

Zhengyan Wu

List of Publications by Year in descending order

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105
papers

3,185
citations

126708

33
h-index

182168

51
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105
all docs

105
docs citations

105
times ranked

3538
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of a pH-Responsively Controlled-Release Pesticide Using an Attapulгите-Based Hydrogel. ACS Sustainable Chemistry and Engineering, 2018, 6, 1192-1201.	3.2	131
2	Synthesis of a Multifunctional Graphene Oxide-Based Magnetic Nanocomposite for Efficient Removal of Cr(VI). Langmuir, 2017, 33, 7007-7014.	1.6	99
3	A pH-responsive platform combining chemodynamic therapy with limotherapy for simultaneous bioimaging and synergistic cancer therapy. Biomaterials, 2019, 216, 119254.	5.7	95
4	Fabrication of light-responsively controlled-release herbicide using a nanocomposite. Chemical Engineering Journal, 2018, 349, 101-110.	6.6	93
5	A pH-Responsive Yolk-Like NanoplatforM for Tumor Targeted Dual-Mode Magnetic Resonance Imaging and Chemotherapy. ACS Nano, 2017, 11, 7049-7059.	7.3	92
6	Adsorption of Polycyclic Aromatic Hydrocarbons (Fluoranthene and Anthracenemethanol) by Functional Graphene Oxide and Removal by pH and Temperature-Sensitive Coagulation. ACS Applied Materials & Interfaces, 2013, 5, 4783-4790.	4.0	90
7	Adsorption of methylene blue from aqueous solution onto multiporous palygorskite modified by ion beam bombardment: Effect of contact time, temperature, pH and ionic strength. Applied Clay Science, 2013, 83-84, 137-143.	2.6	86
8	Fabrication of a Temperature-Controlled-Release Herbicide Using a Nanocomposite. ACS Sustainable Chemistry and Engineering, 2017, 5, 4969-4975.	3.2	84
9	A biodegradable MnSiO ₃ @Fe ₃ O ₄ nanoplatforM for dual-mode magnetic resonance imaging guided combinatorial cancer therapy. Biomaterials, 2019, 194, 151-160.	5.7	83
10	Controlling Pesticide Loss through Nanonetworks. ACS Sustainable Chemistry and Engineering, 2014, 2, 918-924.	3.2	80
11	Fabrication of a High-Performance Fertilizer To Control the Loss of Water and Nutrient Using Micro/Nano Networks. ACS Sustainable Chemistry and Engineering, 2015, 3, 645-653.	3.2	79
12	Functionalized Fe ₃ O ₄ @C Nanospheres with Adjustable Structure for Efficient Hexavalent Chromium Removal. ACS Sustainable Chemistry and Engineering, 2017, 5, 11042-11050.	3.2	75
13	Fabrication of a controllable nanopesticide system with magnetic collectability. Chemical Engineering Journal, 2017, 328, 320-330.	6.6	75
14	Gadolinium-Doped Iron Oxide Nanoprobe as Multifunctional Bioimaging Agent and Drug Delivery System. Advanced Functional Materials, 2015, 25, 6101-6111.	7.8	66
15	Controlling Pesticide Loss by Natural Porous Micro/Nano Composites: Straw Ash-Based Biochar and Biosilica. ACS Applied Materials & Interfaces, 2013, 5, 9212-9216.	4.0	62
16	Kinetics, reaction pathways, and mechanism investigation for improved environmental remediation by OD/3D CdTe/Bi ₂ WO ₆ Z-scheme catalyst. Applied Catalysis B: Environmental, 2021, 285, 119877.	10.8	62
17	Hydroxylated Mesoporous Nanosilica Coated by Polyethylenimine Coupled with Gadolinium and Folic Acid: A Tumor-Targeted T ₁ Magnetic Resonance Contrast Agent and Drug Delivery System. ACS Applied Materials & Interfaces, 2015, 7, 14192-14200.	4.0	57
18	Sandwich-like Nanosystem for Simultaneous Removal of Cr(VI) and Cd(II) from Water and Soil. ACS Applied Materials & Interfaces, 2018, 10, 18316-18326.	4.0	57

