Mohammed F Hamza

List of Publications by Year
in descending order

104 papers	5,973 citations	61945 43 h-index	82499 72 g-index
104 all docs	104 docs citations	104 times ranked	2916 citing authors

#	Article	IF	Citations
1	Green Synthesis of Metallic Nanoparticles and Their Prospective Biotechnological Applications: an Overview. Biological Trace Element Research, 2021, 199, 344-370.	1.9	606
2	Endophytic actinomycetes Streptomyces spp mediated biosynthesis of copper oxide nanoparticles as a promising tool for biotechnological applications. Journal of Biological Inorganic Chemistry, 2019, 24, 377-393.	1.1	236
3	Fungal strain impacts the shape, bioactivity and multifunctional properties of green synthesized zinc oxide nanoparticles. Biocatalysis and Agricultural Biotechnology, 2019, 19, 101103.	1.5	173
4	Green Synthesis of Zinc Oxide Nanoparticles (ZnO-NPs) Using Arthrospira platensis (Class:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td	1.9	165
5	New approach for antimicrobial activity and bio-control of various pathogens by biosynthesized copper nanoparticles using endophytic actinomycetes. Journal of Radiation Research and Applied Sciences, 2018, 11, 262-270.	0.7	149
6	Bactericidal and In-Vitro Cytotoxic Efficacy of Silver Nanoparticles (Ag-NPs) Fabricated by Endophytic Actinomycetes and Their Use as Coating for the Textile Fabrics. Nanomaterials, 2020, 10, 2082.	1.9	148
7	Photocatalytic degradation of real textile and tannery effluent using biosynthesized magnesium oxide nanoparticles (MgO-NPs), heavy metal adsorption, phytotoxicity, and antimicrobial activity. Journal of Environmental Chemical Engineering, 2021, 9, 105346.	3.3	144
8	Optimization of green biosynthesized visible light active CuO/ZnO nano-photocatalysts for the degradation of organic methylene blue dye. Heliyon, 2020, 6, e04896.	1.4	131
9	Antibacterial, Cytotoxicity and Larvicidal Activity of Green Synthesized Selenium Nanoparticles Using Penicillium corylophilum. Journal of Cluster Science, 2021, 32, 351-361.	1.7	131
10	Antimicrobial, Antioxidant and Larvicidal Activities of Spherical Silver Nanoparticles Synthesized by Endophytic Streptomyces spp.. Biological Trace Element Research, 2020, 195, 707-724.	1.9	125
11	Endophytic Streptomyces laurentii Mediated Green Synthesis of Ag-NPs with Antibacterial and Anticancer Properties for Developing Functional Textile Fabric Properties. Antibiotics, 2020, 9, 641.	1.5	120
12	Multifunctional cellulose nanocrystal /metal oxide hybrid, photo-degradation, antibacterial and larvicidal activities. Carbohydrate Polymers, 2020, 230, 115711.	5.1	115
13	Uranium and europium sorption on amidoxime-functionalized magnetic chitosan micro-particles. Chemical Engineering Journal, 2018, 344, 124-137.	6.6	113
14	Efficacy Assessment of Biosynthesized Copper Oxide Nanoparticles (CuO-NPs) on Stored Grain Insects and Their Impacts on Morphological and Physiological Traits of Wheat (Triticum aestivum L.) Plant. Biology, 2021, 10, 233.	1.3	109
15	Integration of Cotton Fabrics with Biosynthesized CuO Nanoparticles for Bactericidal Activity in the Terms of Their Cytotoxicity Assessment. Industrial & Engineering Chemistry Research, 2021, 60, 1553-1563.	1.8	107
16	Isolation and Characterization of Plant Growth Promoting Endophytic Bacteria from Desert Plants and Their Application as Bioinoculants for Sustainable Agriculture. Agronomy, 2020, 10, 1325.	1.3	105
