</i>	On uniqueness of branching to fixed point lie subalgebras	Santosha Pattanayak, Santosh Nadimpalli	2022	34	1663-1678
1014.	<i>Journal of Number theory</i>	On the duality involution for p-adic General Spin Groups	Amiya Kumar Mondal, Santosh Nadimpalli	2023	248	1-13
1015.	<i>manuscripta mathematica</i>	Weighted and anisotropic Sobolev inequality with extremal	Kaushik Bal & Prashanta Garain	2022	168	101-117
1016.	<i>Differ. Equ. Dyn. Syst.</i>	Hilfer Fractional Differential Equations with Almost Sectorial Operators.	Jaiswal, Anjali; Bahuguna, D	2023	31(2)	301–317
1017.	<i>Comput. Appl. Math.</i>	A unique approach to graph-based metric spaces with an application to rocket ascension	Younis, Mudasir, Bahuguna, Dharendra	2023	42(1)	Paper No. 44, 19 pp.

1018.	<i>Proc. Nat. Acad. Sci. India Sect. A</i>	Numerical and approximate solutions for two-dimensional hyperbolic telegraph equation via wavelet matrices.	Patel, Vijay Kumar, Bahuguna, Dharendra	2022	92(4)	605–623
1019.	<i>Differ. Equ. Dyn. Syst.</i>	Monotone iterative technique for nonlocal impulsive finite delay differential equations of fractional order.	Jeet, Kamal, Sukavanam, N., Bahuguna, D.	2022	30(4)	801-816
1020.	<i>Applied Mathematics Letters</i>	Global stability of a predator–prey model with generalist predator	J Roy, M Banerjee	2023	142	108659
1021.	<i>Chaos, Solitons &amp; Fractals</i>	Spatio-temporal pattern selection in a prey–predator model with hunting cooperation and Allee effect in prey	R Han, S Dey, M Banerjee, ,	2023	171	113441
1022.	<i>Chaos, Solitons &amp; Fractals</i>	Spatio-temporal chaos and clustering induced by nonlocal information and vaccine hesitancy in the SIR epidemic	M Banerjee, S Ghosh, P Manfredi, A d’Onofrio	2023	170	113339

		model				
1023.	<i>Scientific Reports</i>	A mathematical modeling technique to understand the role of decoy receptors in ligand-receptor interaction	S Dey, A Ghosh, M Banerjee	2023	13(1)	6523
1024.	<i>Mathematics and Computers in Simulation</i>	Maturation delay induced stability enhancement and shift of bifurcation thresholds in a predator-prey model with generalist predator	J Roy, S Dey, M Banerjee	2023	211	368 - 393
1025.	<i>Communications in Nonlinear Science and Numerical Simulation</i>	Attractors and long transients in a spatio-temporal slow-fast Bazykin's model	PR Chowdhury, S Petrovskii, V Volpert, M Banerjee	2023	118	107014
1026.	<i>Chaos, Solitons &amp; Fractals</i>	Dynamics of a PDE model with size-structure: Characterizing the growth and flocculation effects of unicellular algae	D Ni, W Ma, M Banerjee	2023	167	113054
1027.	<i>Chaos, Solitons &amp; Fractals</i>	Coexistence of chaotic and non-chaotic attractors in a three-species slow-	PR Chowdhury, M Banerjee, S Petrovskii,	2023	167	113015

		fast system				
1028.	<i>Journal of Mathematical Biology</i>	An age-dependent immuno-epidemiological model with distributed recovery and death rates	S Ghosh, V Volpert, M Banerjee	2023	86 (2), 21,	
1029.	<i>Communications in Nonlinear Science and Numerical Simulation</i>	Epidemic model with strain-dependent transmission rate	M Banerjee, T Lipniacki, A d'Onofrio, V Volpert	2022	114	106641
1030.	<i>International Journal of Bifurcation and Chaos</i>	Bifurcation Analysis and Spatio-Temporal Patterns of a Prey–Predator Model with Hunting Cooperation	S Dey, M Banerjee, S Ghorai	2022	32 (11)	2250173
1031.	<i>Applied Mathematical Modelling</i>	Canards, relaxation oscillations, and pattern formation in a slow-fast ratio-dependent predator-prey system	PR Chowdhury, M Banerjee, S Petrovskii	2022	109	519-535
1032.	<i>Chaos, Solitons &amp; Fractals</i>	Stationary and non-stationary pattern formation over fragmented habitat	M Banerjee, S Pal, PR Chowdhury	2022	162	112412
1033.	<i>Bulletin of Mathematical Biology</i>	An epidemic model with time-distributed recovery and death	S Ghosh, V Volpert, M Banerjee	2022	84 (8)	78



		rates				
1034.	<i>Statistics</i>	\On two exponential populations under a joint adaptive type-II progressive censoring	Farha Sultana, Arnab Koley, Ayan Pal and D. Kundu	2022	55(6)	1328 - 1355.
1035.	<i>Journal of Statistical Computation and Simulation</i>	\Analysis of Skewed Data by using Compound Poisson-Exponential Distribution with Applications to Insurance Claims	Mohammed A. Meraou, Noriah M. Al-Kandari, M.Z. Raqab and D. Kundu	2022	vol.92, no. 5	928-956
1036.	<i>Sankhya, Ser B</i>	Stationary GE-process and its application in analyzing gold price data	D. Kundu	2022	Vol. 84, Issue 2,	575-595
1037.	<i>Communications in Statistics - Simulation and Computation,</i>	A bivariate inverse generalized exponential distribution and its applications in dependent competing risks model	Fatemah A. Alqallaf and D. Kundu	2022	vol. 51, no. 12,	7019 - 7036
1038.	<i>Circuits, Systems and Signal Processing,</i>	Estimating parameters in multichannel sinusoidal mode	Swagata Nandi and D. Kundu	2022	41	4604 - 4631.

1039.	<i>Multidimensional Systems and Signal Processing</i>	Estimating of parameters of two-dimensional random amplitude chirp signal in additive noise	Swagata Nandi, Rhythm Grover and D. Kundu	2022	33	1045 - 1068.
1040.	<i>Journal of Statistical Computation and Simulation</i>	Exact likelihood inference for two exponential populations under jointly generalized progressive hybrid censoring	Cagatay Cetinkaya, Farha Sultana and D. Kundu	2022	vol. 92, no. 17,	3605 - 3629
1041.	<i>Springer Nature Computer Science,</i>	Statistical inference on the Shannon and Renyi entropy measures of generalized exponential distribution under the progressive censoring	Koushik Maiti, Suchandan Kayal and D. Kundu	2022	Vol. 3, Article No. 317	
1042.	<i>Journal of Multivariate Analysis</i>	Approximate least squares estimators of a two-dimensional chirp model	Abhinek Shukla, Rhythm Grover, D. Kundu and Amit Mitra	2022	Vol. 192, Article No. 105045.	
1043.	<i>Sankhya, Ser B</i>	Bivariate semi-parametric singular family of distributions and its	D. Kundu	2022	vol. 84, Part 2	846 - 872.

		applications				
1044.	<i>Applied Stochastic Models in Business and Industry</i>	Exact likelihood ratio test and Wald tests for the Balanced Joint Progressive Censoring scheme,	Shuvashree Mondal and D. Kundu	2022	Vol. 38, Issue 6,	1113 - 1126.
1045.	<i>Statistics,</i>	Optimal plan for ordered step-stress stage life testing	Debashis Samanta, Shuvashree Mondal and D. Kundu	2022	Vol. 56, No. 6,	1319 - 1344.
1046.	<i>Circuits, Systems and Signal Processing,</i>	\On Weighted Least Squares Estimators of Parameters of a Chirp Model	D. Kundu , Swagata Nandi and Rhythm Grover	2023	Vol. 42, No. 1,	493 - 521.
1047.	<i>Journal of Statistical Theory and Practice,</i>	Cure rate based step-stress model	Ayan Pal, Debashis Samanta and D. Kundu	2023	Vol. 17, Article No. 15.	
1048.	<i>Communications in Statistics - Simulation and Computation,</i>	Bayesian Sampling Plan for the Exponential Distribution with Generalized Type - II Hybrid Censoring Scheme	Deepak Prajapati, Sharmistha Mitra and D. Kundu	2023	Vol. 52, No. 2,	533 - 556.
1049.	<i>Sankhya, Ser A</i>	An optimal Bayesian sampling plan for two-parameter	Kiran Prajapat, Arnab Koley, Sharmistha Mitra and D.	2023	Vol. 85-A, Part 1,	512 - 539.

		exponential distribution under Type-I hybrid censoring	Kundu			
1050.	<i>Algebra Universalis</i>	Topological representation of double Boolean algebras	Howlader, Prosenjit and Banerjee, Mohua	2023	84:15	1-32
1051.	<i>ACM Transactions on Computational Logic</i>	Logics for temporal information systems in rough set theory	Khan, M.A., Banerjee, Mohua and Panda, S.	2023	24(1)	1-29
1052.	<i>Transactions on Rough Sets</i>	Zdzisław Pawlak and our journey with rough sets	Banerjee, Mohua and Chakraborty, M.K.	2023	XXIII	3-11
1053.	<i>Int. J. Approximate Reasoning</i>	A non-distributive logic for semiconcepts and its modal extension with semantics based on Kripke contexts	Howlader, Prosenjit and Banerjee, Mohua	2023	153	115-143
1054.	<i>Journal of Logic, Language and Information</i>	Kripke contexts, double Boolean algebras with operators and corresponding modal systems	Howlader, Prosenjit and Banerjee, Mohua	2023	32	117-146
1055.	<i>Logic Journal of the IGPL</i>	Contrapositively complemented Heyting algebras and intuitionistic logic with minimal negation	More, Anuj Kumar and Banerjee, Mohua	2022	jzac041	1-34
1056.	<i>American Journal of Mathematics</i>	Random walk on Tori and normal numbers in self-	Yiftach Dayan, Arijit Ganguly and	2023		

		similar sets	Barak Weiss			
1057.	<i>Journal of Number Theory</i>	Diophantine approximation with prime restriction in function fields	Stephan Baier, Esrafil Ali Molla and Arijit Ganguly	2022	241	57-90
1058.	<i>Topology and its Applications</i>	Equivariant self-homotopy equivalences of product spaces	Gopal Chandra Dutta, Debasis Sen, Ajay Singh Thakur	2023	325	Article no. 108390
1059.	<i>CMBBE</i>	The pulsatile 3D-Hemodynamics in a doubly afflicted human descending abdominal artery with iliac branching	Sumit Kumar, S. K. Rai, BVR Kumar and Om Shankar	2022		
1060.	<i>MRI</i>	VRfRNet: Volumetric ROI fODF reconstruction network for estimation of multi-tissue constrained spherical deconvolution with only single shell dMRI	Ranjeet Ranjan Jha, Sudhir K. Pathak, Vishwesh Nath, Walter Schneider, BVR Kumar, Arnav Bhavsar, Aditya Nigam	2022	90	1-16
1061.	<i>Physics of Fluids</i>	Modeling and simulation of the	Sourabh P. Bhat, B. V.	2022	34	031909

		potential indoor airborne transmission of SARS-CoV-2 virus through respiratory droplets	Rathish Kumar, Shainath Ramesh Kalamkar, Vinay Kumar, Sudhir Pathak and Walter Schneider			
1062.	<i>Comput. Methods Appl. Mech. Engrg.</i>	Variational multiscale stabilized finite element analysis of non-Newtonian Casson fluid flow model fully coupled with Transport equation with variable diffusion coefficients	B.V. Rathish Kumar and Manisha Chowdhury	2022	388	114272
1063.	<i>Mathematics and Computers in Simulation</i>	Multi-force effect on fluid flow, heat and mass transfer, and entropy generation in a stratified fluid-saturated porous enclosure	Vinay Kumar, S.V.S.S.N.V. G. Krishna Murthy, B.V. R. Kumar	2022	203	328-367
1064.	<i>Physics of Fluids</i>	Entropy generation in a chemically and thermally reinforced doubly stratified porous enclosure in a	Vinay Kumar, S. V. S. S. N. V. G. Krishna Murthy and	2022	34	013307

		magnetic field	B. V. Rathish Kumar			
1065.	<i>Physics of Fluids</i>	Linear stability analysis of convection in a solid partitioned inhomogeneous multilayered porous structure	B.V.Rathish Kumar and Parul Pathak	2022	34	076601
1066.	Differ. Equ. Dyn. Syst.	Hilfer Fractional Differential Equations with Almost Sectorial Operators	Jaiswal, Anjali; Bahuguna, D.	2023	2	301–317
1067.	Comput. Appl. Math	A unique approach to graph-based metric spaces with an application to rocket ascension	Younis, Mudasir; Bahuguna, Dharendra	2023	1	Paper No. 44, 19 pp
1068.	Proc. Nat. Acad. Sci. India Sect.	Numerical and approximate solutions for two-dimensional hyperbolic telegraph equation via wavelet matrices	Patel, Vijay Kumar; Bahuguna, Dharendra	2022	4	605–623
1069.	Differ. Equ. Dyn. Syst.	Monotone iterative technique for nonlocal impulsive finite delay differential equations of fractional order	Jeet, Kamal; Sukanam, N.; Bahuguna, D.	2022	4	801–816
<b>Department of Mechanical Engineering</b>						
1070.	Soft Matter	Interaction of a defect with the reference curvature of an elastic surface	Manish Singh, Animesh Pandey, and	2022	18	2979-2991

			Anurag Gupta			
1071.	Proceedings of the Royal Society A	Defects and Metric Anomalies in Föppl-von Kármán Surfaces	Manish Singh, Ayan Roychowdhury, and Anurag Gupta	2022	478	20210829:1-23
1072.	Journal of Elasticity	Singular Points and Singular Curves in von Kármán Elastic Surfaces	Animesh Pandey and Anurag Gupta	2022	150	367–399
1073.	Zeitschrift fuer Angewandte Mathematik und Physik	Some Consequences of the Distributional Stress Equilibrium Condition	Animesh Pandey and Anurag Gupta	2022	73	203:1-7
1074.	Chemical Engineering Science	Insight into molecular rearrangement of a sessile ionic nanodroplet with applied electric field	S. Chatterjee, I. Kumar, K. C. Ghanta, A. Hens, G. Biswas	2022	247	117083-1 – 117083-15
1075.	Computers and Fluids	Analysis of shock wave-boundary layer interaction in a shock tube using higher order scheme	M. Thangadurai, A. Kundu, G. Biswas	2022	236	105305-1 – 105305-13
1076.	Langmuir	Transport Behavior of Commercial Anticancer Drug Protein-Bound Paclitaxel (Paclitaxel) in a Micron-Sized Channel	N. K. Prasad, R. Shome, G. Biswas, S. S. Ghosh, A. Dalal	2022	38	2014–2025
1077.	Physics of Fluids	Evolution of jets during drop impact on a deep liquid pool	S. K. Das, A. Dalal, M. Breuer, G. Biswas	2022	34	022110-1 -- 022110-10



1078.	Computers and Fluids	Analysis of multipolar vortices in the interaction of a shock with a strong moving vortex	A. Kundu G. Biswas	2022	248	105686-1 – 105686-8
1079.	Physics of Fluids	Influence of the interaction of capillary waves on the dynamics of two drops falling side-by-side on a liquid pool	P. K. Kirar, S. D. Pokale, K. C. Sahu, B. Ray, G. Biswas	2022	34	112114-1 -- 112114-10
1080.	Ind. Eng. Chem. Res	Film Boiling in the Presence of External Electric Field Using a Variant of Volume of Fluid-Based Interface Tracking Algorithm	I. Kumar, A. Hens, S. K. Lahiri, G. Biswas	2022	61	18176–18186
1081.	ASME J. Heat Mass Transfer-Trans. ASME	Accurate prediction of transport coefficients of an evaporating liquid drop	A.K. Pal, G. Biswas	2023	145	041602-1 -- 041602-9
1082.	Journal of Vibration and Control	Adaptive control to actively damp bistabilities in highly interrupted turning processes using a hardware-in-the-loop simulator	GN Sahu, M Law, P Wahi	2023	29 (5-6)	1141-1150
1083.	CIRP Journal of Manufacturing Science and Technology	Methods to estimate subpixel level small motion from video of vibrating cutting tools	A Nuhman, A Singh, R Lambora, M Law	2022	39	175-184
1084.	CIRP Annals	Modal parameter recovery from temporally aliased	M Law, R Lambora, S Mukhopadhy	2022	79	329-332

		video recordings of cutting tools	ay			
1085.	Journal of Vibration Engineering & Technologies	Dynamics and Stability of Metal Cutting Circular Saws with Distributed and Lubricated Guides	S Singhania, A Singh, M Law	2022	10 (8),	3119-3131
1086.	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture	Rapid stability analysis of variable pitch and helix end mills using a non-iterative multi-frequency solution	P Bari, ZM Kilic, M Law	2022	-	-
1087.	Journal of Vibration Engineering & Technologies	Damped Chatter Resistant Boring Bar Integrated with an Absorber Working in Conjunction with an Eddy Current Damper	A Patel, A Yadav, M Law, B Bhattacharya, P Wahi	2022	-	1-12
1088.	CIRP Journal of Manufacturing Science and Technology	Recovering cutting tool modal parameters from fractionally uncorrelated and potentially aliased signals	R Lambora, M Law, S Mukhopadaya	2022	38	414-426
1089.	Journal of Vibration Engineering & Technologies	Adaptive Model-Free Gain Tuning for Active Damping of Machine Tool Vibrations	GN Sahu, P Deora, M Law, P Wahi	2022	-	1-10
1090.	HardwareX	Hardware-in-the-loop simulator for emulation and active control of chatter	GN Sahu, M Law	2022	11	-

