Gomaa A.M. Ali

List of Publications by Year
in descending order

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Version: 2024-02-01

129 papers	5,584 citations	53660 45 h-index	91712 69 g-index
133 all docs	133 docs citations	133 times ranked	4322 citing authors

#	Article	IF	Citations
1	The role of nanomaterials as effective adsorbents and their applications in wastewater treatment. Journal of Nanostructure in Chemistry, 2017, 7, 1-14.	5.3	444
2	High surface area activated carbon from rice husk as a high performance supercapacitor electrode. Electrochimica Acta, 2016, 192, 110-119.	2.6	384
3	Efficient removal of toxic bromothymol blue and methylene blue from wastewater by polyvinyl alcohol. Journal of Molecular Liquids, 2016, 218, 191-197.	2.3	141
4	MWCNTs-Fe3O4 nanocomposite for Hg(II) high adsorption efficiency. Journal of Molecular Liquids, 2018, 258, 345-353.	2.3	136
5	High performance MnO2 nanoflower supercapacitor electrode by electrochemical recycling of spent batteries. Ceramics International, 2017, 43, 8440-8448.	2.3	132
6	Facile route synthesis of novel graphene oxide-Î²-cyclodextrin nanocomposite and its application as adsorbent for removal of toxic bisphenol A from the aqueous phase. Journal of Molecular Liquids, 2017, 237, 466-472.	2.3	112
7	Biowaste Sago Bark Based Catalyst Free Carbon Nanospheres: Waste to Wealth Approach. ACS Sustainable Chemistry and Engineering, 2015, 3, 2247-2253.	3.2	111
8	Co3O4/SiO2 nanocomposites for supercapacitor application. Journal of Solid State Electrochemistry, 2014, 18, 2505-2512.	1.2	103
9	Removal of congo red azo dye from aqueous solution by ZnO nanoparticles loaded on multiwall carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 106, 150-155.	1.3	99
10	Graphene oxide-based hydrogels as a nanocarrier for anticancer drug delivery. Nano Research, 2019, 12, 973-990.	5.8	97
11	Hydrogen sulfide emission sources, regulations, and removal techniques: a review. Reviews in Chemical Engineering, 2018, 34, 837-854.	2.3	93
12	CaO impregnated highly porous honeycomb activated carbon from agriculture waste: symmetrical supercapacitor study. Journal of Materials Science, 2019, 54, 683-692.	1.7	93
13	One-step electrochemical synthesis of MoS2/graphene composite for supercapacitor application. Journal of Solid State Electrochemistry, 2020, 24, 25-34.	1.2	91
14	Enhancement of adsorption efficiency of methylene blue on Co₃O₄/SiO₂nanocomposite. Desalination and Water Treatment, 2015, 53, 2980-2989.	1.0	88
15	Carbon nanospheres derived from Lablab purpureus for high performance supercapacitor electrodes: a green approach. Dalton Transactions, 2017, 46, 14034-14044.	1.6	84
16	Taguchi L9 (34) orthogonal array study based on methylene blue removal by single-walled carbon nanotubes-amine: Adsorption optimization using the experimental design method, kinetics, equilibrium and thermodynamics. Journal of Molecular Liquids, 2020, 298, 112001.	2.3	83
17	Electrochemical performance studies of MnO2 nanoflowers recovered from spent battery. Materials Research Bulletin, 2014, 60, 5-9.	2.7	78
18	Magnetic Electrodeposition of the Hierarchical Cobalt Oxide Nanostructure from Spent Lithium-Ion Batteries: Its Application as a Supercapacitor Electrode. Journal of Physical Chemistry C, 2018, 122, 12200-12206.	1.5	77

