

Catalytic degradation of wastewater from the textile and synthesized hematite (Fe_2O_3) and magnesium oxide

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Sunlight-assisted degradation of textile pollutants and phytotoxicity evaluation using mesoporous ZnO/g-C ₃ N ₄ catalyst. RSC Advances, 2021, 11, 26800-26812.	3.6	26
2	Antimicrobial and In Vitro Cytotoxic Efficacy of Biogenic Silver Nanoparticles (Ag-NPs) Fabricated by Callus Extract of Solanum incanum L.. Biomolecules, 2021, 11, 341.	4.0	68
3	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 ETQQO 0 0 rgBT /Overbook 10 Tf50 657 Td		
4	Highly Functionalized Modified Metal Oxides Polymeric Sensors for Potentiometric Determination of Letrozole in Commercial Oral Tablets and Biosamples. Polymers, 2021, 13, 1384.	4.5	14
5	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.	2.9	52
6	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.	4.1	54
7	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.	3.5	100
8	Ni KATKISININ Fe2O3â€™ÄœN YAPISAL Ä–ZELLÄ°KLERÄ° ÄœZERÄ°NE ETKÄ°LERÄ°NÄ°N ARAÄžTIRILMASI. International Journal of Innovative Engineering Applications, 0, , .	0.4	0
9	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.	3.5	88
10	Sonosynthesis and characterization of konjac gum/xanthan gum supported ironoxide nanoparticles. International Journal of Biological Macromolecules, 2021, 183, 1047-1057.	7.5	8
11	Biogenic synthesis of novel platinum-palladium bimetallic nanoparticles from aqueous Annona muricata leaf extract for catalytic activity. 3 Biotech, 2021, 11, 385.	2.2	13
12	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.	6.7	144
13	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.	1.5	6
14	Evaluate the Toxicity of Pyrethroid Insecticide Cypermethrin before and after Biodegradation by Lysinibacillus cresolivorans Strain HIS7. Plants, 2021, 10, 1903.	3.5	13
15	Nanobioremediation: A sustainable approach for the removal of toxic pollutants from the environment. Journal of Hazardous Materials, 2022, 427, 128033.	12.4	58
16	Plant growth-promoting properties of bacterial endophytes isolated from roots of <i>Thymus vulgaris</i> L. and investigate their role as biofertilizers to enhance the essential oil contents. Biomolecular Concepts, 2021, 12, 175-196.	2.2	22
17	Thiolation of Myco-Synthesized Fe3O4-NPs: A Novel Promising Tool for Penicillium expansium Laccase Immobilization to Decolorize Textile Dyes and as an Application for Anticancer Agent. Journal of Fungi (Basel, Switzerland), 2022, 8, 71.	3.5	7
18	Ceria nanoparticles anchored on graphitic oxide sheets (CeO2-GOS) as an efficient catalyst for degradation of dyes and textile effluents. Environmental Research, 2022, 209, 112750.	7.5	22

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19	Construction of SnO ₂ /g-C ₃ N ₄ an effective nanocomposite for photocatalytic degradation of amoxicillin and pharmaceutical effluent. <i>Environmental Research</i> , 2022, 209, 112809.	7.5	30
20	Performance of Activated Mgo Nanopowder on the Treatment of Real Tannery Wastewater: Complementing Experimental Results with a Geochemical Model. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
21	Enhanced Antimicrobial, Cytotoxicity, Larvicidal, and Repellence Activities of Brown Algae, <i>Cystoseira crinita</i> -Mediated Green Synthesis of Magnesium Oxide Nanoparticles. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 849921.	4.1	59
22	Multi-Biofunctional Properties of Phytofabricated Selenium Nanoparticles From <i>Carica papaya</i> Fruit Extract: Antioxidant, Antimicrobial, Antimycotoxin, Anticancer, and Biocompatibility. <i>Frontiers in Microbiology</i> , 2021, 12, 769891.	3.5	12
23	Grafting of Thiazole Derivative on Chitosan Magnetite Nanoparticles for Cadmium Removal—Application for Groundwater Treatment. <i>Polymers</i> , 2022, 14, 1240.	4.5	18
