

Arun Thirumurugan

List of Publications by Year in descending order

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73
papers

2,070
citations

201575

27
h-index

254106

43
g-index

75
all docs

75
docs citations

75
times ranked

2735
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic Nanomaterials for Energy Storage Applications. Environmental Chemistry for A Sustainable World, 2022, , 131-150.	0.3	1
2	ZnO@Sn@Graphene nanopowders: Integrative impact of tin and graphene on the microstructure, surface morphology, and optical properties. Physica B: Condensed Matter, 2022, 628, 413621.	1.3	3
3	Investigation on Tetracycline degradation and bactericidal properties of binary and ternary ZnO/NiO/g-C ₃ N ₄ composites prepared by a facile co-precipitation method. Journal of Environmental Chemical Engineering, 2022, 10, 107368.	3.3	24
4	Nanostructured Materials for Supercapacitors. Advances in Material Research and Technology, 2022, , 1-26.	0.3	1
5	Role of electrolytes on the electrochemical characteristics of Fe ₃ O ₄ /MXene/RGO composites for supercapacitor applications. Electrochimica Acta, 2021, 367, 137473.	2.6	42
6	Magnetic and electrochemical characteristics of carbon-modified magnetic nanoparticles. , 2021, , 235-252.		2
7	Thermally Reduced Soft Magnetic CuFe Nanoparticles for High-Performance Electrical Devices. IEEE Transactions on Magnetics, 2021, 57, 1-6.	1.2	3
8	Altered electrochemical properties of iron oxide nanoparticles by carbon enhance molecular biocompatibility through discrepant atomic interaction. Materials Today Bio, 2021, 12, 100131.	2.6	6
9	Combustion synthesis, characterization and antibacterial properties of pristine ZnO and Ga doped ZnO nanoparticles. Ceramics International, 2021, 47, 27934-27941.	2.3	18
10	NiFe ₂ O ₄ nanospheres with size-tunable magnetic and electrochemical properties for superior supercapacitor electrode performance. Electrochimica Acta, 2021, 399, 139346.	2.6	18
11	Morphology and magnetic properties of FeCo alloy synthesized through polyol process. Applied Nanoscience (Switzerland), 2020, 10, 477-483.	1.6	8
12	Surface Modification of Highly Magnetic Nanoparticles for Water Treatment to Remove Radioactive Toxins. Environmental Chemistry for A Sustainable World, 2020, , 31-54.	0.3	3
13	Microwave-assisted synthesis of localized surface plasmon resonance enhanced bismuth selenide (Bi ₂ Se ₃) layers for non-enzymatic glucose sensing. Journal of Electroanalytical Chemistry, 2020, 856, 113629.	1.9	21
14	Laser induced Fano scattering, electron-phonon coupling, bond length and phonon lifetime changes in Γ -Fe ₂ O ₃ nanostructures. Physical Chemistry Chemical Physics, 2020, 22, 2001-2009.	1.3	32
15	Role of magnetic anisotropy on the heating mechanism of Co-doped Fe ₃ O ₄ nanoparticles. Physica B: Condensed Matter, 2020, 598, 412429.	1.3	14
16	Size dependent magnetic and capacitive performance of MnFe ₂ O ₄ magnetic nanoparticles. Materials Letters, 2020, 276, 128240.	1.3	14
17	Single-phase and binary phase nanogranular ferrites for magnetic hyperthermia application. Journal of the American Ceramic Society, 2020, 103, 5086-5097.	1.9	7
18	Facile synthesized novel hybrid graphene oxide/cobalt ferrite magnetic nanoparticles based surface coating material inhibit bacterial secretion pathway for antibacterial effect. Materials Science and Engineering C, 2019, 104, 109932.	3.8	52