17	Multifunctional properties of spherical silver nanoparticles fabricated by different microbial taxa. Heliyon, 2020, 6, e03943.	1.4	104
18	Harnessing Bacterial Endophytes for Promotion of Plant Growth and Biotechnological Applications: An Overview. Plants, 2021, 10, 935.	1.6	100

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19	Rhizopus oryzae-Mediated Green Synthesis of Magnesium Oxide Nanoparticles (MgO-NPs): A Promising Tool for Antimicrobial, Mosquitocidal Action, and Tanning Effluent Treatment. Journal of Fungi (Basel, Switzerland), 2021, 7, 372.	1.5	100
20	Synthesis and adsorption characteristics of grafted hydrazinyl amine magnetite-chitosan for Ni(II) and Pb(II) recovery. Chemical Engineering Journal, 2019, 362, 310-324.	6.6	97
21	Eco-friendly approach utilizing green synthesized nanoparticles for paper conservation against microbes involved in biodeterioration of archaeological manuscript. International Biodeterioration and Biodegradation, 2019, 142, 160-169.	1.9	96
22	A Review: Studies on Uranium Removal Using Different Techniques. Overview. Journal of Dispersion Science and Technology, 2013, 34, 182-213.	1.3	93
23	An eco-friendly approach to textile and tannery wastewater treatment using maghemite nanoparticles (Î³-Fe2O3-NPs) fabricated by Penicillium expansum strain (K-w). Journal of Environmental Chemical Engineering, 2021, 9, 104693.	3.3	92
24	The Catalytic Activity of Biosynthesized Magnesium Oxide Nanoparticles (MgO-NPs) for Inhibiting the Growth of Pathogenic Microbes, Tanning Effluent Treatment, and Chromium Ion Removal. Catalysts, 2021, 11, 821.	1.6	88
25	Isolation and Characterization of Fungal Endophytes Isolated from Medicinal Plant Ephedra pachyclada as Plant Growth-Promoting. Biomolecules, 2021, 11, 140.	1.8	87
26	Plant Growth-Promoting Endophytic Bacterial Community Inhabiting the Leaves of Pulicaria incisa (Lam.) DC Inherent to Arid Regions. Plants, 2021, 10, 76.	1.6	76
27	Green Approach to Overcome the Resistance Pattern of Candida spp. Using Biosynthesized Silver Nanoparticles Fabricated by Penicillium chrysogenum F9. Biological Trace Element Research, 2021, 199, 800-811.	1.9	70
28	Antimicrobial and In Vitro Cytotoxic Efficacy of Biogenic Silver Nanoparticles (Ag-NPs) Fabricated by Callus Extract of Solanum incanum L.. Biomolecules, 2021, 11, 341.	1.8	68
29	Phosphorylation of Guar Gum/Magnetite/Chitosan Nanocomposites for Uranium (VI) Sorption and Antibacterial Applications. Molecules, 2021, 26, 1920.	1.7	68
30	Green approach for one-pot synthesis of silver nanorod using cellulose nanocrystal and their cytotoxicity and antibacterial assessment. International Journal of Biological Macromolecules, 2018, 106, 784-792.	3.6	66
31	Amidoxime functionalization of a poly(acrylonitrile)/silica composite for the sorption of Ga(III) â€“ Application to the treatment of Bayer liquor. Chemical Engineering Journal, 2019, 368, 459-473.	6.6	65
32	Sulfonic-functionalized algal/PEI beads for scandium, cerium and holmium sorption from aqueous solutions (synthetic and industrial samples). Chemical Engineering Journal, 2021, 403, 126399.	6.6	63
33	Monitoring the effect of biosynthesized nanoparticles against biodeterioration of cellulose-based materials by Aspergillus niger. Cellulose, 2019, 26, 6583-6597.	2.4	61
34	Comparative Study between Exogenously Applied Plant Growth Hormones versus Metabolites of Microbial Endophytes as Plant Growth-Promoting for Phaseolus vulgaris L.. Cells, 2021, 10, 1059.	1.8	61