24	Photocatalytic Efficacy of Heterocyclic Base Grafted Chitosan Magnetite Nanoparticles on Sorption of Pb(II); Application on Mining Effluent. <i>Catalysts</i> , 2022, 12, 330.	3.5	10
25	The Potency of Fungal-Fabricated Selenium Nanoparticles to Improve the Growth Performance of <i>Helianthus annuus</i> L. and Control of Cutworm <i>Agrotis ipsilon</i> . <i>Catalysts</i> , 2021, 11, 1551.	3.5	40
26	Mycosynthesis, Characterization, and Mosquitocidal Activity of Silver Nanoparticles Fabricated by <i>Aspergillus niger</i> Strain. <i>Journal of Fungi (Basel, Switzerland)</i> , 2022, 8, 396.	3.5	22
27	<i>Aspergillus flavus</i> -Mediated Green Synthesis of Silver Nanoparticles and Evaluation of Their Antibacterial, Anti-Candida, Acaricides, and Photocatalytic Activities. <i>Catalysts</i> , 2022, 12, 462.	3.5	32
28	Mycology-Nanotechnology Interface: Applications in Medicine and Cosmetology. <i>International Journal of Nanomedicine</i> , 0, Volume 17, 2505-2533.	6.7	12
29	An innovative process combining electrocoagulation and photoelectro-Fenton-like methods during the abatement of Acid Blue 113 dye. <i>Chemical Engineering Research and Design</i> , 2022, 163, 475-486.	5.6	6
30	Microbial (viruses, bacteria and fungi) protective personal clothing. , 2022, , 199-226.		2
31	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. <i>Catalysts</i> , 2022, 12, 678.	3.5	22
32	<i>Aspergillus tamarii</i> mediated green synthesis of magnetic chitosan beads for sustainable remediation of wastewater contaminants. <i>Scientific Reports</i> , 2022, 12, .	3.3	9
33	Novel Amapã; latex-mediated synthesis of defective $\hat{\pm}$ -Fe ₂ O ₃ nanoparticles with enhanced ferromagnetism and sunlight photocatalytic activity. <i>Ceramics International</i> , 2022, 48, 28496-28511.	4.8	6
34	Synthesis and Characterization of Functionalized Chitosan Nanoparticles with Pyrimidine Derivative for Enhancing Ion Sorption and Application for Removal of Contaminants. <i>Materials</i> , 2022, 15, 4676.	2.9	17
35	Phyco-Synthesized Zinc Oxide Nanoparticles Using Marine Macroalgae, <i>Ulva fasciata</i> Delile, Characterization, Antibacterial Activity, Photocatalysis, and Tanning Wastewater Treatment. <i>Catalysts</i> , 2022, 12, 756.	3.5	32
36	Light enhanced the antimicrobial, anticancer, and catalytic activities of selenium nanoparticles fabricated by endophytic fungal strain, <i>Penicillium crustosum</i> EP-1. <i>Scientific Reports</i> , 2022, 12, .	3.3	46

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37	Nanomaterials as a sustainable choice for treating wastewater. <i>Environmental Research</i> , 2022, 214, 113807.	7.5	38
38	Nanotechnological tweaking for textile industrial dye stress on floras. <i>Materials Today: Proceedings</i> , 2022, , .	1.8	0
39	A hybrid process combining electrocoagulation and active chlorine-based photoelectro-Fenton-like methods during the removal of Acid Blue 29 dye. <i>Journal of Electroanalytical Chemistry</i> , 2022, , 116732.	3.8	5
40	Mycosynthesis of Hematite (\pm -Fe ₂ O ₃) Nanoparticles Using <i>Aspergillus niger</i> and Their Antimicrobial and Photocatalytic Activities. <i>Bioengineering</i> , 2022, 9, 397.	3.5	47
41	Ecofriendly Composite as a Promising Material for Highly-Performance Uranium Recovery from Different Solutions. <i>Toxics</i> , 2022, 10, 490.	3.7	8
42	Simultaneous scavenging of As(V) and safranin O dye by Mg/Al LDH-zeolite heterocoagulated materials: The effect of adsorbent synthesis approach on its efficiency in static and dynamic system. <i>Separation and Purification Technology</i> , 2022, 302, 122072.	7.9	4
43	Endophytic bacterial strain, <i>Brevibacillus brevis</i> -mediated green synthesis of copper oxide nanoparticles, characterization, antifungal, <i>in vitro</i> cytotoxicity, and larvicidal activity. <i>Green Processing and Synthesis</i> , 2022, 11, 931-950.	3.4	28
