K Karthik

List of Publications by Year in Descending Order

107 papers	2,214 citations	30 h-index	43 g-index
126 ext. papers	2,893 ext. citations	2.8 avg, IF	6.12 L-index

#	Paper	IF	Citations
107	Experimental and Theoretical Studies of Green Synthesized CuO Nanoparticles Using Datura Metel L.. *Journal of Fluorescence*, **2022**, 32, 559	2.4	3
106	Facile fabrication of novel ceria-based nanocomposite (CYO-CSO) via co-precipitation: Electrochemical, photocatalytic and antibacterial performances. *Journal of Molecular Structure*, **2022**, 1256, 132519	3.4	2
105	Electrical and Electrochemical Characteristics of Withania somnifera Leaf Extract Incorporation Sodium Alginate Polymer Film for Energy Storage Applications. *Journal of Inorganic and Organometallic Polymers and Materials*, **2022**, 32, 583	3.2	2
104	Heterostructure of polyoxometalate/zinc-iron-oxide nanoplates as an outstanding bifunctional electrocatalyst for the hydrogen and oxygen evolution reaction.. *Journal of Colloid and Interface Science*, **2022**, 618, 419-430	9.3	1
103	Introduction to Additive Manufacturing for Composites: State of the Art and Recent Trends. *Composites Science and Technology*, **2022**, 1-24		1
102	Electrochemical performance and charge density distribution analysis of Ag/NiO nanocomposite synthesized from Withania somnifera leaf extract. *Inorganic Chemistry Communication*, **2022**, 141, 109580	3.1	0
101	Metal-Doped Graphitic Carbon Nitride Nanomaterials for Photocatalytic Environmental Applications: A Review. *Nanomaterials*, **2022**, 12, 1754	5.4	3
100	Synthesis and Characterization of Undoped and Mn-Doped Copper Oxide Nanoparticles. *Macromolecular Symposia*, **2021**, 400, 2100122	0.8	1
99	Recent Advantages and Applications of Various Biosynthesized Greener Silver Nanoparticles. *Asian Journal of Chemistry*, **2021**, 33, 2871-2884	0.4	
98	Indonesian Kaolin supported nZVI (IK-nZVI) used for the an efficient removal of Pb(II) from aqueous solutions: Kinetics, thermodynamics and mechanism. *Journal of Environmental Chemical Engineering* , **2021**, 9, 106483	6.8	5
97	Photocatalytic and antimicrobial properties of microwave synthesized mixed metal oxide nanocomposite. *Inorganic Chemistry Communication*, **2021**, 125, 108429	3.1	14
96	Current Trends in the Application of Nanomaterials for the Removal of Pollutants from Industrial Wastewater Treatment-A Review. *Molecules*, **2021**, 26,	4.8	16
95	Optimization of TiO-P25 photocatalyst dose and HO concentration for advanced photo-oxidation using smartphone-based colorimetry. *Water Science and Technology*, **2021**, 84, 469-483	2.2	6
94	Enhanced Photocatalytic and Antibacterial Activities of ZnSe Nanoparticles. *Journal of Inorganic and Organometallic Polymers and Materials*, **2021**, 31, 4390	3.2	3
93	Y3+ and Sm3+ co-doped mixed metal oxide nanocomposite: Structural, electrochemical, photocatalytic, and antibacterial properties. *Applied Surface Science Advances*, **2021**, 4, 100085	2.6	6
92	Green synthesis of Phenothiazinium Schiff base and its nano silver complex using egg white as a catalyst under solvent free condition. *Materials Today: Proceedings*, **2021**,	1.4	3
91	Structural and functional properties of rare earth-based (NiO-CGO) nanocomposite produced by effective multiple doping approach via co-precipitation. *Materials Technology*, **2021**, 36, 296-307	2.1	6

90	Nanocellulose-based materials/composites for sensors **2021**, 185-214		2
89	Functionalization and partial grafting of the reduced graphene oxide with p-phenylenediamine: An adsorption and photodegradation studies. *FlatChem*, **2021**, 26, 100210	5.1	3
88	Preparation of novel chitosan polymeric nanocomposite as an efficient material for the removal of Acid Blue 25 from aqueous environment. *International Journal of Biological Macromolecules*, **2021**, 168, 760-768	7.9	19