35	Functionalization of magnetic chitosan microparticles for high-performance removal of chromate from aqueous solutions and tannery effluent. Chemical Engineering Journal, 2022, 428, 131775.	6.6	60
36	Enhanced Antimicrobial, Cytotoxicity, Larvicidal, and Repellence Activities of Brown Algae, Cystoseira crinita-Mediated Green Synthesis of Magnesium Oxide Nanoparticles. Frontiers in Bioengineering and Biotechnology, 2022, 10, 849921.	2.0	59

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37	Recent advances in greenly synthesized nanoengineered materials for water/wastewater remediation: an overview. Nanotechnology for Environmental Engineering, 2021, 6, 1.	2.0	57
38	Biological Treatment of Real Textile Effluent Using Aspergillus flavus and Fusarium oxysporium and Their Consortium along with the Evaluation of Their Phytotoxicity. Journal of Fungi (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf50 697 Td	1.6	56
39	An Eco-Friendly Approach to the Control of Pathogenic Microbes and Anopheles stephensi Malarial Vector Using Magnesium Oxide Nanoparticles (Mg-NPs) Fabricated by Penicillium chrysogenum. International Journal of Molecular Sciences, 2021, 22, 5096.	1.8	54
40	Effect of agitation mode (mechanical, ultrasound and microwave) on uranium sorption using amine- and dithizone-functionalized magnetic chitosan hybrid materials. Chemical Engineering Journal, 2021, 411, 128553.	6.6	53
41	Synthesis of Eco-Friendly Biopolymer, Alginate-Chitosan Composite to Adsorb the Heavy Metals, Cd(II) and Pb(II) from Contaminated Effluents. Materials, 2021, 14, 2189.	1.3	52
42	Efficient removal of uranium, cadmium and mercury from aqueous solutions using grafted hydrazide-micro-magnetite chitosan derivative. Journal of Materials Science, 2020, 55, 4193-4212.	1.7	49
43	Development of phosphoryl-functionalized algal-PEI beads for the sorption of Nd(III) and Mo(VI) from aqueous solutions â€“ Application for rare earth recovery from acid leachates. Chemical Engineering Journal, 2021, 412, 127399.	6.6	47
44	Light enhanced the antimicrobial, anticancer, and catalytic activities of selenium nanoparticles fabricated by endophytic fungal strain, Penicillium crustosum EP-1. Scientific Reports, 2022, 12, .	1.6	46
45	Functionalization of Magnetic Chitosan Particles for the Sorption of U(VI), Cu(II) and Zn(II)â€"Hydrazide Derivative of Glycine-Grafted Chitosan. Materials, 2017, 10, 539.	1.3	45
46	As(V) sorption from aqueous solutions using quaternized algal/polyethyleneimine composite beads. Science of the Total Environment, 2020, 719, 137396.	3.9	44
47	Green Synthesis of Zinc Oxide Nanoparticles (ZnO-NPs) by Pseudomonas aeruginosa and Their Activity against Pathogenic Microbes and Common House Mosquito, Culex pipiens. Materials, 2021, 14, 6983.	1.3	44
48	Recovery of Heavy Metal Ions Using Magnetic Glycine-Modified Chitosanâ€"Application to Aqueous Solutions and Tailing Leachate. Applied Sciences (Switzerland), 2021, 11, 8377.	1.3	41
49	Amidoxime Functionalization of Algal/Polyethyleneimine Beads for the Sorption of Sr(II) from Aqueous Solutions. Molecules, 2019, 24, 3893.	1.7	40
50	2-Mercaptobenzimidazole-functionalized chitosan for enhanced removal of methylene blue: Batch and column studies. Journal of Environmental Chemical Engineering, 2021, 9, 105609.	3.3	40
