Jothi Ramalingam Rajabathar

List of Publications by Year in descending order

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107 papers

3,387 citations

30 h-index 53 g-index

111 all docs

111 docs citations

111 times ranked

3925 citing authors

#	Article	IF	Citations
1	Green synthesis of NiO nanoparticles using Aegle marmelos leaf extract for the evaluation of in-vitro cytotoxicity, antibacterial and photocatalytic properties. Journal of Photochemistry and Photobiology B: Biology, 2018, 180, 39-50.	1.7	281
2	Green synthesis of Ag nanoparticles using Tamarind fruit extract for the antibacterial studies. Journal of Photochemistry and Photobiology B: Biology, 2017, 169, 178-185.	1.7	183
3	Review of Recent Developments in Solid Acid, Base, and Enzyme Catalysts (Heterogeneous) for Biodiesel Production via Transesterification. Industrial & Engineering Chemistry Research, 2009, 48, 6162-6172.	1.8	182
4	Okra extract-assisted green synthesis of CoFe2O4 nanoparticles and their optical, magnetic, and antimicrobial properties. Materials Chemistry and Physics, 2018, 204, 410-419.	2.0	138
5	Bioreduction potentials of dried root of Zingiber officinale for a simple green synthesis of silver nanoparticles: Antibacterial studies. Journal of Photochemistry and Photobiology B: Biology, 2017, 177, 62-68.	1.7	128
6	Studies on the efficient dual performance of Mn1–xNixFe2O4 spinel nanoparticles in photodegradation and antibacterial activity. Journal of Photochemistry and Photobiology B: Biology, 2016, 165, 121-132.	1.7	127
7	Cerium incorporated ordered manganese oxide OMS-2 materials: Improved catalysts for wet oxidation of phenol compounds. Applied Catalysis B: Environmental, 2005, 59, 91-98.	10.8	109
8	Facile sonochemical synthesis of perovskite-type SrTiO3 nanocubes with reduced graphene oxide nanocatalyst for an enhanced electrochemical detection of \hat{l}_{\pm} -amino acid (tryptophan). Ultrasonics Sonochemistry, 2019, 56, 193-199.	3.8	96
9	A review of the recent progress on heterogeneous catalysts for Knoevenagel condensation. Dalton Transactions, 2021, 50, 4445-4469.	1.6	95
10	A novel synthesis protocol for Co ₃ O ₄ nanocatalysts and their catalytic applications. RSC Advances, 2017, 7, 38861-38870.	1.7	71
11	Facile synthesis of copper sulfide decorated reduced graphene oxide nanocomposite for high sensitive detection of toxic antibiotic in milk. Ultrasonics Sonochemistry, 2019, 52, 382-390.	3.8	65
12	Anti-cancer activity of hierarchical ZSM-5 zeolites synthesized from rice-based waste materials. RSC Advances, 2018, 8, 481-490.	1.7	62
13	A screen-printed electrode modified with tungsten disulfide nanosheets for nanomolar detection of the arsenic drug roxarsone. Mikrochimica Acta, 2019, 186, 420.	2.5	62
14	Synergic effect of Cu2O/MoS2/rGO for the sonophotocatalytic degradation of tetracycline and ciprofloxacin antibiotics. Ceramics International, 2021, 47, 4226-4237.	2.3	58
15	Synthesis, characterization and catalytic oxidation activity of zirconium doped K-OMS-2 type manganese oxide materials. Journal of Molecular Catalysis A, 2006, 252, 49-55.	4.8	57
16	Preparation, characterization and catalytic properties of cerium incorporated porous manganese oxide OMS-2 catalysts. Catalysis Communications, 2005, 6, 41-45.	1.6	56
17	Studies on Opuntia dilenii haw mediated multifunctional ZnFe 2 O 4 nanoparticles: Optical, magnetic and catalytic applications. Materials Chemistry and Physics, 2017, 194, 153-164.	2.0	55
18	A novel electrochemical sensor for determination of DNA damage biomarker (8-hydroxy-2′-deoxyguanosine) in urine using sonochemically derived graphene oxide sheets covered zinc oxide flower modified electrode. Ultrasonics Sonochemistry, 2019, 58, 104622.	3.8	53

