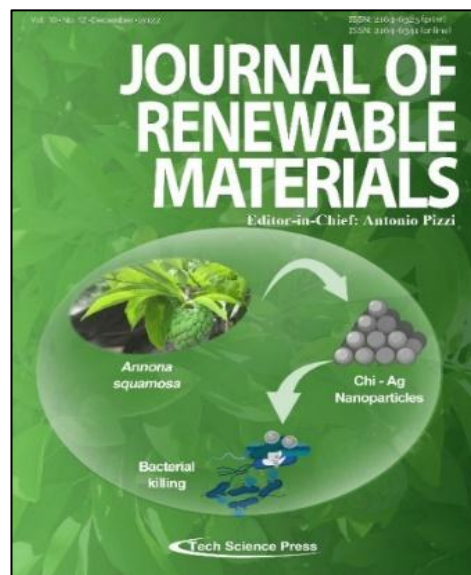


JOURNAL COVER PAGE



PATENTS

Granted Patents

S. No.	Title of the Patent	Inventors	Granted Patent No.	Date
1.	Metal-Free Approach and Method for Synthesis of Polyesters	Piyush Kumar Gupta, Anjaneyulu Kummari, Santosh Gupta, Debashis Chakraborty, Rama Shanker Verma	351891	23.11.2020
2.	A Microbial Desalination Cell Comprising a Perovskite Oxide Catalyst for Oxygen Reduction Reaction	Richa Tomar, Soumya Pandit, Abhilasha Singh Mathuriya, Pramod Kumar Singh, Piyush Kumar Gupta, Mohit Sahni, Aberam Nagarajan, Aparna Sharma	429738	24.04.2023
3.	Ceramic Separator-Cathode Assembly	Prasenjit Saha, Soumya Pandit, Abhilasha Singh Mathuriya, Mohit Sahni, Sanjay Kumar, Piyush Kumar Gupta, Santimoy Khilari	468645	13.11.2023
4.	System and Method for Encoding and Decoding Ethnic Data into Genetic Codes	Rama Shanker Verma, V Kamakoti, Piyush Kumar Gupta, Pronama Biswas, Sudha Varadaraj	475673	30.11.2023
5.	Metal-Free Polyester-Based Nano-Drug Carrier	Piyush Kumar Gupta, Anjaneyulu Kummari, Santosh	475521	30.11.2023

		Gupta, Debashis Chakraborty, Rama Shanker Verma		
6.	Eco-Friendly Anode Chamber Cum Separator Electrode Assembly for Microbial Electrochemical Systems	Prasenjit Saha, Upesh Sharma, Soumya Pandit, Abhilasha Singh Mathuriya, Dantuluri Veerabhadra Raju, Mohit Sahni, Piyush Kumar Gupta , Ankit Kumar	556147	12.12.2024
7.	Semi-Aromatic Polyester Nanocomposite and Method for Preparation Thereof	Piyush Kumar Gupta , Soumya Pandit, Shaily Chauhan, Rohit Kumar, Rekha Gahtori, Siva Chander Chabattula, Sunny Dholpuria, Sharad Agrawal, Bableen Flora	562117	07.03.2025
8.	Nanozyme Linked Oligo Probe Sorbent Assay (NLOPSA) for the Detection of Nucleic Acid Biomarkers	Dharanivasan Gunasekaran, Piyush Kumar Gupta , Rama Shanker Verma	568908	21.07.2025
Published Patents				
9.	Anti-Microbial Chitosan-Based Nanoparticles Composition and Method for Fabrication Thereof	Piyush Kumar Gupta , Soumya Pandit, Shaily Chauhan, Rekha Gahtori, Siva Chander Chabattula, Hem Chandra Joshi, S Shankara Narayanan, Mohit Sahni, R. Ranjithkumar, P. Senthil Kumar	2021110403 50	01.10.2021
10.	A Synergistic Anti-Leishmanial Nanodrug Formulation and Method of Preparation Thereof	Piyush Kumar Gupta , Madhu Gupta, Manali Singh, Ashish Dilip Sutar, Rahul Shukla, Mohit Sahni, Jhalak Singhal, Neha Jha, Shailja Singh	2025110246 33	11.04.2025

JOURNAL PUBLICATIONS

S. No.	Title of the Article	Authors Name	Journal Name, Volume, Page/Article No.	Year	Impact Factor & Quartile
FIRST & CORRESPONDING AUTHOR					
1.	Next-Generation Nanocarriers from the	Sthiti Porna Dutta, Shallu Sharma, Shaily	Nanofabrication , Accepted	2026	1.2, Q4

	Ocean: A Perspective on Fucoïdan in Precision Medicine	Chauhan, Kalpana Balakrishnan, Piyush Kumar Gupta*, Shikha Singh			
2.	Correction: Barani et al. Nanomaterials in the Management of Gram-Negative Bacterial Infections. Nanomaterials 2021, 11, 2535	Mahmood Barani, Mahira Zeeshan,, Saman Sargazi, Piyush Kumar Gupta*, Vijay Kumar Thakur	Nanomaterials, 16(11), 1-2	2026	4.8, Q2
3.	Nanomedicine in Cancer Care: Unmasking the Hidden Toxicological Shadows	K. Vandana, Reena Singh, Shaily Chauhan, Devvret Verma, Shikha Singh, Ekta Srivastava, Anjuvan Singh, Piyush Kumar Gupta*	Journal of Drug Delivery Science and Technology, 124, 108533	2026	5.2, Q1
4.	Nanonizing Bioactives: Precision Chemistry for Next-Gen Therapeutics	Pronama Biswas, Belaguppa Manjunath Ashwin Desai, Suvarna Ghosh, Bhaswati Banerjee,, Piyush Kumar Gupta*	Discover Materials, 6, 59	2026	5.8, Q2
5.	Immunopathology to Nanotherapeutics: Redefining Psoriasis Management in Autoimmune Disease	Anuja Kamble, Ashish Dilip Sutar, B. Behera, Piyush Kumar Gupta*, Rahul Shukla	ACS Nano Medicine, 1, 547 - 563	2026	NA
6.	Development of Phytocompounds Decorated Sustainable Aa-ZnO Nanoparticles using Leaf Extract of <i>Agave americana</i> Plant for Anticancer Application	Siva Chander Chabattula, Srishti Rai, Kavitha Govarthanan, Kalpana Balakrishnan,, Kavindra Kumar Kesari, Piyush Kumar Gupta*	Waste and Biomass Valorization, 17, 2597 - 2609	2026	3.1, Q3

7.	Study on the Photocatalytic Activity of Bimetallic-Semi-Aromatic Polyester Nanocomposite	Shaily Chauhan, Hussaini Baba Ali, Ashish Kumar Chalana, Piyush Kumar Gupta*	Journal of Scientific and Technical Research, 15(2), 120-123	2025	NA
8.	Engineering Trafficking Pathways to Overcome Immunosuppressive Barriers in Solid Tumor Immunotherapy	Sthiti Porna Dutta, Shaily Chauhan, Piyush Kumar Gupta*	Expert Opinion on Drug Delivery, 22(11), 1631 – 1635	2025	6.0, Q1
9.	Synthesis and Characterization of Nanohydroxyapatite from Carbide Lime Waste Through a Green Conversion Approach	Navneet Kaur, Rohit Kumar, Kavindra Kumar Kesari, Piyush Kumar Gupta*, Anjuvan Singh	Nano-Structures & Nano-Objects, 41, 101433	2025	Q1
10.	An Expert Opinion on Phytocompounds Delivery for Leishmaniasis Treatment	Piyush Kumar Gupta*, Harshita Tiwari, Ashutosh Kumar Shukla, Kavindra Kumar Kesari, Shikha Singh	Expert Opinion on Drug Delivery, 22(3), 325 - 327	2025	6.0, Q1
11.	Current Advances in the Therapeutic Potential of Nanomedicines for Pulmonary Disorders	Mayank Sharma, Rahul Shah, Apeksha Saraf, Rohit Kumar, Rahul Maheshwari, Kalpana Balakrishnan,, Piyush Kumar Gupta*	Emergent Materials, 8, 935 - 958	2025	4.0, Q2
12.	Exploring the Multifaceted Therapeutic Potential of Probiotics: A Review of Current Insights and Applications	Kashyapi Chakravarty, Smriti Gaur, Rohit Kumar, Niraj Kumar Jha, Piyush Kumar Gupta*	Probiotics and Antimicrobial Proteins, 17, 341 - 363	2025	5.3, Q1
13.	Exploring Gedunin's Potential in Cancer Therapy: Current Advances and Future	Deepa Bisht, Dolly Sharma, Shaily Chauhan, Shikha Singh, Puniethaa	Proceedings of the Indian National Science Academy, 91, 1120 - 1130	2025	1.3, Q3

