Bharath Govindan

List of Publications by Year
in descending order

99 papers	4,949 citations	71102 41 h-index	106344 65 g-index
100 all docs	100 docs citations	100 times ranked	4989 citing authors

#	Article	IF	Citations
1	Green synthesis of zinc oxide nanoparticles using Phoenix dactylifera waste as bioreductant for effective dye degradation and antibacterial performance in wastewater treatment. Journal of Hazardous Materials, 2021, 402, 123560.	12.4	276
2	Mango leaf extract incorporated chitosan antioxidant film for active food packaging. International Journal of Biological Macromolecules, 2019, 126, 1234-1243.	7.5	264
3	A review on the recent advances, challenges and future aspect of layered double hydroxides (LDH) â€“ Containing hybrids as promising adsorbents for dyes removal. Journal of Molecular Liquids, 2019, 288, 110989.	4.9	196
4	Solvent-free mechanochemical synthesis of graphene oxide and Fe₃O₄â€“reduced graphene oxide nanocomposites for sensitive detection of nitrite. Journal of Materials Chemistry A, 2015, 3, 15529-15539.	10.3	163
5	A comprehensive review on recently developed carbon based nanocomposites for capacitive deionization: From theory to practice. Separation and Purification Technology, 2018, 207, 291-320.	7.9	161
6	Enzymatic electrochemical glucose biosensors by mesoporous 1D hydroxyapatite-on-2D reduced graphene oxide. Journal of Materials Chemistry B, 2015, 3, 1360-1370.	5.8	148
7	Development of adsorption and electrosorption techniques for removal of organic and inorganic pollutants from wastewater using novel magnetite/porous graphene-based nanocomposites. Separation and Purification Technology, 2017, 188, 206-218.	7.9	141
8	Fabrication of Chitosan/PVA/GO/CuO patch for potential wound healing application. International Journal of Biological Macromolecules, 2020, 143, 744-762.	7.5	114
9	Enhanced electrochemical performances of peanut shell derived activated carbon and its Fe3O4 nanocomposites for capacitive deionization of Cr(VI) ions. Science of the Total Environment, 2019, 691, 713-726.	8.0	113
10	Date pits activated carbon for divalent lead ions removal. Journal of Bioscience and Bioengineering, 2019, 128, 88-97.	2.2	101
11	Biosorption performance of date palm empty fruit bunch wastes for toxic hexavalent chromium removal. Environmental Research, 2020, 187, 109694.	7.5	98
12	Sunlight-Induced photochemical synthesis of Au nanodots on Î±-Fe2O3@Reduced graphene oxide nanocomposite and their enhanced heterogeneous catalytic properties. Scientific Reports, 2018, 8, 5718.	3.3	96
13	Nature-Inspired, Graphene-Wrapped 3D MoS₂ Ultrathin Microflower Architecture as a High-Performance Anode Material for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 22323-22331.	8.0	93
14	Date seeds biomass-derived activated carbon for efficient removal of NaCl from saline solution. Chemical Engineering Research and Design, 2019, 129, 103-111.	5.6	91
15	Sol-Gel-Assisted Microwave-Derived Synthesis of Anatase Ag/TiO2/GO Nanohybrids toward Efficient Visible Light Phenol Degradation. Catalysts, 2017, 7, 133.	3.5	87
16	Enhanced electrocatalytic activity of gold nanoparticles on hydroxyapatite nanorods for sensitive hydrazine sensors. Journal of Materials Chemistry A, 2016, 4, 6385-6394.	10.3	83
17	In-vitro evaluation of electrospun cellulose acetate nanofiber containing Graphene oxide/TiO2/Curcumin for wound healing application. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 627, 127166.	4.7	81
18	Synthesis of novel triazole/isoxazole functionalized 7-(trifluoromethyl)pyrido[2,3- d]pyrimidine derivatives as promising anticancer and antibacterial agents. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 2927-2930.	2.2	79

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19	Effective treatment of dye polluted wastewater using nanoporous CaCl2 modified polyethersulfone membrane. Chemical Engineering Research and Design, 2019, 124, 266-278.	5.6	77