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19	Nano hexagonal Co ₃ O ₄ platelets for supercapacitor applications synthesis and characterization. <i>Materials Research Express</i> , 2019, 6, 0850b1.	0.8	15
20	Exchange Bias in Chemically Reduced FeCo Alloy Nanostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900051.	0.8	9
21	Morphological Structure, Optical and Microbial Findings of Ferrites. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 5667-5673.	0.9	9
22	Carbon decorated octahedral shaped Fe ₃ O ₄ and Fe ₂ O ₃ magnetic hybrid nanomaterials for next generation supercapacitor applications. <i>Applied Surface Science</i> , 2019, 485, 147-157.	3.1	80
23	Biological Effects of Green-Synthesized Metal Nanoparticles: A Mechanistic View of Antibacterial Activity and Cytotoxicity. <i>Environmental Chemistry for A Sustainable World</i> , 2019, , 145-171.	0.3	20
24	Optical, vibrational and fluorescence recombination pathway properties of nano SiO ₂ -PVA composite films. <i>Optical Materials</i> , 2019, 90, 139-144.	1.7	21
25	Fabrication of p-NiO nanoflakes/n-Si(100) heterojunction architecture for high sensitive photodetectors. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 6811-6819.	1.1	13
26	Mechanistic Insight into Size-Dependent Enhanced Cytotoxicity of Industrial Antibacterial Titanium Oxide Nanoparticles on Colon Cells Because of Reactive Oxygen Species Quenching and Neutral Lipid Alteration. <i>ACS Omega</i> , 2018, 3, 1244-1262.	1.6	46
27	Mechanistic insight into ROS and neutral lipid alteration induced toxicity in the human model with fins (<i>Danio rerio</i>) by industrially synthesized titanium dioxide nanoparticles. <i>Toxicology Research</i> , 2018, 7, 244-257.	0.9	47
28	Enhanced electrochemical performances of agglomeration-free LaMnO ₃ perovskite nanoparticles and achieving high energy and power densities with symmetric supercapacitor design. <i>Chemical Engineering Journal</i> , 2018, 338, 147-156.	6.6	83
29	Low-energy ion beam synthesis of Ag endotaxial nanostructures in silicon. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	4
30	Rapid Novel Facile Biosynthesized Silver Nanoparticles From Bacterial Release Induce Biogenicity and Concentration Dependent In Vivo Cytotoxicity With Embryonic Zebrafish A Mechanistic Insight. <i>Toxicological Sciences</i> , 2018, 161, 125-138.	1.4	50
31	Molecular aspects of core-shell intrinsic defect induced enhanced antibacterial activity of ZnO nanocrystals. <i>Nanomedicine</i> , 2018, 13, 43-68.	1.7	82
32	Molecular investigation to RNA and protein based interaction induced <i>in vivo</i> biocompatibility of phytofabricated AuNP with embryonic zebrafish. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2018, 46, 671-684.	1.9	34
33	Investigations of Interfacial Electric Field on Reduced Graphene Oxide Supported Molybdenum Oxide @ Silver Phosphate Ternary Hybrid Composite: Highly Efficient Visible Light Driven Photocatalyst. <i>ChemistrySelect</i> , 2018, 3, 9920-9932.	0.7	5
34	Drug-in-mucoadhesive type film for ocular anti-inflammatory potential of amlodipine: Effect of sulphobutyl-ether-beta-cyclodextrin on permeation and molecular docking characterization. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 172, 555-564.	2.5	34
35	Synthesis of Nanocomposites. , 2018, , 141-168.		28
36	Enhanced photocatalytic activity of V ₂ O ₅ nanorods for the photodegradation of organic dyes: A detailed understanding of the mechanism and their antibacterial activity. <i>Materials Science in Semiconductor Processing</i> , 2018, 85, 122-133.	1.9	102

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37	Molecular insights to alkaline based bio-fabrication of silver nanoparticles for inverse cytotoxicity and enhanced antibacterial activity. <i>Materials Science and Engineering C</i> , 2018, 92, 807-818.	3.8	50
38	Positron Annihilation Studies on Chemically Synthesized FeCo Alloy. <i>Scientific Reports</i> , 2018, 8, 9764.	1.6	13
39	Photocatalytic efficacy of ZnO films at light intensity and thickness effects. <i>Surface Engineering</i> , 2017, 33, 512-520.	1.1	27
40	Catalytic and recyclability properties of phyto-genic copper oxide nanoparticles derived from <i>Aglaia elaeagnoides</i> flower extract. <i>Journal of Saudi Chemical Society</i> , 2017, 21, 610-618.	2.4	91
41	Modification of BiOI Microplates with CdS QDs for Enhancing Stability, Optical Property, Electronic Behavior toward Rhodamine B Decolorization, and Photocatalytic Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4834-4849.	1.5	150
42	Bi ₂ Te ₃ thin hexagonal nanoplatelets: Synthesis and its characterization studies. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 92, 17-22.	1.3	13
43	Structure and electron field emission properties of ion beam reduced graphene oxide sheets. <i>Carbon</i> , 2017, 119, 172-178.	5.4	27
44	Exfoliated metal free homojunction photocatalyst prepared by a biomediated route for enhanced hydrogen evolution and Rhodamine B degradation. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1641-1653.	3.2	49
45	Surface protection coating material for controlling the decay of major construction stone. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	2
46	Ion beam radiation effects on natural halite crystals. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017, 409, 216-220.	0.6	3
47	Facile <i>Aglaia elaeagnoides</i> Mediated Synthesis of Silver and Gold Nanoparticles: Antioxidant and Catalysis Properties. <i>Journal of Cluster Science</i> , 2017, 28, 2041-2056.	1.7	40
48	Microstructural and Magnetic Features of SrFe ₁₂ O ₁₉ Materials Synthesized from Different Fuels by Sol-Gel Auto-Combustion Method. <i>Journal of Superconductivity and Novel Magnetism</i> , 2017, 30, 1427-1437.	0.8	15
49	Mechanistic insight into the rapid one-step facile biofabrication of antibacterial silver nanoparticles from bacterial release and their biogenicity and concentration-dependent in vitro cytotoxicity to colon cells. <i>RSC Advances</i> , 2017, 7, 40034-40045.	1.7	62
50	ZnO-nanorods: A possible white LED phosphor. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	0
51	Controlled synthesis of brookite and combined brookite with rutile phases of titanium di-oxide and its characterization studies. <i>Ceramics International</i> , 2017, 43, 2438-2440.	2.3	8
52	Synergistic effects of Mo and F doping on the quality factor of ZnO thin films prepared by a fully automated home-made nebulizer spray technique. <i>Applied Surface Science</i> , 2017, 392, 624-633.	3.1	21
53	CdS QDs-Decorated Self-Doped Bi ₂ MoO ₆ : A Sustainable and Versatile Photocatalyst toward Photoreduction of Cr(VI) and Degradation of Phenol. <i>ACS Omega</i> , 2017, 2, 9040-9056.	1.6	79
54	First report on soapnut extract-mediated synthesis of sulphur-substituted nanoscale NdFeB permanent magnets and their characterization. <i>Applied Nanoscience (Switzerland)</i> , 2017, 7, 389-398.	1.6	1