51	The Potency of Fungal-Fabricated Selenium Nanoparticles to Improve the Growth Performance of Helianthus annuus L. and Control of Cutworm Agrotis ipsilon. Catalysts, 2021, 11, 1551.	1.6	40
52	Quaternization of algal/PEI beads (a new sorbent): Characterization and application to scandium sorption from aqueous solutions. Chemical Engineering Journal, 2020, 383, 123210.	6.6	38
53	U(VI) and Th(IV) recovery using silica beads functionalized with urea- or thiourea-based polymers â€“ Application to ore leachate. Science of the Total Environment, 2022, 821, 153184.	3.9	37
54	Adsorption Properties of Uranium (VI) Ions on Reactive Crosslinked Acrylamidoxime and Acrylic Acid Copolymer Resins. Journal of Dispersion Science and Technology, 2010, 32, 84-94.	1.3	36

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55	Uranium(VI) and zirconium(IV) sorption on magnetic chitosan derivativesÂâ€“Âeffect of different functional groups on separation properties. Journal of Chemical Technology and Biotechnology, 2019, 94, 3866-3882.	1.6	35
56	Biotechnological application of plant growth-promoting endophytic bacteria isolated from halophytic plants to ameliorate salinity tolerance of Vicia faba L.. Plant Biotechnology Reports, 2021, 15, 819-843.	0.9	34
57	Functionalized biobased composite for metal decontamination â€“ Insight on uranium and application to water samples collected from wells in mining areas (Sinai, Egypt). Chemical Engineering Journal, 2022, 431, 133967.	6.6	34
58	Multiple Applications of CdS/TiO2 Nanocomposites Synthesized via Microwave-Assisted Solâ€“Gel. Journal of Cluster Science, 2022, 33, 1119-1128.	1.7	33
59	Aspergillus flavus-Mediated Green Synthesis of Silver Nanoparticles and Evaluation of Their Antibacterial, Anti-Candida, Acaricides, and Photocatalytic Activities. Catalysts, 2022, 12, 462.	1.6	32
60	Integrated treatment of tailing material for the selective recovery of uranium, rare earth elements and heavy metals. Minerals Engineering, 2019, 133, 138-148.	1.8	31
61	Quaternization of Composite Algal/PEI Beads for Enhanced Uranium Sorptionâ€”Application to Ore Acidic Leachate. Gels, 2020, 6, 12.	2.1	30
62	Application of Magnetic and Dielectric Nanofluids for Electromagnetic-Assistance Enhanced Oil Recovery: A Review. Crystals, 2021, 11, 106.	1.0	29
63	Selective adsorption and recovery of scandium from red mud leachate by using phosphoric acid pre-treated pitaya peel biochar. Separation and Purification Technology, 2022, 292, 121043.	3.9	29
64	Magnetic glutamineâ€grafted polymer for the sorption of U(VI), Nd(III) and Dy(III). Journal of Chemical Technology and Biotechnology, 2018, 93, 1790-1806.	1.6	26
65	Efficient Recovery of Rare Earth Elements (Pr(III) and Tm(III)) From Mining Residues Using a New Phosphorylated Hydrogel (Algal Biomass/PEI). Metals, 2021, 11, 294.	1.0	26
66	Metal valorization from the waste produced in the manufacturing of Co/Mo catalysts: leaching and selective precipitation. Journal of Material Cycles and Waste Management, 2019, 21, 525-538.	1.6	25
67	The Efficacy of Silver Nitrate (AgNO3) as a Coating Agent to Protect Paper against High Deteriorating Microbes. Catalysts, 2021, 11, 310.	1.6	23
68	Mycosynthesis, Characterization, and Mosquitocidal Activity of Silver Nanoparticles Fabricated by Aspergillus niger Strain. Journal of Fungi (Basel, Switzerland), 2022, 8, 396.	1.5	22
