

Green biosynthesis of superparamagnetic magnetite Fe₃O₄ applications in targeted anticancer drug delivery system

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Metal nanoparticles fabricated by green chemistry using natural extracts: biosynthesis, mechanisms, and applications. RSC Advances, 2019, 9, 24539-24559.	1.7	247
2	Curing epoxy with electrochemically synthesized Mn Fe ₃ O ₄ magnetic nanoparticles. Progress in Organic Coatings, 2019, 136, 105199.	1.9	13
3	Disinfection of water and wastewater by biosynthesized magnetite and zerovalent iron nanoparticles via NAP-NAR enzymes of Proteus mirabilis 10B. Environmental Science and Pollution Research, 2019, 26, 23661-23678.	2.7	25
4	Green Synthesis of Magnetic Spinel Nanoparticles. Springer Proceedings in Physics, 2019, , 389-398.	0.1	8
5	Structural and Magnetic Behaviours of Magnetite/Polyvinyl Alcohol Composite Nanofibers. IOP Conference Series: Materials Science and Engineering, 2019, 515, 012081.	0.3	5
6	Synthesis of <i>Bombax malabaricum</i> gum based silver and zinc nanoparticles and their application in controlled drug delivery. Materials Research Express, 2019, 6, 115414.	0.8	5
7	Clove and cinnamon: Novel anti-oxidant fuels for preparing magnetic iron oxide particles by the sol-gel auto-ignition method. Journal of Alloys and Compounds, 2019, 786, 71-76.	2.8	10
8	Microbially Synthesized Biomagnetic Nanomaterials. Nanotechnology in the Life Sciences, 2019, , 49-75.	0.4	0
9	Study on Distribution of Magnetite (Fe _{3-x} Mn _x O ₄) Filler in Fe _{3-x} Mn _x O ₄ -PEG/PVA/PVP Magnetic Hydrogel by Using Twolognormal Function Analysis. IOP Conference Series: Materials Science and Engineering, 0, 515, 012024.	0.3	3
10	Phytosynthesized metal oxide nanoparticles for pharmaceutical applications. Naunyn-Schmiedeberg's Archives of Pharmacology, 2019, 392, 755-771.	1.4	67
11	Quercetin conjugated with superparamagnetic iron oxide nanoparticles improves learning and memory better than free quercetin via interacting with proteins involved in LTP. Scientific Reports, 2019, 9, 6876.	1.6	61
12	Sonochemical Mediated Synthesis of Iron Oxide (Fe ₃ O ₄ and Fe ₂ O ₃) Nanoparticles and their Characterization, Cytotoxicity and Antibacterial Properties. Journal of Cluster Science, 2019, 30, 669-675.	1.7	9
13	Phase and Magnetic Properties of Fe ₃ O ₄ /SiO ₂ Natural Materials-Based Using Polyethylene Glycol Media. IOP Conference Series: Materials Science and Engineering, 0, 515, 012017.	0.3	8
14	Recent Advances in Magnetite Nanoparticle Functionalization for Nanomedicine. Nanomaterials, 2019, 9, 1791.	1.9	81
15	Green biosynthesis of Pt-nanoparticles from Anbara fruits: Toxic and protective effects on CCl ₄ induced hepatotoxicity in Wister rats. Arabian Journal of Chemistry, 2020, 13, 4386-4403.	2.3	30
16	Green synthesis of iron oxide nanorods using Withania coagulans extract improved photocatalytic degradation and antimicrobial activity. Journal of Photochemistry and Photobiology B: Biology, 2020, 204, 111784.	1.7	115
17	Magnetic Iron Oxide Nanoparticle (IONP) Synthesis to Applications: Present and Future. Materials, 2020, 13, 4644.	1.3	154
18	Nanoparticles as Novel Emerging Therapeutic Antibacterial Agents in the Antibiotics Resistant Era. Biological Trace Element Research, 2021, 199, 2552-2564.	1.9	48

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19	Differentiation between cellulose acetate and polyvinyl alcohol nanofibrous scaffolds containing magnetite nanoparticles/graphene oxide via pulsed laser ablation technique for tissue engineering applications. <i>Journal of Materials Research and Technology</i> , 2020, 9, 11629-11640.	2.6	43
20	Synthesis and enhanced antioxidant and membrane-protective activity of curcumin@AlOOH nanoparticles. <i>Journal of Inorganic Biochemistry</i> , 2020, 210, 111168.	1.5	9
21	Synthesis of 2-deoxy-D-glucose coated Fe ₃ O ₄ nanoparticles for application in targeted delivery of the Pt(IV) prodrug of cisplatin – a novel approach in chemotherapy. <i>New Journal of Chemistry</i> , 2020, 44, 13863-13874.	1.4	1
22	Novel Bionanocompounds: Outer Membrane Protein A and Laccase Co-Immobilized on Magnetite Nanoparticles for Produced Water Treatment. <i>Nanomaterials</i> , 2020, 10, 2278.	1.9	12
23	Synthesis and Characterization of Amorphous Iron Oxide Nanoparticles by the Sonochemical Method and Their Application for the Remediation of Heavy Metals from Wastewater. <i>Nanomaterials</i> , 2020, 10, 1551.	1.9	81
24	Role of Nanofluids in Drug Delivery and Biomedical Technology: Methods and Applications. <i>Nanotechnology, Science and Applications</i> , 2020, Volume 13, 47-59.	4.6	95
25	Preparation of amphiphilic magnetic polyvinyl alcohol targeted drug carrier and drug delivery research. <i>Designed Monomers and Polymers</i> , 2020, 23, 197-206.	0.7	7
26	Micro Magnetic Field Produced by Fe ₃ O ₄ Nanoparticles in Bone Scaffold for Enhancing Cellular Activity. <i>Polymers</i> , 2020, 12, 2045.	2.0	26
27	Preparation of a trihydrazinotriazine-functionalized core-shell nanocatalyst as an extremely efficient catalyst for the synthesis of benzoxanthenes. <i>Materials Today Chemistry</i> , 2020, 18, 100362.	1.7	12
28	Characterization and Inhibitory Effects of Magnetic Iron Oxide Nanoparticles Synthesized from Plant Extracts on HeLa Cells. <i>International Journal of Biomaterials</i> , 2020, 2020, 1-11.	1.1	4