20	Augmented biohydrogen production from rice mill wastewater through nano-metal oxides assisted dark fermentation. Bioresource Technology, 2021, 319, 124243.	9.6	74
21	Synthesis of hierarchical Mn3O4 nanowires on reduced graphene oxide nanoarchitecture as effective pseudocapacitive electrodes for capacitive desalination application. Electrochimica Acta, 2020, 337, 135668.	5.2	72
22	Investigation on biophysical properties of Hydroxyapatite/Graphene oxide (HAp/GO) based binary nanocomposite for biomedical applications. Materials Chemistry and Physics, 2017, 199, 179-184.	4.0	68
23	Enhanced hydroxyapatite nanorods formation on graphene oxide nanocomposite as a potential candidate for protein adsorption, pH controlled release and an effective drug delivery platform for cancer therapy. Analytical Methods, 2017, 9, 240-252.	2.7	63
24	Hydroxyapatite nanoparticles on dendritic Î±-Fe₂O₃ hierarchical architectures for a heterogeneous photocatalyst and adsorption of Pb(<scp>ii</scp>) ions from industrial wastewater. RSC Advances, 2015, 5, 84685-84693.	3.6	62
25	Synthesis of TiO2/RGO with plasmonic Ag nanoparticles for highly efficient photoelectrocatalytic reduction of CO2 to methanol toward the removal of an organic pollutant from the atmosphere. Environmental Pollution, 2021, 281, 116990.	7.5	61
26	Ferric oxide/date seed activated carbon nanocomposites mediated dark fermentation of date fruit wastes for enriched biohydrogen production. International Journal of Hydrogen Energy, 2021, 46, 16631-16643.	7.1	60
27	Systematic production and characterization of pyrolysis-oil from date tree wastes for bio-fuel applications. Biomass and Bioenergy, 2020, 135, 105523.	5.7	57
28	Enhanced biohydrogen production from date seeds by Clostridium thermocellum ATCC 27405. International Journal of Hydrogen Energy, 2020, 45, 22271-22280.	7.1	56
29	Morphology-dependent electrochemical performance of MnO2 nanostructures on graphene towards efficient capacitive deionization. Electrochimica Acta, 2020, 330, 135202.	5.2	55
30	Shape evolution and size controlled synthesis of mesoporous hydroxyapatite nanostructures and their morphology dependent Pb(<scp>ii</scp>) removal from waste water. RSC Advances, 2014, 4, 37446-37457.	3.6	54
31	Biosorption potential of Phoenix dactylifera coir wastes for toxic hexavalent chromium sequestration. Chemosphere, 2021, 268, 128809.	8.2	54
32	Facile synthesis of Au@Î±-Fe2O3@RGO ternary nanocomposites for enhanced electrochemical sensing of caffeic acid toward biomedical applications. Journal of Alloys and Compounds, 2018, 750, 819-827.	5.5	52
33	Magnetic graphene/chitosan nanocomposite: A promising nano-adsorbent for the removal of 2-naphthol from aqueous solution and their kinetic studies. International Journal of Biological Macromolecules, 2020, 159, 530-538.	7.5	52
34	Edge-carboxylated graphene anchoring magnetite-hydroxyapatite nanocomposite for an efficient 4-nitrophenol sensor. RSC Advances, 2015, 5, 13392-13401.	3.6	50
35	Facile synthesis, structural characterization, photocatalytic and antimicrobial activities of Zr doped CeO2 nanoparticles. Journal of Alloys and Compounds, 2017, 724, 555-564.	5.5	48
36	Catalytic hydrodeoxygenation of biomass-derived pyrolysis oil over alloyed bimetallic Ni3Fe nanocatalyst for high-grade biofuel production. Energy Conversion and Management, 2020, 213, 112859.	9.2	47

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37	Ag-Cu bimetallic nanoparticle decorated graphene nanocomposite as an effective anode material for hybrid capacitive deionization (HCDI) system. Electrochimica Acta, 2019, 297, 1052-1062.	5.2	46
38	Improved permeability and antifouling performance of polyethersulfone ultrafiltration membranes tailored by hydroxyapatite/boron nitride nanocomposites. Chemosphere, 2021, 268, 129306.	8.2	46
39	The fabrication of activated carbon and metal-carbide 2D framework-based asymmetric electrodes for the capacitive deionization of Cr(<scp>vi</scp>) ions toward industrial wastewater remediation. Environmental Science: Water Research and Technology, 2020, 6, 351-361.	2.4	43