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19	Optical constants, dispersion parameters and non-linearity of different thickness of As40S45Se15 thin films for optoelectronic applications. Optik, 2019, 186, 275-287.	1.4	77
20	Optimizing Reduced Graphene Oxide Aerogel for a Supercapacitor. Energy & Fuels, 2021, 35, 4559-4569.	2.5	74
21	Nanofiber-Based Face Masks and Respirators as COVID-19 Protection: A Review. Membranes, 2021, 11, 250.	1.4	74
22	Structural, optical and electrical properties of solâ€“gel prepared mesoporous Co3O4/SiO2 nanocomposites. Journal of Alloys and Compounds, 2013, 579, 606-611.	2.8	72
23	One-step electrosynthesis of MnO2/rGO nanocomposite and its enhanced electrochemical performance. Ceramics International, 2018, 44, 7799-7807.	2.3	72
24	W18O49 nanowires-graphene nanocomposite for asymmetric supercapacitors employing AlCl3 aqueous electrolyte. Chemical Engineering Journal, 2021, 409, 128216.	6.6	72
25	Recent advances in dye and metal ion removal using efficient adsorbents and novel nano-based materials: an overview. RSC Advances, 2021, 11, 36528-36553.	1.7	72
26	Superior supercapacitive performance in porous nanocarbons. Journal of Energy Chemistry, 2016, 25, 734-739.	7.1	71
27	Recent Progress in the Removal of Heavy Metal Ions from Water Using Metalâ€Organic Frameworks. ChemistrySelect, 2020, 5, 124-146.	0.7	70
28	Green Synthesized of Ag/Ag2O Nanoparticles Using Aqueous Leaves Extracts of Phoenix dactylifera L. and Their Azo Dye Photodegradation. Membranes, 2021, 11, 468.	1.4	70
29	Cobalt/silica nanocomposite via thermal calcination-reduction of gel precursors. Materials Chemistry and Physics, 2011, 128, 70-76.	2.0	64
30	High performance supercapacitor using catalysis free porous carbon nanoparticles. Journal Physics D: Applied Physics, 2014, 47, 495307.	1.3	64
31	Potentiostatic and galvanostatic electrodeposition of manganese oxide for supercapacitor application: A comparison study. Current Applied Physics, 2015, 15, 1143-1147.	1.1	61
32	The Recent Progress on Silver Nanoparticles: Synthesis and Electronic Applications. Nanomaterials, 2021, 11, 2318.	1.9	59
33	Al3+ ion intercalation pseudocapacitance study of W18O49 nanostructure. Journal of Power Sources, 2019, 438, 227028.	4.0	58
34	Low-cost and eco-friendly activated carbon from modified palm kernel shell for hydrogen sulfide removal from wastewater: adsorption and kinetic studies. , 0, 84, 205-214.		58
35	Flake size-dependent adsorption of graphene oxide aerogel. Journal of Molecular Liquids, 2019, 277, 175-180.	2.3	57
36	Calcium-based nanosized mixed metal oxides for supercapacitor application. Ceramics International, 2015, 41, 8230-8234.	2.3	55