29	Magnetite (Fe ₃ O ₄) Nanoparticles in Biomedical Application: From Synthesis to Surface Functionalisation. <i>Magnetochemistry</i> , 2020, 6, 68.	1.0	186
30	Magnetic Particle Spectroscopy: A Short Review of Applications Using Magnetic Nanoparticles. <i>ACS Applied Nano Materials</i> , 2020, 3, 4972-4989.	2.4	78
31	Cationic Magnetite Nanoparticles for Increasing siRNA Hybridization Rates. <i>Nanomaterials</i> , 2020, 10, 1018.	1.9	5
32	Cytotoxicity studies of Fe ₃ O ₄ nanoparticles in chicken macrophage cells. <i>Royal Society Open Science</i> , 2020, 7, 191561.	1.1	12
33	Iron oxide nanoparticles: synthesis, functionalization, and applications in diagnosis and treatment of cancer. <i>Chemical Papers</i> , 2020, 74, 3809-3824.	1.0	67
34	Green synthesis and environmental application of iron-based nanomaterials and nanocomposite: A review. <i>Chemosphere</i> , 2020, 259, 127509.	4.2	176
35	Rapid and sensitive extraction of aflatoxins by Fe ₃ O ₄ /zeolite nanocomposite adsorbent in rice samples. <i>Microchemical Journal</i> , 2020, 158, 105206.	2.3	25
36	Correlation between effects of the particle size and magnetic field strength on the magnetic hyperthermia efficiency of dextran-coated magnetite nanoparticles. <i>Materials Science and Engineering C</i> , 2020, 117, 111274.	3.8	32

#	ARTICLE	IF	CITATIONS
37	Development and characterization of antitumoral electrospun polycaprolactone/functionalized Fe ₃ O ₄ hybrid membranes. <i>Materials Today Chemistry</i> , 2020, 17, 100309.	1.7	21
38	Study of the adsorption activity of Fe ₃ O ₄ synthesized by the solvothermal method in relation to doxorubicin. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 4923-4930.	1.6	6
39	Magnetic particles in algae biotechnology: recent updates. <i>Journal of Applied Phycology</i> , 2020, 32, 1743-1753.	1.5	10
40	Removal of toxic metals from water using chitosan-based magnetic adsorbents. A review. <i>Environmental Chemistry Letters</i> , 2020, 18, 1145-1168.	8.3	89
41	Colloidal stability study of Fe ₃ O ₄ -based nanofluids in water and ethylene glycol. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 146, 509-520.	2.0	5
42	Targeted drug therapy in nonsmall cell lung cancer: clinical significance and possible solutions-part II (role of nanocarriers). <i>Expert Opinion on Drug Delivery</i> , 2021, 18, 103-118.	2.4	13
43	Green magnetic nanomaterial as antibiotic release vehicle: The release of pefloxacin and ofloxacin. <i>Materials Science and Engineering C</i> , 2021, 118, 111439.	3.8	8
44	Environmental fate, distribution and state-of-the-art removal of antineoplastic drugs: A comprehensive insight. <i>Chemical Engineering Journal</i> , 2021, 407, 127184.	6.6	26
45	Fabrication of a smart and biocompatible brush copolymer decorated on magnetic graphene oxide hybrid nanostructure for drug delivery application. <i>European Polymer Journal</i> , 2021, 142, 110126.	2.6	33
46	Advances of molecularly imprinted polymers (MIP) and the application in drug delivery. <i>European Polymer Journal</i> , 2021, 143, 110179.	2.6	100
47	Green synthesis of Fe ₃ O ₄ nanoparticles for hyperthermia, magnetic resonance imaging and 5-fluorouracil carrier in potential colorectal cancer treatment. <i>Research on Chemical Intermediates</i> , 2021, 47, 1789-1808.	1.3	33
48	Metal-Organic Framework-Based Nanostructures for Biomedical Applications. <i>Nanotechnology in the Life Sciences</i> , 2021, , 339-358.	0.4	0
49	Novel Fe ₃ O ₄ -poly(methacryloxyethyltrimethyl ammonium chloride) adsorbent for the ultrafast and efficient removal of anionic dyes. <i>RSC Advances</i> , 2021, 11, 1172-1181.	1.7	11
50	Magnetic nanoparticle-based hybrid materials in the biomedical field: fundamentals and applications. , 2021, , 387-423.		1
51	Synthesis and characterization of phyto mediated talc-based nanocomposite by wet chemical reduction method. <i>Materials Today: Proceedings</i> , 2021, 47, 1878-1882.	0.9	1
52	Recent advances on drug delivery nanocarriers for cerebral disorders. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 024104.	1.7	13
53	The distribution of the iron oxide nanoparticles modified with polyethylene glycol in rat brains. <i>Materials Chemistry and Physics</i> , 2021, 260, 124108.	2.0	3
54	Copper/Graphene Based Materials Nanocomposites and Their Antibacterial Study: A Mini Review. <i>ICRRD Quality Index Research Journal</i> , 2021, 1, 44-52.	0.4	0

#	ARTICLE	IF	CITATIONS
55	Green Synthesis-Based Magnetic Diatoms for Biological Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3439-3451.	3.2	9
56	Electrospun Polycaprolactone Nanofibrous Webs Containing Cu ²⁺ /Magnetite/Graphene Oxide for Cell Viability, Antibacterial Performance, and Dye Decolorization from Aqueous Solutions. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 303-318.	1.7	15
57	Synthesis and characterization of polypyrrole-coated iron oxide nanoparticles. <i>Materials Research Express</i> , 2021, 8, 025007.	0.8	5
58	Green Synthesis of Fe ₃ O ₄ Nanoparticles Stabilized by a <i>Garcinia mangostana</i> Fruit Peel Extract for Hyperthermia and Anticancer Activities. <i>International Journal of Nanomedicine</i> , 2021, Volume 16, 2515-2532.	3.3	83