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19	Ultrasound-assisted synthesis of tungsten trioxide entrapped with graphene nanosheets for developing nanomolar electrochemical (hormone) sensor and enhanced sensitivity of the catalytic performance. Ultrasonics Sonochemistry, 2019, 56, 134-142.	3.8	51
20	Comparative investigation on the structural, morphological, optical, and magnetic properties of CoFe2O4 nanoparticles. Ceramics International, 2017, 43, 7682-7689.	2.3	50
21	Novel sonochemical synthesis of Fe3O4 nanospheres decorated on highly active reduced graphene oxide nanosheets for sensitive detection of uric acid in biological samples. Ultrasonics Sonochemistry, 2019, 58, 104618.	3.8	48
22	Synthesis, characterization and photocatalytic activity of porous manganese oxide doped titania for toluene decomposition. Journal of Hazardous Materials, 2007, 147, 562-569.	6.5	40
23	Highly efficient green mesostructured urea functionalized on SBA-15 catalysts for selective synthesis of benzlidenemalononitrile. Microporous and Mesoporous Materials, 2018, 256, 67-74.	2.2	40
24	Facile synthesis of mesoporous WS2 nanorods decorated N-doped RGO network modified electrode as portable electrochemical sensing platform for sensitive detection of toxic antibiotic in biological and pharmaceutical samples. Ultrasonics Sonochemistry, 2019, 56, 430-436.	3.8	37
25	Sonochemical synthesis of perovskite-type barium titanate nanoparticles decorated on reduced graphene oxide nanosheets as an effective electrode material for the rapid determination of ractopamine in meat samples. Ultrasonics Sonochemistry, 2019, 56, 318-326.	3.8	36
26	Recent Developments in the Use of Heterogeneous Semiconductor Photocatalyst Based Materials for a Visible-Light-Induced Water-Splitting Systemâ€"A Brief Review. Catalysts, 2021, 11, 160.	1.6	34
27	A relative study on sonochemically synthesized mesoporous WS2 nanorods & amp; hydrothermally synthesized WS2 nanoballs towards electrochemical sensing of psychoactive drug (Clonazepam). Ultrasonics Sonochemistry, 2019, 54, 79-89.	3.8	32
28	Facile synthesis and characterization of erbium oxide (Er2O3) nanospheres embellished on reduced graphene oxide nanomatrix for trace-level detection of a hazardous pollutant causing Methemoglobinaemia. Ultrasonics Sonochemistry, 2019, 56, 422-429.	3.8	32
29	Synthesis and structural characterization of copper incorporated manganese oxide OMS-2 materials synthesized via potassium birnessite. Materials Chemistry and Physics, 2006, 100, 257-261.	2.0	31
30	Developing green sonochemical approaches towards the synthesis of highly integrated and interconnected carbon nanofiber decorated with Sm2O3 nanoparticles and their use in the electrochemical detection of toxic 4-nitrophenol. Ultrasonics Sonochemistry, 2019, 58, 104595.	3.8	31
31	A novel electrochemical sensor for the detection of oxidative stress and cancer biomarker (4-nitroquinoline N-oxide) based on iron nitride nanoparticles with multilayer reduced graphene nanosheets modified electrode. Sensors and Actuators B: Chemical, 2019, 291, 120-129.	4.0	30
32	Review on Carbon Dioxide Utilization for Cycloaddition of Epoxides by Ionic Liquid-Modified Hybrid Catalysts: Effect of Influential Parameters and Mechanisms Insight. Catalysts, 2021, 11, 4.	1.6	30
33	Synthesis of porous activated carbon powder formation from fruit peel and cow dung waste for modified electrode fabrication and application. Biomass and Bioenergy, 2020, 142, 105800.	2.9	28
34	Flexible Type Symmetric Supercapacitor Electrode Fabrication Using Phosphoric Acid-Activated Carbon Nanomaterials Derived from Cow Dung for Renewable Energy Applications. ACS Omega, 2020, 5, 15028-15038.	1.6	28
35	In-situ incorporation of ruthenium/copper nanoparticles in mesoporous silica derived from rice husk ash for catalytic acetylation of glycerol. Renewable Energy, 2020, 160, 564-574.	4.3	27
36	Efficient synthesis of butyl levulinate from furfuryl alcohol over ordered mesoporous Ti-KIT-6 catalysts for green chemistry applications. RSC Advances, 2017, 7, 55206-55214.	1.7	26

