Suguna Perumal

List of Publications by Year in descending order

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69 papers	4,360 citations	109321 35 h-index	110387 64 g-index
71 all docs	71 docs citations	71 times ranked	3760 citing authors

#	Article	IF	Citations
1	Highly fluorescent nitrogen-doped carbon dots derived from Phyllanthus acidus utilized as a fluorescent probe for label-free selective detection of Fe3+ ions, live cell imaging and fluorescent ink. Biosensors and Bioelectronics, 2018, 99, 303-311.	10.1	537
2	Facile green synthesis of nitrogen-doped carbon dots using Chionanthus retusus fruit extract and investigation of their suitability for metal ion sensing and biological applications. Sensors and Actuators B: Chemical, 2017, 246, 497-509.	7.8	301
3	Hydrophilic nitrogen-doped carbon dots from biowaste using dwarf banana peel for environmental and biological applications. Fuel, 2020, 275, 117821.	6.4	273
4	Facile synthesis of zinc oxide nanoparticles decorated graphene oxide composite via simple solvothermal route and their photocatalytic activity on methylene blue degradation. Journal of Photochemistry and Photobiology B: Biology, 2016, 162, 500-510.	3.8	203
5	Betel-derived nitrogen-doped multicolor carbon dots for environmental and biological applications. Journal of Molecular Liquids, 2019, 296, 111817.	4.9	161
6	Sustainable synthesis of carbon quantum dots from banana peel waste using hydrothermal process for in vivo bioimaging. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 126, 114417.	2.7	158
7	Green synthesis of nitrogen-doped graphitic carbon sheets with use of Prunus persica for supercapacitor applications. Applied Surface Science, 2017, 393, 276-286.	6.1	146
8	Hydrothermal conversion of Magnolia liliiflora into nitrogen-doped carbon dots as an effective turn-off fluorescence sensing, multi-colour cell imaging and fluorescent ink. Colloids and Surfaces B: Biointerfaces, 2018, 169, 321-328.	5.0	134
9	Effective photocatalytic degradation of anthropogenic dyes using graphene oxide grafting titanium dioxide nanoparticles under UV-light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 333, 92-104.	3.9	123
10	An ultrasensitive photoelectrochemical biosensor for glucose based on bio-derived nitrogen-doped carbon sheets wrapped titanium dioxide nanoparticles. Biosensors and Bioelectronics, 2019, 126, 160-169.	10.1	121
11	In-situ green synthesis of nitrogen-doped carbon dots for bioimaging and TiO2 nanoparticles@nitrogen-doped carbon composite for photocatalytic degradation of organic pollutants. Journal of Alloys and Compounds, 2018, 766, 12-24.	5.5	120
12	Concurrent synthesis of nitrogen-doped carbon dots for cell imaging and ZnO@nitrogen-doped carbon sheets for photocatalytic degradation of methylene blue. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 350, 75-85.	3.9	114
13	Utilization of waste biomass of Poa pratensis for green synthesis of n-doped carbon dots and its application in detection of Mn2+ and Fe3+. Chemosphere, 2022, 286, 131764.	8.2	114
14	High-performance glucose biosensor based on green synthesized zinc oxide nanoparticle embedded nitrogen-doped carbon sheet. Journal of Electroanalytical Chemistry, 2018, 816, 195-204.	3.8	97
15	Direct solvothermal synthesis of zinc oxide nanoparticle decorated graphene oxide nanocomposite for efficient photodegradation of azo-dyes. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 337, 100-111.	3.9	87
16	Tunable fluorescent carbon dots from biowaste as fluorescence ink and imaging human normal and cancer cells. Environmental Research, 2022, 204, 112365.	7.5	78
17	Indian Gooseberry-Derived Tunable Fluorescent Carbon Dots as a Promise for In Vitro/In Vivo Multicolor Bioimaging and Fluorescent Ink. ACS Omega, 2018, 3, 17590-17601.	3.5	76
18	Assembling covalently linked nanocrystals and nanotubes through click chemistry. Chemical Physics Letters, 2007, 443, 118-121.	2.6	71