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37	Photocatalytic performance of a novel semiconductor nanocatalyst: Copper doped nickel oxide for phenol degradation. Materials Chemistry and Physics, 2020, 242, 122520.	2.0	54
38	One-step production of pyrene-1-boronic acid functionalized graphene for dopamine detection. Materials Chemistry and Physics, 2019, 231, 286-291.	2.0	53
39	Metalâ€“organic frameworks (MOFs) based nanofiber architectures for the removal of heavy metal ions. RSC Advances, 2022, 12, 1433-1450.	1.7	53
40	Experimental design technique on removal of hydrogen sulfide using CaO-eggshells dispersed onto palm kernel shell activated carbon: Experiment, optimization, equilibrium and kinetic studies. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 305-320.	0.4	52
41	A wide potential window symmetric supercapacitor by TEMPO functionalized MWCNTs. Journal of Molecular Liquids, 2018, 271, 31-39.	2.3	52
42	Recent Advances of Nanoremediation Technologies for Soil and Groundwater Remediation: A Review. Water (Switzerland), 2021, 13, 2186.	1.2	52
43	Aminopyrene functionalized reduced graphene oxide as a supercapacitor electrode. RSC Advances, 2015, 5, 38111-38116.	1.7	49
44	Capacitive performance of cysteamine functionalized carbon nanotubes. Materials Chemistry and Physics, 2017, 197, 100-104.	2.0	49
45	HUMIDITY SENSING PROPERTIES OF COBALT OXIDE/SILICA NANOCOMPOSITES PREPARED VIA SOLâ€“GEL AND RELATED ROUTES. Nano, 2012, 07, 1250038.	0.5	48
46	Ferrocene functionalized multi-walled carbon nanotubes as supercapacitor electrodes. Journal of Molecular Liquids, 2020, 318, 114064.	2.3	47
47	Layered sodium titanate nanostructures as a new electrode for high energy density supercapacitors. Electrochimica Acta, 2013, 113, 141-148.	2.6	44
48	Application of Natural Coagulants for Pharmaceutical Removal from Water and Wastewater: A Review. Water (Switzerland), 2022, 14, 140.	1.2	44
49	Investigation of photocatalytic behavior of modified ZnS:Mn/MWCNTs nanocomposite for organic pollutants effective photodegradation. Journal of Environmental Management, 2019, 247, 624-632.	3.8	43
50	One-pot synthesis of isotype heterojunction g-C3N4-MU photocatalyst for effective tetracycline hydrochloride antibiotic and reactive orange 16 dye removal. Advanced Powder Technology, 2020, 31, 1891-1902.	2.0	43
51	Surface Modification of MWCNTs with Carboxylic-to-Amine and Their Superb Adsorption Performance. International Journal of Environmental Research, 2019, 13, 523-531.	1.1	41
52	Amide-Functionalized Metalâ€“Organic Framework for High Efficiency and Fast Removal of Pb(II) from Aqueous Solution. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 3170-3178.	1.9	41
53	Effect of functionalization of metal-organic frameworks on anion sensing. Polyhedron, 2020, 183, 114514.	1.0	40
54	Green biosynthesis and physicochemical characterization of Fe₃O₄nanoparticles usingPunica granatum L.fruit peel extract for optoelectronic applications. Textile Reseach Journal, 2022, 92, 2685-2696.	1.1	40

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55	Superior supercapacitance behavior of oxygen self-doped carbon nanospheres: a conversion of Allium cepa peel to energy storage system. Biomass Conversion and Biorefinery, 2021, 11, 1311-1323.	2.9	39
56	Size-dependent corrosion behavior of graphene oxide coating. Progress in Organic Coatings, 2019, 134, 272-280.	1.9	39
57	Influence of surface properties on electroâ€chemical supercapacitors utilizing Callerya atropurpurea pod derived porous nanocarbons: Structure property relationship between porous structures to energy storage devices. Nano Select, 2020, 1, 226-243.	1.9	37
58	Electrochemical detection of gliclazide and glibenclamide on ZnIn2S4 nanoparticles-modified carbon ionic liquid electrode. Journal of Molecular Liquids, 2019, 289, 111141.	2.3	36
59	Recycling the Plastic Wastes to Carbon Nanotubes. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 701-727.	1.4	36
60	In situ growth of redox-active iron-centered nanoparticles on graphene sheets for specific capacitance enhancement. Arabian Journal of Chemistry, 2019, 12, 3883-3889.	2.3	34
61	Recycled MnO2 Nanoflowers and Graphene Nanosheets for Low-Cost and High Performance Asymmetric Supercapacitor. Journal of Electronic Materials, 2020, 49, 5411-5421.	1.0	33
62	Cutting-edge development in dendritic polymeric materials for biomedical and energy applications. European Polymer Journal, 2021, 160, 110770.	2.6	32
63	ISOTHERMAL MODELLING BASED EXPERIMENTAL STUDY OF DISSOLVED HYDROGEN SULFIDE ADSORPTION FROM WASTE WATER USING EGGSHELL BASED ACTIVATED CARBON. Malaysian Journal of Analytical Sciences, 2017, 21, 334-345.	0.2	32
64	Adsorption of Ammonium Ions onto Multi-Walled Carbon Nanotubes. Studia Universitatis Babes-Bolyai Chemia, 2017, 62, 233-245.	0.1	31
65	Reduction of graphene oxide nanosheets by natural beta carotene and its potential use as supercapacitor electrode. Arabian Journal of Chemistry, 2015, 8, 560-569.	2.3	30
66	Low-cost and Highly Sensitive Sensor for Determining Atorvastatin Using PbTe Nanoparticles-Modified Graphite Screen-Printed Electrode. International Journal of Electrochemical Science, 2019, 14, 9622-9632.	0.5	30
67	Olive mill wastewater treatment using infiltration percolation in column followed by aerobic biological treatment. SN Applied Sciences, 2020, 2, 1.	1.5	29
68	Quantitative determination of Al(iii) ion by using Alizarin Red S including its microspheres optical sensing material. Analytical Methods, 2013, 5, 2602.	1.3	28
69	Transition metals doped WO3 photocatalyst towards high efficiency decolourization of azo dye. Journal of Molecular Structure, 2022, 1250, 131800.	1.8	28
70	KINETIC, ISOTHERM AND EQUILIBRIUM STUDY OF ADSORPTION CAPACITY OF HYDROGEN SULFIDE-WASTEWATER SYSTEM USING MODIFIED EGGSHELLS. IIUM Engineering Journal, 2017, 18, 13-25.	0.5	27
71	Potential Applications of Nanomaterials in Wastewater Treatment. Advances in Environmental Engineering and Green Technologies Book Series, 2019, , 51-61.	0.3	27
72	Structural, optical and electrical characteristics of sulfur incorporated ZnSe thin films. Optik, 2018, 164, 527-537.	1.4	25

