Mathur Gopalakrishnan Sethuraman

List of Publications by Year
in descending order

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72 papers	4,310 citations	172207 29 h-index	110170 64 g-index
72 all docs	72 docs citations	72 times ranked	4322 citing authors

#	Article	IF	Citations
1	Natural products as corrosion inhibitor for metals in corrosive media â€" A review. Materials Letters, 2008, 62, 113-116.	1.3	805
2	Instant green synthesis of silver nanoparticles using Terminalia chebula fruit extract and evaluation of their catalytic activity on reduction of methylene blue. Process Biochemistry, 2012, 47, 1351-1357.	1.8	405
3	Microwave assisted green synthesis of fluorescent N-doped carbon dots: Cytotoxicity and bio-imaging applications. Journal of Photochemistry and Photobiology B: Biology, 2016, 161, 154-161.	1.7	261
4	Efficient synthesis of highly fluorescent nitrogen-doped carbon dots for cell imaging using unripe fruit extract of Prunus mume. Applied Surface Science, 2016, 384, 432-441.	3.1	177
5	Biogenic robust synthesis of silver nanoparticles using Punica granatum peel and its application as a green catalyst for the reduction of an anthropogenic pollutant 4-nitrophenol. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 104, 262-264.	2.0	158
6	Inhibitive effect of black pepper extract on the sulphuric acid corrosion of mild steel. Materials Letters, 2008, 62, 2977-2979.	1.3	156
7	Reductive-degradation of carcinogenic azo dyes using Anacardium occidentale testa derived silver nanoparticles. Journal of Photochemistry and Photobiology B: Biology, 2016, 162, 604-610.	1.7	143
8	Green synthesis of silver nanoparticles using Terminalia cuneata and its catalytic action in reduction of direct yellow-12 dye. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 161, 122-129.	2.0	135
9	Caulerpinâ€"A bis-Indole Alkaloid As a Green Inhibitor for the Corrosion of Mild Steel in 1 M HCl Solution from the Marine Alga Caulerpa racemosa. Industrial & Engineering Chemistry Research, 2012, 51, 10399-10407.	1.8	130
10	Biological and catalytic applications of green synthesized fluorescent N-doped carbon dots using Hylocereus undatus. Journal of Photochemistry and Photobiology B: Biology, 2017, 168, 142-148.	1.7	128
11	Fabrication of copper-based superhydrophobic self-cleaning antibacterial coating over cotton fabric. Cellulose, 2017, 24, 395-407.	2.4	111
12	Spirulina platensis â€" A novel green inhibitor for acid corrosion of mild steel. Arabian Journal of Chemistry, 2012, 5, 155-161.	2.3	103
13	Facile green synthesis of fluorescent N-doped carbon dots from Actinidia deliciosa and their catalytic activity and cytotoxicity applications. Optical Materials, 2018, 78, 181-190.	1.7	98
14	Corrosion inhibition of mild steel by Datura metel in acidic medium. Pigment and Resin Technology, 2005, 34, 327-331.	0.5	72
15	Supercapacitor performance of carbon supported Co3O4 nanoparticles synthesized using Terminalia chebula fruit. Journal of the Taiwan Institute of Chemical Engineers, 2016, 68, 489-495.	2.7	72
16	Hydrothermally Green Synthesized Nitrogen-Doped Carbon Dots from Phyllanthus emblica and Their Catalytic Ability in the Detoxification of Textile Effluents. ACS Omega, 2019, 4, 3449-3457.	1.6	68
17	Electrocatalytic Reduction of Benzyl Chloride by Green Synthesized Silver Nanoparticles Using Pod Extract of Acacia nilotica. ACS Sustainable Chemistry and Engineering, 2013, 1, 1326-1332.	3.2	63
18	Electrocatalytic performance of carbon dots/palladium nanoparticles composite towards hydrogen evolution reaction in acid medium. International Journal of Hydrogen Energy, 2020, 45, 28800-28811.	3.8	63