	Perspectives	Prabhu, Piyush Kumar Gupta*			
14.	<i>In-Vivo</i> Toxicological Study of Cysteamine Modified Carbon Dots Derived from <i>Ruellia simplex</i> on Fruit Fly for Potential Bioimaging	Pratibha Pansari, Surajita Sahu, Monalisa Mishra, Piyush Kumar Gupta*, Geeta Durga	Biocatalysis and Agricultural Biotechnology, 61, 103359	2024	4.6, Q2
15.	An Opinion on Advanced Cancer Immunotherapy through Innovations in PD-1 Inhibitor Delivery Systems	Piyush Kumar Gupta*, Harshita Tiwari, Richa Mishra, Kalpana Balakrishnan,, Saravanan Krishnan	Expert Opinion on Drug Delivery, 21(12), 1693 – 1695	2024	6.0, Q1
16.	Nano Cerium Oxide Loaded Magnetic Multi-Walled Carbon Nanotubes Nanocomposite for Anti-Cancer and Anti-Bacterial Applications	Kalpana Balakrishnan, Sreejesh Sreekumar, Karthik Arumugam, Piyush Kumar Gupta*	Biocatalysis and Agricultural Biotechnology, 57(4), 103114	2024	4.6, Q2
17.	<i>In vivo</i> Toxicological Analysis of ZnFe ₂ O ₄ @poly(<i>t</i> BGE- <i>alt</i> -PA) Nanocomposite: A Study on Fruit Fly <i>Highlighted on the Front Cover Page of Journal Magazine</i>	Shaily Chauhan, Seekha Naik, Rohit Kumar, Janne Ruokolainen, Kavindra Kumar Kesari, Monalisa Mishra, Piyush Kumar Gupta*	ACS Omega, 9(6), 6549 - 6555	2024	5.2, Q2
18.	Revolutionizing Leishmaniasis Treatment with Cutting Edge Drug Delivery Systems and Nanovaccines: An Updated Review	Srushti Tambe, Sagnik Nag, Shivani R. Pandya, Rohit Kumar,, Purnima Amin, Piyush Kumar Gupta*	ACS Infectious Diseases, 10(6), 1871-1889	2024	4.5, Q1
19.	Biofilm Inhibition on Medical Devices and Implants Using Carbon	Eepsita Priyadarshini, Rohit Kumar, Kalpana	ACS Applied Bio Materials, 7(5), 2604 - 2619	2024	5.6, Q2

	Dots: An Updated Review	Balakrishnan,, Piyush Kumar Gupta*			
20.	3D-Printed Nanomedicines for Cancer Therapy	Surbhi Bisht, Sweta Kanwal, Balasubramanian Mythili Gnanamangai, Swati Singh,, Piyush Kumar Gupta*	Future Science OA, 10(1), FSO973	2024	2.5, Q3
21.	Synthesis of Pectin and Eggshells Biowaste Mediated Nanohydroxyapatite (nHAp), Their Physicochemical Characterizations, and Use as An Antibacterial Material	Priyanka Thakur, Arivarasan Vishnu Kirthi, Gaurav Kumar,, Piyush Kumar Gupta*	Applied Biochemistry and Biotechnology, 196, 491-505	2024	3.5, Q2
22.	Emerging Trends in Zinc Ferrite Nanoparticles for Biomedical and Environmental Applications	Jivesh Garg, Mei Nee Chiu, Saravanan Krishnan, Rohit Kumar,, Janne Ruokolainen, Piyush Kumar Gupta*	Applied Biochemistry and Biotechnology, 196, 1008 - 1043	2024	3.5, Q2
23.	Advanced Nanomedicine Approach of JAK Inhibitors: Supporting Treatment of Rheumatoid Arthritis	Radha Rani, Neha Raina, Akhilesh Kumar, Piyush Kumar Gupta*, Madhu Gupta	Nanomedicine, 19(4), 277 - 280	2024	4.6, Q2
24.	Development of Chemically Synthesized Hydroxyapatite Composite with Reduced Graphene Oxide for Enhanced Mechanical Properties	Bableen Flora, Rohit Kumar, Preeti Tiwari, Akhilesh Kumar,, Piyush Kumar Gupta*, Anjuvan Singh	Journal of the Mechanical Behavior of Biomedical Materials, 142(6), 105845	2023	4.1, Q2
25.	Polyester Nanomedicines for Visceral Leishmaniasis	Mohini Sikarwar, Vaishali Sunil Mishra, Preeti Tiwari, Madhu	Nanomedicine, 18(22), 1515 - 1518	2023	4.6, Q2

	Treatment	Gupta, Sunny Dholpuria, Piyush Kumar Gupta*			
26.	An Update on Lipid-Based Nano Drug Delivery Systems for Leishmaniasis Treatment	Vaishali Sunil Mishra, Preeti Tiwari, Madhu Gupta, Piyush Kumar Gupta*	Nanomedicine , 18(21), 1417 - 1419	2023	4.6, Q2
27.	<i>In Vivo</i> Toxicological Analysis of MnFe ₂ O ₄ @poly(<i>t</i> -BGE- <i>alt</i> -PA) Composite as A Novel Hybrid Nanomaterial for Possible Biomedical Use <i>Highlighted on the Front Cover Page of Journal Magazine</i>	Rohit Kumar, Samir Bauri, Soumyamitra Sahu, Shaily Chauhan, Kavindra Kumar Kesari, Monalisa Mishra, Piyush Kumar Gupta*	ACS Applied Bio Materials , 6(3), 1122 - 1132	2023	5.6, Q2
28.	Nanotechnology-Based Solutions for Anti-Biofouling Applications: An Overview	Somya Sinha, Rohit Kumar, Jigisha Anand,, Saravanan Krishnan, Kavindra Kumar Kesari, Piyush Kumar Gupta*	ACS Applied Nano Materials , 6, 14, 12828 - 12848	2023	5.8, Q2
29.	Oxygen Generating Nanomaterials for Chronic Wound Management	Neha Raina, Parvaiz Ahmad Shiekh, Akhilesh Kumar, Manu Smriti Singh, Piyush Kumar Gupta* , Madhu Gupta	Nanomedicine , 18(11), 845 - 847	2023	4.6, Q2
30.	Recent Updates on Viral Oncogenesis and Their Available Therapeutics	Shivam Chowdhary, Rahul Deka, Kingshuk Panda, Rohit Kumar,, Ashish Kumar Gupta, Somya Sinha, Piyush Kumar Gupta*	ACS Molecular Pharmaceutics , 20(8), 3698-3740	2023	4.9, Q1

31.	Current Aspects of Organoid Technology for Biomaterials Toxicity Analysis	Srushti Tambe, Rohit Kumar, Purnima Amin,, Ashwin Kumar Narasimhan, Piyush Kumar Gupta*	Future Medicinal Chemistry, 15(7), 579 - 582	2023	3.3, Q3
32.	Current Trends on the Effects of Metal-Based Nanoparticles on Microbial Ecology	Jyoti Rawat, Vikas Kumar, Priyanka Ahlawat, Lokesh Kumar Tripathi, Richa Tomar, Rohit Kumar, Sunny Dholpuria, Piyush Kumar Gupta*	Applied Biochemistry and Biotechnology, 195, 6168 - 6182	2023	3.5, Q2
33.	Emerging Trends in Silk Fibroin Based Nanofibers for Impaired Wound Healing	G. Sabarees, V. Velmurugan, G. P. Tamilarasi, V. Alagarsamy, Belay Zeleke Sibuh, Mohini Sikarwar, Piyush Kumar Gupta*	Journal of Drug Delivery Science and Technology, 79(1) 103994	2023	5.2, Q1
34.	Advances and Opportunities of Nano-Imaging Agents for the Diagnosis of Inflammatory Lung Diseases	Hema Brindha Musandam, Govindaraj Perumal,, Piyush Kumar Gupta*, Ashwin Kumar Narasimhan	Nanomedicine, 17(25), 1981-2005	2023	4.6, Q2
35.	Special Issue on Smart Nanomaterials for Cancer Theranostics	A.K. Narasimhan, P.K. Gupta*, N.K. Jha, K.K. Kesari, Y.K. Mishra	Materials Today Chemistry, 32(8), 101631	2023	7.4, Q1
36.	Recent Update on Correlation Between Reactive Oxygen Species and Synbiotics for Effective Management of Ulcerative Colitis	Sumel Ashique, Neeraj Mishra, Ashish Garg, Belay Z. Sibuh,, Petr Slama, Shubhadeep Roychoudhury, Piyush Kumar Gupta*	Frontiers in Nutrition, 10, 1126579	2023	5.5, Q1
37.	Strategies Facilitating the	Aishaanya Mishra,	Journal of Drug	2023	5.2, Q1

