

Piyush Kumar Gupta

List of Publications by Year in descending order

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Version: 2024-02-01

109
papers

2,185
citations

279798

23
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330143

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112
all docs

112
docs citations

112
times ranked

1116
citing authors

#	ARTICLE	IF	CITATIONS
1	Green Synthesis of Metallic Nanoparticles: Applications and Limitations. <i>Catalysts</i> , 2021, 11, 902.	3.5	237
2	Microfluidic chips: recent advances, critical strategies in design, applications and future perspectives. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 99.	2.2	73
3	Agricultural Waste and Wastewater as Feedstock for Bioelectricity Generation Using Microbial Fuel Cells: Recent Advances. <i>Fermentation</i> , 2021, 7, 169.	3.0	72
4	Microbial desalination cell: Desalination through conserving energy. <i>Desalination</i> , 2022, 521, 115381.	8.2	71
5	Use of biomass-derived biochar in wastewater treatment and power production: A promising solution for a sustainable environment. <i>Science of the Total Environment</i> , 2022, 825, 153892.	8.0	62
6	Discovering multifaceted role of vanillic acid beyond flavours: Nutraceutical and therapeutic potential. <i>Trends in Food Science and Technology</i> , 2022, 122, 187-200.	15.1	56
7	Recent Developments in Microbial Electrolysis Cell-Based Biohydrogen Production Utilizing Wastewater as a Feedstock. <i>Sustainability</i> , 2021, 13, 8796.	3.2	53
8	Recent advances in the application of biochar in microbial electrochemical cells. <i>Fuel</i> , 2022, 311, 122501.	6.4	43
9	Autophagy and EMT in cancer and metastasis: Who controls whom?. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2022, 1868, 166431.	3.8	43
10	Molecular mechanism(s) of regulation(s) of c-MET/HGF signaling in head and neck cancer. <i>Molecular Cancer</i> , 2022, 21, 31.	19.2	42
11	Potential and future prospects of biochar-based materials and their applications in removal of organic contaminants from industrial wastewater. <i>Journal of Material Cycles and Waste Management</i> , 2022, 24, 852-876.	3.0	42
12	Self-assembled dual-drug loaded core-shell nanoparticles based on metal-free fully alternating polyester for cancer theranostics. <i>Materials Science and Engineering C</i> , 2019, 101, 448-463.	7.3	40
13	Berberine-loaded liquid crystalline nanoparticles inhibit non-small cell lung cancer proliferation and migration in vitro. <i>Environmental Science and Pollution Research</i> , 2022, 29, 46830-46847.	5.3	40
14	Meniscal tissue engineering via 3D printed PLA monolith with carbohydrate based self-healing interpenetrating network hydrogel. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 1358-1371.	7.5	38
15	Recent trends in biodegradable polyester nanomaterials for cancer therapy. <i>Materials Science and Engineering C</i> , 2021, 127, 112198.	7.3	37
16	Valorisation of CO ₂ into Value-Added Products via Microbial Electrosynthesis (MES) and Electro-Fermentation Technology. <i>Fermentation</i> , 2021, 7, 291.	3.0	35
17	<i>Abrus</i> agglutinin stimulates BMP α 2 α -dependent differentiation through autophagic degradation of β -catenin in colon cancer stem cells. <i>Molecular Carcinogenesis</i> , 2018, 57, 664-677.	2.7	33
18	Extracellular Vesicle-Based Therapy for COVID-19: Promises, Challenges and Future Prospects. <i>Biomedicines</i> , 2021, 9, 1373.	3.2	33