87	Fluorescent carbon quantum dots from Ananas comosus waste peels: A promising material for NLO behaviour, antibacterial, and antioxidant activities. *Inorganic Chemistry Communication*, **2021**, 124, 108397	3.1	11
86	Nanofunctionalized 3D printing **2021**, 457-504		
85	Influence of nanotechnology to combat against COVID-19 for global health emergency: A review. *Sensors International*, **2021**, 2, 100079	6.1	24
84	Review of photocatalytic and antimicrobial properties of metal oxide nanoparticles. *Physics and Chemistry of Solid State*, **2021**, 22, 5-15	1.9	2
83	Investigation on nonlinear optical and antibacterial properties of organic single crystal: p-Toluidinium L-Tartrate. *Chemical Data Collections*, **2021**, 31, 100640	2.1	2
82	Metal-to-Semimetal Transition in Platinum Nanotubes: Dependence on Thickness. *Journal of Physical Chemistry Letters*, **2021**, 12, 2183-2190	6.4	1
81	Trends and Innovations in Biosensors for COVID-19 Detection in Air **2021**, 287-304		
80	Thermal, Electrical, and Sensing Properties of Recycled HDPE/Carbonaceous Industrial Waste Composites. *Macromolecular Symposia*, **2021**, 400, 2100146	0.8	0
79	Bioengineered TiO 2 Nanoparticles Using Andrographis alata (Vahl) Nees Leaf Extract and Their Antibacterial and Anticancer Activities. *Macromolecular Symposia*, **2021**, 400, 2100085	0.8	0
78	Current Trends in MXene-Based Nanomaterials for Energy Storage and Conversion System: A Mini Review. *Catalysts*, **2020**, 10, 495	4	39
77	Facile microwave-assisted synthesis of metal oxide CdO-CuO nanocomposite: Photocatalytic and antimicrobial enhancing properties. *Optik*, **2020**, 218, 165112	2.5	27
76	Bioengineered silver nanoparticles using Elytraria acaulis (L.f.) Lindau leaf extract and its biological applications. *Biocatalysis and Agricultural Biotechnology*, **2020**, 27, 101690	4.2	24
75	Fabrication of ZnO-Fe-MXene Based Nanocomposites for Efficient CO2 Reduction. *Catalysts*, **2020**, 10, 549	4	33
74	Polymers in electronics **2020**, 365-392		7
73	A simple chemical precipitation of ceria based (Sm doped-CGO) nanocomposite: structural and electrolytic behaviour for LT-SOFCs. *SN Applied Sciences*, **2020**, 2, 1	1.8	7

72	Facile fabrication of CuO nanoparticles via microwave-assisted method: photocatalytic, antimicrobial and anticancer enhancing performance. *International Journal of Environmental Analytical Chemistry*, **2020**, 1-14	1.8	38
71	Bio-engineered TiO2 nanoparticles using Ledebouria revoluta extract: Larvicidal, histopathological, antibacterial and anticancer activity. *International Journal of Environmental Analytical Chemistry*, **2020**, 1-11	1.8	43
70	Structural and biological properties with enhanced photocatalytic behaviour of CdO-MgO nanocomposite by microwave-assisted method. *Optik*, **2020**, 204, 164221	2.5	39
69	Structural studies of bio-mediated NiO nanoparticles for photocatalytic and antibacterial activities. *Inorganic Chemistry Communication*, **2020**, 113, 107755	3.1	53
68	Synthesis, Characterisation, and Antimicrobial Efficacy of Acid Fuchsin Schiff Base-Modified Silver Nanoparticles. *Nanotechnologies in Russia*, **2020**, 15, 828-836	0.6	2
67	Crystal growth and characterization of Benzimidazolium salicylate single crystal for nonlinear optical studies and antibacterial activity. *Physics and Chemistry of Solid State*, **2020**, 21, 377-389	1.9	2
66	Structural, morphological and optical studies of sol-gel engineered Sm3+ activated ZnO thin films for photocatalytic applications. *Physics and Chemistry of Solid State*, **2020**, 21, 433-439	1.9	3
65	Bioengineered metal and metal oxide nanoparticles for photocatalytic and biological applications: A review. *Physics and Chemistry of Solid State*, **2020**, 21, 571-583	1.9	6