	Permeation of Nanoparticles through Blood-Brain Barrier: An Insight Towards the Development of Brain-Targeted Drug Delivery System	Rohit Kumar,, Ashish Kumar Gupta, Somya Sinha, Dillip Kumar Bishi, Piyush Kumar Gupta* , Sunita Nayak	Delivery Science and Technology , 86(9), 104694		
38.	Recent Updates on Metal-Polymer Nanocomposites in 3D Bioprinting for Tissue Engineering Applications	Bableen Flora, Rohit Kumar,, Anjuvan Singh, Kavindra Kumar Kesari, Piyush Kumar Gupta*	Nanofabrication , 8, 1-15	2023	1.2, Q4
39.	Molecular Insights and Therapeutic Implications of Nanoengineered Dietary Polyphenols for Targeting Lung Cancer: Part I	Sabya Sachi Das, Srushti Tambe, P.R.P. Verma, Purnima Amin, Neeru Singh, Sandeep Kumar Singh, Piyush Kumar Gupta*	Nanomedicine , 17(23), 1779-1798	2022	4.6, Q2
40.	Molecular Insights and Therapeutic Implications of Nanoengineered Dietary Polyphenols for Targeting Lung Cancer: Part II	Sabya Sachi Das, Srushti Tambe, P.R.P. Verma, Purnima Amin, Neeru Singh, Sandeep Kumar Singh, Piyush Kumar Gupta*	Nanomedicine , 17(23), 1799-1816	2022	4.6, Q2
41.	Polyester Nanomedicines Targeting Inflammatory Signaling Pathways for Cancer Therapy	Sabya Sachi Das, Sandeep Kumar Singh, P.R.P. Verma, Rekha Gahtori,, Piyush Kumar Gupta*	Biomedicine and Pharmacotherapy , 154(10), 113654	2022	NA
42.	Emerging Trends in Immunotoxin Targeting Cancer Stem Cells	Belay Zeleke Sibuh, Rekha Gahtori, Kumud Pant, Bahareh Farasati Far, Asrar Ahmad Malik, Sushil Dohare, Piyush Kumar Gupta*	Toxicology In Vitro , 83(9), 105417	2022	2.7, Q3

43.	Synthesis, Characterization, and Remedial Action of Biogenic <i>p</i> -Ag Nanoparticles	Somya Sinha, Belay Zeleke Sibuh, Abhilasha Mishra, Kumud Pant, Shikha Tomar, Jigisha Anand, Piyush Kumar Gupta*	Nanofabrication, 7, 1-6	2022	1.2, Q4
44.	Biogenic Preparation, Characterizations, and Biomedical Applications of Chitosan Functionalized Iron Oxide Nanocomposite	Devaraj Bharathi, Ranjithkumar Rajamani, Belay Zeleke Sibuh, Soumya Pandit,, Piyush Kumar Gupta*	Journal of Composites Science, 6(5), 120	2022	4.6, Q2
45.	Current Trends in Bio-Waste Mediated Metal/Metal Oxide Nanoparticles for Drug Delivery	B. H. Jaswanth Gowda, Mohammed Gulzar Ahmed, Sampath Chinnam, Karthika Paul,, Kavindra Kumar Kesari, Piyush Kumar Gupta*	Journal of Drug Delivery Science and Technology, 71(5), 103305	2022	5.2, Q1
46.	Applications of Lignin Nanoparticles for Cancer Drug Delivery: An Update	Jivesh Garg, Mei Nee Chiu, Saravanan Krishnan,, Vikas Tripathi, Sadanand Pandey, Piyush Kumar Gupta*	Materials Letters, 311(3), 131573	2022	2.6, Q3
47.	Enhanced Photocatalytic Activity of <i>St</i> -ZnO Nanorods for Methylene Blue Dye Degradation	Devaraj Bharathi, Thiruvengadam Nandagopal Jaya Ganesh,, Sadanand Pandey, Piyush Kumar Gupta*	Materials Letters, 311(3), 131637	2022	2.6, Q3
48.	Synthesis, Characterization and Remedial Action of Biogenic Silver Nanoparticles and Chitosan Silver Nanoparticles against	Piyush Kumar Gupta*, D. Karthik Kumar, M. Thaveena, Soumya Pandit, Somya Sinha, R. Ranjithkumar, Vijay Kumar Thakur	Journal of Renewable Materials, 10(12), 3093 - 3105	2022	NA

	Bacterial Pathogens <i>Highlighted on the Front Cover Page of the Journal Magazine</i>				
49.	Synthesis and Characterization of Biocompatible Bimetallic-Semi-Aromatic Polyester Hybrid Nanocomposite	Rohit Kumar, Piyush Kumar Gupta*, Soumya Pandit, Niraj Kumar Jha, Kavindra Kumar Kesari	Colloids and Surfaces A: Physicochemical and Engineering Aspects, 633(1), 127845	2022	5.4, Q2
50.	Synthesis and Characterization of Novel Bimetallic-Semi-Aromatic Polyester Nanocomposite for Possible Biomedical Use	Shaily Chauhan, Noura Al-Dayana, Rohit Kumar,, Piyush Kumar Gupta*	Materials Letters, 306(1), 130943	2022	2.6, Q3
51.	Novel EPR-Enhanced Strategies for Targeted Drug Delivery in Pancreatic Cancer: An Update	Mohammadzadeh, Niloufar Rahiman,, Ashish Gupta, Vijay Kumar Thakur, Belay Zeleke Sibuh, Piyush Kumar Gupta*	Journal of Drug Delivery Science and Technology, 73, 103459	2022	5.2, Q1
52.	Aptameric Nanobiosensors for the Diagnosis of COVID-19: An Update	Saravanan Krishnan, Ashwin Kumar Narasimhan, Niraj Kumar Jha, Kamal Dua, Vijay Kumar Thakur, Piyush Kumar Gupta*	Materials Letters, 308, 131237	2022	2.6, Q3
53.	Nanotechnology-Based Therapeutic Formulations in the Battle against Animal Coronaviruses -An Update	Saravanan Krishnan, Ashok Kumar Thirunavukkarsu, Niraj Kumar Jha, Rekha Gahtori, Ayush Singha Roy,, Piyush Kumar Gupta*	Journal of Nanoparticle Research, 23(10), 229	2021	3.5, Q2
54.	Synthesis and Characterization of PCU@C-Ag/AgCl	P. Senthilkumar, S. Kalaivani, B. Lerince Godrina, A. Janani, G.	Nanofabrication, 6(1), 68 - 78	2021	1.2, Q4

	Nanoparticles as An Antimicrobial Material for Respiratory Tract Infection	Aganiya, B. Sudhagar, R. Ranjithkumar,, Piyush Kumar Gupta*			
55.	Anti-Cancer Therapeutic Efficacy of Biogenic Am-ZnO Nanoparticles on 2D and 3D Tumor Models	Siva Chander Chabattula, Piyush Kumar Gupta*, Surya Kant Tripathi, Rekha Gahtori,, Kavindra Kumar Kesari	Materials Today Chemistry, 22(12), 100618	2021	7.4, Q1
56.	Nanomaterials in Alzheimer's Disease Treatment: A Comprehensive Review	Maryam Faiyaz, Mohd. Azhardin Ganayee,, Poonam Negi, Kamal Dua, Kavindra Kumar Kesari, Piyush Kumar Gupta*	Frontiers in Bioscience-Landmark, 26(10), 851-865	2021	4.1, Q2
57.	Nanomaterials in The Management of Gram-Negative Bacterial Infections	Mahmood Barani, Mahira Zeeshan,, Saman Sargazi, Piyush Kumar Gupta*, Vijay Kumar Thakur	Nanomaterials, 11(10), 2535	2021	4.8, Q2
58.	Theranostic Advances of Bio-nanomaterials against Gestational Diabetes Mellitus: A Preliminary Review	Mahmood Barani, Saman Sargazi,, Niraj Kumar Jha, Piyush Kumar Gupta*, Vijay Kumar Thakur	Journal of Functional Biomaterials, 12(4), 54	2021	5.9, Q1
59.	Synthesis and Characterization of Novel Fe ₃ O ₄ /PVA/Eggshell Hybrid Nanocomposite for Photodegradation and Antibacterial Activity	Piyush Kumar Gupta*, Senthilkumar P., Tamilarasi G., R. Ranjithkumar, Soumya Pandit, Somya Sinha, Vijay Kumar Thakur	Journal of Composites Science, 5(10), 267	2021	4.6, Q2
60.	Mitigating Inflammation	Sabya Sachi Das,	Future Medicinal	2021	3.3, Q3