69	Synthesis of a Novel Adsorbent Based on Chitosan Magnetite Nanoparticles for the High Sorption of Cr (VI) Ions: A Study of Photocatalysis and Recovery on Tannery Effluents. Catalysts, 2022, 12, 678.	1.6	22
70	Studies on the Uptake of Rare Earth Elements on Polyacrylamidoxime Resins from Natural Concentrate Leachate Solutions. Journal of Dispersion Science and Technology, 2010, 31, 1128-1135.	1.3	20
71	Extraction Studies of Some Hazardous Metal Ions Using Magnetic Peptide Resins. Journal of Dispersion Science and Technology, 2015, 36, 411-422.	1.3	20
72	Praseodymium sorption on Laminaria digitata algal beads and foams. Journal of Colloid and Interface Science, 2017, 504, 780-789.	5.0	20

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73	Controlled bi-functionalization of silica microbeads through grafting of amidoxime/methacrylic acid for Sr(II) enhanced sorption. Chemical Engineering Journal, 2020, 402, 125220.	6.6	19
74	Adsorption of Uranium (VI) Ions on Hydrazinyl Amine and 1,3,4-Thiadiazol-2(3ÂH)-thion Chelating Resins. Journal of Dispersion Science and Technology, 2012, 33, 1544-1551.	1.3	18
75	Synthesis of a New Phosphonate-Based Sorbent and Characterization of Its Interactions with Lanthanum (III) and Terbium (III). Polymers, 2021, 13, 1513.	2.0	18
76	Grafting of Thiazole Derivative on Chitosan Magnetite Nanoparticles for Cadmium Removalâ€"Application for Groundwater Treatment. Polymers, 2022, 14, 1240.	2.0	18
77	Sulfonation of chitosan for enhanced sorption of Li(I) from acidic solutions â€“ Application to metal recovery from waste Li-ion mobile battery. Chemical Engineering Journal, 2022, 441, 135941.	6.6	18
78	Synthesis and Characterization of Functionalized Chitosan Nanoparticles with Pyrimidine Derivative for Enhancing Ion Sorption and Application for Removal of Contaminants. Materials, 2022, 15, 4676.	1.3	17
79	Studies on the Uptake of Uranium(VI) Ions on Polyacrylamidoxime Resins Synthesized by Free Radical Polymerization with Different Crosslinking Ratios and Pore Solvents. Journal of Dispersion Science and Technology, 2011, 32, 224-234.	1.3	16
80	Evaluating the Effect of Lignocellulose-Derived Microbial Inhibitors on the Growth and Lactic Acid Production by Bacillus coagulans Azu-10. Fermentation, 2021, 7, 17.	1.4	16
81	Grafting of quaternary ammonium groups for uranium(VI) recovery: application on natural acidic leaching liquor. Journal of Radioanalytical and Nuclear Chemistry, 2019, 322, 519-532.	0.7	15
82	Use of Corn-Steep Water Effluent as a Promising Substrate for Lactic Acid Production by Enterococcus faecium Strain WH51-1. Fermentation, 2021, 7, 111.	1.4	15
83	Effect of bi-functionalization of algal/polyethyleneimine composite beads on the enhancement of tungstate sorption: Application to metal recovery from ore leachate. Separation and Purification Technology, 2022, 290, 120893.	3.9	15
84	Functionalization of magnetic chitosan microparticles â€“ Comparison of trione and trithione grafting for enhanced silver sorption and application to metal recovery from waste X-ray photographic films. Journal of Environmental Chemical Engineering, 2022, 10, 107939.	3.3	15
85	Recent advancement of hybrid materials used in chemical enhanced oil recovery (CEOR): A review. IOP Conference Series: Materials Science and Engineering, 2017, 206, 012007.	0.3	14
86	Uranium recovery from concentrated chloride solution produced from direct acid leaching of calcareous shale, Allouga ore materials, southwestern Sinai, Egypt. Journal of Radioanalytical and Nuclear Chemistry, 2018, 315, 613-626.	0.7	13