59	Synthesis of Luminescent Eu(III)-Doped Octacalcium Phosphate Particles Hybridized with Succinate Ions and Their Reactive Behavior in Simulated Body Fluid. <i>Crystal Growth and Design</i> , 2021, 21, 2005-2018.	1.4	4
60	Optical and Morphology Properties of the Magnetite (Fe ₃ O ₄) Nanoparticles Prepared by Green Method. <i>Journal of Physics: Conference Series</i> , 2021, 1829, 012022.	0.3	5
61	Recent developments in the fabrication of magnetic nanoparticles for the synthesis of trisubstituted pyridines and imidazoles: A green approach. <i>Synthetic Communications</i> , 0, , 1-31.	1.1	8
62	Nanoparticle-based methodologies for targeted drug delivery—an insight. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	0.8	17
63	Evaluation of the acid–base surface properties of nanoscale Fe ₃ O ₄ and Fe ₃ O ₄ /SiO ₂ by potentiometric method. <i>Molecular Crystals and Liquid Crystals</i> , 2021, 719, 140-152.	0.4	4
64	Evaluation of nanoparticle drug-delivery systems used in preclinical studies. <i>Therapeutic Delivery</i> , 2021, 12, 325-336.	1.2	6
65	Green biosynthesis and physicochemical characterization of Fe ₃ O ₄ nanoparticles using <i>Punica granatum L.</i> fruit peel extract for optoelectronic applications. <i>Textile Research Journal</i> , 2022, 92, 2685-2696.	1.1	40
66	Excellent Antimicrobial Activity of Fe ₃ O ₄ /SiO ₂ /Ag Nanocomposites. <i>Nano</i> , 2021, 16, 2150049.	0.5	7
67	Structural characterization of green synthesized magnetic mesoporous Fe ₃ O ₄ NPs@ME. <i>Materials Chemistry and Physics</i> , 2021, 262, 124323.	2.0	33
68	Ananas comosus peel-mediated green synthesized magnetite nanoparticles and their antifungal activity against four filamentous fungal strains. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 5649-5660.	2.9	12
69	Simultaneous Fe ₃ O ₄ Nanoparticle Formation and Catalyst-Driven Hydrothermal Cellulose Degradation. <i>ACS Omega</i> , 2021, 6, 10790-10800.	1.6	4
70	Highly efficient sunitinib release from pH-responsive mHPMC@Chitosan core-shell nanoparticles. <i>Carbohydrate Polymers</i> , 2021, 258, 117719.	5.1	34
71	Magnetite nanoparticles: Synthesis methods – A comparative review. <i>Methods</i> , 2022, 199, 16-27.	1.9	118
72	Green Synthesis of Transition-Metal Nanoparticles and Their Oxides: A Review. <i>Materials</i> , 2021, 14, 2700.	1.3	58

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73	Cytotoxicity of Bio-Synthesized MgFe ₂ O ₄ @Ag Nanocomposite on Gastric Cancer Cell Line and Evaluation Its Effect on Bax, p53 and Bcl-2 Genes Expression. Journal of Cluster Science, 2022, 33, 1579-1588.	1.7	6
74	Endophytic Nanotechnology: An Approach to Study Scope and Potential Applications. Frontiers in Chemistry, 2021, 9, 613343.	1.8	35
75	Sustainable plant and microbes-mediated preparation of Fe ₃ O ₄ nanoparticles and industrial application of its chitosan, starch, cellulose, and dextrin-based nanocomposites as catalysts. International Journal of Biological Macromolecules, 2021, 179, 429-447.	3.6	22
77	Structure and Magnetic Properties of Nanoparticles of Magnetite Obtained by Mechanochemical Synthesis. Metal Science and Heat Treatment, 2021, 63, 95-100.	0.2	5
78	Design of thermosensitive polymer-coated magnetic mesoporous silica nanocomposites with a core-shell structure as a magnetic/temperature dual-responsive drug delivery vehicle. Polymers for Advanced Technologies, 2021, 32, 4101-4109.	1.6	18
79	Improved delivery system for celastrol-loaded magnetic Fe ₃ O ₄ /Fe ₂ O ₃ heterogeneous nanorods: HIF-1 α -related apoptotic effects on SMMC-7721 cell. Materials Science and Engineering C, 2021, 125, 112103.	3.8	14
80	Biosynthesized magnetite nanoparticles as an environmental opulence and sustainable wastewater treatment. Science of the Total Environment, 2021, 774, 145610.	3.9	32
81	The monolithic Γ_1 , Γ_2 crystal structural design of piezoelectric poly (vinylidene fluoride) (PVDF) polymer/fullerene based sensor array for the measurement of lung pressure. Sensing and Bio-Sensing Research, 2021, 32, 100418.	2.2	3
82	Investigation of Magnetic Properties of Magnetic Poly (glycidyl methacrylate) Microspheres: Experimental and Theoretical. Advances in Materials Science and Engineering, 2021, 2021, 1-10.	1.0	1
83	Recent advances on the fundamental physical phenomena behind stability, dynamic motion, thermophysical properties, heat transport, applications, and challenges of nanofluids. Physics Reports, 2022, 946, 1-94.	10.3	179
84	Conversion of ferritin ferrihydrite core to magnetite by gold ions binding and the derived nanoparticle formation. Journal of Nanostructure in Chemistry, 0, , 1.	5.3	1
85	Recovery of iron from direct reduction iron sludge and biosynthesis of magnetite nanoparticles using green tea extract. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 622, 126675.	2.3	16
86	Spinel ferrites (MFe ₂ O ₄): Synthesis, improvement and catalytic application in environment and energy field. Advances in Colloid and Interface Science, 2021, 294, 102486.	7.0	159
87	Conjugation strategies on functionalized iron oxide nanoparticles as a malaria vaccine delivery system. Revista Bionatura, 2021, 3, 2009-2016.	0.1	2
89	Effect of carbon-based and metal-based nanoparticles on enhanced oil recovery: A review. Journal of Molecular Liquids, 2021, 338, 116903.	2.3	13