	Using Advance Drug Delivery by Targeting Tumour Necrosis Factor-Alpha in Lung Diseases	Sandeep Kumar Singh, P.R.P Verma, Piyush Kumar Gupta*, Kamal Dua	Chemistry, 14(2), 57-60		
61.	Phytomedicines Targeting Cancer Stem Cells: Therapeutic Opportunities and Prospects for Pharmaceutical Development	Piyush Kumar Gupta*, Mrunmayee Saraff, Rekha Gahtori, Nidhi Negi, Surya Kant Tripathi, Jatin Kumar,, Shreesh Ojha, Kavindra Kumar Kesari	Pharmaceuticals, 14(7), 676	2021	5.7, Q1
62.	Recent Advances in Cardiac Tissue Engineering for the Management of Myocardium Infarction	Vineeta Sharma, Sanat Kumar Dash, Kavitha Govarthan, Rekha Gahtori,, Kavindra Kumar Kesari, Niraj Kumar Jha, Piyush Kumar Gupta*, Shreesh Ojha	Cells, 10(10), 2538	2021	6.0, Q2
63.	Delineating The Role of Phytocompounds against Anti-Bacterial Drug Resistance–An Update	Rekha Gahtori, Nidhi Negi, Saravanan Krishnan, Sugapriya Dhanasekaran, Soumya Pandit, Kanu Priya, Dillip Kumar Bishi, Ram Prasad, Piyush Kumar Gupta*	Biocell, 45(6), 1465-1477	2021	1.8, Q3
64.	Recent Trends in Biodegradable Polyester Nanomaterials for Cancer Therapy	Piyush Kumar Gupta*, Rekha Gahtori, Kavitha Govarthan, Vineeta Sharma,, Dillip Kumar Bishi	Materials Science and Engineering C: Materials for Biological Applications, 127(8), 112198	2021	8.4, Q1
65.	Metal-Free Semi-Aromatic Polyester: A Novel Nanomaterial for Potential Clinical Application	Piyush Kumar Gupta*, Rekha Gahtori, Siva Chander Chabattula, Kavitha Govarthan, Santosh	Journal of Drug Delivery Science and Technology, 56(4), 101582	2020	5.2, Q1

		Gupta, Rama Shanker Verma			
66.	Metal-Free Semi-Aromatic Polyester as Nanodrug Carrier: A Novel Tumor-Targeting Drug Delivery Vehicle for Potential Clinical Application	Piyush Kumar Gupta*, Surya Kant Tripathi, Sreenath Pappuru,, Debashis Chakraborty, Rama Shanker Verma	Materials Science and Engineering C: Materials for Biological Applications, 107(2), 110285	2020	8.4, Q1
67.	Self-Assembled Dual-Drug Loaded Core-Shell Nanoparticles Based on Metal-Free Fully Alternating Polyester for Cancer Theranostics	Piyush Kumar Gupta*, Sreenath Pappuru, Santosh Gupta, Bamadeb Patra, Debashis Chakraborty, Rama Shanker Verma	Materials Science and Engineering C: Materials for Biological Applications, 101(8), 448–463	2019	8.4, Q1
68.	Enhancing the Anti-Cancer Therapeutic Efficacy by Optimizing Molecular Weight of Metal-Free Fully Alternating Semi-Aromatic Polyester as Nano-Drug Carriers	Piyush Kumar Gupta*, Santosh Gupta, Sreenath Pappuru, Siva Chander Chabattula, Debashis Chakraborty, Rama Shanker Verma	Journal of Drug Delivery Science and Technology, 51(6), 101–114	2019	5.2, Q1
CO-AUTHOR					
69.	Pathophysiology and Molecular Signalling in Osteoporosis: Linking Risk Factors to Bone Loss	Pramoda G., Kamini Shivhare, Piyush Kumar Gupta, Amirhossein Sahebkar, Rahul Shukla, Prashant Kesharwani	Journal of Cellular and Molecular Medicine, 30(9), e71155	2026	4.7, Q2
70.	Nanofibrous Cellulosic Matte Conjugated with Antioxidative Cerium Oxide Nanoparticle and S-Nitroso-N-acetylpenicillamine (SNAP) for Biomedical Application	Shivam Pandey, Sneha Kumari, Sharda Gupta, Arindam Bit, Piyush Kumar Gupta, Sushant Singh	Biotechnology for Sustainable Materials, 3, 5	2026	NA

71.	Nanomedicine to Enhance Melanoma Radiotherapy: Mechanisms and Translational Prospects	Chou-Yi Hsu, Jasur Rizaev,, Piyush Kumar Gupta, Krishnakumar Rishnakumar Samikan, Samir Sahoo, Neeraj Bansal	Journal of Pharmacology and Experimental Therapeutics, 393(6), 104903	2026	4.3, Q2
72.	Innovative Approaches in the Treatment of Hematologic Malignancies: The Role of CRISPR-Engineered Microbiomes along the Gut-Immune Axis in Immunotherapy Development	Chou-Yi Hsu,, Piyush Kumar Gupta, Renu Sharma, Priya Priyadarshini Nayak, Amirali Ebrahimpour, Yeganeh Khazaei	Cancer Cell International, 26, 228	2026	7.0, Q1
73.	Functionalized Iron Oxide Nanoparticles Improve Iron Status and Alleviate Iron Deficiency Anemia: Evidence from a Comparative <i>In Vivo</i> Study	Dennis George, Akhilesh Kumar,, Piyush Kumar Gupta, Mayank Handa, Rahul Shukla	Inorganic and Nano-Metal Chemistry, 56(2), 126 - 144	2026	1.7, Q3
74.	Rational Design and <i>In-Vivo</i> Toxicity Assessment of Multichannel Fluorescent Carbon Dots Derived from <i>Withania coagulans</i> in <i>Drosophila melanogaster</i>	Pratibha Pansari, Surajita Sahu, Anwar Alam, Piyush Kumar Gupta, Monalisa Mishra, Geeta Durga	Microchimica Acta, 192, 585	2025	5.4, Q1
75.	Investigation on the Heating Effects of Intra-Tumoral Injectable Magnetic Hydrogels (IT-MG) for Cancer Hyperthermia	Hema Brindha Masanam, Janani Muthuraman, Bharath Chandra, Kottapalli,, Piyush Kumar Gupta, Ashwin Kumar Narasimhan	Biomedical Physics & Engineering Express, 11(2), 025036	2025	2.0, Q3
76.	Intranasal Therapeutics for Neurodegenerative	Siddhant Kumar, Akshay Yadav, Rahul	ACS Molecular Pharmaceutics, 22(7),	2025	4.9, Q1

	Disorders: Overcoming the Blood-Brain Barrier with Smart Formulations and Devices	K. Verma, Akhilesh Kumar, Piyush Kumar Gupta, Rahul Shukla	3602 - 3620		
77.	Revolutionising Neurological Therapies: The Multifaceted Potential of Zein-Based Nanoparticles for Brain-Targeted Drug Delivery	Somesh Narayan, Piyush Kumar Gupta, Kalpana Nagpal	ACS Molecular Pharmaceutics, 22(7), 3803 - 3823	2025	4.9, Q1
78.	Synergy of Microfluidics and Nanomaterials: A Revolutionary Approach for Cancer Management	Pramoda G., Mansi Singh, Piyush Kumar Gupta, Rahul Shukla	ACS Applied Bio Materials, 8, 4, 2716 - 2734	2025	5.6, Q2
79.	Studying the Remedial Action of Zinc Oxide Nanoparticles on <i>Salmonella typhimurium</i>	Chiu Kai Yuan, Sinouvassane Djearamane, Wong Ling Shing, Ranjithkumar Rajamani, Piyush Kumar Gupta, Saminathan Kayarohanam	Malaysian Journal of Analytical Sciences, 29(4), 1529	2025	NA
80.	A Comprehensive Review of the Application of 3D Bioprinting in Chronic Wound Management	Prathap Madeswara Guptha, Jovita Kanoujia,, Piyush Kumar Gupta, Madhu Gupta	Expert Opinion on Drug Delivery, 21(11), 1573-1594	2024	6.0, Q1
81.	Anticancer Application of $Nat-ZnFe_2O_4$ Nanoparticles on 2D Tumor Models	Siva Chander Chabattula, Bamadeb Patra, Piyush Kumar Gupta, Kavitha Govarthanan, Suresh Kumar Rayala,, Rama Shanker Verma	Applied Biochemistry and Biotechnology, 196, 1058 - 1078	2024	3.5, Q2
82.	Recent Updates on Nano-Phyto Formulations-Based Therapeutic Intervention	Abhishek Wahi, Mamta Bishnoi,, Piyush Kumar Gupta, Ginpreet Kaur,	Oncology Research, 32(1), 19-47	2024	4.6, Q2

	for Cancer Treatment	Hardeep Tuli, Madhu Gupta			
83.	Anti-Cancer Activity of Biogenic <i>Nat</i> -ZnO Nanoparticles Synthesized Using <i>Nyctanthes arbor-tristis</i> (<i>Nat</i>) Flower Extract	Siva Chander Chabattula, Piyush Kumar Gupta, Kavitha Govarthanan, Sudha Varadaraj, Suresh Kumar Rayala, Debashis Chakraborty, Rama Shanker Verma	<i>Applied Biochemistry and Biotechnology</i> , 196, 382 - 399	2024	3.5, Q2
84.	Self-Nanoemulsifying Drug Delivery System (SNEDDS) Mediated Improved Oral Bioavailability of Thymoquinone: Optimization, Characterization, Pharmacokinetic, and Hepatotoxicity Studies	Charul Rathore, Chetna Hemrajani, Abhishek Kumar Sharma, Piyush Kumar Gupta,, Murtaza M. Tambuwala	<i>Drug Delivery and Translational Research</i> , 13, 292-307	2023	6.9, Q1
85.	Designing of Smart Nanogels Based on Tragacanth Gum for Cisplatin Delivery	Chetna Verma, Deepak Pathania, Poonam Negi, Piyush Kumar Gupta, Rama Shanker Verma, Bhuvanesh Gupta	<i>Polymer International</i> , 72(2), 158-165	2023	3.0, Q3
86.	Development of a Quartz Crystal Microbalance Based Immunosensor for the Early Detection of Mesothelin in Cancer	Hem C. Joshi, Himanshu Kharkwal, Ajay Kumar, Piyush Kumar Gupta	<i>Sensors International</i> , 4, 100248	2023	Q1
87.	Microbial Fuel Cell-based Biosensors and Applications	Anshika Varshney, Lokendra Sharma, Chetan Pandit, Piyush Kumar Gupta,, Vijay Jagdish Upadhye	<i>Applied Biochemistry and Biotechnology</i> , 195, 3508 - 3531	2023	3.5, Q2