1091.	Journal of Sound and Vibration	Optimally tuning an absorber for a chatter-resistant rotating slender milling tool holder	A Patel, D Kumar Talaviya, M Law, P Wahi	2022	520	-
1092.	International Communication in Heat and Mass Transfer	Energy Efficient Thermal Management at Low Reynolds Number with Air-Ferrofluid Taylor Bubble Flows	Kole M., Shah R., Khandekar S.	2022	Vol. 135	p.106109
1093.	Thermal Science and Engineering Progress	Thermal Characterization of Spray Impingement Heat Transfer over a High-Power LED Module	Sahu G. N., Khandekar S. Muralidhar K.	2022	Vol. 32	p. 101332
1094.	Scripta Materialia	Domination of Phononic Scattering in Solid Solutioning and Interfaces of HfB <sub>2</sub> -ZrB <sub>2</sub> - SiC - Carbon Nanotube Based Ultra High Temperature Composites	Dubey S., Ariharan S., Nisar A., Saini S., Jana S. S., Wangaskar B., Das A., Khandekar S., Maiti T., Omar S., Balani K.	2022	Vol. 218	p. 114776
1095.	International Journal of Thermal Sciences	Determination of Evaporation Rate of Warm Water Placed inside a Partially-filled Top Cooled Enclosure	Bhendura M., Muralidhar K., Khandekar S.	2022	Vol. 179	p. 107612
1096.	International Journal of Thermal Sciences	Thermal Performances of a Flat-plate Pulsating Heat Pipe Tested	Ayel V., Slobodeniuk M., Bertossi R., Karmakar	2022	Vol. 178	p. 107599

		with Water, Aqueous Mixtures and Surfactants	A., Martineau F., Romestant C., Bertin Y., Khandekar S.			
1097.	Applied Thermal Engineering	Copper Wick based Loop Heat Pipe for Thermal Management of a High-power LED Module	Kumar P., Sahu G. N., Chatterjee D., Khandekar S.	2022	Vol. 211	p. 118459
1098.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Influence of External Magnetic Manipulation on Thermal Transport Characteristics of the Bubble-Slug Flow of Ferro-Nanocolloids	Shah R. K., Khandekar S.	2022	Vol. 646	p. 128936
1099.	Applied Nanoscience	Photothermal Effects in Small Gold Nanorod Aggregates for Therapeutic Applications	Pratap D. Shah R., Khandekar S. and Soni S.	2022	Vol. 12	pp. 2045–2058,
1100.	Interfacial Phenomena and Heat Transfer,	Evaporation Dynamics of Liquid Bridge Formed between Two Heated Hydrophilic and Hydrophobic Flat Surfaces,	Jaiswal A., Benard B., Garg V. and Khandekar S.	2022	Vol. 10(1)	pp. 1–14,
1101.	Experiments in Fluids	Understanding Vertical Coalescence Dynamics of Liquid Drops over a Superhydrophobic Surface using High Speed Orthographic Visualization	Somwanshi P., Cheverda V. V., Muralidhar K., Khandekar S., Kabov O. A	2022	Vol. 63 (2)	pp. 1-21
1102.	Applied Thermal Engineering	On-demand Augmentation in	Shah R., Khandekar S.	2022	Vol. 205	p. 118058

		Heat Transfer of Taylor Bubble Flows Using Ferrofluids,				
1103.	Applied Thermal Engineering	Effect of Wick Oxidation on the Thermal Performance of a Copper Acetone Loop Heat Pipe,	Kumar P., Gachake M., Khandekar S.	2022	Vol. 200	p. 117627
1104.	Computational Thermal Sciences	An Improved Correlation of Evaporation Rate of a Water Pool Derived using Combined ANN-GA	Bhendura M, Muralidhar K, Khandekar S.	2022	Vol 15	pp. 1-19
1105.	Physics of Fluids	Effect of a bend on vortex formation and evolution in a three-dimensional stenosed geometry during pulsatile flow,	Md. Owais, A. Usmani and K. Muralidhar	2023	35	031906
1106.	Physical Review-E	Contact line dynamics of a water drop spreading over a textured surface in the electrowetting-on-dielectric configuration	R.K. Dwivedi and K. Muralidhar	2022	045111	045111
1107.	Int. J. Thermal Sciences	Effect of Liquid Splattering on Thermal Performance of Jets and Sprays over Plain and Pillared surfaces	G.N. Sahu, K. Muralidhar and S. Khandekar	2023	187	108131
1108.	Physical Review - F	Dynamic contact angle model for	R.K. Dwivedi, V.	2022	7	034002

		resolving low viscosity droplet oscillations during spreading over a surface with varying wettability	Jain and K. Muralidhar			
1109.	Experiments in Fluids	Understanding Vertical Coalescence Dynamics of Liquid Drops over a Superhydrophobic Surface using High Speed Orthographic Visualization,	P. M. Somwanshi, V. V. Cheverda, K. Muralidhar, S. Khandekar, and O. A. Kabov	2022	63	47
1110.	Int. J. Thermal Sciences	Determination of Evaporation Rate of Warm Water Placed inside a Partially-filled Top Cooled Enclosure	Manish Bhendura, K. Muralidhar, and S. Khandekar	2022	179	107612
1111.	Sensors and Actuators A (Physical)	Closed EWOD-Based Low-Cost Portable Thermal Detection System for Point-of-Care Applications	Vandana Jain, Raghvendra K. Dwivedi, and K. Muralidhar	2022		113831
1112.	Thermal Science and Engineering Progress	Enhancing Hydrophobicity of Copper Substrate by Temperature-Controlled Chemical Etching for Dropwise Condensation of Vapor from Moist Air	Punj Lata Singh, B.S. Sikarwar, M. Ranjan and K. Muralidhar	2022	34	101403
1113.	Computational Thermal Sciences	An Improved Correlation of Evaporation Rate of	Manish Bhendura, K. Muralidhar,	2023	15(2)	1-19

		a Water Pool derived using Combined ANN-GA	and S. Khandekar			
1114.	Thermal Science and Engineering Progress	Thermal Characterization of Spray Impingement Heat Transfer over a High-Power LED Module	G.N. Sahu, K. Muralidhar, and S. Khandekar	2022	32	101333
1115.	Journal of Non-Newtonian Fluid Mechanics	Effects of coupling of mass transport and blood viscosity models for microchannel flows	Pritam Giri, Krishna Chandran, K. Muralidhar, and Indranil Saha Dalal	2022	303	104754
1116.	International Journal of Heat and Mass Transfer	Investigation of the transient coupling between the dynamic laser beam absorptance and the melt pool - vapor depression morphology in laser powder bed fusion process	A. Aggarwal, Y. Shin, A. Kumar	2023	201	123663
1117.	Additive Manufacturing	Deciphering the individual effects of the fluid flow and material evaporation physics on the melting characteristics and the re-solidification parameters during laser melting of solid Ti6Al4V substrate	A.K. Mishra, A. Kumar, Govind	2023	66	103453
1118.	Thermal Science and Engineering Progress	Computational analysis of the thermo-hydrodynamic	A.K. Mishra, A. Kumar	2023	39(12)	101698

		transport processes during substrate re-melting in laser powder bed fusion of AlSi10Mg				
1119.	Journal of Energy Storage	Effect of segregation and advection governed heterogeneous distribution of nanoparticles on NEPCM discharging behavior	S. Patil, C. Kataria, A. Kumar, A. Kumar	2023	57	106230
1120.	Met. Mater. Int.	Investigation of cracking susceptibility and porosity formation and its mitigation techniques in laser powder bed fusion of Al 7075 alloy	M. Patel, A. Aggarwal, A. Kumar	2023		<a href="https://doi.org/10.1007/s12540-023-01387-w">https://doi.org/10.1007/s12540-023-01387-w</a>
1121.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Numerical simulations of the effect on twisted spacer filaments on biofouling and scaling in the feed channel of reverse osmosis membrane modules	C.P. Singh, A. Yadav, A. Kumar	2023	666	131333
1122.	Experimental Mechanics	Compression behavior of triply periodic minimal surface polymer lattice structures	A.K. Mishra, A. Kumar	2023		<a href="https://doi.org/10.1007/s11340-023-00940-3">https://doi.org/10.1007/s11340-023-00940-3</a>
1123.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Investigations on the effect of spacers in direct contact and air gap membrane distillation using	A. Yadav, C.P. Singh, R.V. Patel, A. Kumar, P.K.	2022	654	130111



		computational fluid dynamics	Labhasetwar			
1124.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Numerical simulations of the effect of spacer filament geometry and orientation on the performance of the reverse osmosis process	C.P. Singh, A. Yadav, A. Kumar	2022	650	129664
1125.	Journal of Cleaner Production	Synergistic impact of eco-friendly nano-lubricants on the grindability of AISI H13 tool steel: A study towards clean manufacturing	A.S. Awale, M. Vashista, A. Chaudhari, M.Z. Khan Yusufzai	2022	364	132686
1126.	Journal of Thermal Analysis and Calorimetry	A critical review of heat source and resulting temperature distribution in arc welding	A. Das, A. Kumar, K. Shankhwar, N. Gubeljak	2022	147	12975–13010
1127.	The International Journal of Advanced Manufacturing Technology	Use of low thermal diffusivity shielding plate to improve thermal behaviour in submerged arc welding by controlling the heat input	A. Das, S.S. Sarkar, A. Ghosh, S. Chattopadhyaya, N. Gubeljak, A. Kumar	2022	123	3337–3359
1128.	Thermal Science and Engineering Progress	Development and benchmarking of numerical model in OpenFOAM® for the prediction of channel segregation during columnar alloy solidification	A. Kumar, A. Singh, A. Kumar	2022	35(4)	101464

1129.	Thermal Science and Engineering Progress	Development of free surface based thermo-fluidic model for conduction mode laser spot welding and comparison with the conventional flat surface based model	S. Patel, A Singh, A. Kumar, V.K. Jain	2022	38(3)	101631
1130.	Experimental Heat Transfer	Investigation of the transition of natural convective flow of water in a differentially heated cubic enclosure	Omprakash S Bharti, Arun K Saha, Malay K Das	2023	36	373-403
1131.	Journal of Dispersion Science and Technology	Effect of surfactant crowding on clathrate hydrate growth	Randeep Ravesh, Ayaj A Ansari, Pradipta K Panigrahi, Malay K Das	2022	43	2092-2106
1132.	Energy Reports	Investigations on a controlled microwave heating technique for efficient depressurization in methane hydrate reservoirs	Rahul Yadav, Akash K Gupta, Malay K Das, PK Panigrahi	2022	8	7825-7839
1133.	Numerical Heat Transfer, Part B: Fundamentals	A multiscale approach for stable relaxation parameter values in lattice Boltzmann simulations of heat and mass transport in porous media	Jithin Madhavan, Malay K Das, Ashoke De	2022	82	41-59
1134.	Journal of Biomechanical Engineering	Ramifications of Vorticity on Aggregation and	Meraj Ahmed, Nirmal Gupta,	2022	144	081002 17 pages

		Activation of Platelets in Bi-Leaflet Mechanical Heart Valve: Fluid–Structure-Interaction Study	Rashmoni Jana, Malay K Das, Kamal K Kar			
1135.	Applied Physics B	Digital holographic study of corona wind assisted evaporation of hydrocarbon from a microliter well	Digvijay Shukla, Bal Krishan Mishra and P K Panigrahi	2022	128	123
1136.	Physical Review Fluids	Bal Krishan Mishra, Archana Gupta, and P. K. Panigrahi	Near-wall characteristics of wall-normal jet generated by an annular DBD plasma actuator	2022	7	033702
1137.	Chemical Engineering Journal	Synthesis of Cu-Al LDH nanofluid and effectiveness as a promoter for CO <sub>2</sub> hydrate formation	Ayaj Ahamad Ansari, Samarshi Chakraborty, Randeep Ravesh, Pradipta Kumar Panigrahi, Malay Kumar Das	2022	435	134786 14 pages
1138.	Journal of Thermal Science and Engineering Applications	Sensitivity Analysis of Schlieren-Particle Image Velocimetry System for Simultaneous Measurement of Flow and Temperature Field of a Free Convective Flow Inside a Cubic	Omprakash S Bharti, Arun K Saha, Malay K Das	2022	14	051005 16 pages

		Cavity				
1139.	Marine Georesources & Geotechnology	Effect of confined boundary and mud-layers on depressurization-based gas recovery and land subsidence in hydrate reservoirs		2022	40	78-95
1140.	Chemical Engineering & Technology	CO <sub>2</sub> hydrate formation kinetics in the presence of layered double hydroxide nanofluid	Ayaj Ahamad Ansari, Randeep Ravesh, Samarshi Chakraborty, Pradipta Kumar Panigrahi, Malay Kumar Das	2023	Accepted for publication	
1141.	ACS Sustainable Chemistry & Engineering	Agar-based composite films as effective biodegradable sound absorbers	S Kumar, K Jahan, A Verma, M Agarwal, and C Chandraprakash	2022	10	8242--9253
1142.	Journal of Applied Physics	Quasi-superhydrophobic microscale two-dimensional phononic crystals of stainless steel 304	V Sharma and C Chandraprakash	2022	131	184901
1143.	ACS Food Science & Technology	Burst and physicochemical characteristics of Glycerol-Added Chitosan Films for Food Packaging	B M Bharti, T Bhuvana, and C Chandraprakash,	2023	3	772—780

1144.	Thermal Science and Engineering Progress	Numerical investigation into heat transfer augmentation in a square minichannel heat sink using butterfly inserts/ Elsevier	A. P. Sudheer and U. Madanan	2022	36	101522
1145.	International Journal of Thermal Sciences	Numerical simulation of two-phase flow: Air-mist film cooling over a flat plate.	A. Dwivedi and S. Sarkar	2023	184	107923
1146.	Physics of Fluids	Flow transition on the suction surface of a controlled-diffusion compressor blade using a large-eddy simulation.	S. Katiyar and S. Sarkar	2022	34 (9)	094108
1147.	arXiv preprint	Aero-thermal analysis of a laminar separation bubble subjected to varying free-stream turbulence: Large Eddy Simulation.	Sonalika Srivastava and S. Sarkar	2023	2304.06392	---
1148.	Journal of Thermal Science and Engineering Applications	Numerical study of heat transfer during oblique impact of a cold drop on a heated liquid film	Swati Singh, Arun K Saha	2023	15	050907: 1-13
1149.	Physics of Fluids	Effect of cube spacings on the three-dimensional flow structure over an array of wall-mounted cube	Basheer Ahmad Khan, Arun K. Saha	2023	35	055111:1-18

1150.	Physics of Fluids	Characterization of the turbulent field behavior of an elevated jet-in crossflow investigated using direct numerical simulation	Sachidananda Behera, Basheer A Khan, Arun K Saha	2023	35	015157: 1-24
1151.	Physics of Fluids	Turbulent flow and heat transfer characteristics of an impinging jet over a heated wall-mounted cube placed in a cross-flow	Basheer A Khan, Arun K Saha	2022	34	025120: 1-18
1152.	Experimental Heat Transfer	Investigation of the transition of natural convective flow of water in a differentially heated cubic enclosure	Omprakash S Bharti, Arun K Saha, Malay K Das	2022	36	376-403
1153.	Fuel	Partially premixed combustion of diesel-di-ethyl ether blends in light-duty commercial engine	Ashutosh Jena, Utkarsha Sonawane, Avinash Kumar Agarwal	2023	345	128197:1-12
1154.	Fuel	Removal and mechanism analysis of NOx emissions in carbon-free ammonia combustion systems with a secondary fuel injection	Tao Cai, Dan Zhao, Lin Ji, Avinash Kumar Agarwal	2023	344	128088: 1-11
1155.	Energy Conversion and Management	Dimethyl ether fuel injection system development for a compression ignition	Avinash Kumar Agarwal, Shanti	2023	287	117067: 1-17

		engine for increasing the thermal efficiency and reducing emissions	Mehra, Hardikk Valera, Nalini Kanta Mukherjee, Vikram Kumar, Devendra Nene			
1156.	Environmental Pollution	Characterisation of particulates and trace metals emitted by a dimethyl ether-fuelled genset engine prototype	Ayush Tripathi, Avinash Kumar Agarwal	2023	329	121649: 1-12
1157.	Fuel	Effect of pilot injection strategy on the methanol-mineral diesel fueled reactivity controlled compression ignition combustion engine	Avinash Kumar Agarwal, Akhilendra Pratap Singh, Vikram Kumar	2023	338	127115: 1-15
1158.	SAE International Journal of Engines	Experimental Evaluation of Pilot and Main Injection Strategies on Gasoline Compression Ignition Engine— Part 1: Combustion Characteristics	Avinash Kumar Agarwal, Vishnu Singh Solanki, M Krishnamoorthi	2023	16	24
1159.	International Journal of Engine Research	Multiple fuel injection strategy for premixed charge compression ignition combustion engine using biodiesel blends	Akhilendra Pratap Singh, Ashutosh Jena, Avinash Kumar Agarwal	2023	24	888-903
1160.	Energy	Macroscopic spray characteristics and	Quangkhai Pham,	2023	263	126055: 1-16

		internal structure studies of natural gas injection	Mengzhao Chang, Ankur Kalwar, Avinash Kumar Agarwal, Sungwook Park, Byungchul Choi, Suhan Park			
1161.	Applied Thermal Engineering	Gasoline Compression Ignition (GCI) Combustion in a Light-Duty Engine Using Double Injection Strategy	Gasoline Compression Ignition (GCI) Combustion in a Light-Duty Engine Using Double Injection Strategy	2023	223	120006: 1-21
1162.	Progress in Energy and Combustion Science	Challenges and Opportunities for Application of Reactivity-Controlled Compression Ignition Combustion in Commercially Viable Transport Engines	Avinash K Agarwal, Akhilendra P Singh, Antonio García, Javier Monsalve-Serrano	2022	93	101028: 1-47
1163.	Journal of Energy Resources Technology	Computational Investigations of Spray Atomization and Evaporation Under Cold-Start Conditions of a Diesel Engine	Utkarsha Sonawane, Avinash Kumar Agarwal	2022	11	112305: 1-14