90	Magnetite/graphene oxide/Prussian blue composite with robust effectiveness for electromagnetic interference shielding. Ceramics International, 2022, 48, 1690-1698.	2.3	9
91	Large Superparamagnetic FeCo Nanocubes for Magnetic Theranostics. ACS Applied Nano Materials, 2021, 4, 9382-9390.	2.4	3
92	Metal and Metal Oxide Nanoparticle as a Novel Antibiotic Carrier for the Direct Delivery of Antibiotics. International Journal of Molecular Sciences, 2021, 22, 9596.	1.8	43

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93	Influences of greenly synthesized iron oxide nanoparticles on the bioremediation of dairy effluent using selected microbial isolates. <i>International Journal of Environmental Science and Technology</i> , 2022, 19, 7019-7030.	1.8	13
94	The synthesis and characterization of targeted delivery curcumin using chitosan-magnetite-reduced graphene oxide as nano-carrier. <i>International Journal of Biological Macromolecules</i> , 2021, 186, 554-562.	3.6	68
95	Dielectric and electrical properties of synthesized PBGO/Fe ₃ O ₄ nanocomposite. <i>Ceramics International</i> , 2021, 47, 26224-26232.	2.3	19
96	Copper Immobilization on Fe ₃ O ₄ @Agar: An Efficient Superparamagnetic Nanocatalyst for Green Ullmann-Type Cross-Coupling Reaction of Primary and Secondary Amines with Aryl Iodide Derivatives. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 4648-4658.	1.9	7
97	Doping effect of Cu (II) in the adsorption of CrO ₄ ²⁻ by the Fe ₃ O ₄ (1 1 1) surface: A theoretical study. <i>Chemical Physics Letters</i> , 2021, 781, 138984.	1.2	6
98	Au@GO@g-C ₃ N ₄ and Fe ₂ O ₃ nanocomposite for efficient photocatalytic and electrochemical applications. <i>Surfaces and Interfaces</i> , 2021, 26, 101399.	1.5	16
99	Superparamagnetic nanoarchitectures: Multimodal functionalities and applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 538, 168300.	1.0	20
100	Synthesis of Fe ₃ O ₄ @copper(II) imidazolate nanoparticles: Catalytic activity of modified graphite screen printed electrode for the determination of levodopa in presence of melatonin. <i>Microchemical Journal</i> , 2021, 170, 106637.	2.3	18
101	Sustainable materials in the removal of pesticides from contaminated water: Perspective on macro to nanoscale cellulose. <i>Science of the Total Environment</i> , 2021, 797, 149129.	3.9	89
102	Synthesis of nanocomposite iron Oxide modified with Punica granatum peel extract and its application in azo dye degradation. <i>Inorganic Chemistry Communication</i> , 2021, 133, 108925.	1.8	6
103	Development and characterization of magnetic iron oxide nanoparticles using microwave for the combustion reaction ignition, as possible candidates for biomedical applications. <i>Powder Technology</i> , 2021, 394, 1026-1038.	2.1	15
104	Spinel ferrites nanoparticles: Synthesis methods and application in heterogeneous Fenton oxidation of organic pollutants – A review. <i>Applied Surface Science Advances</i> , 2021, 6, 100145.	2.9	101
105	The influence of a rotating magnetic field on the thermal effect in magnetic fluid. <i>International Journal of Thermal Sciences</i> , 2022, 171, 107258.	2.6	15
106	Green Synthesized Nanoparticles as a Promising Strategy for Controlling Microbial Biofilm. <i>Environmental and Microbial Biotechnology</i> , 2021, , 1-28.	0.4	0
107	Bio-inspired Synthesis of Nanomaterials. <i>Indian Institute of Metals Series</i> , 2021, , 589-622.	0.2	0
108	Functionalized Magnetic Nanoparticle-based Sensors for Point-of-care Applications: From the Preparation to Practical Applications. , 2021, , 454-488.		0
110	Synthesis and efficacy of norfloxacin loaded onto magnetic hydrogel nanocomposites. <i>RSC Advances</i> , 2021, 11, 30183-30194.	1.7	5
111	Extracellular and intracellular synthesis of gold and silver nanoparticles by living plants: a review. <i>Nanotechnology for Environmental Engineering</i> , 2021, 6, 1.	2.0	27

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112	Effects of ZnO nanoparticles on the antifungal performance of Fe ₃ O ₄ /ZnO nanocomposites prepared from natural sand. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2020, 11, 045004.	0.7	5
113	Preparation and Properties of Magnetic Iron Oxide Nanoparticles for Biomedical Applications: A Brief Review. <i>Journal of Islam in Asia</i> , 2020, 75, 10-18.	0.2	3
114	Synthesis Processing Condition Optimization of Citrate Stabilized Superparamagnetic Iron Oxide Nanoparticles using Direct Co-Precipitation Method. <i>Biomedical and Pharmacology Journal</i> , 2021, 14, 1533-1542.	0.2	8
115	Comparison of the Surface Properties of Hydrothermally Synthesised Fe ₃ O ₄ @C Nanocomposites at Variable Reaction Times. <i>Nanomaterials</i> , 2021, 11, 2742.	1.9	5
116	Synthesis of Magnetite Nanoparticles through a Lab-On-Chip Device. <i>Materials</i> , 2021, 14, 5906.	1.3	13
117	A Spin-Valve GMR Based Sensor with Magnetite@silver Core-Shell Nanoparticles as a Tag for Bovine Serum Albumin Detection. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 107002.	0.9	7
118	Hydroxyurea-loaded Fe ₃ O ₄ /SiO ₂ /chitosan-g-mPEG2000 nanoparticles; pH-dependent drug release and evaluation of cell cycle arrest and altering p53 and lincRNA-p21 genes expression. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2022, 395, 51-63.	1.4	3
119	Biomimetic synthesis of iron oxide nanoparticles using <i>Canthium coromandelicum</i> leaf extract and its antibacterial and catalytic degradation of Janus green. <i>Inorganic Chemistry Communication</i> , 2021, 133, 108977.	1.8	11