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37	Polymer assisted Ga doped ZnO nanodisk/nanorod structures prepared by a low temperature one-pot hydrothermal method. Materials Letters, 2012, 68, 247-250.	1.3	25
38	Facile synthesis of copper(II) oxide nanospheres covered on functionalized multiwalled carbon nanotubes modified electrode as rapid electrochemical sensing platform for super-sensitive detection of antibiotic. Ultrasonics Sonochemistry, 2019, 58, 104596.	3.8	25
39	Green Synthesis of Co ₃ O ₄ Nanorods for Highly Efficient Catalytic, Photocatalytic, and Antibacterial Activities. Journal of Nanoscience and Nanotechnology, 2019, 19, 2590-2598.	0.9	25
40	Crystal stabilization of \hat{l}_{\pm} -FAPbI3 perovskite by rapid annealing method in industrial scale. Journal of Materials Research and Technology, 2021, 12, 1924-1930.	2.6	25
41	Synthesis, characterization and optical properties of sulfur and fluorine doped ZnO nanostructures for visible light utilized catalysis. Optik, 2017, 148, 325-331.	1.4	24
42	Synthesis and bio-physical characterization of Silver nanoparticle and Ag-mesoporous MnO2 nanocomposite for anti-microbial and anti-cancer activity. Journal of Molecular Liquids, 2017, 243, 348-357.	2.3	22
43	One-pot sonochemical synthesis of Bi2WO6 nanospheres with multilayer reduced graphene nanosheets modified electrode as rapid electrochemical sensing platform for high sensitive detection of oxidative stress biomarker in biological sample. Ultrasonics Sonochemistry, 2019, 57, 233-241.	3.8	22
44	A Novel Approach in Hybrid Energy Storage System for Maximizing Solar PV Energy Penetration in Microgrid. International Journal of Photoenergy, 2022, 2022, 1-7.	1.4	22
45	Highly sensitive determination of cancer toxic mercury ions in biological and human sustenance samples based on green and robust synthesized stannic oxide nanoparticles decorated reduced graphene oxide sheets. Analytica Chimica Acta, 2020, 1137, 181-190.	2.6	21
46	Synthesis and characterization of metal chalcogenide modified graphene oxide sandwiched manganese oxide nanofibers on nickel foam electrodes for high performance supercapacitor applications. Journal of Alloys and Compounds, 2021, 850, 156346.	2.8	21
47	A Green approach: synthesis, characterization and opto-magnetic properties of MgxMn1â^'xFe2O4 spinel nanoparticles. Journal of Materials Science: Materials in Electronics, 2017, 28, 10321-10329.	1.1	20
48	Ultrasound-assisted synthesis of α-MnS (alabandite) nanoparticles decorated reduced graphene oxide hybrids: Enhanced electrocatalyst for electrochemical detection of Parkinson's disease biomarker. Ultrasonics Sonochemistry, 2019, 56, 378-385.	3.8	20
49	Investigation of sonochemically synthesized sphere-like metal tungstate nanocrystals decorated activated carbon sheets network and its application towards highly sensitive detection of arsenic drug in biological samples. Journal of the Taiwan Institute of Chemical Engineers, 2020, 114, 211-219.	2.7	20
50	Selective synthesis of dioxolane biofuel additive via acetalization of glycerol and furfural enhanced by MCM-41-alanine bifunctional catalyst. Fuel, 2021, 288, 119573.	3.4	20
51	Manganese oxide nanocomposites with improved surface area prepared by one-pot surfactant route for electro catalytic and biosensor applications. Journal of Porous Materials, 2010, 17, 677-683.	1.3	19
52	Synthesis and structural characterization of Ga-ZnO nanodisk/nanorods formation by polymer assisted hydrothermal process. Powder Technology, 2013, 239, 308-313.	2.1	19
53	Microwave-assisted synthesis of gadolinium(III) oxide decorated reduced graphene oxide nanocomposite for detection of hydrogen peroxide in biological and clinical samples. Journal of Electroanalytical Chemistry, 2019, 837, 167-174.	1.9	18
54	Floating ZnO QDs-Modified TiO2/LLDPE Hybrid Polymer Film for the Effective Photodegradation of Tetracycline under Fluorescent Light Irradiation: Synthesis and Characterisation. Molecules, 2021, 26, 2509.	1.7	18