1164.	Applied Energy	Optical and computational investigations of the effect of Spray-Swirl interactions on autoignition and soot formation in a compression ignition engine fuelled by Diesel, dieseline and diesohol	Ashutosh Jena, Akhilendra Pratap Singh, Avinash Kumar Agarwal	2022	324	119677: 1-15
1165.	Journal of Energy Resources Technology	Methanol/Ethanol/B utanol–Gasoline Blends Use in Transportation Engine—Part 2: Composition, Morphology, and Characteristics of Particulates	Akhilendra Pratap Singh, Utkarsha Sonawane, Avinash Kumar Agarwal	2022	144	102305: 1-11
1166.	Journal of Energy Resources Technology	Methanol/Ethanol/B utanol-Gasoline Blends Use in Transportation Engine—Part 1: Combustion, Emissions, and Performance Study	Akhilendra Pratap Singh, Utkarsha Sonawane, Avinash Kumar Agarwal	2022	144	102304: 1-11
1167.	International Journal of Engine Research	Review of morphological and chemical characteristics of particulates from compression ignition engines	Avinash Kumar Agarwal, Muniappan Krishnamoorthi	2022	0	1-59
1168.	Fuel	Feasibility study of novel DME fuel injection equipment: Part 2-performance, combustion, regulated and	Nalini Kanta Mukherjee, Hardikk Valera, Sarat Unnithan, Vikram	2022	323	124338: 1-13

		unregulated emissions	Kumar, Vipin Dhyani, Shanti Mehra, Rahul Kumar Singh, Devendra Nene, Avinash Kumar Agarwal			
1169.	Fuel	Feasibility study of novel DME fuel injection Equipment: Part 1-fuel injection strategies and spray characteristics	Nalini Kanta Mukherjee, Hardikk Valera, Sarat Unnithan, Vikram Kumar, Vipin Dhyani, Shanti Mehra, Ayush Tripathi, Devendra Nene, Avinash Kumar Agarwal	2022	323	124333: 1-17
1170.	Energy	Fuel injection strategy optimisation and experimental performance and emissions evaluation of diesel displacement by port fuel injected methanol in a retrofitted mid-size genset engine prototype	Avinash Kumar Agarwal, Vikram Kumar, Ashutosh Jena Ankur Kalwar	2022	248	123593: 1-13

1171.	Journal of Cleaner Production	Evaluating the effect of variable methanol injection timings in a novel co-axial fuel injection system equipped locomotive engine	Hardikk Valera, Dhananjay Kumar, Avinash Kumar Agarwal	2022	349	131452: 1-14
1172.	Nature communications	Electrifying passenger road transport in India requires near-term electricity grid decarbonisation	Electrifying passenger road transport in India requires near-term electricity grid decarbonisation	2022	13	1-13
1173.	International Journal of Engine Research	The role of hydrogen for future internal combustion engines	A Onorati, R Payri, BM Vaglieco, AK Agarwal, Choongsik Bae, G Bruneaux, M Canakci, M Gavaises, M Günthner, C Hasse, S Kokjohn, SC Kong, Y Moriyoshi, R Novella, A Pesyridis, R Reitz, T Ryan, R Wagner, H Zhao	2022	23	529-540
1174.	Journal of Sound and Vibration	Tailoring of interface modes in topologically protected edge states	Harsh Mirani, Vivek Gupta, Sondipon	2023	562	117814: 1-27

		with hourglass lattice metamaterials	Adhikari, Bishakh Bhattacharya			
1175.	CSI Transactions on ICT	A review on tele-manipulators for remote diagnostic procedures and surgery	Ratnangshu Das, Nayan Jyoti Baishya, Bishakh Bhattacharya	2023	11	31–37
1176.	Smart Materials and Structures	Extreme on-demand contactless modulation of elastic properties in magnetostrictive lattices	A Singh, T Mukhopadhyay, S Adhikari, B Bhattacharya	2022	31	125005: 1-20
1177.	Sensors and Actuators A: Physical	Bimorph sensor based in-line inspection method for corrosion defect detection in natural gas pipelines	Taha Sheikh, Santhakumar Sampath, Bishakh Bhattacharya	2022	347	113940: 1-15
1178.	International Journal of Solids and Structures	Dispersion analysis of the hourglass-shaped periodic shell lattice structure	Vivek Gupta, Rajendra Kumar Munian, Bishakh Bhattacharya	2022	254	111931: 1-11
1179.	Journal of Vibration Engineering & Technologies	Effect of Shape Memory Alloy Actuation on Parametric Instability in Pipes Conveying Pulsating Fluid	Nurul Huda Shaik, Arun Kumar Sharma, Bishakh Bhattacharya	2022	10	1-14
1180.	International Journal of Engineering Advanced Research	DETERMINING THE ELASTIC PROPERTIES OF FLEXIBLE 3D PRINTED BEAMS	Anirudha Bhattacharjee, Pancho Dachkinov, Bishakh	2022	4	12-24

		WITH VARIABLE INFILL DENSITIES AND PATTERNS	Bhattacharya, Hiroaki Wagatsuma			
1181.	Journal of Vibration Engineering & Technologies	De-coupling the Eigenmodes of SMA-reinforced Bimorph Composites using Multi-objective Optimization	Rupal Srivastava, Bishakh Bhattacharya	2022	2151-2161	10
1182.	International Journal of Adaptive Control and Signal Processing	A material system with integrated fault diagnosis and feedback controlled self-healing	Oluwafemi Sedoten Kuponu, Visakan Kadirkamathan, Bishakh Bhattacharya, Simon Alexander Pope	2022	36	2100-2121
1183.	Experimental Mechanics	Energy absorption of hourglass shaped lattice metastructures	V Gupta, B Bhattacharya, S Adhikari	2022	62	943-952
1184.	Scientific Reports	Design and development of non-magnetic hierarchical actuator powered by shape memory alloy based bipennate muscle	Kanhaiya Lal Chaurasiya, A Sri Harsha, Yashaswi Sinha, Bishakh Bhattacharya	2022	12	10758: 1-15
1185.	Mechanics Research Communications	Bandgap merging with double-negative metabeam	Ankur Dwivedi, Arnab Banerjee, Sondipon Adhikari, Bishakh Bhattacharya	2022	122	103889: 1-7

1186.	ASME Journal of Mechanisms and Robotics	Energy-Based Footstep Planning of Biped on Uneven Deformable Terrain Using Nonlinear Inverted Pendulum	Sunil Gora, Shakti S Gupta, Ashish Dutta	2023	15	054502:1-7
1187.	ASME Journal of Mechanisms and Robotics	Control of Pneumatic Artificial Muscle Actuated Two Degrees-of-Freedom Robot Using PD-Based Pulse Width Modulation Strategy With Feed-Forward Outer Control Loop	Sushant Maurya, Ashish Dutta	2023	15	031008: 10-10
1188.	IEEE Transactions on Human-Machine Systems	Detection of Dyslexic Children Using Machine Learning and Multimodal Hindi Language Eye-Gaze-Assisted Learning System	Yogesh Kumar Meena, Hubert Cecotti, Braj Bhushan, Ashish Dutta, Girijesh Prasad	2022	53	122-131
1189.	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	Comparative analysis on path planning of ATR using RRT*, PSO, and modified APF in CG-Space	Shubhi Katiyar, Ashish Dutta	2022	236	5663-5677
1190.	Robotica	Design of a variable stiffness index finger exoskeleton	Abhishek Attal, Ashish Dutta	2022	40	1151-1167
1191.	International Journal of Plasticity	Bidirectional transformation enabled improvement in strength and ductility of metastable	Roopam Jain, Venkitanarayanan Parameswaran, Krishanu Biswas, NP	2023	166	103633: 1-19

		Fe50Mn30Co10Cr10 complex concentrated alloy under dynamic deformation	Gurao			
1192.	International Journal of Impact Engineering	Evaluation of the mean crushing load of perforated circular tubes undergoing progressive collapse	Ravi Sankar Haridas, Arunim Joarder, Venkitanarayanan Parameswaran	2023	172	104419: 1-8
1193.	Journal of Rock Mechanics and Geotechnical Engineering	Rate-dependent mechanical behavior of jointed rock with an impersistent joint under different infill conditions	Sachin Kumar, Gaurav Tiwari, Venkitanarayanan Parameswaran, Arghya Das	2022	14	1380-1393
1194.	Computational Materials Science	Molecular dynamic study on modulating the interfacial thermal conductivity of carbon fiber/epoxy interfaces	Ankit Chauhan, Prabhat K Agnihotri, Sumit Basu	2023	217	111914: 1-9
1195.	International Journal of Solids and Structures	Numerical study of the compression of tightly constrained slender rods	Ankur Patel, Sumit Basu	2023	265-266	112107: 1-16
1196.	Structural and Multidisciplinary Optimization	An improved Material Mask Overlay Strategy for the desired discreteness of pressure-loaded	Prabhat Kumar, Anupam Saxena	2022	65	304: 1-19

		optimized topologies				
1197.	arXiv preprint arXiv:2208.10879	Normalized Field Product method for Topology Optimization	Nikhil Singh, Anupam Saxena	2022		1-22
1198.	Synthetic Metals	Fast decolorization of rhodamine-B dye using novel V <sub>2</sub> O <sub>5</sub> -rGO photocatalyst under solar irradiation	Pankaj Singh Chauhan, Kuldeep Kumar, Kirtiman Singh, Shantanu Bhattacharya	2022	283	116981
1199.	Journal of Applied Physics	Novel fractal acoustic metamaterials (FAMs) for multiple narrow-band near-perfect absorption	Sanjeet Kumar Singh, Om Prakash, Shantanu Bhattacharya	2022	132	035105
1200.	Journal of the Knowledge Economy	Rural Employment Through Product Development: Entrepreneurial Framework for Grassroot Level Innovations	Eshan Sadasivan, Kapil Manoharan, Mainak Das, Shantanu Bhattacharya	2022		1-21
1201.	Scientific Reports	Hybrid fractal acoustic metamaterials for low-frequency sound absorber based on cross mixed micro-perforated panel mounted over the fractals structure cavity	Sanjeet Kumar Singh, Om Prakash, Shantanu Bhattacharya	2022	12	20444
1202.	Journal of Clinical Virology Plus	Performance evaluation of a rapid dengue NS1 antigen	Mohammed Rashiku, Kapil	2023	3	100144



		lateral flow immunoassay test with reference to dengue NS1 antigen-capture ELISA	Manoharan, Nitiksha Rani, Jasmine Samal, Ekta Gupta, Shantanu Bhattacharya			
1203.	Materials and Manufacturing Processes	Evaluating electrochemical machining capabilities for Industrial Applications: A Review  doi: 10.1080/10426914.2023.2219304	Jitendra Singh, Rishi Kant, Anutosh Nimesh, Nitish Katiyar, Shantanu Bhattacharya	2023		1-42
1204.	Mathematics and Mechanics of Solids	Indentation of a periodically layered, elastic half-space by a rigid sphere.	D. Sachan, I. Sharma, T. Muthukumar	2022		
1205.	Int. J. Mech. Sci.	Transient planar dynamics of cable-payload systems using geometrically exact beam theory	AR Dehadrai, I Sharma, SS Gupta	2022	224	
1206.	Proceedings of the Royal Society A	Regolith flow on top-shaped asteroids	D Banik, K Gaurav, I Sharma	2022	478	20210972
1207.	International Journal of Solids and Structures	Indentation of geometrically exact beams	Deepak Sachan, Ishan Sharma, T Muthukumar	2022	254	111905
1208.	Zeitschrift für angewandte Mathematik und Physik	Axisymmetric indentation of a periodically layered, viscoelastic half-	D. Sachan, I. Sharma, T. Muthukumar	2022	73	222

		space				
1209.	Powder Technology	Axial segregation of granular mixtures in laterally shaken multi-trapezium channels	MI Ansari, A Bhateja, I Sharma	2023	417	118265
1210.	J. Fluid Mechanics	Equilibrium shapes of liquid drops on pre-stretched nonlinear elastic membranes	V Nair, I Sharma, V Shankar	2023	961	A28
1211.	Physics of Fluids	Equilibria of liquid drops on pre-stretched, nonlinear elastic membranes through a variational approach	V Nair, I Sharma	2023	35	047111
1212.	International Journal of Solids and Structures	Indentation of geometrically exact adhesive beams	K Suryanarayanan, T Bhuvana, I Sharma, SL Das	2023		
1213.	Microactuators, Microsensors and Micromechanisms: MAMM 2022	Compliant Finger Gripper Based on Topology Optimization	Anupam Saxena	2022	126	31
1214.	Structural and Multidisciplinary Optimization	An improved Material Mask Overlay Strategy for the desired discreteness of pressure-loaded optimized topologies	Prabhat Kumar, Anupam Saxena	2022	65(10)	304
1215.	arXiv preprint arXiv:2208.10879	Normalized Field Product method for Topology	Nikhil Singh, Anupam Saxena	2022	-	1-12

		Optimization				
1216.	arXiv e-prints	Compliant Constant Output/Input Force Mechanisms: Topology Optimization with Contact	BVS Nagendra Reddy, Vitthal Manohar Khatik, Burkhard Corves, Anupam Saxena	2022		arXiv: 2201.01538
1217.	Experimental Heat Transfer	Investigation of the transition of natural convective flow of water in a differentially heated cubic enclosure	Omprakash S Bharti, Arun K Saha, Malay K Das	2022		1-28
1218.	Journal of Thermal Science and Engineering Applications	Sensitivity analysis of schlieren-particle image velocimetry system for simultaneous measurement of flow and temperature field of a free convective flow inside a cubic cavity	Omprakash S Bharti, Arun K Saha, Malay K Das	2022	14	-
1219.	Bulletin of the American Physical Society	Investigation of Separated and Reattached Flow on a Blunt Flat Plate	Arun Saha	2022	-	-
1220.	Journal of Flow Visualization and Image Processing	PREFACE: VISUALIZATION OF COMPLEX FLOW STRUCTURES IN JETS AND WAKES	Arun K Saha, Krishnamurthy Muralidhar	2023	30	

1221.	Physics of Fluids	Characterization of the turbulent field behavior of an elevated jet-in crossflow investigated using direct numerical simulation	Sachidananda Behera, Basheer A Khan, Arun K Saha	2023	35	
1222.	Physics of Fluids	Characterization of the turbulent field behavior of an elevated jet-in crossflow investigated using direct numerical simulation	Sachidananda Behera, Basheer A Khan, Arun K Saha	2023	35	
1223.	Physics of Fluids	Effect of cube spacings on the three-dimensional flow structure over an array of wall-mounted cube	Basheer Ahmad Khan, Arun K. Saha	2023	35	055111
1224.	Journal of Thermal Science and Engineering Applications	Numerical study of heat transfer during oblique impact of a cold drop on a heated liquid film	Swati Singh, Arun K Saha	2023	15	050907
1225.	Physical Review Fluids	Effect of surface tension gradients on coalescence dynamics of two unequal-sized drops	Swati Singh, Arun K Saha	2023	8	053604
1226.	Journal of the Mechanics and Physics of Solids	Stiffness and toughness of soft, liquid reinforced composites	M Rashid Zafar, Sumit Basu	2022	159	104714
1227.	Journal of Rock Mechanics and Geotechnical	Rate-dependent mechanical behavior of jointed rock with	Sachin Kumar, Gaurav	2022	14	1380-1393

	Engineering	an impersistent joint under different infill conditions	Tiwari, Venkitanarayan Parameswaran, Arghya Das			
1228.	International Journal of Impact Engineering	Evaluation of the mean crushing load of perforated circular tubes undergoing progressive collapse	Ravi Sankar Haridas, Arunim Joarder, Venkitanarayan Parameswaran	2023	172	104419
1229.	Robotica	Energy optimal motion planning of a 14-DOF biped robot on 3D terrain using a new speed function incorporating biped dynamics and terrain geometry	Jitendra Kumar, Ashish Dutta	2022	40	250-278
1230.	Robotica	Dynamic path planning over CG-Space of 10DOF Rover with static and randomly moving obstacles using RRT* rewiring	Shubhi Katiyar, Ashish Dutta	2022	40	2610-2659
1231.	Journal of Computational and Nonlinear Dynamics	Semi-Implicit Integration and Data-Driven Model Order Reduction in Structural Dynamics With Hysteresis	Bidhayak Goswami and Anindya Chatterjee	2023	18(5)	051002
1232.	Journal of Dynamic Systems, Measurement and Control	LQR for Delayed Systems Using the Hamiltonian Approach and Exact Closed-Loop Poles	J Shaik, CP Vyasrayani, and Anindya Chatterjee	2023	In press	

		for First-Order Systems				
1233.	Nonlinear Dynamics	Vibration stabilization by a nonresonant secondary limit cycle oscillator	Dhananjay D Tandel, Pankaj Wahi, and Anindya Chatterjee	2023	111(7)	6043-6062
1234.	Journal of Dynamic Systems, Measurement, and Control	Balancing a Stick with Eyes Shut: Inverted Pendulum on a Cart without Angle Measurement	Bidhayak Goswami and Anindya Chatterjee	2023	In press	
1235.	International Journal of Solids and Structures	Indentation of geometrically exact adhesive beams	K Suryanarayanan, T Bhuvana, I Sharma, SL Das	2023	In press	
1236.	Physics of Fluids	Equilibria of liquid drops on pre-stretched, nonlinear elastic membranes through a variational approach	V Nair, I Sharma	2023	35	047111
1237.	Powder Technology	Axial segregation of granular mixtures in laterally shaken multi-trapezium channels	MI Ansari, A Bhateja, I Sharma	2023	417	118265
1238.	Zeitschrift für angewandte Mathematik und Physik	Axisymmetric indentation of a periodically layered, viscoelastic half-space	D. Sachan, I. Sharma, T. Muthukumar	2022	73	222
1239.	International Journal of Solids and Structures	Indentation of geometrically exact beams	K Suryanarayanan, I Sharma, S L Das	2022	254	111905