88.	Microbial Electrochemical Treatment of Methyl Red Dye Degradation Using Co-Culture Method	Kalpana Sharma, Soumya Pandit, Abhilasha Singh Mathuriya, Piyush Kumar Gupta, Kumud Pant, Dipak A. Jadhav	Water, 15(1), 56	2023	3.5, Q2
89.	A Comprehensive Review on Enhanced Production of Microbial Lipids for High Value Applications	Rupal Gupta, Srijoni Banerjee, Piyush Kumar Gupta,, Soumya Pandit	Biomass Conversion and Biorefinery, 13, 15357 - 15380	2023	4.3, Q2
90.	Investigating The Performance of Lithium-Doped Bismuth Ferrite [BiFe _{1-x} Li _x O ₃] Graphene Nanocomposites as Cathode Catalyst for the Improved Power Output in Microbial Fuel Cells	Tenzin Pema, Ankit Kumar, Soumya Pandit,, Piyush Kumar Gupta, Dibyajit Lahiri, Ram Chandra Singh, Jigisha Anand, Kundan Kumar Chaubey	Catalysts, 13(3), 618	2023	4.5, Q2
91.	Green Biomaterials: Fundamental Principles	Navid Rabiee, Mehmet R. Dokmeci, Ali Zarrabi, Pooyan Makvandi....., Piyush Kumar Gupta,, Reddicherla Umapathi, Amir Ghasemi, Milica Radisic	Green Biomaterials, 1(1), 1-4	2023	NA
92.	Antimicrobial Peptides against Microbial Biofilms: Efficacy, Challenges, and Future Prospect	Tahseena Naaz, Dibyajit Lahiri, Soumya Pandit, Moupriya Nag, Piyush Kumar Gupta,, Ashish Kumar Gupta	International Journal of Peptide Research and Therapeutics, 29, 48	2023	2.5, Q3
93.	Food-Grade Quercetin-Loaded Nanoemulsion Ameliorates Effects	Sabya Sachi Das, Arunabh Sarkar, Siva Chander Chabattula,	Antioxidants, 11(7), 1378	2022	8.2, Q1

	Associated with Parkinson's Disease and Cancer: Studies Employing Transgenic <i>C. elegans</i> Model and Human Cancer Cell Lines	PRP Verma, Aamir Nazir, Piyush Kumar Gupta ,, Sandeep Kumar Singh			
94.	<i>In Vivo</i> Therapeutic Efficacy of <i>Curcuma longa</i> Extract-Loaded Ethosomes on Wound Healing	Sumit Kumar, Akhilesh Kumar, Naveen Kumar, Praveen Singh, Thakur Uttam Singh, Bhoj Raj Singh, Piyush Kumar Gupta , Vijay Kumar Thakur	Veterinary Research Communications , 46, 1033-1049	2022	2.2, Q2
95.	Remedial Aspect of Zinc Oxide Nanoparticles (ZnO NPs) against <i>Serratia marcescens</i> and <i>Enterococcus faecalis</i>	Sinouvasane Djearmane, Zhe Chi Loh, Jun Jie Lee, Ling Shing Wong,, Piyush Kumar Gupta , Sharolynne Xiao Tong Liang	Frontiers in Pharmacology , 13, 891304	2022	5.4, Q1
96.	Genome-Wide Methylome Pattern Predictive Network Analysis Reveal Mesenchymal Stem Cell's Propensity to Undergo Cardiovascular Lineage	Kavitha Govarthanan, Piyush Kumar Gupta , Bamadeb Patra, Deepa Ramasamy,, Rama Shanker Verma	3 Biotech , 12, 12	2022	3.1, Q3
97.	Targeting Mucus Barrier in Respiratory Diseases by Chemically Modified Advanced Delivery Systems	Parteek Prasher, Mousmee Sharma, Sachin Kumar Singh, Monica Gulati, Niraj Kumar Jha, Piyush Kumar Gupta ,, Brian Gregory George Oliver	Chemico-Biological Interactions , 365(9), 110048	2022	5.2, Q1
98.	Modification of Graphite Sheet Anode with Iron	Babita Tripathi, Soumya Pandit,,	Catalysts , 12(9), 1040	2022	4.5, Q2

	(II, III) Oxide-Carbon Dots for Enhancing the Performance of Microbial Fuel Cell	Piyush Kumar Gupta, Ram Chandra Singh, Mohit Sahni, Kumud Pant, Satyendra Singh			
99.	Advances in Designing of Polymeric Micelles for Biomedical Application in Brain Related Diseases	Jaskiran Kaur, Monica Gulati, Bhupinder Kapoor, Niraj Kumar Jha, Piyush Kumar Gupta, Gaurav Gupta,, Sachin Kumar Singh	Chemico-Biological Interactions, 361(7), 109960	2022	5.2, Q1
100.	Harnessing the Therapeutic Potential of Fisetin and Its Nanoparticles: Journey So Far and Road Ahead	Sukriti Vishwas, Sachin Kumar Singh, Monica Gulati,, Piyush Kumar Gupta, Hari Prasad Devkota, Dinesh Kumar Chellappan, Gaurav Gupta, Jon Adams, Kamal Dua	Chemico-Biological Interactions, 356(4), 109869	2022	5.2, Q1
101.	Impact of Cathode Biofouling in Microbial Fuel Cells and Mitigation Techniques	Oluwafemi Oladipupo Kolajo, Chetan Pandit, Abhilasha Singh Mathuriya, Piyush Kumar Gupta, Deepak Jadhav, Dibyajit Lahiri, Moupriya Nag, Vijay Jagdish Upadhye	Biocatalysis and Agricultural Biotechnology, 43, 102408	2022	4.6, Q2
102.	Re-establishing the Comprehension of Phytomedicine and Nanomedicine in Inflammation-Mediated Cancer Signaling	Niraj Kumar Jha, Sania Arfin, Saurabh Kumar Jha, Rohan Kar, Abhijit Dey, Rohit Gundamaraju, Ghulam Md. Ashraf, Piyush Kumar Gupta,, Kavindra Kumar Kesari	Seminars in Cancer Biology, 86(11), 1086 - 1104	2022	20.3, Q1

103.	Overcoming Hydrolytic Degradation Challenges in Topical Delivery: Non-Aqueous Nano-Emulsions	Arya Kadukkattil Ramanunni,, Dinesh Kumar Chellappan, Niraj Kumar Jha, Piyush Kumar Gupta, Sukriti Vishwas	Expert Opinion on Drug Delivery, 19(1), 23–45	2022	6.0, Q1
104.	Recent Advancements in The Cathodic Catalyst for The Hydrogen Evolution Reaction in a Microbial Electrolytic Cell	Nishit Savla, Mridula Guin, Soumya Pandit, Santimoy Khilari, Abhilasha Singh Mathuriya, Piyush Kumar Gupta, Bhimsen Thapa, Rambabu Bobba, Sokhee Philemon Jung	International Journal of Hydrogen Energy, 47(34), 15333-15356	2022	9.2, Q1
105.	Repurposing Chia Seed Oil: A Versatile Novel Futuristic Functional Food	Yamini Tak, Manpreet Kaur, Rajendra Kumar,, Piyush Kumar Gupta, Ryszard Amarowicz	Journal of Food Science, 87(7), 2798 - 2819	2022	4.1, Q2
106.	Potential and Future Prospects of Biochar-based Materials and Their Applications in Removal of Organic Contaminants from Industrial Wastewater	Rupal Gupta, Chetan Pandit, Soumya Pandit, Piyush Kumar Gupta, Dibyajit Lahiri, Daksh Agarwal, Sadanand Pandey	Journal of Material Cycles and Waste Management, 24, 852 - 876	2022	3.8, Q2
107.	Recent Progress in Development of Dressings Used for Diabetic Wounds with Special Emphasis on Scaffolds	Ankit Awasthi, Monica Gulati, Bimlesh Kumar, Jaskiran Kaur, Sukriti Vishwas,, Piyush Kumar Gupta, Dinesh Kumar Chellappan, Gaurav Gupta,, Sachin Kumar Singh	Biomed Research International, 2022, 1659338	2022	2.9, Q3