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19	Atropine sulphate as corrosion inhibitor for mild steel in sulphuric acid medium. Materials Letters, 2008, 62, 1602-1604.	1.3	56
20	Ecofriendly Synthesis of Fluorescent Nitrogen-Doped Carbon Dots from Coccinia grandis and its Efficient Catalytic Application in the Reduction of Methyl Orange. Journal of Fluorescence, 2020, 30, 103-112.	1.3	55
21	NaBH4 reduction of ortho and para-nitroaniline catalyzed by silver nanoparticles synthesized using Tamarindus indica seed coat extract. Research on Chemical Intermediates, 2016, 42, 713-724.	1.3	53
22	Corrosion inhibition performance of spermidine on mild steel in acid media. Journal of Molecular Liquids, 2018, 264, 483-489.	2.3	47
23	Fabrication of a superhydrophobic and flame-retardant cotton fabric using a DNA-based coating. Journal of Materials Science, 2020, 55, 11959-11969.	1.7	45
24	Fabrication of superhydrophobic and enhanced flame-retardant coatings over cotton fabric. Cellulose, 2018, 25, 3151-3161.	2.4	40
25	Inhibition of corrosion of mild steel in sulphuric acid medium by Calotropis procera. Pigment and Resin Technology, 2009, 38, 33-37.	0.5	39
26	Sol-gel based hybrid silane coatings for enhanced corrosion protection of copper in aqueous sodium chloride. Journal of Molecular Liquids, 2020, 302, 112551.	2.3	35
27	Solâ€“Gel Coating with 3-Mercaptopropyltrimethoxysilane as Precursor for Corrosion Protection of Aluminium Metal. Journal of Materials Science and Technology, 2014, 30, 814-820.	5.6	32
28	Electrochemically exfoliated graphene sheets as electrode material for aqueous symmetric supercapacitors. Surface and Coatings Technology, 2021, 416, 127150.	2.2	32
29	Surface modification, characterization and corrosion protection of 1,3-diphenylthiourea doped sol-gel coating on aluminium. Progress in Organic Coatings, 2017, 111, 112-123.	1.9	31
30	Recent developments in sol-gel based polymer electrolyte membranes for vanadium redox flow batteries â€“ A review. Polymer Testing, 2020, 89, 106567.	2.3	29
31	Corrosion protection ability of self-assembled monolayer of 3-amino-5-mercapto-1,2,4-triazole on copper electrode. Thin Solid Films, 2014, 562, 32-36.	0.8	27
32	Design of electrically conductive superhydrophobic antibacterial cotton fabric through hierarchical architecture using bimetallic deposition. Journal of Alloys and Compounds, 2017, 724, 240-248.	2.8	27
33	Studies on Ervatinine â€“ The anticorrosive phytoconstituent of Ervatamia coronaria. Arabian Journal of Chemistry, 2017, 10, S522-S530.	2.3	27
34	Corrosion inhibition ability of electropolymerised composite film of 2-amino-5-mercapto-1,3,4-thiadiazole/TiO2 deposited over the copper electrode in neutral medium. Materials Today Communications, 2018, 14, 27-39.	0.9	27
35	Reduction of Congo red using nitrogen doped fluorescent carbon nanodots obtained from sprout extract of Borassus flabellifer. Chemical Physics Letters, 2020, 754, 137646.	1.2	27
36	Electrocatalytic study of carbon dots/ Nickel iron layered double hydroxide composite for oxygen evolution reaction in alkaline medium. Fuel, 2022, 320, 123947.	3.4	27

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37	Corrosion protection behaviour of solâ€“gel derived N,N-dimethylthiourea doped 3-glycidoxypropyltrimethoxysilane on aluminium. Progress in Organic Coatings, 2014, 77, 136-141.	1.9	25
38	Fabrication of corrosion resistant mussel-yarn like superhydrophobic composite coating on aluminum surface. Journal of the Taiwan Institute of Chemical Engineers, 2017, 77, 302-310.	2.7	25
39	Influence of phyto-derived nitrogen doped carbon dots from the seeds of Azadirachta indica on the NaBH4 reduction of Safranin-O dye. Diamond and Related Materials, 2020, 108, 107984.	1.8	23
40	Efficient green synthesis of N,B co-doped bright fluorescent carbon nanodots and their electrocatalytic and bio-imaging applications. Diamond and Related Materials, 2021, 116, 108437.	1.8	23
41	Chemical composition and antibacterial activity of the rhizome oil of Hedychium larsenii. Acta Pharmaceutica, 2005, 55, 315-20.	0.9	23
42	STUDIES ON THE INHIBITIVE EFFECT OF DATURA STRAMONIUM EXTRACT ON THE ACID CORROSION OF MILD STEEL. Surface Review and Letters, 2007, 14, 1157-1164.	0.5	22
43	Anti-inflammatory activity of roots of Ecbolium viride (Forsk) Merrill. Journal of Ethnopharmacology, 2010, 128, 248-250.	2.0	22
44	Hybrid sol-gel/thiourea binary coating for the mitigation of copper corrosion in neutral medium. Progress in Organic Coatings, 2017, 102, 259-267.	1.9	22
45	Independent hydrothermal synthesis of the undoped, nitrogen, boron and sulphur doped biogenic carbon nanodots and their potential application in the catalytic chemo-reduction of Alizarine yellow R azo dye. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119920.	2.0	22
46	Studies on the effects of thiourea and its derivatives dopedâ€"Hybrid/zirconium nanocomposite based sol-gel coating for the corrosion behaviour of aluminum metal. Progress in Organic Coatings, 2016, 99, 463-473.	1.9	19
47	Ultrasonic synthesis, characterization and energy applications of Niâ€“B alloy nanorods. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 901-907.	2.7	18
48	Enhancement of corrosion protection of 3-glycidoxypropyltrimethoxysilane-based solâ€“gel coating through methylthiourea doping. Journal of Coatings Technology Research, 2014, 11, 545-554.	1.2	17
49	A study of copper corrosion inhibition by self-assembled films of 3-mercapto-1H-1,2,4-triazole. Research on Chemical Intermediates, 2016, 42, 1809-1821.	1.3	16
50	Surface protection of copper by allyl thiourea and hybrid solâ€“gel coatings. Progress in Organic Coatings, 2016, 90, 380-389.	1.9	16
51	Energy and environmental applications of ultrasonically sulfur doped copper-nickel hydroxides with heterostructures. Journal of Alloys and Compounds, 2017, 729, 126-136.	2.8	16
52	Sonochemical fabrication of petal array-like copper/nickel oxide composite foam as a pseudocapacitive material for energy storage. Applied Surface Science, 2017, 396, 1245-1250.	3.1	16
53	Electrosynthesis of a Novel Poly(3-amino-1,2,4-triazole) + TiO₂ Hybrid Composite on Copper and Its Corrosion Protection. Industrial & Engineering Chemistry Research, 2013, 52, 15057-15065.	1.8	15
54	Fabrication of micro-nanocomposite coatings with lotus leaf like texture by combining electroless and candle soot depositions. New Journal of Chemistry, 2015, 39, 3337-3340.	1.4	15