1240.	Proceedings of the Royal Society A	Regolith flow on top-shaped asteroids	D Banik, K Gaurav, I Sharma	2022	478	20210972
1241.	○ <i>International Journal of Mechanical Sciences</i>	Transient planar dynamics of cable-payload systems using geometrically exact beam theory	AR Dehadrai, I Sharma, SS Gupta	2022	224	107271
1242.	○ <i>Mathematics and Mechanics of Solids</i>	Indentation of a periodically layered, elastic half-space by a rigid sphere.	D. Sachan, I. Sharma, T. Muthukumar	2022	27	
1243.	Journal of Clinical Virology Plus	Performance evaluation of a rapid dengue NS1 antigen lateral flow immunoassay test with reference to dengue NS1 antigen-capture ELISA	Mohammed Rashiku, Kapil Manoharan, Nitiksha Rani, Jasmine Samal, Ekta Gupta, Shantanu Bhattacharya	2023/6/1	3	100144
1244.	INTER-NOISE and NOISE-CON Congress and Conference Proceedings	Flat Fresnel-spiral acoustic metamaterials composed of several arms ventilated metamaterials for simultaneous broadband sound absorption and air circulation	Shantanu Bhattacharya	2023	265	408-416

1245.	Scientific Reports	Hybrid fractal acoustic metamaterials for low-frequency sound absorber based on cross mixed micro-perforated panel mounted over the fractals structure cavity	Sanjeet Kumar Singh, Om Prakash, Shantanu Bhattacharya	2022	12	20444
1246.	Journal of the Knowledge Economy	Rural Employment Through Product Development: Entrepreneurial Framework for Grassroot Level Innovations	Eshan Sadasivan, Kapil Manoharan, Mainak Das, Shantanu Bhattacharya	2022		1-21
1247.	Journal of Applied Physics	Novel fractal acoustic metamaterials (FAMs) for multiple narrow-band near-perfect absorption	Sanjeet Kumar Singh, Om Prakash, Shantanu Bhattacharya	2022	132	035105
1248.	Journal of Nuclear Engineering and Radiation Science	Development and Calibration of an Indigenous Spectroscopic System for Radiation Portal Monitor Application	Akanchha Fnu, Vikesh Singh Bhadouria, Arun Kumar Pandey, Pankaj Wahi, Niraj Sinha, Prabhat Munshi	2023	9	032003
1249.	IEEE Transactions on Automatic Control	Global Reachability of Heterogeneous Multi-Agent Systems under Collaborative Interaction Topology and Unknown	Souradip De, Soumya Ranjan Sahoo, Pankaj Wahi	2023	In press	



		Delays				
1250.	Journal of Vibration and Control	Adaptive control to actively damp bistabilities in highly interrupted turning processes using a hardware-in-the-loop simulator	Govind N Sahu, Mohit Law, Pankaj Wahi	2023	29	1141-1150
1251.	Journal of Sound and Vibration	Influence of bushing flexibility and its constitutive behavior on the performance of suspension system	Vaibhav Dhar Dwivedi, Pankaj Wahi	2022	538	117240
1252.	Journal of Applied Physics	Stability of thermally bistable states and their switching in superconducting weak link	Sourav Biswas, Pankaj Wahi, Anjan Kumar Gupta	2022	132	144302
1253.	Current Science	Preliminary observations on computerized tomography-powered fractal dimension-based technique to differentiate between coprolites and body fossils.	Shubhabrata Sarkar, Sanjukta Chakravorti, Sudhir Kumar Chaudhary, Dhurjati P Sengupta, Pankaj Wahi, Prabhat Munshi	2022	123	933-938
1254.	Journal of Vibration Engineering & Technologies	Damped Chatter Resistant Boring Bar Integrated with an Absorber Working in Conjunction with an Eddy Current Damper	Arjun Patel, Ajay Yadav, Mohit Law, Bishakh Bhattacharya, Pankaj Wahi	2022		1-12

1255.	arXiv preprint arXiv:2208.12964	Uniformly Sampled Polar and Cylindrical Grid Approach for 2D, 3D Image Reconstruction using Algebraic Algorithm	Sudhir Kumar Chaudhary, Pankaj Wahi, Prabhat Munshi	2022		
1256.	Journal of Sound and Vibration	On the stability of thin-walled circular cylindrical shells under static and periodic radial loading	Anish Kumar, Sovan Lal Das, Pankaj Wahi, Krzysztof Kamil Żur	2022	527	116872
1257.	Journal of Vibration Engineering & Technologies	Adaptive Model-Free Gain Tuning for Active Damping of Machine Tool Vibrations	Govind N Sahu, Pankaj Deora, Mohit Law, Pankaj Wahi	2022	10	2799–2808
1258.	IEEE Transactions on Instrumentation and Measurement	Super resolution ct imaging using higher order total variation (hotv) technique	Shubhabrata Sarkar, Pankaj Wahi, Prabhat Munshi	2022	71	1-8
1259.	Journal of Sound and Vibration	Optimally tuning an absorber for a chatter-resistant rotating slender milling tool holder	Arjun Patel, Devang kumar Talaviya, Mohit Law, Pankaj Wahi	2022	520	116594
1260.	Journal of Sound and Vibration	<i>Modeling of geometrical stiffening in a rotating blade—A review</i>	Hoskoti L.;Gupta S.S.;Sucheendran M.M.	2023	548	117526
1261.	Journal of Mechanisms and Robotics	<i>Energy-Based Footstep Planning of Biped on Uneven Deformable Terrain Using Nonlinear Inverted</i>	Gora S.;Gupta S.S.;Dutta A.	2023	15	054502

		<i>Pendulum</i>				
1262.	International Journal of Mechanical Sciences	<i>Transient planar dynamics of cable-payload systems using geometrically exact beam theory</i>	Dehadrai A.R.;Sharma I.;Gupta S.S.	2022	224	107271
1263.	IFAC-PapersOnLine	<i>Path Tracking Strategy for Quadrupe d Robots Using a Hierarchical Framework</i>	Manu A.;Gupta S.S.;Kothari M.	2022	55	192-197
1264.	Carbon Trends	<i>Helical single-walled carbon nanotubes under mechanical and electrostatic loading</i>	Mokhalingam A.;Gupta S.S	2022	9	100204
1265.	AIAA Journa	<i>Rotation-Induced Geometrical Stiffening of a Tapered, Pretwisted Blade</i>	Hoskoti L.;Gupta S.S.;Sucheendran M.M.	2022	60	5462-5488
1266.	Ceramics International	<i>Fabrication and characterization of additively manufactured CNT-bioglass composite scaffolds coated with cellulose nanowhiskers for</i>	Kumar A.;Dixit K.;Sinha N.	2023	49	17639-17649

		<i>bone tissue engineering</i>				
1267.	Journal of Molecular Liquids	<i>PVDF/BNNSs nanocomposite membrane for simultaneous removal of Tetracycline and Ofloxacin from water</i>	Awasthi P.;Bangari R.S.;Sinha N.	2023	370	120970
1268.	Biofabrication	<i>Closed-loop vasculature network design for bioprinting large, solid tissue scaffolds</i>	Kumar H.;Dixit K.;Sharma R.;MacDonald M.E.;Sinha N.;Kim K.	2023	15	
1269.	Solid State Communications	<i>Comparative study on adsorption of volatile organic compounds on graphene, boron nitride and boron carbon nitride nanosheets</i>	Dindorkar S.S.;Sinha N.;Yadav A.	2023	359	115021
1270.	Separation and Purification Technology	<i>Synthesis of multi-layered nanoswabs for simultaneous and expeditious removal of antibiotic-resistant bacteria,</i>	Raichur A.;Sinha N.	2023	308	122830

		<i>dyes, and antibiotics from wastewater</i>				
1271.	Lasers in Manufacturing and Materials Processing	<i>Effect of Build and Scan Direction on Tensile Properties of Selective Laser Melted SS316L Alloy</i>	Kumar B.S.B.;Yadav D.K.;Jain R.;Gupta N.;Gurao N.P.;Sinha N.	2023	10	330-352
1272.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	<i>Experimental and theoretical analysis of simultaneous removal of methylene blue and tetracycline using boron nitride nanosheets as adsorbent</i>	Bangari R.S.;Yadav A.;Awasthi P.;Sinha N.	2022	634	127943
1273.	Ceramics International	<i>A sol-gel based bioactive glass coating on laser textured 316L stainless steel substrate for enhanced biocompatibility and anti-corrosion properties</i>	Singh P.P.;Dixit K.;Sinha N.	2022	48	18704-18715
1274.	Journal of Water Process Engineering	<i>Simultaneous adsorption of methylene blue and</i>	Yadav A.;Dindorkar S.S.;Ramiseti S.B.;Sinha	2022	46	102653

		<i>arsenic on graphene, boron nitride and boron carbon nitride nanosheets: Insights from molecular simulations</i>	N.			
1275.	Encyclopedia of Materials: Plastics and Polymers	<i>Organic Polymers for Drinking Water Purification</i>	Yadav A.;Sinha N.	2022	2	997-1003
1276.	Environmental Science: Nano	<i>Eco-friendly multi-layered nanoswabs for sensitive removal of antibiotic-resistant bacteria from drinking water sources and their molecular biology studies</i>	Raichur A.;Sinha N.	2022		
1277.	Chemical Physics	<i>Insights on the enhanced nitrogen dioxide sensing using doped boron nitride nanosheets through the quantum chemical studies</i>	Yadav A.;Dindorkar S.S.;Sinha N.	2022	562	111629
1278.	Energy for Sustainable Development	<i>Comparing hut-shaped-east-west array for fixed</i>	V Vineesh, Jishnu Bhattacharya	2022	70	225-238

		<i>photovoltaic panels against conventional equator facing parallel rows for power output per unit field area</i>				
1279.	Solar Energy	<i>An accurate and cheaper method of estimating shading and blocking losses in a heliostat field through efficient filtering, removal of double counting and parallel plane assumption</i>	Manish Raj, Jishnu Bhattacharya	2022	243	469-482
1280.	THERMAL SCIENCE AND ENGINEERING PROGRESS	<i>Computational prediction of significant efficiency gain through multi-tank modular heat storage for solar thermal systems with variable-temperature input profile</i>	Manmeet Singh, Jishnu Bhattacharya, Manoj Kumar Sharma	2022	29	
1281.	Thermal Science and Engineering Progress	<i>Corrigendum to “Computational prediction of significant efficiency gain through multi-tank modular heat storage for solar</i>	Manmeet Singh, Manoj Kumar Sharma, Jishnu Bhattacharya	2022	29	101236

		<i>thermal systems with variable-temperature input</i>				
1282.	Sustainable Energy Technologies and Assessments	<i>Finding optimal operating point for advection-cooled concentrated photovoltaic system</i>	Manoj Kumar Sharma, Jishnu Bhattacharya	2022	49	101769
1283.	Energy	<i>An experimental investigation of high-ash coal gasification in a pilot-scale bubbling fluidized bed reactor</i>	Saurabh Gupta, Santanu De	2022	244	122868
1284.	Combustion and Flame	<i>A fully dynamic mixing time-scale model for the sparse Lagrangian multiple mapping conditioning approach</i>	Eshan Sharma, Santanu De, Matthew J Cleary	2022	238	111872
1285.	arXiv preprint arXiv:2305.17379	<i>Generalizing Parametrization Invariance in the Calculus of Variations</i>	Sanjay Dharmavaram, Basant Lal Sharma	2023	Oin pre4ss	
1286.	Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences	<i>wave across crack-tip in a lattice model</i>	BL Sharma	2022	380	
1287.	Additive Manufacturing	<i>An Intelligent Scanning Strategy</i>	Chuan He, Keval S.	2023	64	103427



		(SmartScan) for Improved Part Quality in Multi-Laser PBF Additive Manufacturing	Ramani, Chinedum E. Okwudire			
1288.	Langmuir	On the generality of evaporative crystal lift-off on heated hydrophobic substrates	Pranjal Agrawal, Virkeshwar Kumar, Samantha McBride, and Susmita Dash	2023	39	7578–7589
1289.	Langmuir	Patterns during evaporative crystallization of a saline droplet	Virkeshwar Kumar, Susmita Dash	2022	38	10265–10273
1290.	Journal of Materials Chemistry A	Cobalt(II)-bridged triphenylamine and terpyridine-based donor-acceptor coordination polymer as an efficient trifunctional electrocatalyst	Sugandha Singh, Manas K Ghorai, and Kamal K. Kar	2023	11	8003-8012 <a href="https://doi.org/10.1039/D2TA08759F">https://doi.org/10.1039/D2TA08759F</a>
1291.	Journal of Materials Chemistry A	Outer Cover for Cobalt(II)-bridged triphenylamine and terpyridine-based donor-acceptor coordination polymer as an efficient trifunctional electrocatalys	Sugandha Singh, Manas K Ghorai, and Kamal K. Kar	2023	11	<a href="https://doi.org/10.1039/D3TA90074F">https://doi.org/10.1039/D3TA90074F</a>
1292.	Advances in Colloid and Interface Science	A review on multi-synergistic transition metal oxide systems towards arsenic treatment: Near molecular analysis of	Yaswanth K. Penke and Kamal K Kar	2023	314	102859 <a href="https://doi.org/10.1016/j.cis.2023.102859">https://doi.org/10.1016/j.cis.2023.102859</a>

		surface-complexation (synchrotron studies/modeling tools)				
1293.	Applied Materials Today	Enhanced performance with ionic and organic redox-couple electrolytes on MTMO anchored CQD nanocomposites and renewable carbon-based asymmetric flexible supercapacitor	Prerna Sinha and Kamal K Kar	2023	32	101806 <a href="https://doi.org/10.1016/j.apmt.2023.101806">https://doi.org/10.1016/j.apmt.2023.101806</a>
1294.	Transactions of the ASME, Journal of Manufacturing Science and Engineering	Development of novel low-cost sustainable abrasive flow finishing media from ground tire rubber and its performance evaluation	Irfan Ahmad Ansari, Kamal K Kar, and J. Ramkumar	2023	135	041002 <a href="https://doi.org/10.1115/1.4055963">https://doi.org/10.1115/1.4055963</a>
1295.	Environmental Science and Pollution Research (ESPR)	Anti-bacterial and arsenic remediation insights in aqueous systems onto heterogeneous metal oxide (Cu <sub>0.52</sub> Al <sub>0.1</sub> Fe <sub>0.47</sub> O <sub>4</sub> )/rGO Hybrid: An Approach towards Airborne Microbial Degradation	Yaswanth. K. Penke, Prem A. Murugan, Iram Malik, Saravanan Matheshwaran, Janakarajan Ramkumar, and Kamal. K. Kar	2023	30	811-822 <a href="https://doi.org/10.1007/s11356-022-22169-8">https://doi.org/10.1007/s11356-022-22169-8</a>
1296.	ACS Applied Nano Materials	Flexible, stretchable, and thin films based on functionalized carbon nanofiber/graphene	Jitendra Tahalyani, M. Jaleel Akhtar and Kamal K.	2023	-	<a href="https://doi.org/10.1021/acsnano.3c00215">https://doi.org/10.1021/acsnano.3c00215</a>

		nanostructures for electromagnetic interference shielding	Kar			
1297.	Advanced Materials Technologies	A flexible, redox-active, aqueous electrolyte-based asymmetric supercapacitor with high energy density based on keratin-derived renewable carbon	Prerna Sinha, Kamal K. Kar, and Amit K. Naskar	2022	07	2200133 <a href="https://doi.org/10.1002/admt.202200133">https://doi.org/10.1002/admt.202200133</a>
1298.	Materials Today Sustainability	Proliferation of pH-universal oxygen reduction performance by morphology modulation in NiS-N,S doped carbon microflowers	Alekha Tyagi and Kamal K. Kar	2022	17	100093 <a href="https://doi.org/10.1016/j.mtsust.2021.100093">https://doi.org/10.1016/j.mtsust.2021.100093</a>
1299.	Journal of Physics and Chemistry of Solids	Exploring the electrical behavior of iodine substituted $\text{CaCu}_3\text{Ti}_4\text{O}_{12-x}\text{I}_x$ by impedance and modulus spectroscopy	Bhoomika Yadav, Prerna Sinha, Kamal K. Kar, Manas K. Ghorai and Devendra Kumar	2022	164	110613 <a href="https://doi.org/10.1016/j.jpics.2022.110613">https://doi.org/10.1016/j.jpics.2022.110613</a>
1300.	Materials Chemistry and Physics	Impact of defect migration on electrical and dielectric properties in molten salt synthesized $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ and customizing the properties by compositional engineering with Mg	Bhoomika Yadav, Kamal K. Kar, Manas K. Ghorai, Devendra Kumar, and Dharmendra Yadav	2022	281	125893 <a href="https://doi.org/10.1016/j.matchemphys.2022.125893">https://doi.org/10.1016/j.matchemphys.2022.125893</a>