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73	Recycling Nanofibers from Polyethylene Terephthalate Waste Using Electrospinning Technique. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 805-821.	1.4	25
74	Preparation of Mg-doped TiO2 nanoparticles for photocatalytic degradation of some organic pollutants. Studia Universitatis Babes-Bolyai Chemia, 2019, 64, 7-18.	0.1	24
75	Taguchi L25 (54) Approach for Methylene Blue Removal by Polyethylene Terephthalate Nanofiber-Multi-Walled Carbon Nanotube Composite. Water (Switzerland), 2022, 14, 1242.	1.2	22
76	Efficient and Recyclable Cu Incorporated TiO2 Nanoparticle Catalyst for Organic Dye Photodegradation. International Journal of Thin Film Science and Technology, 2021, 10, 169-182.	0.6	20
77	Investigation of Structural and Optical Properties of Amorphous-Crystalline Phase Transition of As₄₀S₄₅Se₁₅ Thin Films. Acta Physica Polonica A, 2019, 136, 498-512.	0.2	20
78	Low-Cost and Eco-Friendly Hydroxyapatite Nanoparticles Derived from Eggshell Waste for Cephalexin Removal. Separations, 2022, 9, 10.	1.1	20
79	Recycling of Cobalt Oxides Electrodes from Spent Lithium-Ion Batteries by Electrochemical Method. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 91-123.	1.4	19
80	Toxicity and Uptake of CuO Nanoparticles: Evaluation of an Emerging Nanofertilizer on Wheat (Triticum aestivum L.) Plant. Sustainability, 2022, 14, 4914.	1.6	18
81	Electrochemical Properties of Electrodeposited MnO₂ Nanoparticles. Advanced Materials Research, 0, 1113, 550-553.	0.3	17
82	Dilute magnetic semiconductor of ZnCoSe thin films: Structural, optical, and magnetic characteristics. Journal of the American Ceramic Society, 2019, 102, 4067-4081.	1.9	17
83	Improving the mechanical and thermal properties of chlorinated poly(vinylchloride) by incorporating modified CaCO3nanoparticles as a filler. Turkish Journal of Chemistry, 2019, 43, 750-759.	0.5	16
84	Facile synthesis of reduced graphene oxide aerogel in soft drink as supercapacitor electrode. Journal of Nanostructure in Chemistry, 2022, 12, 417-427.	5.3	16
85	High Surface Area Mesoporous Silica for Hydrogen Sulfide Effective Removal. Current Nanoscience, 2020, 16, 226-234.	0.7	16
86	Fundamentals ofÂWaste Recycling for Nanomaterial Manufacturing. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 3-24.	1.4	15
87	Reinforcement of Petroleum Wax By-Product Paraffins as Phase Change Materials for Thermal Energy Storage by Recycled Nanomaterials. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 823-850.	1.4	14
88	Thermodynamic Studies on the Adsorption of Organophosphate Pesticides (Diazinon) onto ZnO/Polyethersulfone Nanocomposites. ChemistrySelect, 2022, 7, .	0.7	14
89	Cutting-edge development in waste-recycled nanomaterials for energy storage and conversion applications. Nanotechnology Reviews, 2022, 11, 2215-2294.	2.6	13
90	Highly stable symmetric supercapacitor from cysteamine functionalized multi-walled carbon nanotubes operating in a wide potential window. Materials Today: Proceedings, 2019, 16, 2273-2279.	0.9	12