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19	A Comprehensive Review on Oxygen Reduction Reaction in Microbial Fuel Cells. <i>Journal of Renewable Materials</i> , 2022, 10, 665-697.	2.2	32
20	Deacetylation of LAMP1 drives lipophagy-dependent generation of free fatty acids by <i>Abrus</i> agglutinin to promote senescence in prostate cancer. <i>Journal of Cellular Physiology</i> , 2020, 235, 2776-2791.	4.1	30
21	Enhanced photocatalytic activity of St-ZnO nanorods for methylene blue dye degradation. <i>Materials Letters</i> , 2022, 311, 131637.	2.6	27
22	Bioelectricity production using plant-microbial fuel cell: Present state of art. <i>South African Journal of Botany</i> , 2021, 140, 393-408.	2.5	26
23	Re-establishing the comprehension of phytomedicine and nanomedicine in inflammation-mediated cancer signaling. <i>Seminars in Cancer Biology</i> , 2022, 86, 1086-1104.	9.6	25
24	Self-nanoemulsifying drug delivery system (SNEDDS) mediated improved oral bioavailability of thymoquinone: optimization, characterization, pharmacokinetic, and hepatotoxicity studies. <i>Drug Delivery and Translational Research</i> , 2023, 13, 292-307.	5.8	25
25	Green Synthesis of Zinc Oxide Nanoparticles (ZnO NPs) Using <i>Cissus quadrangularis</i> : Characterization, Antimicrobial and Anticancer Studies. <i>Proceedings of the National Academy of Sciences India Section B - Biological Sciences</i> , 2021, 91, 289-296.	1.0	24
26	Development of mushroom polysaccharide and probiotics based solid self-nanoemulsifying drug delivery system loaded with curcumin and quercetin to improve their dissolution rate and permeability: State of the art. <i>International Journal of Biological Macromolecules</i> , 2021, 189, 744-757.	7.5	24
27	Applications of lignin nanoparticles for cancer drug delivery: An update. <i>Materials Letters</i> , 2022, 311, 131573.	2.6	24
28	Nuclear factor-kappa B (NF- κ B) inhibition as a therapeutic target for plant nutraceuticals in mitigating inflammatory lung diseases. <i>Chemico-Biological Interactions</i> , 2022, 354, 109842.	4.0	24
29	Current trends in bio-waste mediated metal/metal oxide nanoparticles for drug delivery. <i>Journal of Drug Delivery Science and Technology</i> , 2022, 71, 103305.	3.0	24
30	The role of HGF/MET in liver cancer. <i>Future Medicinal Chemistry</i> , 2021, 13, 1829-1832.	2.3	23
31	Nanomaterials in the Management of Gram-Negative Bacterial Infections. <i>Nanomaterials</i> , 2021, 11, 2535.	4.1	23
32	Interplay between Dysbiosis of Gut Microbiome, Lipid Metabolism, and Tumorigenesis: Can Gut Dysbiosis Stand as a Prognostic Marker in Cancer?. <i>Disease Markers</i> , 2022, 2022, 1-15.	1.3	23
33	Dioscin: A review on pharmacological properties and therapeutic values. <i>BioFactors</i> , 2022, 48, 22-55.	5.4	23
34	Metal-free semi-aromatic polyester as nanodrug carrier: A novel tumor targeting drug delivery vehicle for potential clinical application. <i>Materials Science and Engineering C</i> , 2020, 107, 110285.	7.3	22
35	Metal-free Lewis pair catalyst synergy for fully alternating copolymerization of norbornene anhydride and epoxides: Biocompatible tests for derived polymers. <i>Materials Today Communications</i> , 2019, 19, 306-314.	1.9	21
36	Theranostic Advances of Bionanomaterials against Gestational Diabetes Mellitus: A Preliminary Review. <i>Journal of Functional Biomaterials</i> , 2021, 12, 54.	4.4	21