		doping				
1301.	Diamond and Related Materials	Mesoporous electrode from human hair and bio-based gel polymer electrolyte for high-performance supercapacitor	Kapil Dev Verma, Prerna Sinha, Manas K. Ghorai, and Kamal K. Kar	2022	123	108879 <a href="https://doi.org/10.1016/j.diamond.2022.108879">https://doi.org/10.1016/j.diamond.2022.108879</a>
1302.	Journal of Alloys and Compounds	Facile synthesis of Al substituted Cu-Ferrite infused Reduced Graphene Oxide (rGO) nanohybrid for improving microwave absorption at gigahertz frequencies	Sandeep Kumar Singh, Yawanth K. Penke, J. Ramkumar, M. J. Akhtar, and Kamal K. Kar	2022	901	163659 <a href="https://doi.org/10.1016/j.jallcom.2022.163659">https://doi.org/10.1016/j.jallcom.2022.163659</a>
1303.	IEEE Transactions on Electromagnetic Compatibility	Graphene nanoplatelets-based lightweight flexible nanocomposites for EMI shielding application	Jitendra Tahalyani, M. Jaleel Akhtara Kamal K. Kar	2022	64	1674-1682 doi: 10.1109/TEM C.2022.3198646
1304.	Langmuir	Simulation study of electric double-layer capacitance of ordered carbon electrodes	Ravi Nigam, Kamal K. Kar	2022	38	12235-12247 <a href="https://doi.org/10.1021/acs.langmuir.2c01865">https://doi.org/10.1021/acs.langmuir.2c01865</a>
1305.	Materials Today Communications	Flexible, stretchable and lightweight polyurethane and graphene nanoplatelets nanocomposite for high performance EMI shielding	Jitendra Tahalyani, M. Jaleel Akhtara Kamal K. Kar	2022	33	104586 <a href="https://doi.org/10.1016/j.mtcomm.2022.104586">https://doi.org/10.1016/j.mtcomm.2022.104586</a>

		application				
1306.	Electrochimica Acta	A flexible and high energy density - hydrous RuO <sub>2</sub> and keratin-derived renewable carbon composite-based asymmetric supercapacitor in redox-mediated electrolytes	Prerna Sinha and Kamal K. Kar	2022	435	141368 <a href="https://doi.org/10.1016/j.electacta.2022.141368">https://doi.org/10.1016/j.electacta.2022.141368</a>
1307.	Ceramics International	Exploring the dielectric and conduction characteristics of iodine substituted CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> I <sub>x</sub>	Bhoomika Yadav, Kamal K. Kar, Manas K. Ghorai, and Devendra Kumar	2022	49	26932-6945 <a href="https://doi.org/10.1016/j.ceramint.2022.10.289">https://doi.org/10.1016/j.ceramint.2022.10.289</a>
1308.	Journal of Energy Storage	Value-added functional carbon for potential electrodes and its validation	Prerna Sinha, Mukesh Kumar, Ravi Nigam, Hiroyuki Yokoi, and Kamal K. Kar	2022	56	106116 <a href="https://doi.org/10.1016/j.est.2022.106116">https://doi.org/10.1016/j.est.2022.106116</a>
1309.	preprint	Per-/poly-fluoroalkyl substances (PFASs) treatment and mechanistic insights: Photo-catalyst and photo-electro-catalyst materials application	Yaswanth K. Penke and Kamal K. Kar	2022	-	<a href="https://chemrxiv.org">https://chemrxiv.org</a> 10.26434/chemrxiv-2022-rljqn
1310.	IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	Design and development of carbon nanofiber based lightweight flexible	Jitendra Tahalyani, M. Jaleel Akhtar, Kamal K.	2022	-	1228-1233 <a href="https://doi.org/10.1109/MAPCON56011.20">https://doi.org/10.1109/MAPCON56011.20</a>

		nanocomposite structure for EMI shielding application	Kar, and Vishal Kumar Chakradhary			22.10047143
1311.	Energy Proceedings	Ni-Co oxide anchored carbon dots for high-performance asymmetric supercapacitor	Prerna Sinha and Kamal K Kar	2022	-	Bind:2004, Sider: 2965
1312.	Combustion and Flame	MMC-LES of spray combustion: Analysis of mixing timescales and flame structure	Eshan Sharma, Santanu De	2023		Vol 251, pp: 112708

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1313.	Scientific Reports	Design, fabrication and testing of 3D printed smartphone-based device for collection of intrinsic fluorescence from human cervix	Shivam Shukla, Amar Nath Sah, Diganta Hatiboruah, Shikha Ahirwar, Pabitra Nath and Asima Pradhan	2022	12	1-9
1314.	Journal of Fluorescence	In-vivo testing of oral muscosal lesions with an in-house developed portable imaging device and comparison with	Amar Nath Sah, Pavan Kumar and Asima Pradhan	2023		1-9

		spectroscopy results				
1315.	Physics Review D	Conditional normalizing flow for Markov chain Monte Carlo sampling in the critical region of lattice field theory	A. Singha, D. Chakrabarti, and V. Arora	2023	107	014512
1316.	Physical Review D	Azimuthal asymmetries in $J/\psi$ -photon production at the EIC	D. Chakrabarti, R. Kishore, A. Mukherjee, and S. Rajesh	2023	107	014008
1317.	Physical Review D	Polarized gluon distribution in the proton from holographic light-front QCD	B. Gurjar, D. Chakrabarti and C. Mondal	2023	107	054013
1318.	Physical Review D	Sivers and Boer-Mulders TMDs of the proton in a light-front quark-diquark model	B. Gurjar, D. Chakrabarti, and C. Mondal	2022	106	114027

1319.	Physical Review D	Gravitational form factors and mechanical properties of the proton: Connections between distributions in 2D and 3D	P. Choudhary, B. Gurjar, D. Chakrabarti, and A. Mukherjee	2022	106	076004
1320.	SciPost Physics Core	Generative learning for the problem of critical slowing down in lattice Gross-Neveu model	A. Singha, D. Chakrabarti, and V. Arora	2022	5	052
1321.	Asian Journal of Physics	Far-detuned parametric sidebands via multiple intermodal four-wave mixing in communication fiber	Sudip K. Chatterjee and R. Vijaya	2022	31	465-473
1322.	ISSS Journal of Micro and Smart systems	Photonic crystal based heterostructures in the control of emission and diffraction features	Govind Kumar, Arpita Haldar and R. Vijaya	2022	11	81-112
1323.	Optical and Quantum Electronics	Multiband, Continuously Tunable Filter in 100-300 GHz Range Using a Two-Layer Cavity of Perforated, All-Dielectric Metasurfaces	Garima Joshi and R. Vijaya	2023	55	109



1324.	Optical and Quantum Electronics	Mixed line broadening in the saturable absorption of erbium-doped fiber	Deeksha Jachpure and R. Vijaya	2023	55	113
1325.	Advanced Optical Materials	Design and Polarization Control of the Modal Splitting in Hybrid Anisotropic Nanocavities	Aniket Patra, Renuka Devi Pothuraju, Dhananjay De, Vincenzo Caligiuri, R. Vijaya, Antonio De Luca and Roman Krahn	2023	-	2202876
1326.	Plasma Processes and Polymers	Improving electrochemical sensitivity of screen-printed carbon electrodes by atmospheric pressure plasma jet treatment and electrochemical detection of dopamine	Kalyani Barman, Sunil Luhar, Ramkrishna Rane, Divesh N. Srivastava, Sudhir K. Nema and Sudeep Bhattacharjee	2022	20	2200161-1 to 2200161-13
1327.	Journal of Applied Physics	Comparative study on atomically heterogeneous surface with conical arrays of field emitters generated	Jayashree Majumdar and Sudeep Bhattacharjee	2022	132	083304-1 to 083304-16

		using plasma based low-energy ion beams				
1328.	Chemical Thermodynamics and Thermal Analysis	Temperature guided behavioral transitions in confined helium: gas-wall interaction effects on dynamics and transport in the cryogenic limit	Swati Swagatika Mishra and Sudeep Bhattacharjee	2022	7	100073-1 to 100073-13
1329.	Journal of Applied Physics	Time-domain simulation of charged particle diffraction by an electrostatically biased grating: transmission tunability and shaping of the quantum point contact for protons	Sushanta Barman and Sudeep Bhattacharjee	2022	132	034401-1 to 034401-12
1330.	Reviews of Modern Plasma Physics	Physics of plasmas confined by a dipole magnet: insights from compact experiments driven at steady state	Sudeep Bhattacharjee , Anuj Ram Baitha, Ayesha Nanda, Sargam Hunjan and Sayak Bhattacharjee	2022	6	16-1 to 16-46

1331.	Applied Physics A	Optical, structural, and electrical properties of modified Indium-tin-oxide (ITO) films on glass surface by low energy ion implantation	Dipak Bhowmik and Sudeep Bhattacharjee	2022	128	605-1 to 605-10
1332.	Physics of Plasmas	Temperature anisotropy governed electrical conductivity tensor in a steady state dipole plasma: spatially resolved experiments and modeling	Ayesha Nanda and Sudeep Bhattacharjee	2022	29	062105-1 to 062105-12
1333.	Plasma Research Express	Experimental realization of nonlinear demagnification in plasma-based charged particle optics	Sushanta Barman, Sanjeev K. Maurya and Sudeep Bhattacharjee	2022	4	025003-1 to 025003-8
1334.	Optics Continuum	Stability of Al and Ag metallic thin film mirrors in a space environment under the implantation of low energy helium ions	Krishn Pal Singh and Sudeep Bhattacharjee	2022	1	4-660 to 4-673
1335.	Phys. Rev. Lett.	Fractionalization and topology in	Sunghoon Kim, Adhip	2023	130	026202-1 to 026202-6

		amorphous electronic solids	Agarwala, Debanjan Chowdhury			
1336.	Resonance	Exploring ideas in topological quantum phenomena-I	Anantha Hegde, Adarsh Kumar, Adhip Agarwala, Bhaskaran Muralidharan	2022	27 (10)	1761-1776
1337.	Resonance 27	Exploring ideas in topological quantum phenomena-II	Anantha Hegde, Adarsh Kumar, Adhip Agarwala, Bhaskaran Muralidharan	2022	27 (11)	1913-1921
1338.	Resonance 27	Exploring ideas in topological quantum phenomena-III	Anantha Hegde, Adarsh Kumar, Adhip Agarwala, Bhaskaran Muralidharan	2022	27 (12)	2139-2151
1339.	Resonance	Exploring ideas in topological quantum phenomena-IV	Anantha Hegde, Adarsh Kumar, Adhip Agarwala,	2023	28 (1)	55-70

			Bhaskaran Muralidharan			
1340.	Resonance	Exploring ideas in topological quantum phenomena-V	Anantha Hegde, Adarsh Kumar, Adhip Agarwala, Bhaskaran Muralidharan	2023	28 (3)	371-388
1341.	Indian Journal of Physics	Structural changes in bulk MoS2 as a consequence of 1.5 MeV proton micro beam irradiation	R Kumar, S Singh, B Paul, A H Kelkar and N Shukla	2023	<a href="https://doi.org/10.1007/s12648-023-02738-4">https://doi.org/10.1007/s12648-023-02738-4</a>	1-5
1342.	Journal of Alloys and Compounds 951, 169882	Strain induced structural changes and magnetic ordering in thin MoS2 flakes as a consequence of 1.5 MeV proton ion irradiation	R Kumar, A H Kelkar, R Singhal, VG Sathe, RJ Choudhary, N Shukla	2023	951	169882 (1-8)
1343.	MDPI - Atoms	Fragmentation Dynamics of CO <sub>2</sub> <sup>q+</sup> (q= 2, 3) in Collisions with 1 MeV Proton	A Duley, AH Kelkar	2023	11	75 (1-16)
1344.	Review of Scientific Instruments	Design and characterization of a recoil ion momentum	A Duley, R Tyagi, SB Bari, A H Kelkar	2022	93	113308 (1-14)

		spectrometer for investigating molecular fragmentation dynamics upon MeV energy ion impact ionization				
1345.	The European Physical Journal D 76 (162), 9	Fragmentation dynamics of diatomic molecules under proton impact: Kinetic energy release spectra of $\text{CO}^{\{q+\}}$ and $\text{NO}^{\{q+\}}$ ( $q= 2, 3$ ) molecular ions	A Duley, NN Dutta, C Bagdia, LC Tribedi, CP Safvan, AH Kelkar	2022	76	162 (1-9)
1346.	Thin Solid Films 755, 139350	Tunable room temperature ferromagnetism in fullerene thin film induced by 1 MeV Proton microbeam irradiation	Ram Kumar, Krishna Mohan, Amala Augusthy, Sandeep Bari, Anukul P Parhi, Aditya H Kelkar, Sujay Chakravarty, Neeraj Shukla	2022	755	139350 (1-7)
1347.	Journal of Electron Spectroscopy and Related Phenomena	K-LL Auger electron angular distribution and absolute cross section measurement	AH Kelkar, LC Tribedi	2022	258	147220 (1-5)

		upon keV energy electron impact ionization of CH <sub>4</sub> , N <sub>2</sub> and Ne				
1348.	J. Appl. Phys.	<i>Stability of thermally bistable states and their switching in superconducting weak link</i>	Sourav Biswas, Pankaj Wahi, and Anjan K. Gupta	2022	132	144302
1349.	Phys. Lett. A	<i>A thermal model with AC Josephson effect for a shunted superconducting weak-link</i>	Sourav Biswas and Anjan K. Gupta	2022	450	128372
1350.	Am. J. Phys.	<i>Acoustic analog to multiple avoided- crossings in two coupled acoustic cavities</i>	Arjit Kant Gupta and Anjan K. Gupta	2022	90	494
1351.	Nature Communications	Perpendicular electric field drives Chern transitions and layer polarization changes in Hofstadter bands	Pratap Chandra Adak, Subhajit Sinha, Debasmita Giri, Dibya Kanti Mukherjee, Chandan, L. D. Varma Sangani, Surat Layek, Ayshi	2022	13	7781

			Mukherjee1, Kenji Watanabe, Takashi Taniguchi, H. A. Fertig, Arijit Kundu & Mandar M. Deshmukh			
1352.	Physical Review B Letters	Broken symmetry and competing orders in Weyl semimetal interfaces	Ritajit Kundu, H.A. Fertig, Arijit Kundu	2023	107	L041402
1353.	Physical Review B Letters	Schwinger-Boson mean-field study of spin-1/2 $J_1$ - $J_2$ - $J_\chi$ model in honeycomb lattice: thermal Hall signature	Rohit Mukherjee, Ritajit Kundu, Avinash Singh, Arijit Kundu	2023	107	155122
1354.	Phys.: Condens. Matter	Spin-Orbit Coupling, Orbitally Entangled Antiferromagnetic Order, and Collective Spin- Orbital Excitations in Sr <sub>2</sub> VO <sub>4</sub>	Shubhajyoti Mohapatra, Dheeraj Kumar Singh, Rajyavardhan Ray, Sayandip Ghosh, and Avinash Singh	2023	35	045801
1355.	<i>Journal of the Physical Society of Japan</i>	Metallic Surface State in the Bulk	D. Ootsuki, A.	2022	91	114704



	<i>(J. Phys. Soc. Jpn.)</i>	Insulating Phase of $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$ ( $x = 0.06$ ) Studied by Photoemission Spectroscopy	Hishikawa, T. Ishida, D. Shibata, Y. Takasuka, M. Kitamura, K. Horiba, Y. Takagi, A. Yasui, C. Sow, S. Yonezawa, Y. Maeno, T. Yoshida			
1356.	<i>Nano Letters (Nano Lett.)</i>	Nanoscale Femtosecond Dynamics of Mott Insulator $(\text{Ca}_{0.99}\text{Sr}_{0.01})_2\text{RuO}_4$	J. R. A. Vitalone, A. J. Sternbach, B. A. Foutty, A. S. McLeod, C. Sow, D. Golez, F. Nakamura, Y. Maeno <i>et al.</i>	2022	22	5689
1357.	SciPost Physics	Fingerprints of freeze-in dark matter in an early matter-dominated era	Avik Banerjee and Debtosh Chowdhury	2022	13 (issue 2)	022(1-18)
1358.	Physical Review D	Wormholes and half wormholes under irrelevant deformation	Diptarka Das, Sridip Pal and Anurag Sarkar	2022	106	066014
1359.	Physical Review D	Memories of quenches in operator	Joydeep Chakraborty,	2022	106	105012

		mixing	Diptarka Das, Bidyut Dey, Suraj Prakash and Shakeel Ur Rahaman			
1360.	SciPost Physics Core	Scrambling under quench	Adith Sai Aramthottil, Diptarka Das, Suchetan Das and Bidyut Dey	2023	6	21
1361.	Phys. Lett. B	Covariant holographic negativity from the entanglement wedge in AdS3/CFT2	Jaydeep Kumar Basak, Himanshu Parihar, Boudhayan Paul, Gautam Sengupta	2022	834	137451
1362.	Eur.Phys.J.C	Odd entanglement entropy in Galilean conformal field theories and flat holography	Jaydeep Kumar Basak, Himanshu Chourasiya, Vinayak Raj & Gautam Sengupta	2022	82	1050
1363.	JHEP	Reflected entropy and entanglement negativity for holographic moving mirrors	Jaydeep Kumar Basak, Debarshi Basu, Vinay	2022	89	

