

Kumar Ponnuchamy

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

2,957
citations

172457

29
h-index

182427

51
g-index

83
all docs

83
docs citations

83
times ranked

3009
citing authors

#	ARTICLE	IF	CITATIONS
1	Photocatalytic degradation of methyl orange dye using silver (Ag) nanoparticles synthesized from <i>Ulva lactuca</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 103, 658-661.	5.0	247
2	Chitosan nanopolymers: An overview of drug delivery against cancer. <i>International Journal of Biological Macromolecules</i> , 2019, 130, 727-736.	7.5	179
3	Synthesis of Silver Nanoparticles and their Biomedical Applications - A Comprehensive Review. <i>Current Pharmaceutical Design</i> , 2019, 25, 2650-2660.	1.9	167
4	Mushroom-Derived Carbon Dots for Toxic Metal Ion Detection and as Antibacterial and Anticancer Agents. <i>ACS Applied Nano Materials</i> , 2020, 3, 5910-5919.	5.0	146
5	A crucial review on polycyclic aromatic Hydrocarbons - Environmental occurrence and strategies for microbial degradation. <i>Chemosphere</i> , 2021, 280, 130608.	8.2	144
6	Seaweed-mediated biosynthesis of silver nanoparticles using <i>Gracilaria corticata</i> for its antifungal activity against <i>Candida</i> spp.. <i>Applied Nanoscience (Switzerland)</i> , 2013, 3, 495-500.	3.1	124
7	Gold nanoparticles using red seaweed <i>Gracilaria verrucosa</i> : Green synthesis, characterization and biocompatibility studies. <i>Process Biochemistry</i> , 2019, 80, 58-63.	3.7	89
8	Biomimetic gold nanoparticles for its cytotoxicity and biocompatibility evidenced by fluorescence-based assays in cancer (MDA-MB-231) and non-cancerous (HEK-293) cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2020, 202, 111715.	3.8	82
9	Synthesis of Silver Nanoparticles from <i>Sargassum Tenerrimum</i> and Screening Phytochemicals for Its Antibacterial Activity. <i>Nano Biomedicine and Engineering</i> , 2012, 4, .	0.9	80
10	Phyto-mediated synthesis of silver nanoparticles using fucoïdan isolated from <i>Spatoglossum asperum</i> and assessment of antibacterial activities. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2018, 185, 117-125.	3.8	80
11	Utilization of marine seaweed <i>Spyridia filamentosa</i> for silver nanoparticles synthesis and its clinical applications. <i>Materials Letters</i> , 2020, 263, 127244.	2.6	74
12	Synthesis of highly active biocompatible ZrO ₂ nanorods using a bioextract. <i>Ceramics International</i> , 2020, 46, 25915-25920.	4.8	74
13	Microwave-assisted green synthesis of fluorescent carbon quantum dots from Mexican Mint extract for Fe ³⁺ detection and bio-imaging applications. <i>Environmental Research</i> , 2021, 199, 111263.	7.5	66
14	Precomposting and green manure amendment for effective vermitransformation of hazardous coir industrial waste into enriched vermicompost. <i>Bioresource Technology</i> , 2021, 319, 124136.	9.6	65
15	A sustainable green synthesis of functionalized biocompatible carbon quantum dots from <i>Aloe barbadensis</i> Miller and its multifunctional applications. <i>Environmental Research</i> , 2021, 200, 111414.	7.5	63
16	Effect of C/N substrates for enhanced extracellular polymeric substances (EPS) production and Poly Cyclic Aromatic Hydrocarbons (PAHs) degradation. <i>Environmental Pollution</i> , 2021, 275, 116035.	7.5	62
17	A perspective on biogenic synthesis of platinum nanoparticles and their biomedical applications. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 211, 94-99.	3.9	59
18	Extraction of microplastics from commonly used sea salts in India and their toxicological evaluation. <i>Chemosphere</i> , 2021, 263, 128181.	8.2	59