40	ZrO2 incorporated polysulfone anion exchange membranes for fuel cell applications. International Journal of Hydrogen Energy, 2020, 45, 29668-29680.	7.1	43
41	A review of the therapeutic and biological effects of edible and wild mushrooms. Bioengineered, 2021, 12, 11239-11268.	3.2	43
42	Hybrid Pd50-Ru50/MXene (Ti3C2Tx) nanocatalyst for effective hydrogenation of CO2 to methanol toward climate change control. Chemical Engineering Journal, 2021, 414, 128869.	12.7	42
43	Synthesis of edge-site selectively deposited Au nanocrystals on TiO2 nanosheets: An efficient heterogeneous catalyst with enhanced visible-light photoactivity. Electrochimica Acta, 2018, 283, 1095-1104.	5.2	41
44	Development of watermelon rind derived activated carbon/manganese ferrite nanocomposite for cleaner desalination by capacitive deionization. Journal of Cleaner Production, 2020, 272, 122626.	9.3	41
45	Designed Synthesis of Nanostructured Magnetic Hydroxyapatite Based Drug Nanocarrier for Anti-Cancer Drug Delivery toward the Treatment of Human Epidermoid Carcinoma. Nanomaterials, 2017, 7, 138.	4.1	40
46	Investigations on the in-vivo toxicity analysis of reduced graphene oxide/TiO2 nanocomposite in zebrafish embryo and larvae (Danio rerio). Applied Surface Science, 2019, 481, 1360-1369.	6.1	39
47	Nutritional Quality and Physico-Chemical Characteristics of Selected Date Fruit Varieties of the United Arab Emirates. Processes, 2020, 8, 256.	2.8	39
48	Nano-activated carbon derived from date palm coir waste for efficient sequestration of noxious 2,4-dichlorophenoxyacetic acid herbicide. Chemosphere, 2021, 282, 131103.	8.2	37
49	Designed assembly of Ni/MAX (Ti3AlC2) and porous graphene-based asymmetric electrodes for capacitive deionization of multivalent ions. Chemosphere, 2021, 266, 129048.	8.2	36
50	Adsorptive removal of noxious atrazine using graphene oxide nanosheets: Insights to process optimization, equilibrium, kinetics, and density functional theory calculations. Environmental Research, 2021, 200, 111428.	7.5	35
51	Facile in situ growth of Fe₃O₄ nanoparticles on hydroxyapatite nanorods for pH dependent adsorption and controlled release of proteins. RSC Advances, 2014, 4, 50510-50520.	3.6	34
52	Hybrid capacitive deionization of NaCl and toxic heavy metal ions using faradic electrodes of silver nanospheres decorated pomegranate peel-derived activated carbon. Environmental Research, 2021, 197, 111110.	7.5	34
53	Valorization of groundnut shell via pyrolysis: Product distribution, thermodynamic analysis, kinetic estimation, and artificial neural network modeling. Chemosphere, 2021, 283, 131162.	8.2	33
54	Synthesis of one-dimensional magnetite hydroxyapatite nanorods on reduced graphene oxide sheets for selective separation and controlled delivery of hemoglobin. Applied Surface Science, 2020, 501, 144215.	6.1	32

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55	Adsorptive removal of Acid Blue 113 using hydroxyapatite nanoadsorbents synthesized using Peltophorum pterocarpum pod extract. Chemosphere, 2022, 299, 134752.	8.2	32
56	Molybdenum disulfide decorated palm oil waste activated carbon as an efficient catalyst for hydrogen generation by sodium borohydride hydrolysis. International Journal of Hydrogen Energy, 2019, 44, 14406-14415.	7.1	31
57	Cobalt and nickel ferrites based capacitive deionization electrode materials for water desalination applications. Electrochimica Acta, 2020, 363, 137083.	5.2	31
58	High-performance and stable Ru-Pd nanosphere catalyst supported on two-dimensional boron nitride nanosheets for the hydrogenation of furfural via water-mediated protonation. Fuel, 2021, 290, 119826.	6.4	31
59	Extraction, characterization and optimization of high quality bio-oil derived from waste date seeds. Chemical Engineering Communications, 2021, 208, 801-811.	2.6	31