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19	Facile synthesis of a novel nitrogen-doped carbon dot adorned zinc oxide composite for photodegradation of methylene blue. Dalton Transactions, 2020, 49, 17725-17736.	3.3	70
20	A Review of Polymeric Micelles and Their Applications. Polymers, 2022, 14, 2510.	4.5	65
21	Spherical Chitosan/Gelatin Hydrogel Particles for Removal of Multiple Heavy Metal Ions from Wastewater. Industrial & Engineering Chemistry Research, 2019, 58, 9900-9907.	3.7	64
22	Synthesis and characterization of graphitic mesoporous carbon using metalâ€“metal oxide by chemical vapor deposition method. Microporous and Mesoporous Materials, 2015, 215, 123-132.	4.4	59
23	Highly graphitic carbon nanosheets synthesized over tailored mesoporous molecular sieves using acetylene by chemical vapor deposition method. RSC Advances, 2015, 5, 93364-93373.	3.6	59
24	Leftover Kiwi Fruit Peel-Derived Carbon Dots as a Highly Selective Fluorescent Sensor for Detection of Ferric Ion. Chemosensors, 2021, 9, 166.	3.6	54
25	Green synthesis of nitrogen-doped carbon nanograss for supercapacitors. Journal of the Taiwan Institute of Chemical Engineers, 2019, 102, 475-486.	5.3	53
26	Biowaste-originated heteroatom-doped porous carbonaceous material for electrochemical energy storage application. Journal of Industrial and Engineering Chemistry, 2021, 98, 308-317.	5.8	51
27	Electrocatalytic and energy storage performance of bio-derived sulphur-nitrogen-doped carbon. Journal of Electroanalytical Chemistry, 2019, 833, 357-369.	3.8	50
28	One-pot dual product synthesis of hierarchical Co3O4@N-rGO for supercapacitors, N-GDs for label-free detection of metal ion and bio-imaging applications. Ceramics International, 2018, 44, 2869-2883.	4.8	49
29	Facile synthesis of monodisperse hollow carbon nanospheres using sucrose by carbonization route. Materials Letters, 2016, 166, 145-149.	2.6	47
30	Efficient Synthesis of Fused Perhydrofuro[2,3-b]pyrans (and Furans) by Ring Opening of 1,2-Cyclopropanated Sugar Derivatives. Organic Letters, 2007, 9, 1331-1334.	4.6	46
31	Simultaneous removal of heavy metal ions using carbon dots-doped hydrogel particles. Chemosphere, 2022, 286, 131760.	8.2	42
32	Facile synthesis of nitrogen-doped porous carbon materials using waste biomass for energy storage applications. Chemosphere, 2022, 289, 133225.	8.2	40
33	Graphene oxide-embedded chitosan/gelatin hydrogel particles for the adsorptions of multiple heavy metal ions. Journal of Materials Science, 2020, 55, 9354-9363.	3.7	39
34	Facile one-pot synthesis of thio and selenourea derivatives: A new class of potent urease inhibitors. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 6387-6391.	2.2	38
35	Eco-friendly synthesis of tunable fluorescent carbon nanodots from Malus floribunda for sensors and multicolor bioimaging. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 390, 112336.	3.9	38
36	PVP-b-PEO block copolymers for stable aqueous and ethanolic graphene dispersions. Journal of Colloid and Interface Science, 2016, 464, 25-35.	9.4	37