64	Solvothermal/Hydrothermal Manufacturing of Carbon Nanotubes for Hydrogen storage: A Comparative Study. *Physics and Chemistry of Solid State*, **2020**, 21, 700-706	1.9	2
63	OLIVE MILL WASTEWATER (OMW) TREATMENT BY HYBRID PROCESSES OF ELECTROCOAGULATION/CATALYTIC OZONATION AND BIODEGRADATION. *Environmental Engineering and Management Journal*, **2020**, 19, 1401-1410	0.6	4
62	Nanostructured metal oxides and its hybrids for photocatalytic and biomedical applications. *Advances in Colloid and Interface Science*, **2020**, 281, 102178	14.3	118
61	Facile low-temperature synthesis and application of La0.85Sr0.15Co0.85Fe0.15O3-δ as superior cathode for LT-SOFCs using C-TAB as surfactant. *Materials Research Innovations*, **2020**, 24, 395-401	1.9	10
60	Tartaric acid-assisted precipitation of visible light-driven Ce-doped ZnO nanoparticles used for photodegradation of methylene blue. *Journal of the Australian Ceramic Society*, **2020**, 56, 1029-1041	1.5	9
59	Cost-effective method of Co-doped rare-earth-based ceria (Y-CGO) nanocomposite as electrolyte for LT-SOFCs using C-TAB as surfactant. *Materials Research Innovations*, **2020**, 24, 414-421	1.9	10
58	Degradation of p-nitroaniline from aqueous solutions using ozonation/Mg-Al layered double hydroxides integrated with the sequencing batch moving bed biofilm reactor. *Journal of the Taiwan Institute of Chemical Engineers*, **2020**, 113, 241-252	5.3	3
57	Facile synthesis of NiO-CYSO nanocomposite for photocatalytic and antibacterial applications. *Inorganic Chemistry Communication*, **2020**, 122, 108307	3.1	10
56	Photocatalytic degradation of dyes by cobalt ferrite nanoparticles synthesized by sol-gel method **2020**,		1
55	Hibiscus subdariffa leaf extract mediated 2-D fern-like ZnO/TiO2 hierarchical nanoleaf for photocatalytic degradation. *FlatChem*, **2020**, 24, 100197	5.1	15

54	Bioinspired fluorescence carbon quantum dots extracted from natural honey: Efficient material for photonic and antibacterial applications. *Nano Structures Nano Objects*, **2020**, 24, 100589	5.6	13
53	Biocompatible Carbon Quantum Dots Derived from Sugarcane Industrial Wastes for Effective Nonlinear Optical Behavior and Antimicrobial Activity Applications. *ACS Omega*, **2020**, 5, 30363-30372	3.9	30
52	Larvicidal and histopathology effect of endophytic fungal extracts of and. *Heliyon*, **2020**, 6, e05331	3.6	1
51	Photocatalytic, antibacterial and electrochemical properties of novel rare earth metal oxides-based nanohybrids. *Materials Science for Energy Technologies*, **2020**, 3, 853-861	5.2	36
50	Investigations on structural, optical, dielectric, electronic polarizability, Z-scan and antibacterial properties of Ni/Zn/Fe2O4 nanoparticles fabricated by microwave-assisted combustion method. *Journal of Photochemistry and Photobiology A: Chemistry*, **2020**, 402, 112794	4.7	6
49	Enhanced Corrosion Protection of Epoxy/ZnO-NiO Nanocomposite Coatings on Steel. *Coatings*, **2020**, 10, 783	2.9	27
48	Non-Invasive Diabetic Sensor Based on Cellulose Acetate/Graphene Nanocomposite. *Macromolecular Symposia*, **2020**, 392, 2000024	0.8	9
47	Synthesis of Ag/Bi2MoO6 Nanocomposites Using NaBH4 as Reducing Agent for Enhanced Visible-Light-Driven Photocatalysis of Rhodamine B. *Journal of Inorganic and Organometallic Polymers and Materials*, **2020**, 30, 322-329	3.2	28
46	Effect of annealing on the structural, morphological, optical and electrical properties of Al-Zn co-doped SnO2 thin films. *Materials Research Innovations*, **2020**, 24, 193-201	1.9	8
45	Influence of Sn and Mn on structural, optical and magnetic properties of spray pyrolysed CdS thin films. *Materials Research Innovations*, **2020**, 24, 82-86	1.9	23
44	Effect of cerium on electrochemical properties of V2O5 nanoparticles synthesized via non-aqueous sol-gel technique. *Ionics*, **2020**, 26, 905-912	2.7	7