44	Urinary 8-OHdG level is not affected by geography and trace elements in nail of residents of Addis Ababa: It is shaped by interactions between different social factors. <i>Toxicology Reports</i> , 2022, 9, 1777-1787.	3.3	2
45	Green Synthesis of Metal Oxide Nanoparticles and Gamma Rays for Water Remediation. , 2022, , 1-17.		0
46	Antimicrobial, Antiviral, and In-Vitro Cytotoxicity and Mosquitocidal Activities of <i>Portulaca oleracea</i> -Based Green Synthesis of Selenium Nanoparticles. <i>Journal of Functional Biomaterials</i> , 2022, 13, 157.	4.4	31
47	Nano-bioremediation of textile industry wastewater using immobilized CuO-NPs myco-synthesized by a novel Cu-resistant <i>Fusarium oxysporum</i> OSF18. <i>Environmental Science and Pollution Research</i> , 2023, 30, 16694-16706.	5.3	15
48	Application of Algal Nanotechnology for Leather Wastewater Treatment and Heavy Metal Removal Efficiency. <i>Sustainability</i> , 2022, 14, 13940.	3.2	13
49	Insights into the recent advances in nano-bioremediation of pesticides from the contaminated soil. <i>Frontiers in Microbiology</i> , 0, 13, .	3.5	12
50	Current developments in nanostructurally engineered metal oxide for removal of contaminants in water. <i>Ceramics International</i> , 2023, 49, 7308-7321.	4.8	17
51	A comprehensive review on biosynthesis of magnesium oxide nanoparticles, and their antimicrobial, anticancer, antioxidant activities as well as toxicity study. <i>Inorganic Chemistry Communication</i> , 2022, 146, 110156.	3.9	12
52	Magnetic properties, phase evolution, hollow structure and biomedical application of hematite (\pm -Fe ₂ O ₃) and QUAIPH. <i>Advanced Powder Technology</i> , 2022, 33, 103847.	4.1	12
53	Synthesis, Characterization, and Evaluation of <i>Artemisia afra</i> -Mediated Iron Nanoparticles as a Potential Nano-Priming Agent for Seed Germination. <i>ACS Agricultural Science and Technology</i> , 2022, 2, 1218-1229.	2.3	2
54	Abatement of a complex mixture of dyes in the presence of chlorides by electrocoagulation and active chlorine-based photoelectro-Fenton-like processes. <i>Chemical Engineering Research and Design</i> , 2023, 169, 579-591.	5.6	4

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55	Heterostructures of Ag ₂ FeSnS ₄ chalcogenide nanoparticles as potential photocatalysts. <i>Scientific African</i> , 2023, 19, e01509.	1.5	0
56	Green and Eco-Friendly Treatment of Textile Wastewater by Using <i>Azadirachta indica</i> Leaf Extract Combined with a Silver Nitrate Solution. <i>Sustainability</i> , 2023, 15, 81.	3.2	4
57	Green Synthesis of Magnesium Oxide Nanoparticles and Nanocomposites for Photocatalytic Antimicrobial, Antibiofilm and Antifungal Applications. <i>Catalysts</i> , 2023, 13, 642.	3.5	41
58	Green Synthesis of Zinc Oxide Nanoparticles Using an Aqueous Extract of <i>Punica granatum</i> for Antimicrobial and Catalytic Activity. <i>Journal of Functional Biomaterials</i> , 2023, 14, 205.	4.4	12
59	Efficient detoxification of textile wastewater by applying <i>Chenopodium album</i> nanoparticles and its application in simulated metal-bearing effluents removal. <i>Environmental Science and Pollution Research</i> , 2023, 30, 60890-60906.	5.3	4
60	Treatment of real tannery wastewater using facile synthesized magnesium oxide nanoparticles: Experimental results and geochemical modeling. <i>Water Resources and Industry</i> , 2023, 29, 100205.	3.9	2
61	Magnesium ferrite/titanium dioxide/reduced graphene oxide composite photocatalyst for degradation of crystal violet under ultraviolet irradiation. <i>Materials Chemistry and Physics</i> , 2023, 301, 127661.	4.0	3
62	Zero waste discharge in tannery industries – An achievable reality? A recent review. <i>Journal of Environmental Management</i> , 2023, 335, 117508.	7.8	9
63	Biosynthesis of Metal and Metal Oxide Nanoparticles Using Microbial Cultures: Mechanisms, Antimicrobial Activity and Applications to Cultural Heritage. <i>Microorganisms</i> , 2023, 11, 378.	3.6	13