			Malvimat, Himanshu Parihar & Gautam Sengupta			
1364.	Phys. Lett. B	Covariant holographic reflected entropy in AdS3/CFT2	Mir Afrasiar, Himanshu Chourasiya, Vinayak Raj, Gautam Sengupta	2022	835	137590
1365.	Eur.Phys.J.C	Reflected entropy in Galilean conformal field theories and flat holography	Jaydeep Kumar Basak, Himanshu Chourasiya, Vinayak Raj & Gautam Sengupta	2022	82	12
1366.	JHEP	Reflected entropy for communicating black holes. Part I. Karch-Randall braneworlds	Mir Afrasiar, Jaydeep Kumar Basak, Ashish Chandra & Gautam Sengupta	2023	02	203
1367.	ACS Photonics	Photon Correlations in Spectroscopy and Microscopy	G. Lubin, D. Oron, U. Rossman, R. Tenne, and V. J. Yallapragada	2022	9	2891 - 2904

1368.	Science	A tunable reflector enabling crustaceans to see but not be seen	K. Shavit, A. Wagner, L. Schertel, V. Farstey, D. Akkaynak, G. Zhang, A. Upcher, A. Sagi, V. J. Yallapragada, J. Haataja, and B. A. Palmer,	2023	379	695-700
1369.	Nature Photonics	Brilliant whiteness in shrimp from ultra-thin layers of birefringent nanospheres	T. Lemcoff, L. Alus, J. S. Haataja, A. Wagner, G. Zhang, M. J. Pavan, V. J. Yallapragada, S. Vignolini, D. Oron, L. Schertel, and B. A. Palmer,	2023	Not assigned yet	<a href="https://doi.org/10.1038/s41566-023-01182-4">https://doi.org/10.1038/s41566-023-01182-4</a>
1370.	Proceedings of the National Academy of Sciences (PNAS)	Lizards exploit the changing optics of developing chromatophore cells to switch defensive colors during ontogeny	G. Zhang, V. J. Yallapragada, T. Halperin, A. Wagner, M. Shemesh, A. Upcher, I. Pinkas, H. L. O. McClelland,	2023	120	e2215193120

			D. Hawlena, and B. A. Palmer			
1371.	Journal of Colloid and Interface Science	Dewetting of Non-polar Thin Lubricating Films Underneath Polar Liquid Drops on Slippery Surfaces	Bidisha Bhatt, Shivam Gupta, Meenaxi Sharma, Krishnacharya	2022	607	530-537
1372.	American Journal of Physics	A simple electronic circuit demonstrating Hopf bifurcation for an advanced undergraduate laboratory	Ishan Deo, Krishnacharya	2022	90	908-913
1373.	Soft Matter	Numerical and Experimental Investigation of Static Wetting Morphologies of Aqueous Drops on Lubricated Slippery Surfaces Using a Quasi-Static Approach	Shivam Gupta, Bidisha Bhatt, Meenaxi Sharma, Krishnacharya	2023	19	1164-1173
1374.	arXiv preprint	Effect of externally deposited nanoscale heterogeneities in thin polymer films on their adhesion behavior	Chiranjit Majhi, Bidisha Bhatt, Shivam Gupta,	2023		2301.01627

			Krishnacharya			
1375.	Advanced Materials Interfaces	Electric Field Driven Reversible Spinodal Dewetting of Thin Liquid Films on Slippery Surfaces	Bidisha Bhatt, Shivam Gupta, Vasudevan Sumathi, Sivasurender Chandran, Krishnacharya	2023	10	2202063
1376.		Frequency Dependent Dewetting of Thin Liquid Films Using External ac Electric Field	Bidisha Bhatt, Soumik Mukhopadhyay, Krishnacharya	2023		2305.07387
1377.	Journal of High Energy Physics	Ultra-relativistic bubbles from the simplest Higgs portal and their cosmological consequences	Aleksandr Azatov, Giulio Barni, Sabyasachi Chakraborty, Miguel Vanvlasselaer, Wen Yin.	2022	October 2022	Article No. 17
1378.	Journal of High Energy Physics	Displaced searches for light vector bosons at Belle II	Triparno Bandyopadhyay, Sabyasachi Chakraborty, Sokratis	2022	May 2022	Article No. 141

			Trifinopoulos			
1379.	Physical Review D (Letter)	Heavy QCD axions at Belle II: Displaced and Prompt signals	Emilie Bertholet, Sabyasachi Chakraborty, Vazha Loladze, Takemichi Okui, Abner Soffer, Kohsaku Tobioka	2022	April 2022	PRD 105, L071701
1380.	Journal of Physics: Complexity	Reward versus punishment: Averting the tragedy of the commons in eco-evolutionary dynamics	Samrat Sohel Mondal, Mayank Pathak, and Sagar Chakraborty	2022	3	025005
1381.	Physical Review E	Dynamic scaling in rotating turbulence: A shell model study	Shailendra K. Rathor, Sagar Chakraborty, and Samriddhi Sankar Ray	2022	105	L063102
1382.	Nonlinear Dynamics	Locating order- chaos-order transition in elastic pendulum	Anurag and Sagar Chakraborty	2022	110	37-53

1383.	Journal of Physics: Complexity	Coexistence of coordination and antcoordination in nonlinear public goods game	Arunava Patra, Vikash Kumar Dubey, and Sagar Chakraborty	2022	3	045006
1384.	Journal of Physics: Complexity	Eco-evolutionary games for harvesting self-renewing common resource: Effect of growing harvester population	Joy Das Bairagya, Samrat Sohel Mondal, Debashish Chowdhury, and Sagar Chakraborty	2023	4	025002
1385.	Journal of Applied Physics	Coexistence of different pinning mechanisms in Bi-2223 superconductor and its implications for using the material for high current applications	Md. Arif Ali, S.S. Banerjee	2022	131 (24),	243901-1 to 243901-15
1386.	IEEE Transactions on Applied Superconductivity	Demonstration of a three-dimensional current mapping technique around a superconductor in a prototype of a conventional superconducting fault current limiter	Md. Arif Ali, S.S. Banerjee	2022	32 (5)	1-11



1387.	Bulletin of Materials Science	Exploration of the role of disorder and the behaviour of the surface state in the three-dimensional topological insulator—Bi <sub>2</sub> Se <sub>3</sub>	A Jash, S Ghosh, A Bharathi, S.S. Banerjee	2022	45	1-16
1388.	Physical Review B	Imaging of current crowding effect across the metal to insulator transition in NdNiO <sub>3</sub> a thin film with thickness gradient	N Roy, S Ghosh, S Saha, GL Prajapati, R Dagar, DS Rana, SS Banerjee	2022	105 (8),	085143-1 to 085143-7
1389.	Phys. Rev. Research	Muon spin relaxation study of the layered kagome superconductor CsV <sub>3</sub> Sb <sub>5</sub>	Z. Shan, Pabitra K. Biswas*, Sudeep Kumar Ghosh*, T. Tula, A. Hillier, D. Adroja, S. Cottrell, Guang-Han Cao, Yi Liu, X. Xu, Yu Song, H. Yuan and Michael Smidman*	2022	4	
1390.	Phys. Rev. Research (Letters)	Time-Reversal Symmetry	Sudeep Kumar	2022	4	L012031

		Breaking Superconductivity in Three-Dimensional Dirac Semimetallic Silicides	Ghosh*, P. K. Biswas*, C. Xu, B. Li, J. Z. Zhao, A. D. Hillier and X. Xu*			
1391.	npj Quantum Materials	Spin-triplet superconductivity in Weyl nodal-line semimetals	T. Shang*, Sudeep Kumar Ghosh*, M. Smidman*, D. J. Gawryluk, C. Baines, A. Wang, W. Xie, Y. Chen, M. O. Ajeesh, M. Nicklas, E. Pomjakushina, M. Medarde, M. Shi, J. F. Annett, H. Yuan, J. Quintanilla* and T. Shiroka*	2022	7	35
1392.	Physical Review B	Magnetic structure and crystal field states of Pr <sub>2</sub> Pd <sub>3</sub> Ge <sub>5</sub> : $\mu$ SR and neutron scattering	VK Anand, DT Adroja, C Ritter, Debarchan Das,	2023	107 (10)	104412

		investigations	Harikrishnan S Nair, A Bhattacharyya, Leandro Liborio, Simone Sturniolo, FL Pratt, Duc Le, G Andre, Hubertus Luetkens, AD Hillier, Z Hossain			
1393.	Physical Review B	Electronic structure and physical properties of the candidate topological material GdAgGe	D Ram, J Singh, MK Hooda, O Pavlosiuk, V Kanchana, Z Hossain, DKaczorowski	2023	107 (8),	085137
1394.	Journal of Alloys and Compounds	Antiferromagnetism and mixed valency in the new Kondo lattice compound Ce <sub>3</sub> Rh <sub>4</sub> Sn <sub>7</sub>	P Opletal, E Duverger– Nédellec, K Miliyanchuk, S Malick, Z Hossain, J Custers	2022	927	166941
1395.	Physical Review B	Damping in yttrium iron garnet films	R Kumar, B Samantaray,	2022	106 (5),	054405

		with interface	S Das, K Lal, D Samal, Z Hossain			
1396.	Physical Review B	Large nonsaturating magnetoresistance, weak anti-localization, and non-trivial topological states in SrAl <sub>2</sub> Si <sub>2</sub>	S Malick, AB Sarkar, A Laha, M Anas, VK Malik, A Agarwal, Z Hossain, J Nayak	2022	106 (7)	075105
1397.	Physical Review B	Magnetotransport properties of the topological semimetal SrAgBi	MK Hooda, O Pavlosiuk, Z Hossain, D Kaczorowski	2022	106 (4),	045107
1398.	Journal of Physics: Condensed Matter	Resonant inelastic soft x-ray scattering on LaPt <sub>2</sub> Si <sub>2</sub>	J Hellsvik, A Ghosh, E Chatzigeorgiou, E Nocerino, Q Wang, K von Arx, SW Huang, V Ekholm, Z Hossain, A Thamizhavel, J Chang, M Månsson, L Nordström, C Sâthe, M	2022	34 (32),	324003

			Agåker, JE Rubensson, Y Sassa			
1399.	Supercond. Sci. Technol.	A brief review of the physical properties of charge density wave superconductor LaPt <sub>2</sub> Si <sub>2</sub>	R Gupta, A Thamizhavel, KP Rajeev, Z Hossain	2022	084006	35
1400.	Physical Review B	Weak antilocalization effect and triply degenerate state in Cu-doped CaAuAs	S Malick, A Ghosh, CK Barman, AAlam, Z Hossain, P Mandal, J Nayak	2022	105 (16)	165105
1401.	Physical Review A	Evanescent Field Mach-Zehnder Interferometer	G. Kaur, Harshawardh an Wanare	2023	107 (3)	033506
1402.	Physical Review A	Graded-azimuthal-index fiber as a control element for radial-index and orbital-angular-momentum modes of Laguerre-Gaussian beams	S Srinivasu, Harshawardh an Wanare	2023	107 (1),	013517
1403.	Applied Physics Letters	Spectroscopic ellipsometry-based investigations into the scattering	Nitish Kumar Gupta, Mukesh Kumar,	26110 3	121, no. 26	

		characteristics of topologically distinct photonic stopbands	Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare, and S. Anantha Ramakrishna			
1404.	IEEE Antennas and Wireless Propagation Letters	Singular Phase Characteristics of Electromagnetic Absorbers and a Framework for Low-RCS Target Detection	Nitish Kumar Gupta, Gaganpreet Singh, Sapireddy Srinivasu, Harshawardhan Wanare, Kumar Vaibhav Srivastava, J. Ramkumar, and S. Anantha Ramakrishna	2022	22, no. 1	134-138
1405.	CLEO: QELS_Fundamental Science, JW3B.	Polarization Speckle Generation & Control of Angular Memory Effect in Optically Anisotropic Media	NK Gupta, AK Tiwari, H Wanare, SA Ramakrishna	2022		89
1406.	Scientific reports 12	Realizing quasi-monochromatic switchable thermal	Nitish Kumar Gupta, Sapireddy	2022	no. 1	1-10

		emission from electro-optically induced topological phase transitions	Srinivasu, Anjani Kumar Tiwari, Harshawardhan Wanare, and S. Anantha Ramakrishna			
1407.	Journal of Optics 24	A low-profile consolidated metastructure for multispectral signature management	Nitish Kumar Gupta, Gaganpreet Singh, Harshawardhan Wanare, S. Anantha Ramakrishna, Kumar Vaibhav Srivastava, and J. Ramkumar	2022	no. 3	035102
1408.	Physical Review A	Loschmidt echo and momentum distribution in a Kitaev spin chain	VK Vimal, Harshawardhan Wanare, V Subrahmanyam	2022	106 (3),	032221
1409.	Applied Optics	Chaotic cavity design of a UV-C disinfection chamber for uniform radiation distribution	S Mishra, D Singh, Harshawardhan Wanare	2022	61 (4),	890-897

1410.	Phys. Rev. B	Possible transition between charge density wave and Weyl semimetal phase in $Y_2Ir_2O_7$	Abhishek Juyal, Vinod Kumar Dwivedi, Sonu Verma, Shibabrata Nandi, Amit Agarwal, and Soumik Mukhopadhyay	2022	106	155149-1 to 155149-6
1411.	ACS Appl. Electron. Mater.	Frustration-Induced Inversion of the Magnetocaloric Effect and Metamagnetic Transition in Substituted Pyrochlore Iridates	Vinod Kumar Dwivedi, Pra bhat Mandal, and Soumik Mukhopadhyay	2022	4	1611-1618
1412.	Physical Rev. D	Dynamical systems analysis of tachyon-dark-energy models from a new perspective	S.~Hussain, S.~Chakraborty, N.~Roy and K.~Bhattacharya	2023	107 no.6	063515
1413.	Universe	Ghost Condensates and Pure Kinetic k-Essence Condensates in the Presence of Field-Fluid Non-	S.~Hussain, A.~Chatterjee and K.~Bhattacharya	2023	Vol 9, no.2	65



		Minimal Coupling in the Dark Sector				
1414.	Indian J. Phys.	Flagellar Length control in multi flagellated eukaryotes: a case study with Giardia	S. Patra and D. Chowdhury	2022	Vol. 96	2559
1415.	PHYSICS REPORTS (Elsevier)	Length control of long cell protrusions: rulers, timers and transport	S. Patra, D. Chowdhury and Frank Jülicher	2022	987	1-51
1416.	JOURNAL OF PHYSICS: COMPLEXITY (IOP, UK)	Eco-evolutionary games for harvesting self-renewing common resource: Effect of growing harvester population	J. D. Bairagya, S. S. Mondal, D. Chowdhury and S. Chakraborty	2023	4	025002
1417.	Journal of Electromagnetic Waves and Applications	Analytical analysis of inhomogeneous and anisotropic metamaterial cylindrical waveguides using transformation matrix method	A Bhardwaj, D Pratap, K Vaibhav Srivastava, S Anantha Ramakrishna	2023	37 (1),	53-68
1418.	IEEE Microwaves, Antennas, and Propagation Conference	Analysis of Protective Coating for Optically	K Chaudhary, A Bhardwaj,	2022		89-92

	(MAPCON)	Transparent Microwave Metamaterial Absorber	R Vishwakarma, J Ramkumar			
1419.	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of ...	Large area fabrication of single micron features using two-photon polymerization with sub-nanosecond laser	G Singh, D Mishra, J Ramkumar, S Anantha Ramakrishna	2022		
1420.	IEEE Transactions on Components, Packaging and Manufacturing Technology	Optically transparent adhesives for microwave metamaterial absorber With PET-PDMS interface	K Chaudhary, VK Singh, MS Bisht, J Ramkumar, SA Ramakrishna	2022		
1421.	Optics Letters	Experimental observation of Berreman modes in an uniaxial anisotropic nanoporous alumina film on aluminum substrate	D Pratap, JK Pradhan, SA Ramakrishna	2022	47 (10),	2554-2557
1422.	Workshop on Recent Advances in Photonics (WRAP)	Composite Nitrogen-Vacancy Centers Nano diamonds Grating using Soft Lithography	R Kumar, SA Ramakrishna	2022		01-02
1423.	IET Microwaves, Antennas &	A polarization-insensitive time-	M Saikia, KV Srivastava,		16 (1),	37-45

	Propagation	modulated frequency-selective surface for broad frequency range	SA Ramakrishna			
1424.	Journal of Optics	A low-profile consolidated metastructure for multispectral signature management.	Nitish Kumar Gupta, Gaganpreet Singh, Harshawardh an Wanare, S. Anantha Ramakrishna, Kumar Vaibhav Srivastava, and J. Ramkumar.	2022	24 no. 3	035102
1425.	Journal of High Energy Physics (JHEP)	The Zeroth law of black hole thermodynamics in arbitrary higher derivative theories of gravity	Sayantani Bhattacharyy a, Parthajit Biswas, Anirban Dinda, Nilay Kundu	2022	10	013 - 042
1426.	Journal of High Energy Physics (JHEP)	Non-minimal coupling of scalar and gauge fields with gravity: an entropy current and linearized second law	Parthajit Biswas, Prateksh Dhivakar, Nilay Kundu	2022	12	036 - 092