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37	Protein and peptide delivery to lungs by using advanced targeted drug delivery. <i>Chemico-Biological Interactions</i> , 2022, 351, 109706.	4.0	21
38	Nutraceuticals: unlocking newer paradigms in the mitigation of inflammatory lung diseases. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 3302-3332.	10.3	21
39	Advances in designing of polymeric micelles for biomedical application in brain related diseases. <i>Chemico-Biological Interactions</i> , 2022, 361, 109960.	4.0	21
40	Glycogen synthase kinase 3 β inhibitor- CHIR 99021 augments the differentiation potential of mesenchymal stem cells. <i>Cytotherapy</i> , 2020, 22, 91-105.	0.7	20
41	Self-nanoemulsifying composition containing curcumin, quercetin, Ganoderma lucidum extract powder and probiotics for effective treatment of type 2 diabetes mellitus in streptozotocin induced rats. <i>International Journal of Pharmaceutics</i> , 2022, 612, 121306.	5.2	20
42	Microbial approaches for sustainable remediation of dye-contaminated wastewater: a review. <i>Archives of Microbiology</i> , 2022, 204, 169.	2.2	20
43	Recent advancements in the cathodic catalyst for the hydrogen evolution reaction in microbial electrolytic cells. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 15333-15356.	7.1	20
44	Environmentally benign tetramethylguanidinium cation based ionic liquids. <i>New Journal of Chemistry</i> , 2017, 41, 12268-12277.	2.8	19
45	Current perspectives on integrated approaches to enhance lipid accumulation in microalgae. <i>3 Biotech</i> , 2021, 11, 303.	2.2	19
46	Exploiting Microbes in the Petroleum Field: Analyzing the Credibility of Microbial Enhanced Oil Recovery (MEOR). <i>Energies</i> , 2021, 14, 4684.	3.1	19
47	Recent Advances in Cardiac Tissue Engineering for the Management of Myocardium Infarction. <i>Cells</i> , 2021, 10, 2538.	4.1	19
48	DNA methylation microarray uncovers a permissive methylation for cardiomyocyte differentiation in human mesenchymal stem cells. <i>Genomics</i> , 2020, 112, 1384-1395.	2.9	18
49	Microbial Fuel Cell United with Other Existing Technologies for Enhanced Power Generation and Efficient Wastewater Treatment. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10777.	2.5	18
50	Recent advances in bioelectricity generation through the simultaneous valorization of lignocellulosic biomass and wastewater treatment in microbial fuel cell. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 48, 101572.	2.7	17
51	Recent Advances in Chronotherapy Targeting Respiratory Diseases. <i>Pharmaceutics</i> , 2021, 13, 2008.	4.5	16
52	Molecular Insights into Therapeutic Potentials of Hybrid Compounds Targeting Alzheimer's Disease. <i>Molecular Neurobiology</i> , 2022, 59, 3512-3528.	4.0	15
53	PI3K/Akt/mTOR Pathways Inhibitors with Potential Prospects in Non-Small-Cell Lung Cancer. <i>Journal of Environmental Pathology, Toxicology and Oncology</i> , 2022, 41, 85-102.	1.2	15
54	Current prospects and challenges of nanomedicine delivery in prostate cancer therapy. <i>Nanomedicine</i> , 2017, 12, 2675-2692.	3.3	14

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55	Latest Expansions in Lipid Enhancement of Microalgae for Biodiesel Production: An Update. <i>Energies</i> , 2022, 15, 1550.	3.1	14
56	Harnessing the therapeutic potential of fisetin and its nanoparticles: Journey so far and road ahead. <i>Chemico-Biological Interactions</i> , 2022, 356, 109869.	4.0	14
57	Application of Microbial Fuel Cell (MFC) for Pharmaceutical Wastewater Treatment: An Overview and Future Perspectives. <i>Sustainability</i> , 2022, 14, 8379.	3.2	14
58	Phytomedicines Targeting Cancer Stem Cells: Therapeutic Opportunities and Prospects for Pharmaceutical Development. <i>Pharmaceuticals</i> , 2021, 14, 676.	3.8	13
59	Anticancer therapeutic efficacy of biogenic Am-ZnO nanoparticles on 2D and 3D tumor models. <i>Materials Today Chemistry</i> , 2021, 22, 100618.	3.5	13
60	Unravelling the molecular mechanisms underlying chronic respiratory diseases for the development of novel therapeutics via in vitro experimental models. <i>European Journal of Pharmacology</i> , 2022, 919, 174821.	3.5	13
61	Molecular mechanisms of developmental pathways in neurological disorders: a pharmacological and therapeutic review. <i>Open Biology</i> , 2022, 12, 210289.	3.6	12
62	Recent Progress in Development of Dressings Used for Diabetic Wounds with Special Emphasis on Scaffolds. <i>BioMed Research International</i> , 2022, 2022, 1-43.	1.9	12
63	Enhancing the anti-cancer therapeutic efficacy by optimizing molecular weight of metal-free fully alternating semi-aromatic polyester as nano-drug carriers. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 51, 101-114.	3.0	11
64	Effect of membrane biofouling on the performance of microbial electrochemical cells and mitigation strategies. <i>Bioresource Technology Reports</i> , 2021, 15, 100822.	2.7	11
65	Synthesis, In Silico Study, and Anti-Cancer Activity of Thiosemicarbazone Derivatives. <i>Biomedicines</i> , 2021, 9, 1375.	3.2	11
66	Autoantibodies and autoimmune disorders in SARS-CoV-2 infection: pathogenicity and immune regulation. <i>Environmental Science and Pollution Research</i> , 2022, 29, 54072-54087.	5.3	11
67	Nutraceuticals and mitochondrial oxidative stress: bridging the gap in the management of bronchial asthma. <i>Environmental Science and Pollution Research</i> , 2022, 29, 62733-62754.	5.3	11
68	Food-Grade Quercetin-Loaded Nanoemulsion Ameliorates Effects Associated with Parkinson's Disease and Cancer: Studies Employing a Transgenic <i>C. elegans</i> Model and Human Cancer Cell Lines. <i>Antioxidants</i> , 2022, 11, 1378.	5.1	11
69	Aptameric nanobiosensors for the diagnosis of COVID-19: An update. <i>Materials Letters</i> , 2022, 308, 131237.	2.6	10
70	Potential Immunomodulatory Activities of Plant Products. <i>South African Journal of Botany</i> , 2022, 149, 937-943.	2.5	10
71	Novel EPR-enhanced strategies for targeted drug delivery in pancreatic cancer: An update. <i>Journal of Drug Delivery Science and Technology</i> , 2022, 73, 103459.	3.0	10
72	Remedial Aspect of Zinc Oxide Nanoparticles Against <i>Serratia Marcescens</i> and <i>Enterococcus Faecalis</i> . <i>Frontiers in Pharmacology</i> , 0, 13, .	3.5	10