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19	Manganese-deposited iron oxide promotes tumor-responsive ferroptosis that synergizes the apoptosis of cisplatin. <i>Theranostics</i> , 2021, 11, 5418-5429.	4.6	57
20	Efficient Synthesis of Starch-Regulated Porous Calcium Carbonate Microspheres as a Carrier for Slow-Release Herbicide. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3649-3658.	3.2	55
21	A potential Mg-enriched biochar fertilizer: Excellent slow-release performance and release mechanism of nutrients. <i>Science of the Total Environment</i> , 2021, 768, 144454.	3.9	54
22	Composite of Functional Mesoporous Silica and DNA: An Enzyme-Responsive Controlled Release Drug Carrier System. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 8042-8047.	4.0	52
23	Flocculation of harmful algal blooms by modified attapulgite and its safety evaluation. <i>Water Research</i> , 2011, 45, 2855-2862.	5.3	44
24	Improvement of Cr (VI) photoreduction under visible-light by g-C ₃ N ₄ modified by nano-network structured palygorskite. <i>Chemical Engineering Journal</i> , 2019, 358, 398-407.	6.6	44
25	Stimuli-responsive hydrogel as carrier for controlling the release and leaching behavior of hydrophilic pesticide. <i>Science of the Total Environment</i> , 2020, 722, 137811.	3.9	44
26	Remediation of Cr(VI)-Contaminated Acid Soil Using a Nanocomposite. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2246-2254.	3.2	41
27	Remediation of Cr(VI) contaminated soil using long-duration sodium thiosulfate supported by micro-“nano networks. <i>Journal of Hazardous Materials</i> , 2015, 294, 64-69.	6.5	39
28	Fabrication of pH-Controlled-Release Ferrous Foliar Fertilizer with High Adhesion Capacity Based on Nanobiomaterial. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6800-6808.	3.2	38
29	Oxygen-enriched Fe ₃ O ₄ /Gd ₂ O ₃ nanopeanuts for tumor-targeting MRI and ROS-triggered dual-modal cancer therapy through platinum (IV) prodrugs delivery. <i>Chemical Engineering Journal</i> , 2020, 388, 124269.	6.6	38
30	Infrared-Light-Responsive Controlled-Release Pesticide Using Hollow Carbon Microspheres@Polyethylene Glycol/β-Cyclodextrin Gel. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 6981-6988.	2.4	37
31	Immediate remediation of heavy metal (Cr(VI)) contaminated soil by high energy electron beam irradiation. <i>Journal of Hazardous Materials</i> , 2015, 285, 208-211.	6.5	36
32	Effective pH-Activated Theranostic Platform for Synchronous Magnetic Resonance Imaging Diagnosis and Chemotherapy. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31114-31123.	4.0	36
33	Near-Infrared Light-Responsively Controlled-Release Herbicide Using Biochar as a Photothermal Agent. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14924-14932.	3.2	36
34	Near infrared light-driven release of pesticide with magnetic collectability using gel-based nanocomposite. <i>Chemical Engineering Journal</i> , 2021, 411, 127881.	6.6	35
35	A unique technology to transform inorganic nanorods into nano-networks. <i>Nanotechnology</i> , 2009, 20, 255302.	1.3	34
36	A facile approach to fabricate self-cleaning paint. <i>Applied Clay Science</i> , 2016, 132-133, 290-295.	2.6	34