1427.	Physical Review E	Exact relations for energy transfer in simple and active binary fluid turbulence	Nandita Pan & Supratik Banerjee	2022	106 (2)	025104-1 to 025104-5
1428.	Physics of Fluids	Temperature evolution equation of a compressible turbulent ferrofluid	Sukhdev Mouraya and Supratik Banerjee	2023	35 (1)	015120-1 to 015120-7
1429.	Physical Review E (Letters)	Universal turbulent relaxation of fluids and plasmas by the principle of vanishing nonlinear transfers	Supratik Banerjee, Arijit Halder and Nandita Pan	2023	107 (4)	L043201-1 to L043201-5
1430.	Physical Review Fluids	Contribution of the Hall term in small-scale magnetohydrodynamic dynamos	Arijit Halder, Supratik Banerjee, Anando Gopal Chatterjee and Manohar Kumar Sharma	2023	8 (5)	053701-1 to 053701-11
1431.	Phys. Rev. B	Large nonsaturating magnetoresistance, weak anti-localization, and non-trivial topological states in	Sudip Malick, A. B. Sarkar, Antu Laha, M. Anas, V. K. Malik, Amit	2022	106	075105

		SrAl <sub>2</sub> Si <sub>2</sub> ,	Agarwal, Z. Hossain, and J. Nayak,			
1432.	Phys. Rev. B	Weak antilocalization effect and triply degenerate state in Cu-doped CaAuAs,	Sudip Malick, Arup Ghosh, Chanchal K. Barman, Aftab Alam, Z. Hossain, Prabhat Mandal, and J. Nayak,	2022	105	165105
1433.	Phys. Rev. B	FeRhCrSi: Spin semimetal with spin- valve behavior at room temperature,	Y. Venkateswar a, Jadupati Nag, S. Shanmukhara o Samatham, Akhilesh Kumar Patel, P. D. Babu, Manoj Raama Varma, Jayita Nayak, K. G. Suresh, and Aftab Alam,	2023	107,	L100401
1434.	Soft Matter	Kinetics of high density functional polymer	A. Swain, N. Das, S. Chandran,	2022	18	1005 – 1012

		nanocomposite formation by tuning enthalpic and entropic barriers	and J. K. Basu			
1435.	Macromolecules	Primary Nucleation in Metastable Solutions of Poly(3-hexylthiophene)	T. Wu, S. Chandran, Y. Zhang, T. Zheng, T. Pfohl, J. Xu, and G. Reiter	2022	55	3325 – 3334
1436.	Advanced Materials and Interfaces	Electric Field Driven Reversible Spinodal Dewetting of Thin Liquid Films on Slippery Surfaces	B. Bhatt, S. Gupta, V. Sumathi, S. Chandran, and K. Khare	2023	10	2202063 – (1-8)
1437.	Journal: Physical Rev. D	Dynamical systems analysis of tachyon-dark-energy models from a new perspective	S.~Hussain, S.~Chakraborty, N.~Roy and K.~Bhattacharya	2023	107,	no.6, 063515
1438.	Journal: Universe,	Ghost Condensates and Pure Kinetic k-Essence Condensates in the Presence of Field-Fluid Non-Minimal Coupling in the Dark Sector	S.~Hussain, A.~Chatterjee and K.~Bhattacharya	2023	9	no.2, 65
1439.	Journal of Physical Chemistry Letters	Unveiling the Catalytic Potential of Topological Nodal-Line Semimetal	B. Danil, A. Politano, M. Federico, K. Chia-Nung.	2023	14	3069–3076

		AuSn <sub>4</sub> for Hydrogen Evolution and CO <sub>2</sub> Reduction	S. Mardanya; J. Fujii, G. G. Politano, C. S. Lue, A. Agarwal, I. Vobornik, P. Torelli			
1440.	Phys. Rev. B.	Intrinsic nonreciprocal bulk plasmons in noncentrosymmetric magnetic systems	D. Dutta, A. Chakraborty, A. Agarwal	2023	107	165404
1441.	Journal of Physics: Condensed Matter	Fluence dependent dynamics of excitons in monolayer MoSi <sub>2</sub> Z <sub>4</sub> (Z = pnictogen)	P. Yadav, B. Khamari, B. Singh, K. V. Adarsh, and A. Agarwal*,	2023	35	235701
1442.	Phys. Rev. B	Observation of highly anisotropic bulk dispersion and spin-polarized topological surface states in CoTe <sub>2</sub> ,	A. Chakraborty, J. Fujii, C.-N. Kuo, C. S. Lue, A. Politano, I. Vobornik, and A. Agarwal*,	2023	107	085406
1443.	Nano Letters	Discovery of spin-orbit gaps in the Dirac antiferromagnetic system TaCoTe <sub>2</sub> as origin of a large non-	F. Mazzola, B. Ghosh, J. Fujii, G. Acharya, G. Rossi, A. Bansil, D.	2023		4194

		linear Hall effect,	Farias, J. Hu, A. Agarwal, A. Politano, and I. Vobornik,			
1444.	Advanced materials,	Terahertz Nonlinear Hall Rectifiers Based on Spin-Polarized 1T-CoTe <sub>2</sub> ,	Z Hu, L. Zhang, A. Chakraborty, ..., A. Agarwal, ..., L. Wang	2023		09557
1445.	ACS Applied Nano Materials	Extreme Optical Anisotropy in the Type-II Dirac Semimetal NiTe <sub>2</sub> for Applications to Nanophotonics,	C. Rizza, D. Dutta, B. Ghosh, F. Alessandro, C.-N. Kuo, C. S. Lue, L. S. Caputi, A. Bansil, A. Agarwal, A. Politano, A. Cupolillo,	2022	12	18531
1446.	Phys. Rev. Letters	Resonant Second- Harmonic Generation as a Probe of Quantum Geometry,	P. Bhalla, K. Das, D. Culcer, and A. Agarwal*,	2022	129	227401
1447.	Computational Materials Science	Easily exfoliable monolayer of GdTe <sub>3</sub> : ab initio study,	I. Ahmed, Y. S. Chouhan, B. Somnath and A. Agarwal*,	2022	216	111869



1448.	Phys. Rev. B	Tunable interband and intraband plasmons in twisted double bilayer graphene,	A. Chakraborty, K. Das, and A. Agarwal*,	2022	106	155422
1449.	Phys. Rev. B 106, 155149 (2022).	Possible transition between charge density wave and Weyl semimetal phase in Y <sub>2</sub> Ir <sub>2</sub> O <sub>7</sub>	A. Juyal, V. K. Dwivedi, S. Verma, S. Nandi, A. Agarwal*, and S. Mukhopadhyay*	2022	106	155149
1450.	Phys. Rev. B	Possible transition between charge density wave and Weyl semimetal phase in Y <sub>2</sub> Ir <sub>2</sub> O <sub>7</sub> ;	A. Juyal, V. K. Dwivedi, S. Verma, S. Nandi, A. Agarwal*, and S. Mukhopadhyay*,	2022	106	155149
1451.	Journal of Physics: Materials	Atomic-scale study of type-II Dirac semimetal PtTe <sub>2</sub> surface	P. C. Augilar, F. Calleja, C.-N. Kuo, C. S. Lue, B. Ghosh, A. Agarwal, A. Politano, A. L. Vázquez de Parga, R. Miranda, J. A. S.-Guillén and	2022	5	044003

			Manuela Garnica,			
1452.	Nature Physics	Berry curvature dipole senses topological transition in a moire superlattice,	S. Sinha, P. C. Adak, A. Chakraborty, K. Das, K. Debnath, L. D. Varma Sangani, K. Watanabe, T. Taniguchi, U. V. Waghmare, A. Agarwal*, and M. M. Deshmukh*	2022		01606
1453.	2D Materials	Nonlinear anomalous Hall effects probe topological phase- transitions in twisted double bilayer graphene,	A. Chakraborty, K. Das, S. Sinha, P. C. Adak, M. M. Deshmukh, and A. Agarwal*,	2022	9	045020
1454.	Phys. Rev. B.	Large nonsaturating magnetoresistance, weak anti- localization, and non-trivial topological states in SrAl <sub>2</sub> Si <sub>2</sub> ,	S. Malick, A. B. Sarkar, A. Laha, M. Anas, V. K. Malik, A. Agarwal*, Z. Hossain*,	2022	106	075105

			and J. Nayak*,			
1455.	Nanoscale	Large and anisotropic carrier mobility in monolayers of the MA <sub>2</sub> Z <sub>4</sub> series (M=Cr, Mo, W; A=Si, Ge; Z=N, P).	A. Priydarshi, Y. S. Chauhan, S. Bhowmick, and Amit Agarwal*,	2022	14	11988
1456.	Phys. Rev. B	Nonlinear magnetotransport in Weyl semimetal	D. Mandal, K. Das, and A. Agarwal*	2022	106	035423
1457.	SMALL	NiSe and CoSe topological nodal-line semimetals: a sustainable platform for efficient thermoplasmonics and solar-driven photothermal membrane distillation	S. Abramovich, D. Dutta, C. Rizza, S. Santoro, M. Aquino, A. Cupolillo, J. Occhiuzzi, Barun Ghosh, Andrea Locatelli, Danil W. Boukhvalov, A. Agarwal, Efrem Curcio*, Maya Bar Sadan*, Antonio Politano*,	2022		2201473

1458.	Phys. Rev. B.	Nonlinear magnetoconductivity in Weyl semimetal in quantizing magnetic field,	S. Das, K. Das, and A. Agarwal*,	2022	105	235408
1459.	Phys. Rev. Research	Topological states in superlattices of HgTe-class materials for engineering three-dimensional flat bands,	R. Islam, B. Ghosh, G. Cuono, A. Lau, W. Brzezicki, A. Bansil, A. Agarwal, B. Singh, T. Dietl, C. Autieri,	2022	4	023114
1460.	<i>Journal of Luminescence,</i>	Dopant mediated augmentation of nanotwinning and anomalous emission behaviour,	Tania Kalsi, Sachin Kumar Godara, Rohit Medwal, Pragati Kumar,	2023	255	119544
1461.	<i>Physical Review B,</i>	Disentanglement of intrinsic and extrinsic side-jump scattering induced spin Hall effect in N-implanted Pt,	Utkarsh Shashank, Yoji Nakamura, Yu Kusaba, Takafumi Tomoda, Razia Nongjai, Asokan Kandasami, Rohit	2023	107	064402

			Medwal, Rajdeep Singh Rawat, Hironori Asada, Surbhi Gupta, Yasuhiro Fukuma			
1462.	<i>Applied Physics Letters</i>	Anisotropy-assisted bias-free spin Hall nanooscillator,	Sourabh Manna, Rohit Medwal, Surbhi Gupta, John Rex Mohan, Yasuhiro Fukuma, Rajdeep Singh Rawat	2023	122	072401
1463.	<i>Physica status solidi (RRL)–Rapid Research Letters,</i>	Room-Temperature Charge-to-Spin Conversion from Quasi-2D Electron Gas at SrTiO <sub>3</sub> -Based Interfaces,	Utkarsh Shashank, Angshuman Deka, Chen Ye, Surbhi Gupta, Rohit Medwal, Rajdeep Singh Rawat, Hironori Asada, X Renshaw Wang, Yasuhiro Fukuma,	2022		2200377

1464.	<i>IEEE Transactions on Electron Devices,</i>	In Situ Electrical Characteristics and Defect Dynamics Induced by Swift Heavy Ion Irradiation in Pt/PtO/-GaO Vertical Schottky Barrier Diodes,	N Manikanthababu, Hardhyan Sheoran, K Prajna, SA Khan, K Asokan, Joseph Vas, Rohit Medwal, BK Panigrahi, R Singh,	2022	69	5996
1465.	IEEE Transactions of magnetism	Evaluation of memory capacity and, time series prediction using a spin Hall oscillator as reservoir	Arun Jacob Mathew, john Rex Mohan, Rouyan Feng, Rohit Medwal, Surbhi Gupta, Rajdeep Singh Rawat, Yasuhiro Fukuma,	2023		1
1466.	Scientific Report	Classification tasks using input driven nonlinear magnetization dynamics in spin Hall oscillator	John Rex Mohan, Arun Jacob Mathew, Kazuma Nishimura, Ruoyan Feng, Rohit Medwal, Surbhi	2023	13	7909

			Gupta, Rajdeep Singh Rawat and Yasuhiro Fukuma,			
1467.	Phys.Rev.D	Integrating out heavy scalars with modified equations of motion: Matching computation of dimension-eight SMEFT coefficients	Upalaparna Banerjee, Joydeep Chakraborty, Christoph Englert, Shakeel Ur Rahaman, Michael Spannowsky, Durham U.,	2023	107	5, 055007
1468.	Physical Chemistry Chemical Physics	Simulation study of domain formation in a model bacterial membrane	Shivam Gupta and Taraknath Mandal	2022	24	18133-18143
1469.	Journal of High Energy Physics	Galilean gauge theories from null reductions	A. Bagchi, R. Basu, M. Islam, K. S. Kolekar and A. Mehra	2022	04	176
1470.	Journal of High Energy Physics	Carrollian superconformal theories and super BMS	A. Bagchi, D. Grumiller and P. Nandi	2022	05	044
1471.	Journal of High Energy Physics	A Rindler road to Carrollian worldsheets	A. Bagchi, A. Banerjee, S. Chakraborty and R.	2022	04	082

			Chatterjee			
1472.	Physical Review Letters	Scattering Amplitudes: Celestial and Carrollian	A. Bagchi, S. Banerjee, R. Basu and S. Dutta	2022	128	241601
1473.	Journal of High Energy Physics	Carroll covariant scalar fields in two dimensions	A. Bagchi, A. Banerjee, S. Dutta, K. S. Kolekar and P. Sharma	2023	01	072
1474.	Journal of High Energy Physics	Boosting to BMS	A. Bagchi, A. Banerjee and H. Muraki	2022	09	251
1475.	Journal of High Energy Physics	Magic fermions: Carroll and flat bands	A. Bagchi, A. Banerjee, R. Basu, M. Islam and S. Mondal	2023	03	227
1476.	Journal of High Energy Physics	Non-Lorentzian Kač-Moody algebras	A. Bagchi, R. Chatterjee, R. Kaushik, A. Saha and D. Sarkar	2023	03	041
1477.	Journal of High Energy Physics	AdS Witten diagrams to Carrollian correlators	A. Bagchi, P. Dhivakar and S. Dutta	2023	04	135
1478.	Eur. Phys. Journal C	Shadows and thin accretion disk images of the gamma metric	Rajibul Shaikh1, Suvankar Paul1, Pritam Banerjee,	2022	82	696 1-11



			Tapobrata Sarkar			
1479.	Phys. Rev. E	Nielsen complexity of coherent spin state operators	Kunal Pal, Kuntal Pal, Tapobrata Sarkar	2022	105	064117 1-12
1480.	Astrophys. Journal	Stable Hydrogen-burning Limits in Rapidly Rotating Very Low Mass Objects	Shaswata Chowdhury, Pritam Banerjee, Debojyoti Garain, Tapobrata Sarkar	2022	929:117	1-8
1481.	J. Stat. Mech	Complexity, information geometry, and Loschmidt echo near quantum criticality	Nitesh Jaiswal, Mamta Gautam, Tapobrata Sarkar	2022	073105	1-21
1482.	Phys. Lett. B	Shadows in conformally related gravity theories	Kunal Pal, Kuntal Pal, Rajibul Shaikh, Tapobrata Sarkar	2022	829	1-6
1483.	Universe	Analogue Metric in a Black-Bounce Background	Kunal Pal, Kuntal Pal, Tapobrata Sarkar	2022	197	1-12
1484.	Physics of Fluid	Large-eddy simulation of Rayleigh–Bénard	R. Samuel, R. Samtaney, and M. K.	2022	34	075133

		convection at extreme Rayleigh numbers	Verma			
1485.	Physical Review Fluids	Universal functions for Burgers turbulence	S. Alam, P. K. Sahu, and M. K. Verma	2022	7	074605
1486.	Journal of Astrophysics and Astronomy	Magnetohydrodynamic Turbulence: Chandrasekhar's Contributions and Beyond	M. K. Verma	2022	43	58
1487.	Physics of Plasmas	Taylor's frozen-in hypothesis for magnetohydrodynamic turbulence and solar wind	M. K. Verma	2022	29	082902
1488.	Physical Review Fluids	Hydrodynamic Entropy and Emergence of Order in Two-dimensional Euler Turbulence	M. K. Verma and S. Chatterjee	2022	7	114608
1489.	Physical Review E	Nonlinear energy dissipation and transfers in coarsening systems	M. K. Verma, R. Agrawal, P. K. Yadav, and S. Pur	2023	107	034207