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55	Acid-base bifunctional SBA-15 as an active and selective catalyst for synthesis of ethyl î±-cyanocinnamate via Knoevenagel condensation. Microporous and Mesoporous Materials, 2021, 320, 111091.	2.2	18
56	Effects of different additives with assistance of microwave heating for heavy metal stabilization in electronic industry sludge. Chemosphere, 2010, 78, 609-613.	4.2	17
57	Synthesis, characterization and catalytic activity of ionic liquid mimic halides modified MCM-41 for solvent free synthesis of phenyl glycidyl carbonate. Materials Chemistry and Physics, 2019, 233, 79-88.	2.0	17
58	Synthesis, characterization and catalytic sorption activity of various method prepared magnetite (Fe 3) Tj ETQq0 (698, 1077-1085.	0 0 rgBT 2.8	/Overlock 10
59	Silver nanoparticle/r-graphene oxide deposited mesoporous-manganese oxide nanocomposite for pollutant removal and supercapacitor applications. International Journal of Hydrogen Energy, 2017, 42, 15679-15688.	3.8	16
60	Unprecedented 2D GNR-CoB nanocomposite for detection and degradation of malachite green – A computational prediction of degradation pathway and toxicity. Chemosphere, 2022, 287, 132153.	4.2	16
61	Synthesis, Characterizations and Catalysis of Sulfated Silica and Nickel Modified Silica Catalysts for Diethyl Ether (DEE) Production from Ethanol towards Renewable Energy Applications. Catalysts, 2021, 11, 1511.	1.6	16
62	A novel nanocomposite with superior electrocatalytic activity: A magnetic property based ZnFe2O4 nanocubes embellished with reduced graphene oxide by facile ultrasonic approach. Ultrasonics Sonochemistry, 2019, 57, 116-124.	3.8	14
63	Review on Carbon Nanotube Varieties for Healthcare Application: Effect of Preparation Methods and Mechanism Insight. Processes, 2020, 8, 1654.	1.3	14
64	Acetylation of glycerol over bimetallic Ag–Cu doped rice husk silica based biomass catalyst for bio-fuel additives application. International Journal of Industrial Chemistry, 2016, 7, 187-194.	3.1	13
65	Surface and Electrochemical Characterization of N-Fe-doped-TiO2 Nanoparticle Prepared by Hydrothermal and Facile Electro-Deposition Method for Visible Light Driven Pollutant Removal. International Journal of Electrochemical Science, 2017, 12, 797-811.	0.5	13
66	Synthesis of MoS2 nanoparticle deposited graphene/mesoporous MnOx nanocomposite for high performance super capacitor application. International Journal of Hydrogen Energy, 2018, 43, 17121-17131.	3.8	13
67	Rapid sonochemical synthesis of silver nano-leaves encapsulated on iron pyrite nanocomposite: An excellent catalytic application in the electrochemical detection of herbicide (Acifluorfen). Ultrasonics Sonochemistry, 2019, 54, 90-98.	3.8	13
68	An improving aqueous dispersion of polydopamine functionalized vapor grown carbon fiber for the effective sensing electrode fabrication to chloramphenicol drug detection in food samples. Microchemical Journal, 2021, 170, 106675.	2.3	13
69	Construction of novel quaternary nanocomposite and its synergistic effect towards superior photocatalytic and antibacterial application. Journal of Environmental Chemical Engineering, 2022, 10, 106961.	3.3	13
70	Chitosan-Type Bioadditive-Modified Electronic Industry Waste Sludge for Heavy Metal Stabilization with Assistance of Microwave Heating. Industrial & Engineering Chemistry Research, 2010, 49, 2557-2561.	1.8	12
71	Synthesis, characterization and catalytic activity of melamine immobilized MCM-41 for condensation reactions. Journal of Porous Materials, 2018, 25, 629-641.	1.3	12
72	Facile sonochemical synthesis of silver nanoparticle and graphene oxide deposition on bismuth doped manganese oxide nanotube composites for electro-catalytic sensor and oxygen reduction reaction (ORR) applications. Intermetallics, 2021, 131, 107101.	1.8	12