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37	Waste Carton-Derived Nanocomposites for Efficient Removal of Hexavalent Chromium. <i>Langmuir</i> , 2018, 34, 5955-5963.	1.6	34
38	Reduction of aqueous Crvi using nanoscale zero-valent iron dispersed by high energy electron beam irradiation. <i>Nanoscale</i> , 2013, 5, 9917.	2.8	33
39	Functional biochar fabricated from waste red mud and corn straw in China for acidic dye wastewater treatment. <i>Journal of Cleaner Production</i> , 2021, 320, 128887.	4.6	32
40	Micro-nanopores Fabricated by High-Energy Electron Beam Irradiation: Suitable Structure for Controlling Pesticide Loss. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 5215-5219.	2.4	31
41	Fabricating High-Performance T_2 -Weighted Contrast Agents via Adjusting Composition and Size of Nanomagnetic Iron Oxide. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7003-7011.	4.0	31
42	Fabrication of Fe ₃ O ₄ /ZIF-8 nanocomposite for simultaneous removal of copper and arsenic from water/soil/swine urine. <i>Journal of Environmental Management</i> , 2021, 290, 112626.	3.8	31
43	Promising Approach for Improving Adhesion Capacity of Foliar Nitrogen Fertilizer. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 499-506.	3.2	30
44	Degradation of herbicide (glyphosate) using sunlight-sensitive MnO ₂ /C catalyst immediately fabricated by high energy electron beam. <i>Chemical Engineering Journal</i> , 2016, 306, 693-703.	6.6	30
45	Nanostructure-enhanced water interaction to increase the dual-mode MR contrast performance of gadolinium-doped iron oxide nanoclusters. <i>Chemical Engineering Journal</i> , 2019, 360, 289-298.	6.6	30
46	CuO dot-decorated Cu@Gd ₂ O ₃ core-shell hierarchical structure for Cu(<i>scp</i>) self-supplying chemodynamic therapy in combination with MRI-guided photothermal synergistic therapy. <i>Materials Horizons</i> , 2021, 8, 1017-1028.	6.4	30
47	Oxygen Vacancy Defect-Induced Activity Enhancement of Gd Doping Magnetic Nanocluster for Oxygen Supplying Cancer Theranostics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36917-36927.	4.0	29
48	Detection of di(2-ethylhexyl)phthalate through graphene α -cyclodextrin composites by electrochemical impedance spectroscopy. <i>Analytical Methods</i> , 2014, 6, 1736.	1.3	27
49	Controlling the Hydrolysis and Loss of Nitrogen Fertilizer (Urea) by using a Nanocomposite Favors Plant Growth. <i>ChemSusChem</i> , 2017, 10, 2068-2079.	3.6	26
50	A polyethyleneimine-driven self-assembled nanoplatform for fluorescence and MR dual-mode imaging guided cancer chemotherapy. <i>Chemical Engineering Journal</i> , 2018, 350, 69-78.	6.6	26
51	Fabrication of reusable temperature-controlled-released fertilizer using a palygorskite-based magnetic nanocomposite. <i>Applied Clay Science</i> , 2018, 161, 194-202.	2.6	25
52	In situ degradation of antibiotic residues in medical intravenous infusion bottles using high energy electron beam irradiation. <i>Scientific Reports</i> , 2017, 7, 39928.	1.6	23
53	Electrochemical Detection of Pb(II) by Glassy Carbon Electrode Modified with Amine-Functionalized Magnetite Nanoparticles. <i>Analytical Letters</i> , 2013, 46, 912-922.	1.0	22
54	Harmful algae blooms removal from fresh water with modified vermiculite. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 340-346.	1.2	22