60	An efficient and magnetically recoverable g-C3N4/ZnS/CoFe2O4 nanocomposite for sustainable photodegradation of organic dye under UVâ€“visible light illumination. Environmental Research, 2021, 201, 111429.	7.5	31
61	Activated Carbon Derived from Phoenix dactylifera (Palm Tree) and Decorated with MnO₂ Nanoparticles for Enhanced Hybrid Capacitive Deionization Electrodes. ChemistrySelect, 2020, 5, 3248-3256.	1.5	29
62	Solution combustion synthesis and physico-chemical properties of ultrafine CeO₂ nanoparticles and their photocatalytic activity. RSC Advances, 2016, 6, 51238-51245.	3.6	28
63	Development of chitosan/poly (vinyl alcohol)/graphene oxide loaded with vanadium doped titanium dioxide patch for visible light driven antibacterial activity and accelerated wound healing application. International Journal of Biological Macromolecules, 2021, 193, 1430-1448.	7.5	27
64	Development of Au and 1D Hydroxyapatite Nanohybrids Supported on 2D Boron Nitride Sheets as Highly Efficient Catalysts for Dehydrogenating Glycerol to Lactic Acid. ACS Sustainable Chemistry and Engineering, 2020, 8, 7278-7289.	6.7	26
65	High-Grade Biofuel Synthesis from Paired Electrohydrogenation and Electrooxidation of Furfural Using Symmetric Ru/Reduced Graphene Oxide Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 24643-24653.	8.0	26
66	Surface functionalized highly porous date seed derived activated carbon and MoS2 nanocomposites for hydrogenation of CO2 into formic acid. Journal of Hazardous Materials, 2021, 409, 124980.	12.4	26
67	Pyrolysis of different date palm industrial wastes into high-quality bio-oils: A comparative study. Clean Technologies and Environmental Policy, 2021, 23, 55-64.	4.1	25
68	Dual-functional paired photoelectrocatalytic system for the photocathodic reduction of CO2 to fuels and the anodic oxidation of furfural to value-added chemicals. Applied Catalysis B: Environmental, 2021, 298, 120520.	20.2	24
69	Enhanced water permeability and fouling resistance properties of ultrafiltration membranes incorporated with hydroxyapatite decorated orange-peel-derived activated carbon nanocomposites. Chemosphere, 2022, 286, 131799.	8.2	24
70	Highly selective etherification of fructose and 5â€hydroxymethylfurfural over a novel Pdâ€Ru/MXene catalyst for sustainable liquid fuel production. International Journal of Energy Research, 2021, 45, 14680-14691.	4.5	23
71	Pyrolysis of date seeds loaded with layered double hydroxide: Kinetics, thermodynamics, and pyrolytic gas properties. Energy Conversion and Management, 2022, 252, 115127.	9.2	23
72	Surface engineering of Au nanostructures for plasmon-enhanced electrochemical reduction of N2 and CO2 into urea in the visible-NIR region. Applied Energy, 2022, 318, 119244.	10.1	23

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73	Fabrication of Pd/MnFe2O4 bifunctional 2-D nanosheets to enhance the yield of HCOOH from CO2 cathodic reduction paired with anodic oxidation to CH3OH. Fuel, 2022, 311, 122619.	6.4	22
74	Synthesis of Jointâ€Welded Carbon Nanotube Foam @ Ni(OH)₂ Nanosheetâ€Based Coreâ€"Shell 3D Architecture for Freestanding Flexible Electrode for Supercapacitor Applications. Advanced Materials Interfaces, 2019, 6, 1900670.	3.7	20
75	Highly permeable, environmentally-friendly, antifouling polylactic acid-hydroxyapatite/polydopamine (PLA-HAp/PDA) ultrafiltration membranes. Journal of Cleaner Production, 2022, 330, 129871.	9.3	20
76	Self-Assembled Co₃O₄ Nanospheres on N-Doped Reduced Graphene Oxide (Co₃O₄/N-RGO) Bifunctional Electrocatalysts for Cathodic Reduction of CO₂ and Anodic Oxidation of Organic Pollutants. ACS Applied Energy Materials, 2021, 4, 11408-11418.	5.1	19
77	Capacitive deionization of NaCl from saline solution using graphene/CNTs/ZnO NPs based electrodes. Journal Physics D: Applied Physics, 2019, 52, 455304.	2.8	18
78	Integrated Microcentrifuge Carbon Entrapped Glucose Oxidase Poly (N-Isopropylacrylamide) (pNIPAm) Microgels for Glucose Amperometric Detection. Analytical Letters, 2019, 52, 825-838.	1.8	17