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55	Effects of pH on inhibitor-doped hybrid protective solâ€“gel coatings on the copper electrode surface. Journal of the Taiwan Institute of Chemical Engineers, 2021, 119, 259-268.	2.7	15
56	Volatile constituents from the rhizomes of Curcuma haritha Mangaly and Sabu from southern India. Flavour and Fragrance Journal, 2008, 23, 348-352.	1.2	14
57	Investigation of inhibiting properties of self-assembled films of 4-aminothiophenol on copper in 3.5% NaCl. Journal of Adhesion Science and Technology, 2015, 29, 1107-1117.	1.4	12
58	Improved copper corrosion resistance of epoxy-functionalized hybrid solâ€“gel monolayers by thiosemicarbazide. Ionics, 2015, 21, 1477-1488.	1.2	12
59	Monoterpenoids from the seeds of Heracleum candolleanum. FÃ¬toterapÃ¬Ã¢, 2000, 71, 616-617.	1.1	11
60	Transformation of hydrophobic surface into superhydrophobic surface by interfacial flower like silver films. Surface and Interface Analysis, 2015, 47, 423-428.	0.8	10
61	A Facile Approach for Fabrication Superhydrophobic and UV-blocking Cotton Fabrics with Self-cleaning Properties. Fibers and Polymers, 2021, 22, 1033-1040.	1.1	10
62	Suzukiâ€“Miyaura cross-coupling reaction assisted by palladium nanoparticles-decorated zeolite 13X nanocomposite: a greener approach. Research on Chemical Intermediates, 2022, 48, 1111-1128.	1.3	10
63	Synthesis of blue emissive fluorescent nitrogen doped carbon dots from Annona squamosa fruit extract and their diverse applications in the field of catalysis and bio-imaging. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 432, 114097.	2.0	8
64	Synthesis, characterization and corrosion protection of poly-4-methyl-3-mercapto-1,2,4-triazole/TiO2 composite on copper. Polymer Bulletin, 2014, 71, 3249-3260.	1.7	7
65	Assessment of the corrosion protection ability of cysteamine and hybrid solâ€“gel twin layers on copper in 1% NaCl. RSC Advances, 2015, 5, 8693-8705.	1.7	7
66	A novel hybrid composite coating of poly-3-amino-5-mercapto-1,2,4-triazole/TiO2 on copper for corrosion protection. Iranian Polymer Journal (English Edition), 2016, 25, 119-128.	1.3	7
67	Areca catechu Assisted Synthesis of Silver Nanoparticles and its Electrocatalytic Activity on Glucose Oxidation. Journal of Cluster Science, 2017, 28, 3139-3148.	1.7	7
68	Enhancement of protection of copper through electropolymerised poly-2-amino-1,3,4-thiadiazole and its composite films. Materials Chemistry and Physics, 2021, 259, 123987.	2.0	6
69	Studies on oleoresinous varnishes and their natural precursors. Progress in Organic Coatings, 2004, 49, 244-251.	1.9	4
70	Studies on Chemical Composition of Essential Oils from Leaf and Inflorescence ofHedychium larseniiM.Dan & Sathish. Journal of Essential Oil Research, 2013, 25, 33-38.	1.3	4
71	An Automated System for the Assesment of Interview Performance through Audio & Emotion Cues. , 2019, , .		4
72	Robust composite coating with superior corrosion inhibitory performance on surgical grade 316L stainless steel in Ringer solution. Iranian Polymer Journal (English Edition), 2020, 29, 919-931.	1.3	3