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91	A Broad Family of Carbon Nanomaterials: Classification, Properties, Synthesis, and Emerging Applications. , 2019, , 1-40.		12
92	Optical and Electrochemical Properties of Co₃O₄/SiO₂ Nanocomposite. Advanced Materials Research, 0, 1133, 447-451.	0.3	11
93	Recovery of Metal Oxide Nanomaterials from Electronic Waste Materials. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 203-227.	1.4	11
94	Nanomaterial Surface Modifications for Enhancement of the Pollutant Adsorption From Wastewater. Advances in Environmental Engineering and Green Technologies Book Series, 2019, , 143-170.	0.3	11
95	Electrical Properties of Cobalt Oxide/Silica Nanocomposites Obtained by Sol-Gel Technique. American Journal of Engineering and Applied Sciences, 2016, 9, 12-16.	0.3	10
96	Application of Dendrimer/Gold Nanoparticles in Cancer Therapy: A Review. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 4231-4244.	1.9	10
97	Experimental and theoretical studies of a novel synthesized azopyrazole-benzenesulfonamide derivative as an efficient corrosion inhibitor for mild steel. Journal of the Iranian Chemical Society, 2021, 18, 1231-1241.	1.2	10
98	Recycled Nanomaterials for Energy Storage (Supercapacitor) Applications. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 175-202.	1.4	10
99	Investigation of structural and optical properties of near surface of CdTe film induced by nitrogen plasma immersion ion implantation. Materials Research Express, 2018, 5, 086402.	0.8	9
100	Conversion of Waste Cheap Petroleum Paraffinic Wax By-Products to Expensive Valuable Multiple Carbon Nanomaterials. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 729-751.	1.4	8
101	Effect of biochar addition method on ammonia volatilization and quality of chicken manure compost. Zemdirbyste, 2021, 108, 331-338.	0.3	8
102	Flakes Size-Dependent Optical and Electrochemical Properties of MoS2. Current Nanoscience, 2018, 14, 416-420.	0.7	7
103	An investigation on temperature-dependant surface properties of porous carbon nanoparticles derived from biomass. Journal of Nanostructure in Chemistry, 2022, 12, 495-511.	5.3	7
104	Rice Husk Ash f or Enhancing Salts Attack Resistance o f Blended Cement Containing Metakoalin. Canadian Chemical Transactions, 2014, 2, 274-285.	0.2	7
105	APPLICATION OF RESPONSE SURFACE METHODOLOGY FOR OPTIMIZATION OF PALM KERNEL SHELL ACTIVATED CARBON PREPARATION FACTORS FOR REMOVAL OF H2S FROM INDUSTRIAL WASTEWATER. Jurnal Teknologi (Sciences and Engineering), 2017, 79, .	0.3	6
106	Acacia auriculiformisâ€“Derived Bimodal Porous Nanocarbons via Self-Activation for High-Performance Supercapacitors. Frontiers in Energy Research, 2021, 9, .	1.2	6
107	A Broad Family of Carbon Nanomaterials: Classification, Properties, Synthesis, and Emerging Applications. , 2019, , 1-40.		5
108	Potential Applications of Nanomaterials in Wastewater Treatment. , 2021, , 1230-1240.		5