120	Green Synthesis of Metal and Metal Oxide Nanoparticles: Principles of Green Chemistry and Raw Materials. <i>Magnetochemistry</i> , 2021, 7, 145.	1.0	64
121	Preparation of Multilayered Core-Shell Fe ₃ O ₄ -SnO ₂ -C Nanoparticles via Polymeric/Silane Amino Functionalization. <i>Nanomaterials</i> , 2021, 11, 2877.	1.9	3
122	Bio-fabrication of multifunctional nano-ceria mediated from <i>Pouteria campechiana</i> for biomedical and sensing applications. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022, 424, 113631.	2.0	8
123	Topical Delivery of Drugs for Skin Disease Treatment: Prospects and Promises. <i>Nanotechnology in the Life Sciences</i> , 2020, , 197-212.	0.4	0
124	An experimental study on the use of iron oxide magnetic nanoparticles synthesized through watermelon rind extracts for industrial applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 545, 168740.	1.0	5
125	A review on green synthesis of iron (Fe) nanomaterials, its alloys and oxides. <i>Inorganic and Nano-Metal Chemistry</i> , 2022, 52, 20-36.	0.9	5
126	Novel monodisperse FePt nanocomposites for T2-weighted magnetic resonance imaging: biomedical theranostics applications. <i>Nanoscale Advances</i> , 2022, 4, 377-386.	2.2	7
127	Natural tannic acid (green tea) mediated synthesis of ethanol sensor based Fe ₃ O ₄ nanoparticles: Investigation of structural, morphological, optical properties and colloidal stability for gas sensor application. <i>Sensors and Actuators B: Chemical</i> , 2022, 352, 131071.	4.0	35
128	Magnetite-Silica Core/Shell Nanostructures: From Surface Functionalization towards Biomedical Applications—A Review. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11075.	1.3	20
129	Fe ₃ O ₄ Nanoparticles: Structures, Synthesis, Magnetic Properties, Surface Functionalization, and Emerging Applications. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11301.	1.3	159

#	ARTICLE	IF	CITATIONS
130	Solution combustion method to synthesize magnetic Fe ₃ O ₄ as photocatalytic of Congo red dye and antibacterial activity. IOP Conference Series: Earth and Environmental Science, 2021, 926, 012050.	0.2	0
131	Comparative Study between Magnetite Nanoparticles and Magnetite/Silver as a Core/Shell Nanostructure. Advances in Nanoparticles, 2021, 10, 115-122.	0.3	7
132	Alginate and Gum Arabic Coated Iron Oxide Nanoparticles as an Efficient Drug Carrier Agent. Asian Journal of Chemistry, 2021, 34, 133-139.	0.1	0
133	Green synthesis of chitosan-coated magnetic nanoparticles for drug delivery of oxaliplatin and irinotecan against colorectal cancer cells. Polymer Bulletin, 2022, 79, 10595-10613.	1.7	19
134	Phytogenic-mediated nanoparticles for the management of water pollution. , 2022, , 433-456.		0
135	In vitro and in vivo MRI imaging and photothermal therapeutic properties of Hematite (Î±-Fe ₂ O ₃) Nanorods. Journal of Materials Science: Materials in Medicine, 2022, 33, 10.	1.7	6
136	Effect of La Doping on NiCr ₂ O ₄ Properties and Catalytic Applications toward Decolorization of 4-Nitrophenol. ECS Journal of Solid State Science and Technology, 2022, 11, 026001.	0.9	2
137	Magnetism-Controllable Catalytic Activity of DNAzyme. Analytical Chemistry, 2022, 94, 2827-2834.	3.2	5
138	Efficient electrochemical detection of hazardous para-nitrophenol based on a carbon paste electrode modified with green synthesized gold/iron oxide nanocomposite. Chemical Papers, 0, , 1.	1.0	4
139	Nano-SiO ₂ inhibits the marine aquatic pathogen Vibrio parahaemolyticus. Aquaculture Reports, 2022, 23, 101015.	0.7	3
140	Investigation of antioxidant and antibacterial activity of iron oxide nanoparticles (IONPS) synthesized from the aqueous extract of Penicillium spp.. Sensors International, 2022, 3, 100164.	4.9	25
142	Hybrid organic or inorganic nanomaterials for healthcare diagnostics. , 2022, , 275-312.		1
143	Recent Developments in Metallic Nanomaterials for Cancer Therapy, Diagnosing and Imaging Applications. Pharmaceutics, 2022, 14, 435.	2.0	46
144	Green Synthesis of a Novel PtFe ₂ O ₄ @Ag Nanocomposite: Implications for Cytotoxicity, Gene Expression and Anti-Cancer Studies in Gastric Cancer Cell Line. Journal of Cluster Science, 0, , 1.	1.7	3
145	MHD Hybrid Nanofluid Mixed Convection Heat Transfer and Entropy Generation in a 3-D Triangular Porous Cavity with Zigzag Wall and Rotating Cylinder. Mathematics, 2022, 10, 769.	1.1	63
146	Biogenic Metal and Metal Oxides Nanoparticles as Anticancer Agent: A Review. IOP Conference Series: Materials Science and Engineering, 2022, 1225, 012043.	0.3	5
147	Formation, antimicrobial activity, and biomedical performance of plant-based nanoparticles: a review. Environmental Chemistry Letters, 2022, 20, 2531-2571.	8.3	39
148	Enhanced thermodynamic, pharmacokinetic and theranostic properties of polymeric micelles via hydrophobic core-clustering of superparamagnetic iron oxide nanoparticles. Biomaterials Research, 2022, 26, 8.	3.2	5

#	ARTICLE	IF	CITATIONS
149	Eco-friendly synthesis and characterizations of Ag/AgO/Ag ₂ O nanoparticles using leaf extracts of <i>Solanum elaeagnifolium</i> for antioxidant, anticancer, and DNA cleavage activities. <i>Chemical Papers</i> , 2022, 76, 4309-4321.	1.0	12