79	Fabrication of Ruâ€"CoFe2O4/RGO hierarchical nanostructures for high-performance photoelectrodes to reduce hazards Cr(VI) into Cr(III) coupled with anodic oxidation of phenols. Chemosphere, 2022, 299, 134439.	8.2	17
80	Synthesis, antimicrobial evaluation, and docking studies of some novel benzofuran based analogues of chalcone and 1,4-benzodiazepine. Russian Journal of General Chemistry, 2016, 86, 1711-1721.	0.8	16
81	Surface tuned polyethersulfone membrane using an iron oxide functionalized halloysite nanocomposite for enhanced humic acid removal. Environmental Research, 2022, 204, 112113.	7.5	16
82	A facile low-temperature synthesis of V2O5 flakes for electrochemical detection of hydrogen peroxide sensor. Ionics, 2017, 23, 2193-2200.	2.4	15
83	Sub-critical water extraction of reducing sugars and phenolic compounds from date palm fruit. Biomass Conversion and Biorefinery, 0, , 1.	4.6	14
84	Polymerization of lactic acid produced from food waste by metal oxide-assisted dark fermentation. Environmental Technology and Innovation, 2021, 24, 101862.	6.1	13
85	Nanosized Titania-Nickel mixed oxide for visible light photocatalytic activity. Journal of Molecular Liquids, 2020, 311, 113328.	4.9	12
86	Mesoporous hydroxyapatite nanoplate arrays as pH-sensitive drug carrier for cancer therapy. Materials Research Express, 2019, 6, 085409.	1.6	11
87	Facile synthesis of fibrous, mesoporous Ni1â€‰â"'â€‰xO nanosponge supported on Ni foam for enhanced pseudocapacitor applications. Journal of Materials Science, 2020, 55, 12232-12248.	3.7	11
88	Shape-controlled rapid synthesis of magnetic nanoparticles and their morphological dependent magnetic and thermal studies for cancer therapy applications. Materials Research Express, 2019, 6, 066104.	1.6	10
89	2D Î±-MoO3-x truncated microplates and microdisks as electroactive materials for highly efficient asymmetric supercapacitors. Journal of Energy Storage, 2022, 48, 103958.	8.1	9
90	Emerging chemo-biocatalytic routes for valorization of major greenhouse gases (GHG) into industrial products: A comprehensive review. Journal of Industrial and Engineering Chemistry, 2022, 109, 1-20.	5.8	9

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91	A hybrid chemo-biocatalytic system of carbonic anhydrase submerged in CO2-phillic sterically hindered amines for enhanced CO2 capture and conversion into carbonates. International Journal of Greenhouse Gas Control, 2021, 111, 103465.	4.6	8
92	Preparation of MoS2/graphene nanostructures and their supercapacitor and hydrogen evolution reaction (HER) performances. Journal Physics D: Applied Physics, 2020, 53, 065501.	2.8	7
93	Removal of 1-napthylamine using magnetic graphene and magnetic graphene oxide functionalized with Chitosan. Environmental Nanotechnology, Monitoring and Management, 2021, 15, 100450.	2.9	7
94	Nanoporous Ag-Au Bimetallic Triangular Nanoprisms Synthesized by Galvanic Replacement for Plasmonic Applications. Journal of Nanomaterials, 2018, 2018, 1-7.	2.7	6
95	Morphology-dependent catalytic activity of tungsten trioxide (WO₃) nanostructures for hydrogenation of furfural to furfuryl alcohol. Journal Physics D: Applied Physics, 2021, 54, 305502.	2.8	4
96	Smart polymeric composite membranes for wastewater treatment. , 2021, , 313-350.		3
97	Synthesis and Antimicrobial Activity of Novel Substituted 4-[3-(1H-Benzimidazol-2-yl)-4-hydroxybenzyl]-2-(1H-benzimidazol-2-yl)phenol Derivatives. Russian Journal of General Chemistry, 2017, 87, 3017-3022.	0.8	2
98	Synthesis and antimicrobial activity of novel substituted 4-[3-(1H-benzimidazol-2-yl)-4-hydroxybenzyl]-2-(1H-benzimidazol-2-yl)phenol derivatives. Russian Journal of General Chemistry, 2017, 87, 2648-2653.	0.8	1
99	Corrigendum to â€œNanoporous Ag-Au Bimetallic Triangular Nanoprisms Synthesized by Galvanic Replacement for Plasmonic Applicationsâ€• Journal of Nanomaterials, 2018, 2018, 1-1.	2.7	0