64	Plant-Based Copper Oxide Nanoparticles; Biosynthesis, Characterization, Antibacterial Activity, Tanning Wastewater Treatment, and Heavy Metals Sorption. <i>Catalysts</i> , 2023, 13, 348.	3.5	23
65	A critical analysis of the nanotechnology-based approach in textile wastewater treatment. <i>Nanotechnology for Environmental Engineering</i> , 0, , .	3.3	0
66	Bio-synthesis of Fe-nanocomplex using leaves <i>Ocimum basilicum</i> L. as a promising tool for tanning effluent treatment. <i>Biomass Conversion and Biorefinery</i> , 0, , .	4.6	0
67	Green Synthesis of Metal Oxide Nanoparticles and Gamma Rays for Water Remediation. , 2023, , 203-219.		0
68	Biological approaches to the purification of textile wastewater. <i>E3S Web of Conferences</i> , 2023, 389, 04001.	0.5	1
69	Fabrication of Novel Hemp Charcoal Nanofiber Membrane for Effectual Adsorption of Heavy Metal Ions from Wastewater. <i>Sustainability</i> , 2023, 15, 9365.	3.2	1
70	Pd-Based Nanoparticles as Catalysts for Improved Removal of Florfenicol via Heterogeneous Fenton and Photo-Fenton(-like) Processes. <i>ACS Applied Nano Materials</i> , 2023, 6, 12177-12189.	5.0	2
72	Water Adsorption on MgO Surfaces: A Vibrational Analysis. <i>Crystals</i> , 2023, 13, 1153.	2.2	1
73	Synthesis of <i>Datura innoxia</i> -added iron nanoparticle adsorbent for malachite green dye removal. <i>International Journal of Environmental Science and Technology</i> , 0, , .	3.5	1

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74	Green nanomaterials: Synthesis and applications in wastewater treatment. <i>Inorganic Chemistry Communication</i> , 2023, 158, 111584.	3.9	0
75	Experimental studies of tannery wastewater treatment by combined electrocoagulation and ultrasonication processes using response surface methodology optimization. <i>International Journal of Environmental Science and Technology</i> , 0, , .	3.5	0
76	Effective Removal of Anthracene from Seawater Samples Using a Thermo-Sensitive Polymer Based on Magnetic Graphene Oxide: Fabrication and Characterization. <i>Water, Air, and Soil Pollution</i> , 2023, 234, .	2.4	0
77	Magnesium oxide synthesized with <i>Alpinia zerumbet</i> leaf extracts as a sustainable alternative to zinc oxide in nitrile rubber compounds: A comparative vulcanization kinetics investigation. <i>Journal of Applied Polymer Science</i> , 0, , .	2.6	0
78	$\hat{\pm}$ -Fe ₂ O ₃ /ZnO nanocomposite as an efficient photocatalyst for wastewater treatment and flexible electronic device applications. <i>Ionics</i> , 2024, 30, 1137-1150.	2.4	0
79	Unlocking the potential of MgONPs for effective domestic wastewater treatment. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2023, , 105255.	5.3	0
80	Synthesis of Nanoparticles by Microbes. , 2023, , 629-640.		0
81	Chitosan anchored nZVI bionanocomposites for treatment of textile wastewater: Optimization, mechanism, and phytotoxic assessment. <i>Environmental Research</i> , 2024, 245, 118041.	7.5	1
82	Emerging trends and promising prospects in nanotechnology for improved remediation of wastewater contaminants: Present and future outlooks. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2024, 21, 100913.	2.9	0
83	Penicillium oxalicum-mediated the green synthesis of silica nanoparticles: characterization and environmental applications. <i>Biomass Conversion and Biorefinery</i> , 0, , .	4.6	0
84	Larvicidal activity of CuO and ZnO nanoparticles against <i>Aedes aegypti</i> and <i>Anopheles stephensi</i> mosquito vectors-a greener approach by <i>Phaseolus vulgaris</i> L. aqueous extract as bio-reductant. <i>Results in Chemistry</i> , 2024, 7, 101408.	2.0	0
85	Removal of fluoride ions from water using MgO-based materials with special emphasis on MgO/PPy nanocomposites: A review. <i>Journal of Molecular Liquids</i> , 2024, 399, 124473.	4.9	0