150	Bio-interactive nanoarchitectonics with two-dimensional materials and environments. <i>Science and Technology of Advanced Materials</i> , 2022, 23, 199-224.	2.8	37
151	Comparative Toxicity Assessment of Eco-Friendly Synthesized Superparamagnetic Iron Oxide Nanoparticles (SPIONs) in Plants and Aquatic Model Organisms. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 451.	0.8	7
152	Recycling of industrial wastes in the biosynthesis process of magnetite nanoparticles. <i>International Journal of Environmental Science and Technology</i> , 0, , 1.	1.8	0
153	Magnetite Nanoparticles: Synthesis and Applications in Optics and Nanophotonics. <i>Materials</i> , 2022, 15, 2601.	1.3	28
154	Iron oxide nanoparticles: Preparation methods, functions, adsorption and coagulation/flocculation in wastewater treatment. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2022, 17, 100661.	1.7	34
155	Implementation of hybrid nanofluid flowing in dimpled tube subjected to magnetic field. <i>International Communications in Heat and Mass Transfer</i> , 2022, 134, 106032.	2.9	25
156	Role of ferrite nanoparticles in hyperthermia applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 552, 169236.	1.0	29
157	Facile preparation of lotus seedpod-derived magnetic porous carbon for catalytic oxidation of Ponceau 4R. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 947, 012019.	0.2	6
158	Prospect of core-shell Fe ₃ O ₄ @Ag label integrated with spin-valve giant magnetoresistance for future point-of-care biosensor. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2021, 12, 045013.	0.7	9
159	Rare Earth Doped Iron Oxide Nanostructures for Cancer Theranostics: Magnetic Hyperthermia and Magnetic Resonance Imaging. <i>Small</i> , 2022, 18, e2104855.	5.2	39
161	Analysis of Radiation Shielding Characteristics of Magnetite/High Density Polyethylene Nanocomposite at Diagnostic Level Using the MCNPX, XCOM, XMuDat and Auto-Zeff Programs. <i>Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta)</i> , Tj ETQq1 1 0.784314TgBT /Overlock 10	0.1	4
162	Green synthesis and characterization of iron-oxide nanoparticles using <i>Moringa oleifera</i> : a potential protocol for use in low and middle income countries. <i>BMC Research Notes</i> , 2022, 15, 149.	0.6	36
163	Review on Plant Mediated Green Synthesis of Magnetite Nanoparticles for Pollution Abatement, Biomedical and Electronic Applications. <i>Asian Journal of Chemistry</i> , 2022, 34, 1047-1054.	0.1	4
164	Fabrication and characterization of La ₂ O ₃ @Fe ₂ O ₃ @Bi ₂ O ₃ nanopowders: Effects of La ₂ O ₃ addition on structure, optical, and radiation-absorption properties. <i>Ceramics International</i> , 2022, 48, 22943-22952.	2.3	10
165	Magnetite Nanoparticles Functionalized with Therapeutic Agents for Enhanced ENT Antimicrobial Properties. <i>Antibiotics</i> , 2022, 11, 623.	1.5	17
166	Electrical, dielectric, I-V and antimicrobial behavior of cobalt incapacitated Prussian blue graphene ferrites composite. <i>Inorganic Chemistry Communication</i> , 2022, 141, 109548.	1.8	9
167	Green synthesis of sorbus pohnuashanensis/aronia melanocarpa extracts functionalized ZnO nanoclusters and their applications. <i>Materials Research Express</i> , 2022, 9, 055005.	0.8	0

#	ARTICLE	IF	CITATIONS
168	Research advancement on magnetic iron oxide nanoparticles and their potential biomedical applications. <i>Minerva Biotechnology and Biomolecular Research</i> , 2022, 34, .	0.3	3
170	Microwave-Assisted Biosynthesized Gold Nanoparticles Using <i>Saussurea obvallata</i> : Biocompatibility and Antioxidant Activity Assessment. <i>BioNanoScience</i> , 0, , .	1.5	0
171	GREEN SYNTHESIS OF IRON-OXIDE NANOPARTICLES USING SCRAP IRON AS PRECURSOR FOR THE REMOVAL OF PB (II) FROM AQUEOUS MEDIUM. <i>Journal of Environmental Engineering and Landscape Management</i> , 2022, 30, 308-320.	0.4	4
172	An Experimental Study of ZrO ₂ -CeO ₂ Hybrid Nanofluid and Response Surface Methodology for the Prediction of Heat Transfer Performance: The New Correlations. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-11.	1.5	8
173	Biosynthesis of Iron Oxide Nanoparticles: Physico-Chemical Characterization and Their In Vitro Cytotoxicity on Healthy and Tumorigenic Cell Lines. <i>Nanomaterials</i> , 2022, 12, 2012.	1.9	16
174	All Shapes and Phases of Nanometer-Sized Iron Oxides Made from Natural Sources and Waste Material via Green Synthesis Approach: A Review. <i>Crystal Growth and Design</i> , 2022, 22, 4640-4660.	1.4	7
175	Building nanomaterials with microbial factories. , 2022, , 1-39.		1
176	Green Synthesis Magnetite (Fe ₃ O ₄) Nanoparticles From <i>Rhus coriaria</i> Extract: A Characteristic Comparison With a Conventional Chemical Method. <i>IEEE Transactions on Nanobioscience</i> , 2023, 22, 308-317.	2.2	8
178	Spinel ferrites materials for sulfate radical-based advanced oxidation process: A review. <i>Science of the Total Environment</i> , 2022, 847, 157405.	3.9	22
179	A novel atmospheric pressure hydrolysis without stirring and combustion calcination process for the fabrication of magnetic Fe ₃ O ₄ /±-Fe ₂ O ₃ heterostructure nanorods. <i>Materials Research Express</i> , 2022, 9, 075005.	0.8	3
180	Magnetic, Optical Properties of Magnetite Nanoparticle Synthesized in Different Parameters. <i>Journal of Nano Research</i> , 0, 74, 59-68.	0.8	1