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19	Quantum dots as a promising agent to combat COVID-19. <i>Applied Organometallic Chemistry</i> , 2020, 34, e5887.	3.5	58
20	Green biomimetic silver nanoparticles utilizing the red algae <i>Amphiroa rigida</i> and its potent antibacterial, cytotoxicity and larvicidal efficiency. <i>Bioprocess and Biosystems Engineering</i> , 2021, 44, 217-223.	3.4	55
21	Bioengineered gold nanoparticles from marine seaweed <i>Acanthophora spicifera</i> for pharmaceutical uses: antioxidant, antibacterial, and anticancer activities. <i>Bioprocess and Biosystems Engineering</i> , 2020, 43, 2231-2242.	3.4	54
22	Single and double chain surfactant-cobalt(III) complexes: the impact of hydrophobicity on the interaction with calf thymus DNA, and their biological activities. <i>RSC Advances</i> , 2015, 5, 31746-31758.	3.6	46
23	Study of single and double chain surfactant-cobalt(III) complexes and their hydrophobicity, micelle formation, interaction with serum albumins and antibacterial activities. <i>Inorganic Chemistry Frontiers</i> , 2014, 1, 393-404.	6.0	43
24	Metallothionein dependent-detoxification of heavy metals in the agricultural field soil of industrial area: Earthworm as field experimental model system. <i>Chemosphere</i> , 2021, 267, 129240.	8.2	43
25	Earthworm intervened nutrient recovery and greener production of vermicompost from <i>Ipomoea staphylina</i> – An invasive weed with emerging environmental challenges. <i>Chemosphere</i> , 2021, 263, 128080.	8.2	41
26	A strategy to enhance the photocatalytic efficiency of γ -Fe ₂ O ₃ . <i>Chemosphere</i> , 2021, 270, 129498.	8.2	41
27	Urchin like NiCo ₂ O ₄ /rGO nanocomposite for high energy asymmetric storage applications. <i>Ceramics International</i> , 2020, 46, 16291-16297.	4.8	40
28	Phloroglucinol-encapsulated starch biopolymer: preparation, antioxidant and cytotoxic effects on HepG2 liver cancer cell lines. <i>RSC Advances</i> , 2014, 4, 26787.	3.6	36
29	Unraveling the caspase-mediated mechanism for phloroglucinol-encapsulated starch biopolymer against the breast cancer cell line MDA-MB-231. <i>RSC Advances</i> , 2014, 4, 46157-46163.	3.6	34
30	Cytotoxicity of phloroglucinol engineered silver (Ag) nanoparticles against MCF-7 breast cancer cell lines. <i>Materials Chemistry and Physics</i> , 2018, 220, 402-408.	4.0	29
31	Metal nanoparticles from marine seaweeds – a review. <i>Nanotechnology Reviews</i> , 2016, 5, .	5.8	28
32	Green synthesis of multifunctional carbon quantum dots: An approach in cancer theranostics. , 2022, 136, 212756.		28
33	Ingestion of microplastics and its potential for causing structural alterations and oxidative stress in Indian green mussel <i>Perna viridis</i> – A multiple biomarker approach. <i>Chemosphere</i> , 2021, 283, 130979.	8.2	26
34	Anti-cancer applications of Zr, Co, Ni-doped ZnO thin nanoplates. <i>Materials Letters</i> , 2021, 283, 128760.	2.6	25
35	Extraction, identification, and environmental risk assessment of microplastics in commercial toothpaste. <i>Chemosphere</i> , 2022, 296, 133976.	8.2	25
36	<i>In silico</i> approach of naringin as potent phosphatase and tensin homolog (PTEN) protein agonist against prostate cancer. <i>Journal of Biomolecular Structure and Dynamics</i> , 2022, 40, 1629-1638.	3.5	24