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37	Synthesis and characterization of graphenated carbon nanotubes on IONPs using acetylene by chemical vapor deposition method. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 74, 355-362.	2.7	32
38	Electrochemically exfoliated graphene sheets as electrode material for aqueous symmetric supercapacitors. Surface and Coatings Technology, 2021, 416, 127150.	4.8	32
39	Recent Studies on Dispersion of Grapheneâ€“Polymer Composites. Polymers, 2021, 13, 2375.	4.5	32
40	A study of adhesion forces between vinyl monomers and graphene surfaces for non-covalent functionalization of graphene. Carbon, 2016, 107, 74-76.	10.3	29
41	High-concentration graphene dispersion stabilized by block copolymers in ethanol. Journal of Colloid and Interface Science, 2017, 497, 359-367.	9.4	29
42	Kinetics Study of the Binding of Multivalent Ligands on Size-Selected Gold Nanoparticles. Langmuir, 2011, 27, 4456-4464.	3.5	28
43	Solid Waste-Derived Carbon Fibers-Trapped Nickel Oxide Composite Electrode for Energy Storage Application. Energy & Fuels, 2020, 34, 14958-14967.	5.1	27
44	One-pot synthesis of Fe3O4@graphite sheets as electrocatalyst for water electrolysis. Fuel, 2020, 277, 118235.	6.4	26
45	A Short Review on Recent Advances of Hydrogel-Based Adsorbents for Heavy Metal Ions. Metals, 2021, 11, 864.	2.3	24
46	Sustainable Synthesis of Silver Nanoparticles Using Marine Algae for Catalytic Degradation of Methylene Blue. Catalysts, 2021, 11, 1377.	3.5	22
47	Smartphone-Operated Wireless Chemical Sensors: A Review. Chemosensors, 2022, 10, 55.	3.6	21
48	Multicolor-emitting carbon dots from Malus floribunda and their interaction with Caenorhabditis elegans. Materials Letters, 2020, 261, 127153.	2.6	19
49	Amphiphilic Fluorinated Block Copolymer Synthesized by RAFT Polymerization for Graphene Dispersions. Polymers, 2016, 8, 101.	4.5	16
50	Highly Fluorescent Carbon Dots as a Potential Fluorescence Probe for Selective Sensing of Ferric Ions in Aqueous Solution. Chemosensors, 2021, 9, 301.	3.6	15
51	Facile synthesis of novel molybdenum disulfide decorated banana peel porous carbon electrode for hydrogen evolution reaction. Chemosphere, 2022, 307, 135712.	8.2	15
52	Novel cyclic tetraselenides of mannose: synthesis and mechanistic studies. Tetrahedron Letters, 2007, 48, 2091-2095.	1.4	14
53	Morus nigra-derived hydrophilic carbon dots for the highly selective and sensitive detection of ferric ion in aqueous media and human colon cancer cell imaging. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128073.	4.7	14
54	A Critical Review on Artificial Intelligence for Fuel Cell Diagnosis. Catalysts, 2022, 12, 743.	3.5	14

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55	Enhanced thermomechanical property of a self-healing polymer via self-assembly of a reversibly cross-linkable block copolymer. Polymer Chemistry, 2020, 11, 3701-3708.	3.9	13
56	Sustainable Synthesis of N/S-Doped Porous Carbon from Waste-Biomass as Electroactive Material for Energy Harvesting. Catalysts, 2022, 12, 436.	3.5	13
57	Design and prediction of dye dispersibility stabilized by polymeric dispersants using a Dyeâ€“Monomer interaction force measurement. Dyes and Pigments, 2020, 172, 107791.	3.7	12
58	Exfoliation and Noncovalent Functionalization of Graphene Surface with Poly-N-Vinyl-2-Pyrrolidone by In Situ Polymerization. Molecules, 2021, 26, 1534.	3.8	12
59	A review on bismuth-based materials for the removal of organic and inorganic pollutants. Chemosphere, 2022, 306, 135521.	8.2	12
60	Interaction of Zwitterionic and Ionic Monomers with Graphene Surfaces. Langmuir, 2018, 34, 6737-6747.	3.5	11
61	Poly[2-(methacryloyloxy)ethyl phosphorylcholine]-Stabilized graphene-iron oxide composites for water splitting. International Journal of Hydrogen Energy, 2021, 46, 10850-10861.	7.1	11
62	Preparation of urushiol-containing poly(methyl methacrylate) copolymers for antibacterial and antifouling coatings. Journal of Coatings Technology Research, 2017, 14, 621-630.	2.5	10
63	Novel chalcogenides of thymidine and uridine: synthesis, properties and applications. Carbohydrate Research, 2007, 342, 1151-1158.	2.3	9
64	Noncovalent Functionalized Graphene Nanocarriers from Graphite for Treating Thyroid Cancer Cells. ACS Biomaterials Science and Engineering, 2021, 7, 2317-2328.	5.2	7
65	Comparative investigation on antibacterial studies of Oxalis corniculata and silver nanoparticle stabilized graphene surface. Journal of Materials Science, 2022, 57, 11630-11648.	3.7	7
66	Synthesis and Characterization of Monodispersed Spherical Calcium Oxide and Calcium Carbonate Nanoparticles via Simple Pyrolysis. Nanomaterials, 2022, 12, 2424.	4.1	7
67	Synthetization of hybrid nanocellulose aerogels for the removal of heavy metal ions. Journal of Polymer Research, 2021, 28, 1.	2.4	6
68	Facile synthesis of molybdenum disulfide adorned heteroatom-doped porous carbon for energy storage applications. Journal of Nanostructure in Chemistry, 2023, 13, 545-561.	9.1	5
69	Controlled Synthesis of Platinum and Silver Nanoparticles Using Multivalent Ligands. Nanomaterials, 2022, 12, 2294.	4.1	1