181	Synthesis of dual-stimuli-responsive polyurethane shape memory nanocomposites incorporating isocyanate-functionalized Fe ₃ O ₄ nanoparticles. <i>Journal of Applied Polymer Science</i> , 0, , .	1.3	5
182	Detection of green-synthesized magnetite nanoparticles using spin-valve GMR-based sensor and their potential as magnetic labels. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 560, 169645.	1.0	18
183	Efficient activation of persulfate by C@Fe ₃ O ₄ in visible-light for tetracycline degradation. <i>Chemosphere</i> , 2022, 306, 135635.	4.2	19
184	Green Synthesis and Antibacterial Effect of Fe ₃ O ₄ /Cu Nanocomposite Using <i>Rosmarinus officinalis</i> L. (Rosemary) Aqueous Extracts. <i>Proceedings of the National Academy of Sciences India Section B - Biological Sciences</i> , 0, , .	0.4	1
185	Chitosan/Gamma-Alumina/Fe ₃ O ₄ @5-FU Nanostructures as Promising Nanocarriers: Physicochemical Characterization and Toxicity Activity. <i>Molecules</i> , 2022, 27, 5369.	1.7	43
186	Study and characterization rGO/Fe ₃ O ₄ in microstructure and - magnetic properties. <i>South African Journal of Chemical Engineering</i> , 2022, 42, 280-282.	1.2	1
189	Synthesis, potential of hydrogen activity, biological and chemical stability of zinc oxide nanoparticle preparation by sol-gel: A review. <i>Journal of Radiation Research and Applied Sciences</i> , 2022, 15, 238-254.	0.7	2

#	ARTICLE	IF	CITATIONS
190	Polymeric biomolecules based nanomaterials: Production strategies and pollutant mitigation as an emerging tool for environmental application. <i>Chemosphere</i> , 2022, 307, 136008.	4.2	24
191	Using carbonized hybrid FeNPs@ZIF-8 for the sustained release of doxorubicin hydrochloride. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 653, 129999.	2.3	6
192	Electrochemical sensor based on Fe ₃ O ₄ /ZIF-4 nanoparticles for determination of bisphenol A. <i>Journal of Food Measurement and Characterization</i> , 2023, 17, 1109-1118.	1.6	5
194	Solid phase extraction of arsenic on modified MWCNT/Fe ₃ O ₄ magnetic hybrid nanoparticles from copper ores samples with ETAAS determination. <i>Talanta Open</i> , 2022, 6, 100149.	1.7	4
195	Fe ₃ O ₄ -biphenyldicarboxaldehyde superparamagnetic-nanomaterial for the high-efficiency removal of 9-phenanthrol: experimental combined with DFT investigations. <i>Environmental Science: Nano</i> , 2022, 9, 3562-3580.	2.2	1
196	Effect of variation biomass on the properties of iron oxide NPs for hydrolysis of methylene blue dye. <i>Journal of Physics: Conference Series</i> , 2022, 2322, 012086.	0.3	0
197	Microfluidic Synthesis of -NH ₂ - and -COOH-Functionalized Magnetite Nanoparticles. <i>Nanomaterials</i> , 2022, 12, 3160.	1.9	9
198	Exploration of Site-Specific Drug Targeting—A Review on EPR-, Stimuli-, Chemical-, and Receptor-Based Approaches as Potential Drug Targeting Methods in Cancer Treatment. <i>Journal of Oncology</i> , 2022, 2022, 1-26.	0.6	0
200	Ferric oxide nanosheet-engineered Mg alloy for synergetic osteosarcoma photothermal/chemodynamic therapy. <i>Journal of Materials Science and Technology</i> , 2023, 138, 203-213.	5.6	4
201	Colloidal stability improvement of cobalt ferrite encapsulated in carboxymethylated cashew gum. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 656, 130307.	2.3	0
202	Iron Oxide-Au Magneto-Plasmonic Heterostructures: Advances in Their Eco-Friendly Synthesis. <i>Materials</i> , 2022, 15, 7036.	1.3	1
204	Synthesis and Characterization of Bioactive Magnetic Nanoparticles from the Perspective of Hyperthermia Applications. <i>Magnetochemistry</i> , 2022, 8, 145.	1.0	3
205	Current advancements in self-assembling nanocarriers-based siRNA delivery for cancer therapy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2023, 221, 113002.	2.5	3
206	I-V, dielectric, antibacterial, and robust EMI shielding effectiveness properties of graphene/Fe ₃ O ₄ . <i>Inorganic Chemistry Communication</i> , 2022, 146, 110039.	1.8	6
207	Metal ferrites-based nanocomposites and nano hybrids for photocatalytic water treatment and electrocatalytic water splitting. <i>Chemosphere</i> , 2023, 310, 136835.	4.2	23
208	Probiotic nanoparticles for food. , 2023, , 307-338.		0
209	Evaluating antioxidant activity of phenolic mediated Fe ₃ O ₄ nanoparticles using <i>Usnea Longissima</i> methanol extract. <i>Results in Chemistry</i> , 2022, 4, 100661.	0.9	1
210	Design and preparation of amino-functionalized core-shell magnetic nanoparticles for photocatalytic application and investigation of cytotoxicity effects. <i>Journal of Environmental Health Science & Engineering</i> , 2023, 21, 93-105.	1.4	7

#	ARTICLE	IF	CITATIONS
211	Synthesis of Biogenic Hematite Nanocubes as Recyclable Dark Fenton-like Catalysts at Neutral pH and Plant Growth Applications of Degraded Waste Water. ACS Omega, 2022, 7, 44698-44710.	1.6	1
212	Green synthesis of magnetite nanoparticles using calotropis procera leaf extract and evaluation of its antimicrobial activity. Nano Express, 2022, 3, 045004.	1.2	1
213	Electrical resistivity and compressive strength of cement mortar based on green magnetite nanoparticles and wastes from steel industry. Case Studies in Construction Materials, 2022, 17, e01712.	0.8	3
214	Efficient removal of sertraline hydrochloride from wastewater using banana peels functionalized: performance adsorption, mechanisms and applicability. Environmental Technology (United Kingdom), 2023, 44, 1-13.	1.2	3