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55	Structural, bandgap tuning and electrical properties of Cu doped ZnO nanoparticles synthesized by mechanical alloying. Journal of Materials Science: Materials in Electronics, 2017, 28, 15127-15134.	1.1	35
56	Realizing cost-effective ZnO:Sr nanoparticles@graphene nanospreads for improved photocatalytic and antibacterial activities. RSC Advances, 2016, 6, 67575-67585.	1.7	58
57	Magnetic properties of FeCo alloy nanoparticles synthesized through instant chemical reduction. Journal of Applied Physics, 2016, 120, .	1.1	24
58	Amorphous MoS _x thin-film-coated carbon fiber paper as a 3D electrode for long cycle life symmetric supercapacitors. Nanoscale, 2016, 8, 11787-11791.	2.8	66
59	Synthesis of ZnO:Co/rGO nanocomposites for enhanced photocatalytic and antibacterial activities. Ceramics International, 2016, 42, 17539-17550.	2.3	46
60	Effect of fluorine (an anionic dopant) on transparent conducting properties of Sb (a cationic) doped ZnO thin films deposited using a simplified spray technique. Materials Research Bulletin, 2016, 83, 442-452.	2.7	35
61	Fabrication of a novel low-cost triple layer system (TaZO/Ag/TaZO) with an enhanced quality factor for transparent electrode applications. RSC Advances, 2016, 6, 63314-63324.	1.7	5
62	Rectification of sulphur deficiency defect in CdS based films by introducing a novel modification in the SILAR cyclic process. Journal of Alloys and Compounds, 2016, 687, 402-412.	2.8	14
63	Influence of Fe and Fe+F doping on the properties of sprayed SnO ₂ thin films. Journal of Materials Science: Materials in Electronics, 2016, 27, 9558-9564.	1.1	3
64	Effect of size reduction on the magnetic and antibacterial properties of ZnO:Zr:Mn nanoparticles synthesized by a cost-effective chemical method. Journal of Materials Science: Materials in Electronics, 2016, 27, 5825-5832.	1.1	5
65	Formation of hexagonal plate shaped ZnO microparticles – A study on antibacterial and magnetic properties. Ceramics International, 2016, 42, 7336-7346.	2.3	22
66	Prussian blue modified FePt nanoparticles for the electrochemical reduction of H ₂ O ₂ . Ionics, 2016, 22, 877-883.	1.2	3
67	Dielectric Properties of Lanthanum Doped Pb(Zr _{0.52} Ti _{0.48})O ₃ Ferroelectric Nanoceramics. Nanoscience and Nanotechnology Letters, 2016, 8, 723-728.	0.4	0
68	Adsorption of Ru, Ce and Eu radionuclides within naturally precipitated polycrystalline calcium carbonate under acidic environment. Journal of Radioanalytical and Nuclear Chemistry, 2015, 309, 751.	0.7	0
69	Prussian blue modified Fe ₃ O ₄ nanoparticles for Cs detoxification. Journal of Materials Science, 2014, 49, 7014-7022.	1.7	13
70	Synthesis and magnetic properties of prussian blue modified Fe nanoparticles. Journal of Magnetism and Magnetic Materials, 2013, 345, 100-105.	1.0	16
71	Magnetic properties of prussian blue modified Fe ₃ O ₄ nanocubes. Journal of Physics and Chemistry of Solids, 2013, 74, 1761-1768.	1.9	36
72	Synthesis and magnetic properties of flower-like FeCo particles through a one pot polyol process. Journal of Colloid and Interface Science, 2013, 404, 49-55.	5.0	58

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73	Crystallization kinetics of Nd-substituted yttrium iron garnet prepared through sol-gel auto-combustion method. <i>Ceramics International</i> , 2012, 38, 2369-2373.	2.3	29