108.	Recent Advances in the Application of Biochar in Microbial Electrochemical Cells	Sanchita Bipin Patwardhan, Soumya Pandit, Piyush Kumar Gupta, Niraj Kumar Jha, Jyoti Rawat,, Vijay Kumar Thakur, Kavindra Kumar Kesari	Fuel, 310, 122501	2022	7.8, Q1
109.	Molecular Mechanisms of Developmental Pathways in Neurological Disorders: A Pharmacological and Therapeutic Review	Niraj Kumar Jha, Wei-Chih Chen, Sanjay Kumar, Rajni Dubey, Lung-Wen Tsai, Rohan Kar, Saurabh Kumar Jha, Piyush Kumar Gupta,, Janne Ruokolainen, Kavindra Kumar Kesari, Shreesh Ojha	Open Biology, 12(3), 210289	2022	3.1, Q3
110.	Microbial Desalination Cell: Desalination Through Conserving Energy	Masirah Zahid, Nishit Savla, Soumya Pandit, Sokhee Jung, Piyush Kumar Gupta, Enrico Marsili, Vijay Kumar Thakur, Ram Prasad	Desalination, 521, 115381	2022	9.9, Q1
111.	Unravelling the Molecular Mechanisms Underlying Chronic Respiratory Diseases for the Development of Novel Therapeutics via <i>In Vitro</i> Experimental Models	Ching Leng Tan, Yinghan Chan,, Piyush Kumar Gupta, Niraj Kumar Jha, Lakshmi Thangavelu,, Kamal Dua, Dinesh Kumar Chellappan	European Journal of Pharmacology, 919(3), 174821	2022	5.7, Q1
112.	Use of Biomass-Derived Biochar in Wastewater Treatment and Power Production: A Promising Solution for a Sustainable Environment	Meenal Gupta, Nishit Savla, Chetan Pandit, Soumya Pandit, Piyush Kumar Gupta,, Vijay Kumar Thakur	Science of The Total Environment, 824, 153892	2022	NA

113.	Autophagy and EMT in Cancer and Metastasis: Who Controls Whom?	Rohit Gundamaraju, Wenying Lu, Manash K. Paul, Niraj Kumar Jha, Piyush Kumar Gupta,, Saeid Ghavami	BBA Molecular Basis of Disease, 1868(9), 166431	2022	5.0, Q1
114.	Molecular Insights into Therapeutic Potentials of Hybrid Compounds Targeting Alzheimer's Disease	Ankit Jana, Arkadyuti Bhattacharjee,, Asma Perveen, Danish Iqbal, Piyush Kumar Gupta,, Kavindra Kumar Kesari, Ghulam Md Ashraf	Molecular Neurobiology, 59, 3512-3528	2022	5.5, Q1
115.	Discovering Multifaceted Role of Vanillic Acid Beyond Flavours: Nutraceutical, Therapeutic and Functionalization Potential	Jaskiran Kaur, Monica Gulati,, Piyush Kumar Gupta, Kamal Dua, Rubiya Khursheed, Ankit Awasthi, Leander Corrie, Sachin K Singh	Trends in Food Science & Technology, 122(4), 187-200	2022	17.4, Q1
116.	Interplay Between Dysbiosis of Gut Microbiome, Lipid Metabolism, and Tumorigenesis: Can Gut Dysbiosis Stand as a Prognostic Marker in Cancer	Indranil Chattyapadhyay, Rohit Gundamaraju, Niraj Kumar Jha, Piyush Kumar Gupta, Abhijit Dey, Chandi C. Mandal, Bridget M. Ford	Disease Markers, 2022, 2941248	2022	NA
117.	Occupational Health Hazards and Wide Spectrum of Genetic Damage by the Organic Solvent Fumes at the Workplace: A Critical Appraisal	Neha Verma, Soumya Pandit, Piyush Kumar Gupta, Sanjay Kumar, Anil Kumar, Shiv Kumar Giri, Gulab Yadav, Kanu Priya	Environmental Science and Pollution Research, 29, 30954 - 30966	2022	NA
118.	Nutraceuticals and Mitochondrial Oxidative Stress: Bridging the Gap	Venkata Sita Rama Raju Allam,, Piyush Kumar Gupta,	Environmental Science and Pollution Research, 29, 62733 -	2022	NA

	in the Management of Bronchial Asthma	Vyoma K. Patel, Gang Liu, Mohammad Amjad Kamal, Philip M. Hansbro, Brian Gregory George Oliver, Dinesh Kumar Chellappan, Kamal Dua	62754		
119.	A Comprehensive Review on Oxygen Reduction Reaction (ORR) in Microbial Fuel Cells (MFCs)	Pooja Dange, Nishit Savla, Soumya Pandit, Sokhee Jung, Piyush Kumar Gupta, Mohit Sahni, Ram Prasad	Journal of Renewable Materials, 10(3), 665-697	2022	NA
120.	Potential Immunomodulatory Activities of Plant Products	Monu Kumar Shukla, Sachin Kumar Singh, Sadanand Pandey, Piyush Kumar Gupta, Anurag Choudhary, Deepak Jindal, Kamal Dua, Deepak Kumar	South African Journal of Botany, 149(9), 937 - 943	2022	3.1, Q2
121.	Microbial Approaches for Sustainable Remediation of Dye Contaminated Wastewater: A Review	Devaraj Bharathi, Thiruvengadam Nandagopal Jaya Ganesh, Ranjithkumar Rajamani, Piyush Kumar Gupta, Sinouvassane Djearamane	Archives of Microbiology, 204, 169	2022	3.4, Q3
122.	Autoantibodies and Autoimmune Disorders in SARS-CoV-2 Infection: Pathogenicity and Regulation	Thiviya Darmarajan, Keshav Raj Paudel, Mayuren Candasamy, Jestin Chellian, Thiagarajan Madheswaran, Lakshmana Prabu Sakthivel, Bey Hing Goh, Piyush Kumar Gupta,, Dinesh Kumar Chellappan	Environmental Science and Pollution Research, 29, 54072 - 54087	2022	NA

123.	Molecular Mechanism(s) of Regulation(s) of c-MET/HGF Signalling in Head and Neck Cancer	Sibi Raj, Kavindra Kumar Kesari, Arun Kumar, Brijesh Rathi, Ashok Sharma, Piyush Kumar Gupta, Saurabh Kumar Jha,, Dhruv Kumar	Molecular Cancer, 21, 31	2022	42.2, Q1
124.	Exploring the Role of Antibiotics and Steroids in Managing Respiratory Diseases	Dinesh Kumar Chellappan, Parteek Prasher,, Piyush Kumar Gupta, Niraj Kumar Jha, Madhur D. Shastri, Ronan MacLoughlin, Sachin K Singh, Monica Gulati, Gaurav Gupta, Kamal Dua	Journal of Biochemical and Molecular Toxicology, 36(10), e23174	2022	3.6, Q2
125.	Nuclear Factor-kappa B (NF-κB) Inhibition as A Therapeutic Target for Plant Nutraceuticals in Mitigating Inflammatory Lung Diseases	Khalid Saad Alharbi,, Piyush Kumar Gupta, Dinesh Kumar Chellappan, Brian George Oliver, Kamal Dua, Gaurav Gupta	Chemico-Biological Interactions, 354(2), 109842	2022	5.2, Q1
126.	Protein and Peptide Delivery to Lungs by Using Advanced Targeted Drug Delivery	Dinesh Kumar Chellappan,, Piyush Kumar Gupta, Monica Gulati, Sachin Kumar Singh, Gaurav Gupta, Niraj Kumar Jha, Brian Gregory George Oliver, Kamal Dua	Chemico-Biological Interactions, 351(1), 109706	2022	5.2, Q1
127.	Applications of Drug Delivery Systems Targeting Inflammasomes in Pulmonary Diseases	Hari Prasad Devkota, Keshav Raj Paudel, Niraj Kumar Jha, Piyush Kumar Gupta,, Kamal Dua	Nanomedicine, 16(27), 2407 - 2410	2021	4.6, Q2