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55	A tailored nanosheet decorated with a metallized dendrimer for angiography and magnetic resonance imaging-guided combined chemotherapy. <i>Nanoscale</i> , 2018, 10, 488-498.	2.8	22
56	Electrical-Driven Release and Migration of Herbicide Using a Gel-Based Nanocomposite. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 1536-1545.	2.4	22
57	Picomolar thrombin detection by orchestration of triple signal amplification strategy with hierarchically porous Ti ₃ C ₂ T _x MXene electrode material-catalytic hairpin assembly reaction-metallic nanoprobe. <i>Biosensors and Bioelectronics</i> , 2022, 208, 114228.	5.3	20
58	Honeycomb-like magnetic cornstalk for Cr(VI) removal and ammonium release. <i>Bioresource Technology</i> , 2019, 291, 121856.	4.8	19
59	Inhibiting Sprouting and Decreasing $\hat{\pm}$ -Solanine Amount of Stored Potatoes Using Hydrophobic Nanosilica. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 10517-10525.	3.2	18
60	Immobilizing Arsenic and Copper Ions in Manure Using a Nanocomposite. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 8999-9005.	2.4	17
61	Preparation of an amino functionalized Fe ₃ O ₄ /Gd ₂ O ₃ network composite and application in electrochemical detection of Cu ²⁺ . <i>Analytical Methods</i> , 2016, 8, 303-310.	1.3	15
62	A polyethylenimine functionalized porous/hollow nanoworm as a drug delivery system and a bioimaging agent. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7820-7828.	1.3	14
63	Seasonal variation and gender pattern of phenolic and flavonoid contents in <i>Pistacia chinensis</i> Bunge inflorescences and leaves. <i>Journal of Plant Physiology</i> , 2016, 191, 36-44.	1.6	14
64	TiO ₂ /Biochar with Light-Switchable Wettability as a Herbicide Safener and Foliar Fertilizer Adhesive. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1121-1128.	3.2	14
65	A Multifunctional Magnetic Composite Material as a Drug Delivery System and a Magnetic Resonance Contrast Agent. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 976-984.	1.2	13
66	Promoting desert biocrust formation using aquatic cyanobacteria with the aid of MOF-based nanocomposite. <i>Science of the Total Environment</i> , 2020, 708, 134824.	3.9	13
67	Magnetic Relaxation Switch Detecting Boric Acid or Borate Ester through One-Pot Synthesized Poly(vinyl alcohol) Functionalized Nanomagnetic Iron Oxide. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 16837-16841.	4.0	12
68	Reducing the pollution risk of pesticide using nano networks induced by irradiation and hydrothermal treatment. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2015, 50, 901-907.	0.7	12
69	Functionalized nanocomposite for simultaneous removal of antibiotics and As(III) in swine urine aqueous solution and soil. <i>Environmental Science: Nano</i> , 2018, 5, 2978-2992.	2.2	12
70	Efficient photocatalysis of Cr(VI) and methylene blue by dispersive palygorskite-loaded zero-valent iron/carbon nitride. <i>Applied Clay Science</i> , 2020, 198, 105817.	2.6	12
71	Nanostructures for pH-sensitive Drug Delivery and Magnetic Resonance Contrast Enhancement Systems. <i>Current Medicinal Chemistry</i> , 2018, 25, 3036-3057.	1.2	12
72	Hydrophobic nano sponge for efficient removal of diesel fuel from water and soil. <i>Science of the Total Environment</i> , 2019, 688, 1124-1136.	3.9	11