43	Effect of pH on Phase, Morphology and Photocatalytic Properties of BiOBr Synthesized by Hydrothermal Method. *Journal of Inorganic and Organometallic Polymers and Materials*, **2020**, 30, 714-721	3.2	33
42	Synthesis and Characterization Ag Nanoparticles Supported on Bi2WO6 Nanoplates for Enhanced Visible-Light-Driven Photocatalytic Degradation of Rhodamine B. *Journal of Inorganic and Organometallic Polymers and Materials*, **2020**, 30, 1033-1040	3.2	28
41	Ultrasound-assisted synthesis of V2O5 nanoparticles for photocatalytic and antibacterial studies. *Materials Research Innovations*, **2020**, 24, 229-234	1.9	37
40	Detailed study on reduction of hazardous Cr(VI) at acidic pH using modified montmorillonite Fe(II)-Mt under ambient conditions. *Research on Chemical Intermediates*, **2019**, 45, 2357-2368	2.8	5
39	Microwave-assisted V2O5 nanoflowers for efficient lithium-ion battery. *Materials Research Innovations*, **2019**, 1-5	1.9	15
38	Multifunctional Applications of Microwave-Assisted Biogenic TiO2 Nanoparticles. *Journal of Cluster Science*, **2019**, 30, 965-972	3	45
37	Physico-chemical properties and antibacterial activity of Hexakis (Thiocarbamide) Nickel(II) nitrate single crystal. *Chemical Data Collections*, **2019**, 21, 100229	2.1	27

36	Structural, optical and magnetic behaviors of Fe/Mn-doped and co-doped CdS thin films prepared by spray pyrolysis method. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	22
35	Ultrasound-assisted Ta2O5 nanoparticles and their photocatalytic and biological applications. *Microchemical Journal*, **2019**, 147, 749-754	4.8	45
34	Ultrasonic-assisted CdO–MgO nanocomposite for multifunctional applications. *Materials Technology*, **2019**, 34, 403-414	2.1	44
33	Multifunctional properties of CdO nanostructures Synthesised through microwave assisted hydrothermal method. *Materials Research Innovations*, **2019**, 23, 310-318	1.9	40
32	Synthesis and Crystal Structure of a New Binuclear Copper(II) Carboxylate Complex as a Precursor for Copper(II) Oxide Nanoparticles. *Journal of Structural Chemistry*, **2019**, 60, 1126-1132	0.9	7
31	Study on the electrochemical performance of ZnO nanoparticles synthesized via non-aqueous sol-gel route for supercapacitor applications. *Materials Research Express*, **2019**, 6, 105525	1.7	21
30	Effect of Mg/Co on the properties of CdS thin films deposited by spray pyrolysis technique. *Current Applied Physics*, **2019**, 19, 1136-1144	2.6	21
29	Removal of metronidazole from wastewater by Fe/charcoal micro electrolysis fluidized bed reactor. *Journal of Environmental Chemical Engineering*, **2019**, 7, 103457	6.8	34
28	Antibacterial activity and physico-chemical properties of metal-organic single crystal: Zinc (Tris) thiourea chloride. *Chemical Data Collections*, **2019**, 24, 100279	2.1	8
27	Investigations on the enhanced photocatalytic activity of (Ag, La) substituted nickel cobaltite spinels. *Solid State Sciences*, **2019**, 98, 105992	3.4	17
26	Microwave-Assisted ZrO2 Nanoparticles and Its Photocatalytic and Antibacterial Studies. *Journal of Cluster Science*, **2019**, 30, 311-318	3	37
25	A polyaniline-coated ZnS/ZnO/FTO photoelectrode for improving photocorrosion prevention and visible light absorption. *New Journal of Chemistry*, **2019**, 43, 16699-16705	3.6	4
24	Fabrication of MgO nanostructures and its efficient photocatalytic, antibacterial and anticancer performance. *Journal of Photochemistry and Photobiology B: Biology*, **2019**, 190, 8-20	6.7	117
23	Multifunctional properties of microwave assisted CdO–NiO–ZnO mixed metal oxide nanocomposite: enhanced photocatalytic and antibacterial activities. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 5459-5471	2.1	103
22	Nanostructured CdO-NiO composite for multifunctional applications. *Journal of Physics and Chemistry of Solids*, **2018**, 112, 106-118	3.9	70