128.	Recent Advances in Chronotherapy Targeting Respiratory Diseases	Keshav Raj Paudel, Saurav Kumar Jha, Venkata Sita Rama Raju Allam, Parteek Prasher, Piyush Kumar Gupta,, Philip M Hansbro, Kamal Dua	Pharmaceutics, 13(12), 2008	2021	6.9, Q1
129.	Dioscin: A Review on Pharmacological Properties and Therapeutic Values	Shinjini Bandopadhyay, Uttpal Anand, Vijaykumar Shivaji Gadekar, Niraj Kumar Jha, Piyush Kumar Gupta,, Abhijit Dey	Biofactors, 48(1), 22 - 55	2021	5.2, Q1
130.	Role of HGF/MET in Liver Cancer	Gaurav Gupta, Waleed Hassan Al-Malki, Imran Kazmi, Lakshmi Thangavelu, Piyush Kumar Gupta,, Kamal Dua	Future Medicinal Chemistry, 13(21), 1829–1832	2021	3.3, Q3
131.	A Global Comparison of Implementation and Effectiveness of Materiovigilance Programme: Overview of Regulations	Deeksha Joshi, Ishita Sharma, Saurabh Gupta,, Niraj Kumar Jha, Piyush Kumar Gupta, Poonam Negi, Kamal Dua, Sachin Kumar Singh	Environmental Science and Pollution Research, 28, 59608-59629	2021	NA
132.	Cannabinoid Type-2 Receptor Agonist, JWH133 as a Possible Candidate for Targeting Infection, Inflammation, and Immunity in Covid-19	Niraj Kumar Jha, Charu Sharma,, Piyush Kumar Gupta, Abhijit Dey, Kavindra Kumar Kesari, Shreesh Ojha	Immuno, 1(3), 285-304	2021	2.7, Q3
133.	Immunological Mechanisms of Vaccine-Induced Protection	Keshav Goyal, Harsh Goel,, Piyush Kumar Gupta, Dhruv	Immuno, 1(4), 442-456	2021	2.7, Q3

	against SARS-CoV-2 in Humans	Kumar, Shubhadeep Roychoudhury, Niraj Kumar Jha, Tarun Kumar Upadhyay, Kavindra Kumar Kesari			
134.	Current Perspectives on Integrated Approaches to Enhance Lipid Accumulation in Microalgae	Jyoti Rawat, Piyush Kumar Gupta, Soumya Pandit, Ram Prasad, Veena Pande	3 Biotech, 11, 303	2021	3.1, Q3
135.	Microbial Fuel Cell United with Other Existing Technologies for Enhanced Power Generation and Efficient Wastewater Treatment	Sanchita Patwardhan, Nishit Savla, Soumya Pandit, Piyush Kumar Gupta,, Vandana Singh, Vivek Kumar, Ram Prasad	Applied Sciences, 11(22), 10777	2021	2.9, Q2
136.	Valorisation of CO ₂ into Value-Added Products via Microbial Electrosynthesis (MES) and Electro-Fermentation Technology	Marzuqa Quraishi, Kayinath Wani, Soumya Pandit, Piyush Kumar Gupta,, Sokhee P. Jung, Vijay Kumar Thakur, Ram Prasad	Fermentation, 7(4), 291	2021	4.1, Q2
137.	Recent Advances in Bioelectricity Generation through the Simultaneous Valorization of Lignocellulosic Biomass and Wastewater Treatment in Microbial Fuel Cell	Abubakar Muh'd Sani, Soumya Pandit, Abhilasha Singh Mathuriya, Rishi Pramod Babu, Piyush Kumar Gupta, Namita Khanna, Sachin Kumar	Sustainable Energy Technologies and Assessments, 48(12), 101572	2021	7.4, Q2
138.	Effect of the Membrane Biofouling on the Microbial Electrochemical Cell's Performance and Mitigation Strategies	Soumya Pandit, Jayesh M Sonawane, Piyush Kumar Gupta, Ram Prasad, Dipak Ashok Jadhav	Bioresource Technology Reports, 15(9), 100822	2021	5.0, Q1

139.	Microfluidic Platforms to Unravel Mysteries of Alzheimer's Disease: How Far Have We Come?	Pragya Prasanna, Shweta Rathee,, Piyush Kumar Gupta, Shreesh Ojha, Niraj Kumar Jha, Chiara Villa, Saurabh Kumar Jha	Life, 11(10), 1022	2021	3.9, Q1
140.	Nutraceuticals: Unlocking Newer Paradigms in the Mitigation of Inflammatory Lung Diseases	Yinghan Chan, Venkata Sita Rama Raju, Keshav Raj Paudel, Sachin K Singh, Muralikrishnan Dhanasekaran, Piyush Kumar Gupta,, Kamal Dua	Critical Reviews in Food Science and Nutrition, 63(19), 3302 - 3332	2021	10.6, Q1
141.	Agricultural Waste and Wastewater as Feedstock for Bioelectricity Generation using Microbial Fuel Cells: Recent Advances	Soumya Pandit, Nishit Savla,, Piyush Kumar Gupta, Ashutosh Kumar Rai, Dipak A. Jadhav, Sokhee P. Jung, Ram Prasad	Fermentation, 7(3), 169	2021	4.1, Q2
142.	Microfluidic Chips: Recent Advances, Critical Strategies in Design, Applications, and Future Perspectives	Prapti Pattanayak, Sachin Kumar Singh,, Piyush Kumar Gupta, Parteek Prasher, Kamal Dua, Harish Dureja, Deepak Kumar, Vijay Kumar	Microfluidics and Nanofluidics, 25, 99	2021	2.9, Q2
143.	Exploiting Microbes in the Petroleum Field: Analyzing the Credibility of Microbial Enhanced Oil Recovery (MEOR)	Marzuqa Quraishi, Shashi Kant Bhatia, Soumya Pandit, Piyush Kumar Gupta, Vivek Rangarajan, Dibyajit Lahiri, Sunita Varjani, Sanjeet Mehariya, Yung-hun Yang	Energies, 14(15), 4684	2021	3.9, Q3

144.	Recent Developments in Microbial Electrolysis Cells-based Simultaneous Biohydrogen Production Utilizing Wastewater as a Feedstock	Pooja Dange, Soumya Pandit, Dipak Jadhav, Poojhaa Shanmugam, Piyush Kumar Gupta, Sanjay Kumar, Manu Kumar, Yung-hun Yang, Shashi Kant Bhatia	Sustainability, 13(16), 8796	2021	4.1, Q2
145.	Green Synthesis of Metallic Nanoparticles: Applications and Limitations	Pritam Kumar Dixit, Jatin Kumar, Amit K. Das, Soumi Sadhu, Sunita Sharma, Swati Singh, Piyush Kumar Gupta, Beom Soo Kim	Catalysts, 11(8), 902	2021	4.5, Q2
146.	Advanced Drug Delivery Approaches in Managing TGF-beta Mediated Remodelling in Lung Diseases	Gaurav Gupta, Dinesh Kumar Chellappan, Sachin Kumar Singh, Piyush Kumar Gupta,, Kamal Dua	Nanomedicine, 16(25), 2243-2247	2021	4.6, Q2
147.	Pharmacological Potential of JWH133, A Cannabinoid Type 2 Receptor Agonist in Neurodegenerative, Neurodevelopmental, and Neuropsychiatric Diseases	Hebaallah Mamdouh Hashiesh, Niraj Kumar Jha, Charu Sharma, Piyush Kumar Gupta, Saurabh Kumar Jha, Chandragouda R. Patil, Sameer N. Goyal, Shreesh K. Ojha	European Journal of Pharmacology, 909(10), 174398	2021	5.7, Q1
148.	Bioelectricity Production using Plant Microbial Fuel Cell: Present State of Art	Rukhsar Shaikh, Afshan Rizvi, Marzuqa Quraishi, Soumya Pandit, Abhilasha Singh Mathuriya, Piyush Kumar Gupta, Joginder Singh, Ram Prasad	South African Journal of Botany, 140(8), 393 – 408	2021	3.1, Q2

149.	Extracellular Vesicle-Based Therapy for COVID- 19: Promises, Challenges, and Future Prospects	Vamika Karn, Shaista Ahmed,, Piyush Kumar Gupta, Soumi Sadhu, Niraj Kumar Jha, Ashutosh Kumar, Soumya Pandit, Sanjay Kumar	Biomedicines, 9(10), 1373	2021	4.5, Q2
150.	Epigenetic Regulation: The Guardian of Cellular Homeostasis and Lineage Commitment	Kavitha Govarthan, Piyush Kumar Gupta, Binita Zipporah E, Rekha Gahtori, Soumya Pandit, Ram Prasad	Biocell, 45(3), 501–515	2021	1.8, Q3
151.	Green Synthesis of Zinc Oxide Nanoparticles (ZnO NPs) using <i>Cissus quadrangularis</i> : Characterization, Antimicrobial, and Anti-Cancer Studies	Shanthi Sathappan, Nithya Kirubakaran, Dharanivasan Gunasekaran, Piyush Kumar Gupta, Rama Shanker Verma, Janarthanan Sundaram	Proceedings of the National Academy of Sciences, India Section B: Biological Sciences, 91, 289-296	2021	NA
152.	Meniscal Tissue Engineering via 3D Printed PLA Monolith with Carbohydrate-Based Self-Healing Interpenetrating Network Hydrogel	Santosh Gupta, Aakriti Sharma, Vasanth Kumar, Vineeta Sharma, Piyush Kumar Gupta, Rama Shanker Verma	International Journal of Biological Macromolecules, 162(11), 1358–1371	2020	8.7, Q1
153.	Glycogen Synthase Kinase 3 β Inhibitor-CHIR99021 Augments the Differentiation Potential of Mesenchymal Stem Cells	Kavitha Govarthan, Prasanna Vidyasekar, Piyush Kumar Gupta, Nibedita Lenka, Rama Shanker Verma	Cytotherapy, 22(2), 91–105	2020	4.5, Q1
154.	Deacetylation of LAMP1 Drives Lipophagy-Dependent Generation of Free Fatty Acids by <i>Abrus agglutinin</i> to Promote Senescence in	Prashanta K Panda, Srimanta Patra,, Piyush Kumar Gupta, Rama Shanker Verma, Tapas K. Maiti, Sujit	Journal of Cellular Physiology, 235(3), 2776–2791	2020	4.0, Q1