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73	Development and validation of RP-HPLC method for 1 β , γ -Acetoxychavicol acetate (ACA) and its application in optimizing the yield of ACA during its isolation from <i>Alpinia galanga</i> extract as well as its quantification in nanoemulsion. <i>South African Journal of Botany</i> , 2022, 149, 887-898.	2.5	9
74	Synthesis and Characterization of Novel Fe ₃ O ₄ /PVA/Eggshell Hybrid Nanocomposite for Photodegradation and Antibacterial Activity. <i>Journal of Composites Science</i> , 2021, 5, 267.	3.0	9
75	Nanomaterials in Alzheimer's disease treatment: a comprehensive review. <i>Frontiers in Bioscience</i> , 2021, 26, 851.	2.1	9
76	Applications of drug-delivery systems targeting inflammasomes in pulmonary diseases. <i>Nanomedicine</i> , 2021, 16, 2407-2410.	3.3	8
77	A concise review on the cultivation of microalgal biofilms for biofuel feedstock production. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 7219-7236.	4.6	8
78	Synthesis and Characterization of Tetracycline Loaded Methionine-Coated NiFe ₂ O ₄ Nanoparticles for Anticancer and Antibacterial Applications. <i>Nanomaterials</i> , 2022, 12, 2286.	4.1	8
79	Microfluidic Platforms to Unravel Mysteries of Alzheimer's Disease: How Far Have We Come?. <i>Life</i> , 2021, 11, 1022.	2.4	7
80	Nanotechnology-based therapeutic formulations in the battle against animal coronaviruses: an update. <i>Journal of Nanoparticle Research</i> , 2021, 23, 229.	1.9	7
81	Immunological Mechanisms of Vaccine-Induced Protection against SARS-CoV-2 in Humans. <i>Immuno</i> , 2021, 1, 442-456.	1.5	7
82	Biogenic Preparation, Characterization, and Biomedical Applications of Chitosan Functionalized Iron Oxide Nanocomposite. <i>Journal of Composites Science</i> , 2022, 6, 120.	3.0	7
83	Expanding arsenal against diabetes mellitus through nanoformulations loaded with glimepiride and simvastatin: A comparative study. <i>Environmental Science and Pollution Research</i> , 2022, 29, 51976-51988.	5.3	6
84	Overcoming hydrolytic degradation challenges in topical delivery: non-aqueous nano-emulsions. <i>Expert Opinion on Drug Delivery</i> , 2022, 19, 23-45.	5.0	6
85	A global comparison of implementation and effectiveness of materiovigilance program: overview of regulations. <i>Environmental Science and Pollution Research</i> , 2021, 28, 59608-59629.	5.3	5
86	Synthesis and characterization of novel bimetallic-semi-aromatic polyester nanocomposite for possible biomedical use. <i>Materials Letters</i> , 2022, 306, 130943.	2.6	5
87	A comprehensive review on enhanced production of microbial lipids for high-value applications. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 15357-15380.	4.6	5
88	Synthesis and characterization of biocompatible bimetallic-semi-aromatic polyester hybrid nanocomposite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 633, 127845.	4.7	5
89	Repurposing chia seed oil: A versatile novel functional food. <i>Journal of Food Science</i> , 2022, 87, 2798-2819.	3.1	5
90	Metal-free semi-aromatic polyester: A novel nanomaterial for potential clinical application. <i>Journal of Drug Delivery Science and Technology</i> , 2020, 56, 101582.	3.0	4