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37	Explication of the Potential of 2-Hydroxy-4-Methoxybenzaldehyde in Hampering Uropathogenic <i>Proteus mirabilis</i> Crystalline Biofilm and Virulence. <i>Frontiers in Microbiology</i> , 2019, 10, 2804.	3.5	22
38	Bioelectricity generation by natural microflora of septic tank wastewater (STWW) and biodegradation of persistent petrogenic pollutants by basidiomycetes fungi: An integrated microbial fuel cell system. <i>Journal of Hazardous Materials</i> , 2021, 412, 125228.	12.4	22
39	Wastewater substrates in microbial fuel cell systems for carbon-neutral bioelectricity generation: An overview. <i>Fuel</i> , 2022, 317, 123369.	6.4	19
40	In vitro anti-biofilm and anti-bacterial activity of <i>Junceella juncea</i> for its biomedical application. <i>Asian Pacific Journal of Tropical Biomedicine</i> , 2012, 2, 930-935.	1.2	17
41	Proteomics analysis of crude squid ink isolated from <i>Sepia esculenta</i> for their antimicrobial, antibiofilm and cytotoxic properties. <i>Microbial Pathogenesis</i> , 2018, 116, 345-350.	2.9	16
42	Anti-bacterial and anti-biofilm efficacies of bioinspired gold nanoparticles. <i>Materials Letters</i> , 2020, 261, 126998.	2.6	16
43	Dark fermentative biohydrogen production from rice mill wastewater. <i>International Journal of Energy Research</i> , 2021, 45, 17233-17243.	4.5	16
44	A doxorubicin-platinum conjugate system: impacts on PI3K/AKT actuation and apoptosis in breast cancer cells. <i>RSC Advances</i> , 2021, 11, 4818-4828.	3.6	15
45	Antifungal activity and molecular docking of phenol, 2,4-bis(1,1-dimethylethyl) produced by plant growth-promoting actinobacterium <i>Kutzneria</i> sp. strain TSII from mangrove sediments. <i>Archives of Microbiology</i> , 2021, 203, 4051-4064.	2.2	15
46	Coumarin-gold nanoparticle bioconjugates: preparation, antioxidant, and cytotoxic effects against MCF-7 breast cancer cells. <i>Applied Nanoscience (Switzerland)</i> , 2018, 8, 447-453.	3.1	14
47	In vitro screening and in silico prediction of antifungal metabolites from rhizobacterium <i>Achromobacter kerstersii</i> JKP9. <i>Archives of Microbiology</i> , 2020, 202, 2855-2864.	2.2	14
48	Doxorubicin-Conjugated Platinum Theranostic Nanoparticles Induce Apoptosis via Inhibition of a Cell Survival (PI3K/AKT) Signaling Pathway in Human Breast Cancer Cells. <i>ACS Applied Nano Materials</i> , 2021, 4, 198-210.	5.0	14
49	Phloroglucinol-conjugated gold nanoparticles targeting mitochondrial membrane potential of human cervical (HeLa) cancer cell lines. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 219, 450-456.	3.9	13
50	Fluorescence microscopy-based analysis of apoptosis induced by platinum nanoparticles against breast cancer cells. <i>Applied Organometallic Chemistry</i> , 2020, 34, e5740.	3.5	13
51	Water-splitting application of orthorhombic molybdate \pm -MoO ₃ nanorods. <i>Ceramics International</i> , 2020, 46, 23218-23222.	4.8	13
52	A reign of bio-mass derived carbon with the synergy of energy storage and biomedical applications. <i>Journal of Energy Storage</i> , 2022, 51, 104422.	8.1	13
53	Green Simplistic Biosynthesis of Anti-Bacterial Silver Nanoparticles Using <i>Annona Squamosa</i> Leaf Extract. <i>Nano Biomedicine and Engineering</i> , 2013, 5, .	0.9	12
54	Selective antibacterial and apoptosis-inducing effects of hybrid gold nanoparticles - A green approach. <i>Journal of Drug Delivery Science and Technology</i> , 2020, 59, 101890.	3.0	11