	Prostate Cancer	K. Bhutia			
155.	DNA Methylation Microarray Uncovers a Permissive Methylome for Cardiomyocyte Differentiation in Human Mesenchymal Stem Cells	Kavitha Govarthanan, Piyush Kumar Gupta, Deepa Ramasamy, Pavithra Kumar, Shobana Mahadevan, Rama Shanker Verma	Genomics, 112(2), 1384–1395	2020	3.6, Q2
156.	Metal-Free Lewis Pair Catalyst Synergy for Fully Alternating Copolymerization of Norbornene Anhydride and Epoxides: Biocompatible Tests for Derived Polymers	Anjaneyulu Kummari, Sreenath Pappuru, Piyush Kumar Gupta, Debashis Chakraborty, Rama Shanker Verma	Materials Today Communications, 19(6), 306–314	2019	4.9, Q2
157.	<i>Abrus agglutinin</i> Stimulates BMP2-Dependent Differentiation Through Autophagic Degradation of β -catenin in Colon Cancer Stem Cells	Prashanta K. Panda, Prajna P. Naik, Prakash P. Praharaj, Biswa R. Meher, Piyush Kumar Gupta, Rama Shanker Verma,, Sujit K. Bhutia	Molecular Carcinogenesis, 57(5), 664–677	2018	3.5, Q2
158.	Environmentally Benign Tetramethylguanidinium Cation-Based Ionic Liquids	Akhil P. Singh, Devilakshmi Sithambaram, Ruthvi Sanhavi, Piyush Kumar Gupta, Rama Shanker Verma,, Sanjeeb Senapathi	New Journal of Chemistry, 41, 12268–12277	2017	2.6, Q3
159.	Current Prospects and Challenges of Nanomedicine Delivery in Prostate Cancer Therapy	Santosh Gupta, Piyush Kumar Gupta, Gunasekharan Dharanivasan, Rama Shanker Verma	Nanomedicine, 12(23), 2675 – 2692	2017	4.6, Q2

CONFERENCE PROCEEDINGS

S. No.	Book Name	Editors	ISBN No.	Year/Publisher
1.	Abstract Book on “Two Days	Piyush Kumar Gupta,	9788199666153	2025

	National Symposium cum Workshop on Green Nanomedicine”	Shikha Singh		SAAR Publications
2.	Abstract Book on “Two Days National Symposium on Next Generation Drug Delivery Systems”	Piyush Kumar Gupta, Ashwini Kumar, Shikha Singh, Santosh Kumar Mishra	9788198322401	2024 SAAR Publications

BOOKS

S. No.	Book Name	Editors	ISBN No.	Year/Publisher
1.	Bioinspired Materials for Drug Delivery	Piyush Kumar Gupta, Anurag Kumar Singh	****	2027 Royal Society of Chemistry
2.	Development and Characterization of Bionanomaterials for Drug Delivery and Tissue Engineering	Piyush Kumar Gupta, Shikha Singh, Rohit Kumar, Shaily Chauhan	9788197935077	2024 SAAR Publications

BOOK CHAPTERS

S. No.	Title	Author's Name	Book Name	ISBN No.	Year/Publisher
CORRESPONDING AUTHOR					
1.	Antimicrobial Properties of Green Biomaterials	Bableen Flora, Anurag Kumar Singh, Rohit Kumar,, Piyush Kumar Gupta*	Green Biomaterials in Tissue Engineering	9780841296589	2025 American Chemical Society
2.	Lignin for Nanoparticle Synthesis	Kiran Khandare, Rohit Kumar, Manali Singh, Hamisu Shuaibu Idris, Piyush Kumar Gupta*	Handbook of Lignin	9789819726646	2025 Springer Nature
3.	Nanotechnology for Cancer Imaging	Smruti Sudha Biswal, Rohit Kumar,, Piyush Kumar Gupta*, Monalisa Mishra	IoT-WSN-DT-based Medical Systems and Nanotechnology for Smart Cancer Care	9780443339844	2025 Elsevier
4.	Nano-Drug	Priyanca	Nano Drug Delivery	9789819969395	2024

	Carriers for Chemotherapeutic Agents Delivery in Cancer Disease Treatment	Ahlawat, Rohit Kumar, Akhilesh Kumar, Piyush Kumar Gupta*	for Cancer Therapy: Principles and Practices		Springer Nature
5.	Nanomedicine in Cancer Stem Cell Therapy	Piyush Kumar Gupta*, Gunasekaran Dharanivasan, Ranjita Misra, Santosh Gupta, Rama Shanker Verma	Nano Biomedicine	9789813298972	2020 Springer Nature
CO-AUTHOR					
6.	Nanotechnology and Animal Reproductive Disorders	Dinisha, Yashika Thakran, Khushi, Piyush Kumar Gupta, Ashima Sharma, Sandeep Kumar, Sunny Dholpuria	Nanobiomaterials in Animal Husbandry	9789819545421	2026 Springer Nature
7.	Nanotechnology in Animal Disease Detection	Khushboo, Harshita Sharma, Deepti Akansha Rohilla, Piyush Kumar Gupta, Deepansh Sharma, Sunny Dholpuria	Nanobiomaterials in Animal Husbandry	9789819545421	2026 Springer Nature
8.	Microbial Fuel Cell Amalgamated with Other Existing Technologies for Efficient Power Generation and Simultaneous Wastewater Treatment	Sanchita Bipin Patwardhan, Poojhaa Shanmugam,, Piyush Kumar Gupta, Soumya Pandit	Waste Management	9780429341106	2022 CRC Press
9.	Molecular	Kavitha	Handbook of Stem	9789811660160	2022

	Signature of Stem Cells Undergoing Cardiomyogenic Differentiation	Govarathanan, Piyush Kumar Gupta,, Khawaja Husnain Haider	Cell Therapy		Springer Nature
10.	Biohydrogen Evolution in Microbial Electrolysis Cell, a Novel Electrofermentation Technology: Influence of Reactor Design	Pooja Dange, Ankit Kumar, Nishit Savla, Santimoy Khilari, Subhasish Dutta, Piyush Kumar Gupta,, Soumya Pandit	Innovations in Fermentation and Phytopharmaceutical Technologies	9780128218778	2022 Elsevier
11.	Production of Biodiesel from the Bacterial Lipid of Sewage Sludge: Versatile Future of Bioenergy in Developing Countries	Rohit Kumar, Kalpana Sharma, Shaily Chauhan, Ankit Kumar, Piyush Kumar Gupta,, Srijoni Banerjee	Bio-Clean Energy Technologies	9789811680908	2022 Springer Nature
12.	Stem Cell Applications in Cardiac Tissue Regeneration	Vineeta Sharma, Sanat Kumar Dash, Piyush Kumar Gupta,, Kavitha Govarathanan	Handbook of Stem Cell Therapy	9789811660160	2022 Springer Nature
13.	An Overview on the Application of Biomass-Derived Biochar in the Treatment of Wastewater	Tejveer Singh, Marzuqa Quraishi, Aindree, Mayur Thakre, Piyush Kumar Gupta,, Soumya Pandit	BioChar	9783110734003	2022 De Gruyter
14.	Bioelectricity Recovery from Food Waste Using Microbial Fuel	Shruti Rawat, Nishit Savla,, Tanmai Agasam, Piyush	Bioprospecting of Microbial Diversity	9780323909587	2022 Elsevier

	Cell: Recent Advances	Kumar Gupta , Soumya Pandit			
15.	Trends in Photobioreactor Technology for Microalgal Biomass Production along with Wastewater Treatment: Bottlenecks and Breakthroughs	Pujaa Dange, Shreya Gawas, Soumya Pandit, Lukhanyo Mekuto, Piyush Kumar Gupta ,, Srijoni Banerjee	An Integration of Phycoremediation Processes in Wastewater Treatment	9780128234990	2022 Elsevier
16.	Importance of Biofilters in Heavy Metal Removal: Fundamental to Recent Advances	Himja Tiwari, Nishit Savla, Soumya Pandit,, Piyush Kumar Gupta , Kanupriya	An Innovative Role of Biofiltration in Wastewater Treatment Plants (WWTPs)	9780128239469	2022 Elsevier

POPULAR ARTICLES

- Mohini Sikarwar, [Piyush Kumar Gupta](#)*. (2024). Quercetin – A Super Food for Therapeutic Interventions. **Magazine:** [Pharma Focus Asia](#).