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73	FeTiO3 Perovskite Nanoparticles for Efficient Electrochemical Water Splitting. Catalysts, 2021, 11, 1028.	1.6	12
74	High-power ultrasonic-assisted phenol and dye degradation on porous manganese oxide doped titanium dioxide catalysts. Kinetics and Catalysis, 2009, 50, 741-747.	0.3	10
75	Platinum nanoparticle decorated rutile titania synthesized by surfactant free hydrothermal method for visible light catalysis for dye degradation and hydrogen production study. International Journal of Hydrogen Energy, 2019, 44, 23959-23968.	3.8	10
76	Selective synthesis of triacetyl glyceride biofuel additive via acetylation of glycerol over NiO-supported TiO2 catalyst enhanced by non-microwave instant heating. Applied Surface Science, 2021, 545, 149017.	3.1	10
77	Automatic Detection and Segmentation of Colorectal Cancer with Deep Residual Convolutional Neural Network. Evidence-based Complementary and Alternative Medicine, 2022, 2022, 1-8.	0.5	9
78	Synthesis and characterization of novel metal chalcogenide modified Ni-Co-MnO2 nanofibers rolled with graphene based visible light active catalyst for nitro phenol degradation. Optik, 2020, 224, 165538.	1.4	8
79	Antibacterial Activity and Electrical Properties of Gold Nanoparticle Doped Ceria-Rice Husk Silica (Au/Ce-Silica) Nanocomposites Derived From Biomass. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2015, 45, 304-308.	0.6	7
80	Synthesis and characterization of Photochromic inkless coating based on WO3-Titania nanocomposite under sun light and solar simulation condition. Optik, 2021, 228, 166145.	1.4	7
81	Design of copper (II) oxide nanoflakes decorated with molybdenum disulfide@reduced graphene oxide composite as an electrode for high performance supercapacitor. Synthetic Metals, 2021, 278, 116843.	2.1	7
82	Preparation and surface characterization of nanodisk/nanoflower-structured gallium-doped zinc oxide as a catalyst for sensor applications. Chinese Journal of Catalysis, 2016, 37, 1235-1241.	6.9	6
83	Cellulose Acetate/N-TiO2 Biocomposite Flexible Films with Enhanced Solar Photochromic Properties. Journal of Electronic Materials, 2017, 46, 4567-4574.	1.0	6
84	Facile sonochemical synthesis ofÂnanoparticle modified Bi-MnOx and Fe3O4 deposited Bi-MnOx Nanocomposites for Sensor and Pollutant Degradation Application. Journal of Alloys and Compounds, 2021, 859, 158263.	2.8	6
85	Design and development of defect rich titania nanostructure for efficient electrocatalyst for hydrogen evolution reaction in an acidic electrolyte. Journal of Materials Research and Technology, 2021, 14, 2739-2750.	2.6	6
86	Anti-Methanogenic Effect of Phytochemicals on Methyl-Coenzyme M Reductaseâ€"Potential: In Silico and Molecular Docking Studies for Environmental Protection. Micromachines, 2021, 12, 1425.	1.4	6
87	Highly efficient non-microwave instant heating synthesis of hexyl levulinate fuel additive enhanced by sulfated nanosilica catalyst. Microporous and Mesoporous Materials, 2022, 331, 111645.	2.2	6
88	Synthesis of New Hybrid Structured Magnetite Crosslinked Poly Ionic Liquid for Efficient Removal of Coomassie Brilliant Blue R-250 Dye in Aqueous Medium. Molecules, 2022, 27, 441.	1.7	6
89	Facile synthesis of heterostructure NiO–SnO2 nanocomposite for selective electrochemical determination of l-cysteine. Journal of Materials Science: Materials in Electronics, 2022, 33, 6592-6602.	1.1	6
90	Preparation, textural and photoluminescence characterization of green fluorescence protein-immobilised Ga-ZnO (GZO)-nanocomposites. Journal of Photochemistry and Photobiology B: Biology, 2016, 165, 202-212.	1.7	5