21	New camphor hybrids: lipophilic enhancement improves antimicrobial efficacy against drug-resistant pathogenic microbes and intestinal worms. *Medicinal Chemistry Research*, **2018**, 27, 1728-1739	2.2	2
20	Growth, spectral, optical, thermal, electrical, mechanical and etching studies of organic single crystal: l-histidinium l-tartrate hemihydrate. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 17323-17332	2.1	8
19	Facile microwave-assisted green synthesis of NiO nanoparticles from Andrographis paniculata leaf extract and evaluation of their photocatalytic and anticancer activities. *Molecular Crystals and Liquid Crystals*, **2018**, 673, 70-80	0.5	66

18	Microwave-assisted green synthesis of SnO2 nanoparticles and their optical and photocatalytic properties. *Molecular Crystals and Liquid Crystals*, **2018**, 671, 17-23	0.5	43
17	Microwave assisted CdO-ZnO-MgO nanocomposite and its photocatalytic and antibacterial studies. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 18519-18530	2.1	43
16	Andrographis paniculata extract mediated green synthesis of CdO nanoparticles and its electrochemical and antibacterial studies. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 7991-8001	2.1	39
15	Photocatalytic and antibacterial activities of hydrothermally prepared CdO nanoparticles. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 11420-11429	2.1	45
14	Dielectric and antibacterial studies of microwave assisted calcium hydroxide nanoparticles. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 16509-16518	2.1	20
13	Microwave assisted green synthesis of MgO nanorods and their antibacterial and anti-breast cancer activities. *Materials Letters*, **2017**, 206, 217-220	3.3	48
12	Structural and optical properties of microwave assisted CdO-NiO nanocomposite **2016**,		18
11	Microwave-assisted synthesis of CdO-ZnO nanocomposite and its antibacterial activity against human pathogens. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2015**, 139, 7-12	4.4	67
10	Apoptosis and Other Alternate Mechanisms of Cell Death. *Asian Journal of Animal and Veterinary Advances*, **2015**, 10, 646-668	0.1	5
9	Effect of Immunomodulation and Immunomodulatory Agents on Health with some Bioactive Principles, Modes of Action and Potent Biomedical Applications. *International Journal of Pharmacology*, **2015**, 11, 253-290	0.7	56
8	Influence of erbium, chromium-doped: Yttrium scandium-gallium-garnet laser etching and traditional etching systems on depth of resin penetration in enamel: A confocal laser scanning electron microscope study. *Journal of Pharmacy and Bioallied Sciences*, **2015**, 7, S616-22	1.1	6
7	New closed tube loop mediated isothermal amplification assay for prevention of product cross-contamination. *MethodsX*, **2014**, 1, 137-43	1.9	65
6	CdS-sensitized single-crystalline TiO2 nanorods and polycrystalline nanotubes for solar hydrogen generation. *Journal of Materials Research*, **2013**, 28, 418-423	2.5	14
5	CdS-sensitized TiO2 photoelectrodes for quantum dots-based solar cells. *Journal of Materials Research*, **2013**, 28, 497-501	2.5	5
4	Temperature-dependent magnetic anomalies of CuO nanoparticles. *Solid State Communications*, **2011**, 151, 564-568	1.6	49
3	Rational Synthesis of Mixed Metal Oxide Clusters Supported on a Partially Etched MAX Phase for Efficient Electrocatalytic CO2 Conversion. *Topics in Catalysis*,1	2.3	1
2	Molecular identification of extended spectrum -lactamases (ESBLs)-producing strains in clinical specimens from Tiruchirappalli, India. *Applied Nanoscience (Switzerland)*,1	3.3	0
1	Green Synthesis, Characterization and Antibacterial Activity of SiO2-ZnO Nanocomposite by Dictyota bartayresiana Extract and Its Cytotoxic Effect on HT29 Cell Line. *Journal of Cluster Science*,1	3	0