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109	Experimental and quantum investigations of novel corrosion inhibitors based triazene derivatives for mild steel. Journal of Molecular Structure, 2021, 1242, 130831.	1.8	5
110	Hydration characteristics and immobilization of Cr (VI) in slag cement-CKD pastes under hydrothermal treatment. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 1013-1019.	0.4	4
111	OPTIMIZATION OF ACTIVATED CARBON SYNTHESIS USING RESPONSE SURFACE METHODOLOGY TO ENHANCE H2S REMOVAL FROM REFINERY WASTEWATER. Journal of Chemical Engineering and Industrial Biotechnology, 2020, 1, 1-17.	0.1	4
112	Dual-functional single stranded deoxyribonucleic acid for graphene oxide reduction and charge storage enhancement. Electrochimica Acta, 2021, 399, 139366.	2.6	4
113	Eco-friendly activated carbon developed from rice hulls for chromium and iron ion removal. Journal of Environmental Engineering and Science, 2022, 17, 53-66.	0.3	3
114	POTENTIOMETRIC STUDY OF RHENIUM(V) COMPLEX FORMATION WITH AZATHIOPRINE AND CEFTRIAXONE. Malaysian Journal of Analytical Sciences, 2017, 21, .	0.2	3
115	Structural, Electronic, Reactivity, and Conformational Features of 2,5,5-Trimethyl-1,3,2-diheterophosphinane-2-sulfide, and Its Derivatives: DFT, MEP, and NBO Calculations. Molecules, 2022, 27, 4011.	1.7	3
116	Green synthesis, crystal structure, linear and nonlinear optical investigation of MgO1-xMnOx nanocomposite via Z-scan technique. Inorganic Chemistry Communication, 2022, 142, 109659.	1.8	3
117	A Broad Family of Carbon Nanomaterials: Classification, Properties, Synthesis, and Emerging Applications. , 2019, , 451-490.		2
118	Effect of hydrothermal curing on hydration characteristics of metakaolinâ€“CKD pastes at different temperatures in a closed system. Beni-Suef University Journal of Basic and Applied Sciences, 2016, 5, 299-305.	0.8	1
119	Study on Modified Hummers Method for Partially Oxidized Graphene Oxide Synthesis. Materials Science Forum, 0, 981, 23-28.	0.3	1
120	Study of Oleaster Oilâ€™s Falsification by ATR-FTIR and Chemometrics Tools. Egyptian Journal of Chemistry, 2021, .	0.1	1
121	Degradation of cyanide from gold processing effluent by H2O2, NaClO and Ca(ClO)2 combined with sequential catalytic process. Bulgarian Chemical Communications, 2019, 51, 384-393.	0.2	1
122	Applications of FTIR and chemometrics methods in authenticity analysis of walnut oil. Emergent Materials, 2022, 5, 167-174.	3.2	1
123	Structural and morphological investigations of nanolayered double hydroxides as effective adsorbents of methyl orange. Emergent Materials, 2022, 5, 155-165.	3.2	1
124	Physicochemical Characterization and Assessment of Magnitude of Pollution to Contribute to Water Sustainability. Sustainability, 2022, 14, 6689.	1.6	1
125	Corrosion Protection Coatings from Size-Specified Graphene Oxide. Materials Science Forum, 0, 981, 29-33.	0.3	0
126	Smart Electronic Materials. , 2021, , .		0

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127	Electrocatalysis for the cleaner energy conversion process. Energy Reports, 2021, , .	2.5	0
128	Dioxin, a serious environmental threat. , 2020, , 157-163.		0
129	Review on Fisher-Tropsch Synthesis Method in Liquid Fuel Production. Advances in Chemical and Materials Engineering Book Series, 2020, , 96-109.	0.2	0