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91	Polymer surfactant (Triton-100) assisted low cost method for preparing silver and graphene oxide modified Bi-MnOx nanocomposite for enhanced sensor and anti-microbial health care applications. Journal of Sol-Gel Science and Technology, 2021, 97, 638-650.	1.1	5
92	Characterization of Pure Rutile Titania Nanoparticle Prepared by Feasible Method for Coatings and Visible Light-Driven Dye Removal Application. Coatings, 2021, 11, 1150.	1.2	5
93	Rapid synthesis and magnetic property characterization of Mg ²⁺ doped Co ₃ O ₄ nanostructures. Inorganic and Nano-Metal Chemistry, 2022, 52, 996-1002.	0.9	5
94	Facile microwave synthesis, structural, optical, and magnetic properties of Zn ²⁺ doped CoAl ₂ O ₄ spinel nanoparticles. Inorganic and Nano-Metal Chemistry, 2023, 53, 267-276.	0.9	5
95	Effect of Synthesis Conditions on Formation, Electrical Properties, and Seebeck Coefficient of p-Type Ca3Co4O9±δThermoelectric Ceramics. Journal of Electronic Materials, 2017, 46, 1787-1793.	1.0	4
96	Phenotypic Assessment of Probiotic and Bacteriocinogenic Efficacy of Indigenous LAB Strains from Human Breast Milk. Current Issues in Molecular Biology, 2022, 44, 731-749.	1.0	4
97	Ag-ZnO Incorporated Silica Based Bio-Nanocomposite Prepared by Low Cost Method for Photocatalytic Dye Degradation. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2016, 46, 741-746.	0.6	3
98	Preparation and Characterization of Mg Doped ZnAl ₂ O ₄ Spinel Nanoparticles. Journal of Nanoscience and Nanotechnology, 2021, 21, 5659-5665.	0.9	3
99	Preparation, characterization, and morphology insight of ZnO nanodisk–TiO 2 â€coated SWCNT thin film composites for catalytic sensor application. Surface and Interface Analysis, 2021, 53, 395-405.	0.8	3
100	Isolation, Expansion, and Characterization of Placenta Originated <i>Decidua Basalis</i> Mesenchymal Stromal Cells. ACS Omega, 2021, 6, 35538-35547.	1.6	3
101	Electrochemical determination of hydrazine using facilely synthesized Sn-decorated α-Fe2O3 nanoparticles modified electrode. Journal of Materials Science: Materials in Electronics, 2022, 33, 13593-13603.	1.1	3
102	Influence of a compressive strain on the high-temperature thermoelectric properties of europium orthoferrite. Semiconductor Science and Technology, 2021, 36, 065017.	1.0	2
103	Synthesis and Characterization of Pyridine-Grafted Copolymers of Acrylic Acid–Styrene Derivatives for Antimicrobial and Fluorescence Applications. Micromachines, 2021, 12, 672.	1.4	2
104	Influence of Aluminum Silicate and Cerium (IV) Oxide Nanofluid on Pool Boiling Characteristics. International Journal of Photoenergy, 2022, 2022, 1-11.	1.4	2
105	Undecacarbonyl-1îº3C,2îº4C,3îº4C-[tris(2-chloroethyl) phosphite-1îºP]-triangulo-triruthenium(0). Acta Crystallographica Section E: Structure Reports Online, 2010, 66, m1191-m1192.	0.2	0
106	Synthesis, Structural and Sensor Characterization of Ga-ZnO Nanodisk/Nanorods Prepared by One Step Polymer Assisted Hydrothermal Process on AlN/Si Substrate. Materials Science Forum, 0, 756, 251-258.	0.3	0
107	MWCNT/Alumina Nanocomposite Characterization and Toughening Mechanism of Uniform Dispersion. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2014, 44, 1050-1053.	0.6	0