215	Silica-coated magnetite functionalized with polyaniline for antibacterial and anticandidal treatment. International Journal of Polymeric Materials and Polymeric Biomaterials, 2024, 73, 345-353.	1.8	1
216	Selective Enrichment of Gram-positive Bacteria from Apple Juice by Magnetic Fe ₃ O ₄ Nanoparticles Modified with Phytic Acid. Food and Bioprocess Technology, 2023, 16, 1280-1291.	2.6	1
217	Fe ₃ O ₄ @SiO ₂ Core-Shell Nanoparticles: Synthesis, Characterization Prepared by Green Method for Iraqi Aloe Vera Extract. International Journal of Nanoscience, 2023, 22, .	0.4	1
218	Influence of phytochemicals with iron oxide nanoparticles for biomedical applications: a review. Polymer Bulletin, 2023, .	1.7	1
219	Synergistic effect of Fe ₃ O ₄ nanoparticles and Au nanolayer in enhancement of interfacial solar steam generation. Materials Research Bulletin, 2023, 162, 112178.	2.7	6
220	Biological applications of green bionanomaterials: diagnosis applications. , 2023, , 443-467.		0
221	Oxygen and hydrogen peroxide self-supplying magnetic nanoenzymes for cancer therapy through magneto-mechanical force, force-induced reactive oxygen species, chemodynamic effects, and cytotoxicity of Ca ²⁺ ions. Nano Research, 2023, 16, 7134-7147.	5.8	4
222	Bioinspired Graphene Oxide-Magnetite Nanocomposite Coatings as Protective Superhydrophobic Antifouling Surfaces. Langmuir, 2023, 39, 2333-2346.	1.6	13
223	Synthesis of Metallic Nanoparticles Based on Green Chemistry and Their Medical Biochemical Applications: Synthesis of Metallic Nanoparticles. Journal of Renewable Materials, 2023, 11, 2575-2591.	1.1	9
224	Facile one-pot rapid sonoelectrochemical synthesis of mesoporous magnetite nanospheres: A Chimie Douce approach. Materials Chemistry and Physics, 2023, 301, 127620.	2.0	5
225	New design of a commercial chip-based GMR sensor with magnetite nanoparticles for biosensing applications. Journal of Science: Advanced Materials and Devices, 2023, 8, 100556.	1.5	4
226	Establishment of a novel system for photothermal removal of ampicillin under near-infrared irradiation: Persulfate activation, mechanism, pathways and bio-toxicology. Journal of Colloid and Interface Science, 2023, 640, 472-486.	5.0	6
227	The State of the Art of Natural Polymer Functionalized Fe ₃ O ₄ Magnetic Nanoparticle Composites for Drug Delivery Applications: A Review. Gels, 2023, 9, 121.	2.1	9
228	Ultrasound-assisted synthesis of MIL-88(Fe) conjugated starch-Fe ₃ O ₄ nanocomposite: A safe antibacterial carrier for controlled release of tetracycline. International Journal of Biological Macromolecules, 2023, 234, 123665.	3.6	1

#	ARTICLE	IF	CITATIONS
229	Magnetite-Based Biosensors and Molecular Logic Gates: From Magnetite Synthesis to Application. <i>Biosensors</i> , 2023, 13, 304.	2.3	1
230	Cell-Penetrating Peptidic GRP78 Ligand-Conjugated Iron Oxide Magnetic Nanoparticles for Tumor-Targeted Doxorubicin Delivery and Imaging. <i>ACS Applied Bio Materials</i> , 2023, 6, 1019-1031.	2.3	7
231	Nanomaterials obtained from biowastes: Applications for cancer therapy. , 2023, , 469-482.		0
232	Sonoelectrochemical Nanoarchitectonics of Crystalline Mesoporous Magnetite @ Manganese Oxide Nanocomposite as an Alternate Anode Material for Energy-Storage Applications. <i>Crystals</i> , 2023, 13, 557.	1.0	6
233	High-Performance Detection of Exosomes Based on Synergistic Amplification of Amino-Functionalized Fe ₃ O ₄ Nanoparticles and Two-Dimensional MXene Nanosheets. <i>Sensors</i> , 2023, 23, 3508.	2.1	6
234	Processing and Physicochemical Properties of Magnetite Nanoparticles Coated with Curcuma longa L. Extract. <i>Materials</i> , 2023, 16, 3020.	1.3	2
235	Nano magnetic-based ELISA and nano magnetic-based latex agglutination test for diagnosis of experimental trichinellosis. <i>Journal of Parasitic Diseases</i> , 2023, 47, 400-409.	0.4	1
236	Functional magnetic nanomaterials with enhanced antimicrobial activity. , 2023, , 191-211.		0
237	Calculation and optimization methods of SPION concentration formation with different laser wavelengths in liquid. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
238	Advances in Medical Applications: The Quest of Green Nanomaterials. , 2023, , 1889-1909.		0
256	Implementation of agriculture waste for the synthesis of metal oxide nanoparticles: its management, future opportunities and challenges. <i>Journal of Material Cycles and Waste Management</i> , 2023, 25, 3144-3160.	1.6	1
260	Synthesis and characterisation of iron oxide nanoparticles using leaf extract of <i>Ficus religiosa</i> . <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
272	Magnetic Nanoparticle-Based Sensing Strategies for Clinical Analysis and Environmental Safety Assessment. , 2023, , 67-102.		0
288	Effect of alkaline concentration and temperature on Fe ₃ O ₄ synthesis using co-precipitation method. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
291	Phytochemical-embedded nanocomposites: an update on processes and their applications. , 2024, , 53-96.		0
296	Nanomedicines for the Treatment of Bacterial Diseases. <i>Learning Materials in Biosciences</i> , 2023, , 89-122.	0.2	0
297	Nanomaterial synthesis from the plant extract and tree part. , 2024, , 319-330.		0