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55	Macrocyclic β -cyclodextrin-derived colorimetric sensor for the detection of mercury cations and hydrogen sulphate anions and its bio-imaging in living cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2020, 203, 111739.	3.8	10
56	Anti-proliferative and anti-migratory effects of flower-like bimetallic (Au@Pt) nanoparticles. <i>Materials Letters</i> , 2020, 267, 127491.	2.6	10
57	Production and characterization of biodegradable polyhydroxybutyrate by <i>Micrococcus luteus</i> isolated from marine environment. <i>International Journal of Biological Macromolecules</i> , 2021, 186, 125-134.	7.5	10
58	Catechol thwarts virulent dimorphism in <i>Candida albicans</i> and potentiates the antifungal efficacy of azoles and polyenes. <i>Scientific Reports</i> , 2021, 11, 21049.	3.3	10
59	Macrocyclic β -cyclodextrin-Derived Cobalt(III) Complex with a <i>N,N</i> -Disubstituted Hexadentate Ligand: Crystal Structure, Photonuclease Activity, and as a Photosensitizer. <i>ACS Omega</i> , 2022, 7, 669-682.	3.5	9
60	Gold nanoparticles tethered cinnamic acid: preparation, characterization, and cytotoxic effects on MCF-7 breast cancer cell lines. <i>Applied Nanoscience (Switzerland)</i> , 2018, 8, 1133-1138.	3.1	8
61	Solvothermal synthesis of CoMoO ₄ nanostructures for electrochemical applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 5989-6000.	2.2	8
62	Hybrid NiO-CoO nanocomposite for high energy supercapacitor applications. <i>Ceramics International</i> , 2021, 47, 8486-8489.	4.8	8
63	Review on marine sponge alkaloid, aaptamine: A potential antibacterial and anticancer drug. <i>Chemical Biology and Drug Design</i> , 2022, 99, 103-110.	3.2	8
64	Assessment of earthworm diversity and pesticide toxicity in <i>Eudrilus Eugeniae</i> . <i>Environmental Chemistry and Ecotoxicology</i> , 2021, 3, 23-30.	9.1	7
65	Orthorhombic tantalum pentoxide nanorods for electrochemical applications. <i>Ceramics International</i> , 2021, 47, 15253-15259.	4.8	7
66	Surface functionalization of core-shell QDs for solar photovoltaic and anti-cancer applications. <i>Applied Surface Science Advances</i> , 2021, 5, 100122.	6.8	7
67	Biomedical application of single anatase phase TiO ₂ nanoparticles with addition of Rambutan (<i>Nephelium lappaceum</i> L.) fruit peel extract. <i>Applied Nanoscience (Switzerland)</i> , 2021, 11, 699-708.	3.1	6
68	Green synthesis of ionic liquid mediated Ytterbium oxide nanoparticles by <i>Andrographis paniculata</i> leaves extract for structural, morphological and biomedical applications. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105270.	6.7	6
69	GC-MS profiling and antibacterial activity of <i>Sargassum tenerrimum</i> . <i>Journal of Pharmacy Research</i> , 2013, 6, 88-92.	0.4	5
70	Ni supported anorthic phase FeVO ₄ nanorods for electrochemical water oxidation. <i>Materials Letters</i> , 2020, 275, 128091.	2.6	4
71	Isolation, Characterization and In-Silico Study of Conotoxin Protein from <i>Conus lorioisii</i> and Its Anti-cancer Activity. <i>International Journal of Peptide Research and Therapeutics</i> , 2021, 27, 385-395.	1.9	4
72	High performance MnSn(OH) ₆ electrodes for energy conversion application. <i>Materials Letters</i> , 2021, 282, 128888.	2.6	4

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73	Protective efficacy of <i>Capsicum frutescens</i> fruits in pancreatic, hepatic and renal cell injury and their attenuation of oxidative stress in diabetic Wistar rats. Journal of Taibah University for Science, 2021, 15, 1232-1243.	2.5	4
74	The absence of cellular glucose triggers oncogene AEG-1 that instigates VEGFC in HCC: A possible genetic root cause of angiogenesis. Gene, 2022, 826, 146446.	2.2	3
75	Cu ₂ S electrochemical energy storage applications. AIP Conference Proceedings, 2020, , .	0.4	2
76	Cerium doped NiO nanoparticles by hydrothermal method. AIP Conference Proceedings, 2020, , .	0.4	1
77	Transcriptional expression of miRNAs under glucose depletion/2-deoxy-d-glucose in HCC: A possible genetic footprints of angiogenesis and its hallmarks. Gene Reports, 2021, 24, 101277.	0.8	1
78	Ultrasensitive and direct detection of DNA and whole E. coli cell at cholesterol gold nanoparticle composite film electrode. Ionics, 2022, 28, 1973-1984.	2.4	1
79	Design and evaluation of redox responsive disulfide containing resveratrol loaded nanocarrier anti-cancer activity in the MDA-MB-231 cell line. Materials Today Communications, 2022, 32, 103873.	1.9	1
80	16S rRNA based identification of Aeromonas sp. kumar by constructing phylogenetic tree and identification of regulatory elements from the harmful Red Tide bloom, Gulf of Mannar. Nature Precedings, 2009, , .	0.1	0