87	Nd(III) and Gd(III) Sorption on Mesoporous Amine-Functionalized Polymer/SiO2 Composite. Molecules, 2021, 26, 1049.	1.7	13
88	Recovery of magnesium from ferronickel slag to prepare hydrated magnesium sulfate by hydrometallurgy method. Journal of Cleaner Production, 2021, 303, 127049.	4.6	13
89	Evaluate the Toxicity of Pyrethroid Insecticide Cypermethrin before and after Biodegradation by Lysinibacillus cresolivuorans Strain HIS7. Plants, 2021, 10, 1903.	1.6	13
90	Novel phosphonate-functionalized composite sorbent for the recovery of lanthanum(III) and terbium(III) from synthetic solutions and ore leachate. Chemical Engineering Journal, 2021, 424, 130500.	6.6	13

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91	Groundwater Purification in a Polymetallic Mining Area (SW Sinai, Egypt) Using Functionalized Magnetic Chitosan Particles. Water, Air, and Soil Pollution, 2018, 229, 1.	1.1	12
92	Synthesis and characterization of the novel pyrimidineâ€™s derivatives, as a promising tool for antimicrobial agent and in-vitro cytotoxicity. Journal of the Iranian Chemical Society, 2022, 19, 2279-2296.	1.2	12
93	High-Performance Hydrogel Based on Modified Chitosan for Removal of Heavy Metal Ions in Borehole: A Case Study from the Bahariya Oasis, Egypt. Catalysts, 2022, 12, 721.	1.6	12
94	Separation of Uranium and Rare Earth Elements with High Purity from Low-Grade Gibbsite-Bearing Shale Ore by Different Chelating Resins. Journal of Dispersion Science and Technology, 2012, 33, 482-489.	1.3	11
95	Solid phase extraction of uranium removal from underground water, Wadi Naseib, Southwestern Sinai, Egypt. Desalination and Water Treatment, 2014, 52, 331-338.	1.0	11
96	Removal of uranium (VI) from liquid waste of calcareous shale, Allouga, southwestern Sinai, Egypt. Desalination and Water Treatment, 2015, 54, 2530-2540.	1.0	11
97	Enhancement of photocatalytic and biological activities of chitosan/activated carbon incorporated with TiO2 nanoparticles. Environmental Science and Pollution Research, 2022, 29, 18189-18201.	2.7	11
98	Effect of Crosslinker Chemical Structure and Monomer Compositions on Adsorption of Uranium (VI) Ions Based on Reactive Crosslinked Acrylamidoxime Acrylic Acid Resins. Journal of Dispersion Science and Technology, 2012, 33, 490-496.	1.3	10
99	Biological decolorization of azo dyes from textile wastewater effluent by Aspergillus niger. Egyptian Journal of Chemistry, 2019, .	0.1	10
100	Photocatalytic Efficacy of Heterocyclic Base Grafted Chitosan Magnetite Nanoparticles on Sorption of Pb(II); Application on Mining Effluent. Catalysts, 2022, 12, 330.	1.6	10
101	Geological and radioactivity studies accompanied by uranium recovery: Um Bogma Formation, southwestern Sinai, Egypt. Journal of Radioanalytical and Nuclear Chemistry, 2020, 324, 1039-1051.	0.7	8
102	Effect of bi-functionalization silica micro beads on uranium adsorption from synthetic and washing pregnant uranyl solutions. Journal of Radioanalytical and Nuclear Chemistry, 2021, 330, 191-206.	0.7	6
103	Tuning the sorption properties of amidoxime-functionalized algal/polyethyleneimine beads for La(III) and Dy(III) using EDTA: Impact of metal speciation on selective separation. Chemical Engineering Journal, 2022, 431, 133214.	6.6	6
104	Removal of Banana Tree Fungi Using Green Tuff Rock Powder Waste Containing Zeolite. Catalysts, 2019, 9, 1049.	1.6	3