**Department of Space, Planetary & Astronomical Sciences & Engineering**

1490.	Monthly Notices of the Royal Astronomical Society	The comptonizing medium of the black hole X-ray binary MAXI J1535–571 through type-C quasi-periodic oscillations.	Divya Rawat, Mariano Méndez, Federico García, Diego Altamirano, Konstantinos Karpouzas, Liang Zhang, Kevin	2023	520	113-128
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			Alabarta, Tomaso M Belloni, Pankaj Jain, Candela Bellavita			
1491.	Journal of Instrumentation	A GEANT4 based simulation framework for the large area muon telescope of the GRAPES-3 experiment.	F. Varsi <sup>4</sup> , S. Ahmad <sup>3</sup> , M. Chakraborty <sup>1</sup> , A. Chandra <sup>3</sup> , S.R. Dugad <sup>1</sup> , U.D. Goswami <sup>11</sup> , S.K. Gupta <sup>1</sup> , B. Hariharan <sup>1</sup> , Y. Hayashi <sup>2</sup> , P. Jagadeesan <sup>1</sup> , A. Jain <sup>1</sup> , P. Jain <sup>4</sup> , S. Kawakami <sup>2</sup> , H. Kojima <sup>5</sup> , S. Mahapatra <sup>8</sup> , S. Mishra <sup>12</sup> , P.K. Mohanty <sup>1</sup> , R. Moharana <sup>9</sup> , Y. Muraki <sup>6</sup> , P.K. Nayak <sup>1</sup> , T. Nonaka <sup>7</sup> , A. Oshima <sup>5</sup> , B.P. Pant <sup>9</sup> , D. Pattanaik <sup>1,8</sup> , A.K. Pradhan <sup>9</sup> , G.S. Pradhan <sup>10</sup> , M. Rameez <sup>1</sup> , K. Ramesh <sup>1</sup> , L.V. Reddy <sup>1</sup> , S. Saha <sup>4</sup> , R.	2023	18	P03046

			Sahoo <sup>10</sup> , R. Scaria <sup>10</sup> , S. Shibata <sup>5</sup> and M. Zuberi			
1492.	Cosmology and Nongalactic Astrophysics (astro- ph.CO), General Relativity and Quantum Cosmology (gr-qc)	Probing cosmology beyond Lambda- CDM using SKA, S. Ghosh, P. Jain, R. Kothari, M. Panwar, G. Singh, P. Tiwari, 2023 44, 22	Shamik Ghosh, Pankaj Jain, Rahul Kothari, Mohit Panwar, Gurmeet Singh, Prabhakar Tiwari	202 3	44	22-32
1493.	Physical Review D  covering particles, fields, gravitation, and cosmology	Validating the improved angular resolution of the GRAPES-3 air shower array by observing the Moon shadow in cosmic rays	Pattanaik, D. , Ahmad, S. , Chakraborty, M. , Dugad, S. R. , Goswami, U. D. , Gupta, S. K. , Hariharan, B. , Hayashi, Y. , Pankaj Jain, A.Jain, P. , Kawakami, S. , Kojima, H. ,	2022	106	022009

			<p>Mahapatra, S.</p> <p>,</p> <p>Mohanty, P. K. ,</p> <p>Moharana, R.</p> <p>,</p> <p>Muraki, Y. ,</p> <p>Nayak, P. K.</p> <p>,</p> <p>Nonaka, T. ,</p> <p>Oshima, A. ,</p> <p>Pant, B. P. ,</p> <p>Rameez, M. ,</p> <p>Ramesh, K. ,</p> <p>Reddy, L. V.</p> <p>,</p> <p>Shibata, S. ,</p> <p>Varsi, F. ,</p> <p>Zuberi, M. ,</p> <p>Grapes-3 Collaboration</p>			
1494.	Pramana J. Physics	Photon-induced low-energy nuclear reactions	<p>Pankaj jain</p> <p>,Ankit kumar</p> <p>, Raj pala,</p> <p>K.P rajeev</p>	2022	96	96
1495.	Monthly Notices of the Royal Astronomical Society	A mechanism to explain galaxy alignment over a range of scales	<p>Prabhakar Tiwari ,</p> <p>Pankaj jain</p>	2022	513	604-611
1496.	Zeitschrift für angewandte	Axisymmetric indentation of a periodically layered,	<p>D. Sachan, I. Sharma, T.</p>	2022	73	222

	Mathematik und Physik	viscoelastic half-space	Muthukumar			
1497.	International Journal of Solids and Structures	Indentation of geometrically exact beams	K Suryanarayanan, I Sharma, S L Das	2022	254	111905
1498.	Int. J. Mech. Sci.	Transient planar dynamics of cable-payload systems using geometrically exact beam theory	AR Dehadrai, I Sharma, SS Gupta	2022	224	107271
1499.	Mathematics and Mechanics of Solids	Indentation of a periodically layered, elastic half-space by a rigid sphere.	D. Sachan, I. Sharma, T. Muthukumar	2022	27	
1500.	Proceedings of the Royal Society A	Regolith flow on top-shaped asteroids	D Banik, K Gaurav, I Sharma	2022	478	20210972
1501.	International Journal of Solids and Structures	Indentation of geometrically exact adhesive beams	K Suryanarayanan, T Bhuvana, I Sharma, SL Das	2023	Provisionally accepted	
1502.	Physics of Fluids	Equilibria of liquid drops on pre-stretched, nonlinear elastic membranes through a variational approach	V Nair, I Sharma	2023	047111	35
1503.	J. Fluid Mechanics	Equilibrium shapes of liquid drops on pre-stretched nonlinear elastic membranes	V Nair, I Sharma, V Shankar	2023	961	A28
1504.	Powder Technology	Axial segregation of granular mixtures in laterally shaken	MI Ansari, A Bhateja, I	2023	417	118265

		multi-trapezium channels	Sharma			
1505.	Journal of Astrophysics and Astronomy	Detection possibilities of hostless intergalactic supernova remnants with Square Kilometre Array	Amitesh Omar	2023	44	15

**Department of Sustainable Energy Engineering**

1506.	Building and Environment	Effectiveness of plants for passive removal of particulate matter is low in the indoor environment	Mukesh Budaniya and Aakash C. Rai	2022	222	109384 (1-8)
1507.	IEEE Transactions on Industrial Electronics	A Novel Non-Isolated Four-Port Converter for Flexible DC Microgrid Operation	A. A. Saafan, V. Khadkikar, A. Edpuganti, M. S. E. Moursi and H. H. Zeineldin	2023	Early Access	1-11
1508.	IEEE Transactions on Power Electronics	Single-Inductor Multiple-Input–Multiple-Output Converter for CubeSats Electric Power System	A. Edpuganti, V. Khadkikar, N. Al Sayari and B. Zahawi	2023	38	6319-6336
1509.	Journal of American Ceramic Society	Room Temperature Structural, Magnetic and Dielectric Characteristics of La Doped CuO Bulk Multiferroic	K. Brajesh, S. Ranjan, R. Kumar, R. Gupta, A. Dixit and A. Garg	2023	Accepted	Accepted
1510.	Communications Materials	Advanced spectroscopic techniques for	S. Srivastava, S. Ranjan, L. Yadav, T.	2023	Accepted	Accepted

		characterizing defects in perovskite solar cells	Sharma, S.Choudhary, D. Agarwal, A. Singh, S. Satapathi, R. K. Gupta, A. Garg, and K. S. Nalwa			
1511.	Materials Today: Proceedings	Structure and leakage current behavior of GaFe <sub>0.95</sub> Mg <sub>0.05</sub> O <sub>3</sub> ceramic	N. Sharma, K. Singh, S. Kumar, A. Garg	2023	Accepted	Accepted
1512.	ACS Applied Materials and Interfaces	Functionality Tuning in Hierarchically Engineered Magnetolectric Nanocomposite for Energy Harvesting Applications	S. Gupta, C. Chatterjee, B. Fatma, B. Kumar, R. Bhunia, N. S. Sowmya, S. Roy, A. Kulkarni, R. K. Gupta, R. Gupta, P. Ajayan and A. Garg	2023	15 (22)	26563–26575
1513.	Nano Energy	Exalting Energy Scavenging for Triboelectric Nanogenerator using Silicon Carbide Particles Doped Polyvinylidene Difluoride Nanocomposite	S. Shafeek, N. T. M Balakrishnan, B. Fatma, A. Garg, J. Fatima M. J, Danny Morton, J. Luo, P. Raghavan	2023	107	108146 (1-12)
1514.	Photochemical & Photobiological Sciences	Phenothiazine Functionalized Fulleropyrrolidines: Synthesis, Charge Transport and Applications to	D. Badgurjar, N. Duvva, A. Bagui, Pooja, R. Pawar, S. P. Singh, A. Garg, L.	2023	22	379–393



		Organic Solar Cells	Giribabu, R. Chitta			
1515.	ECS Journal of Solid-State Science and Technology	Microstructural, optical, and work function tuning of fullerene (C60) modified zinc oxide films for optoelectronic devices	A. Pandey, A. Garg, and L. Kumar	2022	11	104002 (1-9)
1516.	Solar Energy	Spray deposited gallium doped zinc oxide (GZO) thin film as the electron transport layer in inverted organic solar cells	S. K. Swami, N. Chaturvedi, A. Kumar, V. Kumar, A. Garg, V. Dutta	2022	231	458-463
1517.	Energy Technology	Development of MoO <sub>3</sub> /Au/MoO <sub>3</sub> top transparent conducting electrode for organic solar cells on opaque substrates	L. Sowjanya Pali, J. Kumar Tiwari, N. Ali, S. Ghosh, K. S. Nalwa and A. Garg	2022	10 (2)	2100689 (1-8)
1518.	Journal of Polymer Science	In-situ fabrication of BaTiO <sub>3</sub> @PVP in PVDF polymer nanocomposites for dielectric capacitor applications	P. Prajapati, R. Bhunia, B. Fatma, S. Gupta, A. Garg, R. K. Gupta	2022	60 (6)	961-967
1519.	Physics of Fluids	Leading edge bluntness effects on the hypersonic flow over the double-wedge at multiple aft-wedge	A. A. Ray, A. De	2023	35	056116 (1-26)
1520.	International Journal of Multiphase Flow	Understanding the liquid jet break-up in	B. Bhatia, T. Johny, A. De	2023	159	104303 (1-27)

		various regimes at elevated pressure using a compressible VOF-LPT coupled frameworks				
1521.	Physics of Fluids	Supersonic flow unsteadiness induced by control surface deflections	S. K. Karthick, D. Bhelave, A. De	2023	35	016105 (1-27)
1522.	International Journal of Energy for a Clean Environment	Assessment of Statistical and Kinetics based models for LOx-Methane Green Propellant Combustion	A. Sharma, A. De, S. Kumar	2023	24	1-57
1523.	International Journal of Energy for a Clean Environment	On the Self-Starting Comparative Performance Evaluation of Darrieus and Hybrid Hydrokinetic Rotor	G. Saini, A. De	2023	24	67-91
1524.	Physics of Fluids	Three-Dimensionality in the flow of an elastically mounted circular cylinder with two-degree-of-freedom vortex-induced-vibrations	M. Verma, A. De	2022	34	103616 (1-24)
1525.	Physics of Fluids	Dynamics of Vortex-Induced-Vibrations of a Slit-Offset Circular Cylinder for Energy Harvesting at Low Reynolds Number	M. Verma, A. De	2022	34	083607 (1-14)
1526.	Physics of Fluids	Numerical analysis of dilute methanol	B. Bhatia, A. De, D.	2022	34	075111 (1-21)

		spray flames in vitiated coflow using extended flamelet generated manifold model	Roekaerts, A. R. Masri			
1527.	ASME Thermal Science and Engineering Applications	A Thermal Cooling Enhancements in a Heated Channel Using Flow-Induced Motion	M. Verma, A. De	2022	14	081003 (1-12)
1528.	Physics of Fluids	Open inverted bell and bell formation during the washing of vials	J. Mohd, A. Yadav, and D. Das	2022	34	042126 (1-9)
1529.	Chemical Reviews	Continuum Modeling of Porous Electrodes for Electrochemical Synthesis	J. C. Bui, E. W Lees, L. M. Pant, I. V. Zenyuk, A. T. Bell, & A. Z. Weber	2022	122(12)	11022–11084
1530.	Joule	Coupling covariance matrix adaptation with continuum modeling for determination of kinetic parameters associated with electrochemical CO <sub>2</sub> reduction	K. R. M. Corpus, J. C. Bui, A. M. Limaye, L. M. Pant, K. Manthiram, A. Z. Weber, & A. T. Bell	2023	In Press	In Press
1531.	Journal of Solar Energy Engineering-Transactions of ASME	Simulated Experimental Assessment of a Laboratory-Scale Solar Convective Furnace System	V. D. Kumar, L. Chandra, S. Mukhopadhyay, R. Sekhar	2023	145(4)	041011 (1-11)
1532.	Journal of Heat and Mass Transfer – Transactions of ASME	New Insights in Turbulent Heat Transfer with Oil and Hybrid Nano-	S. Upadhyay, L. Chandra, J. Sarkar	2023	145(8)	083901 (1-17)

		Oils, Subject to Discrete Heating, for Parabolic Trough Absorbers				
1533.	Journal of Thermal Sciences	Experimental Thermal-Hydraulic Characteristics of Single-phase Natural Circulation Loop using Water-based Hybrid Nanofluids	M. Sahu, J. Sarkar, L. Chandra	2023	147	108198 (1-12)
1534.	ACS Applied Energy Materials	Long-Range Binding of Defect Clusters Leads to Suppressed Ion Mobility in Cs-Doped Methylammonium Lead Iodide	P. Bhatt, A. Kumar, N. Singh, A. Garg, K. S. Nalwa, and A. Tewari	2023	In Press DOI: 10.1021/ acsam.3 c00659	
1535.	Journal of Power Sources	Enroute to sub-300 °C operating Sn–Zn  Pb–Bi liquid metal battery by compositional engineering	M. D. Singh, C. Kaushik, J. Nishanth, A.V. Shinde, R. Gupta, N. Tiwari, K. S. Nalwa	2023	564	232855 (1-7)
1536.	Biomaterials Advances	Red-emitting polyaniline-based nanoparticle probe for pH-sensitive fluorescence imaging	L. Yadav, A. Yadav, S. Chatterjee, S. Tyeb, R. K. Gupta, P. Sen, B. Ateeq, V. Verma, K. S. Nalwa	2022	140	213088 (1-12)
1537.	Solar Energy Materials and Solar Cells	Optoelectronic modeling of all-perovskite tandem solar cells with design rules to achieve >30%	S.Yadav, M. Abdul Kareem, H. K. Kodali, D. Agarwal, A. Garg, A.	2022	242	111780 (1-10)

		efficiency	Verma, K. S. Nalwa			
1538.	Renewable and Sustainable Energy Reviews	Recent advances in the modeling of fundamental processes in liquid metal batteries	D. Agarwal, R. Potnuru, C. Kaushik, V. R. Darla, K. Kulkarni, A. Garg, R. K. Gupta, N. Tiwari, K. S. Nalwa	2022	158	112167 (1-23)
1539.	Journal of Engineering for Sustainable Buildings and Cities	Investigation of Cool Roof Based on Reflective Paints, Evaporative Cooling, and Shading	V. K. Arghode	2022	3	34502 (1-7)
1540.	Materials Today Sustainability	A Review on Clay Exfoliation Methods and Modifications for CO <sub>2</sub> Capture Application	S. Das, Prateek, P. Sharma, M. Kumar, R. K. Gupta, H. Sharma	2023	23	100427
1541.	RSC Sustainability	Devising a people-friendly test kit for overcoming challenges in the assessment of water quality and analysis of water pollution in the river Ganga	S. Chauhan, A. Yadav, P. M. Kurup, X. Li, P. Swarnakar and R. K. Gupta	2023	1	418–431 418–431
1542.	Nanofabrication	Investigation of Ag doping and ligand engineering on green synthesized CdS quantum dots for tuning their optical properties	N. Singh, S. Prajapati, Prateek, and R. K. Gupta	2022	7	89-103

1543.	The Journal of Organic Chemistry	Visible Light-Mediated Carbamoylation of para-Quinone Methides	T. Singh, G. Chandra Upreti, S. Arora, H. Chauhan, and A. Singh	2023	88 (5)	2784-2791
1544.	Organic and Biomolecular Chemistry	Brønsted acid catalyzed annulations of ketene dithioacetals: synthesis of 3-aryl coumarins and indenenes	S. Arora, S. P. Singh, P. Sharma and A. Singh	2022	20	8907–8911
1545.	Helvetica Chimica Acta	Mechanochemical Synthesis and Reactivity of a Stable Nickel Borohydride	S. Raje, K. Mani, S. Dinesh, A. Yadav, M. Chahal, R. J. Butcher, and R. Angamuthu	2023	106	e202200188 (1-10)
1546.	Chemical Communications	Triazine based eccentric Piedfort units towards a single source hydrogen bonded network	S. Mehrotra, S. Raje, A. K. Jain, R. J. Butcher and R. Angamuthu	2022	58	11815–11818
1547.	Dalton Transactions	Investigating the photosensitivity of koneramines for cell imaging and therapeutic applications	S. Ghosh, A. Akhir, D. Saxena, S. Singh, S. Sivakumar, S. Chopra and R. Angamuthu	2022	51	15659–15668

1548.	Ionics	Recent advances in NASICON-type oxide electrolytes for solid-state sodium-ion rechargeable batteries	K. Singh, A. Chakraborty, R. Thirupathi, S. Omar	2022	28	5289-5319
1549.	ACS Applied Nano Materials	NiMn-Layered Double Hydroxide Porous Nanoarchitectures as a Bifunctional Material for Accelerated p-Nitrophenol Reduction and Freestanding Supercapacitor Electrodes	V. Sharma, M. Aman, and S. Omar	2022	5	15651–15664
1550.	ACS Applied Energy Materials	Electrochemical Performance of SrMg <sub>0.1</sub> Mo <sub>0.9</sub> O <sub>3</sub> -Based Composites for Solid Oxide Fuel Cell Anodes	A. Das, S. Kumar, B. Jana, M. B. Suresh, C. Prashanthi, and S. Omar	2022	5	1607–1617