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91	Genetic Polymorphisms and Pesticide-Induced DNA Damage: A Review. <i>Open Biotechnology Journal</i> , 2021, 15, 119-130.	1.2	4
92	Mitigating inflammation using advanced drug delivery by targeting TNF- α in lung diseases. <i>Future Medicinal Chemistry</i> , 2022, 14, 57-60.	2.3	4
93	Epigenetic regulation~The guardian of cellular homeostasis and lineage commitment. <i>Biocell</i> , 2021, 45, 501-515.	0.7	3
94	Advanced drug delivery approaches in managing TGF- β -mediated remodeling in lung diseases. <i>Nanomedicine</i> , 2021, 16, 2243-2247.	3.3	3
95	Pharmacological potential of JWH133, a cannabinoid type 2 receptor agonist in neurodegenerative, neurodevelopmental and neuropsychiatric diseases. <i>European Journal of Pharmacology</i> , 2021, 909, 174398.	3.5	3
96	Nanomedicine in Cancer Stem Cell Therapy. , 2020, , 67-105.		2
97	Potential of Zinc Oxide Nanoparticles as an Anticancer Agent: A Review. <i>Journal of Experimental Biology and Agricultural Sciences</i> , 2022, 10, 494-501.	0.4	2
98	Delineating the role of phytocompounds against anti-bacterial drug resistance~An update. <i>Biocell</i> , 2021, 45, 1465-1477.	0.7	1
99	Cannabinoid Type-2 Receptor Agonist, JWH133 May Be a Possible Candidate for Targeting Infection, Inflammation, and Immunity in COVID-19. <i>Immuno</i> , 2021, 1, 285-304.	1.5	1
100	Potential of microbial fuel cells for wastewater treatment. , 2021, , 115-124.		1
101	Synthesis and characterization of PCU@C-Ag/AgCl nanoparticles as an antimicrobial material for respiratory tract infection. <i>Nanofabrication</i> , 2021, 6, 68-78.	1.1	1
102	Occupational health hazards and wide spectrum of genetic damage by the organic solvent fumes at the workplace: A critical appraisal. <i>Environmental Science and Pollution Research</i> , 2022, , 1.	5.3	1
103	Specifics of the methodological approach to the study of nanoparticle impact on human health in the production of non-metallic nanomaterials for construction purposes. <i>IOP Conference Series: Earth and Environmental Science</i> , 2018, 107, 012048.	0.3	0
104	Cancer risk and nullity of Glutathione-S-transferase mu and theta 1 in occupational pesticide workers. <i>Current Pharmaceutical Biotechnology</i> , 2021, 22, .	1.6	0
105	HIGH-THROUGHPUT SEQUENCING ANALYSIS OF MICROBIAL POPULATIONS IN ARCTIC ROCK SAMPLE. , 2018, , .		0
106	HIGH-THROUGHPUT SEQUENCING ANALYSIS OF MICROBIAL POPULATIONS IN ARCTIC ROCK SAMPLE. <i>SWS Journal of EARTH and PLANETARY SCIENCES</i> , 2019, 1, 29-38.	0.1	0
107	Importance of biofilters in heavy metal removal: Fundamental to recent advances. , 2022, , 1-18.		0
108	Synthesis, Characterization and Remedial Action of Biogenic Silver Nanoparticles and Chitosan-Silver Nanoparticles against Bacterial Pathogens. <i>Journal of Renewable Materials</i> , 2022, 10, 1-13.	2.2	0

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109	Genome-wide methylome pattern predictive network analysis reveal mesenchymal stem cell's propensity to undergo cardiovascular lineage. 3 Biotech, 2022, 12, 12.	2.2	0