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73	High Performance Bacteria Anchored by Nanoclay to Boost Straw Degradation. <i>Materials</i> , 2019, 12, 1148.	1.3	11
74	Simultaneously removal of Cr(VI) and Cd(II) from water using a flower-like primary battery nanosystem. <i>Science of the Total Environment</i> , 2021, 765, 142735.	3.9	11
75	Alternating Magnetic Field-Responsive Nanoplatforms for Controlled Imidacloprid Release and Sustainable Pest Control. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10491-10502.	3.2	11
76	A combination of super-resolution fluorescence and magnetic resonance imaging using a Mn(II) compound. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2914-2920.	3.0	10
77	Fabrication of magnetic-responsive controlled-release herbicide by a palygorskite-based nanocomposite. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 208, 112115.	2.5	10
78	Reduction of Cr(VI) by Urea-Dispersed Nanoscale Zero-Valent Iron. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 6103-6107.	0.9	9
79	Removal of anthracenemethanol from soil through a magnetic system assisted by ceramsite coated with nanoflower-structured carbon and preparation for its engineering application. <i>Chemical Engineering Journal</i> , 2017, 328, 748-758.	6.6	8
80	Inhibiting Desertification Using Aquatic Cyanobacteria Assisted by a Nanocomposite. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3477-3486.	3.2	8
81	Photocatalytic removal of hexavalent chromium by Fe doped g-C ₃ N ₄ loaded with dispersed diatomite modified by electron beam bombardment. <i>Journal of Cleaner Production</i> , 2021, 315, 128219.	4.6	8
82	Facile and quantitative electrochemical detection of yeast cell apoptosis. <i>Scientific Reports</i> , 2014, 4, 4373.	1.6	7
83	Promoting Potato Seed Sprouting Using an Amphiphilic Nanocomposite. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 9657-9666.	2.4	7
84	A nanoselenium-coating biomimetic cytomembrane nanoplatform for mitochondrial targeted chemotherapy- and chemodynamic therapy through manganese and doxorubicin codelivery. <i>Journal of Nanobiotechnology</i> , 2021, 19, 227.	4.2	7
85	Chitosan-based organic/inorganic composite engineered for UV light-controlled smart pH-responsive pesticide through in situ photo-induced generation of acid. <i>Pest Management Science</i> , 2022, 78, 2299-2308.	1.7	7
86	Phosphorylation triggered poly-nanoparticle assembly for naked-eye distinguishable T4 polynucleotide kinase detection. <i>RSC Advances</i> , 2014, 4, 56731-56735.	1.7	6
87	Functional terpyridyl iron complexes for in vivo photoacoustic imaging. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 2753-2758.	3.0	6
88	Atomically precise multi-domain GdxFe ₃ O ₄ nanoclusters with modulated contrast properties for T ₂ -weighted magnetic resonance imaging of early orthotopic cancer. <i>Chemical Engineering Journal</i> , 2022, 429, 132255.	6.6	6
89	Degradation of hexavalent chromium and methyl orange by the synergistic system of graphitic carbon nitride and electron beam irradiation. <i>Chemosphere</i> , 2022, 287, 132228.	4.2	6
90	Highly sensitive T ₁ -T ₂ dual-mode MRI probe based on ultra-small gadolinium oxide-decorated iron oxide nanocrystals. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 044104.	1.7	5

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91	A sodium hyposulfite fuel cell for efficient Cr(VI) removal. <i>Chemosphere</i> , 2022, 294, 133803.	4.2	5
92	CdTe Quantum Dot/Bi ₂ WO ₆ Nanosheet Photocatalysts with a Giant Built-In Electric Field for Enhanced Removal of Persistent Organic Pollutants. <i>ACS Applied Nano Materials</i> , 2022, 5, 5128-5139.	2.4	5
93	Inducible Bcl-2 gene RNA interference mediated by aptamer-integrated HDV ribozyme switch. <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 619-626.	0.6	4
94	Rapid remediation of Cd(II)-contaminated water using a magnetically collectable iron-based primary battery. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107191.	3.3	4
95	Probing the Migration of Free Radicals in Solid and Liquid Media via Cr(VI) Reduction by High-Energy Electron Beam Irradiation. <i>Scientific Reports</i> , 2018, 8, 15196.	1.6	3
96	Surface migration of Pb(II) from water and soil using an aerogel/graphite felt primary cell system. <i>Chemosphere</i> , 2022, 294, 133666.	4.2	3
97	A Biodegradable High-Efficiency Magnetic Nanoliposome Promotes Tumor Microenvironment-Responsive Multimodal Tumor Therapy Along with Switchable T ₂ Magnetic Resonance Imaging. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 24160-24173.	4.0	3
98	Improving the combustion efficiency of diesel fuel and lowering PM2.5 using palygorskite-based nanocomposite and removing Cd ²⁺ by the residue. <i>Applied Clay Science</i> , 2018, 162, 276-287.	2.6	2
99	Controlling Preharvest Sprouting of Wheat through Nanonetworks. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11050-11057.	3.2	2
100	Synergistic effect of cyanobacteria and nano-sand-stabilizer on biocrust formation and sand fixation. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104887.	3.3	2
101	Synthesis of Iron-Based Carbon Microspheres with Tobacco Waste Liquid and Waste Iron Residue for Cd(II) Removal from Water and Soil. <i>Langmuir</i> , 2022, 38, 5557-5567.	1.6	2
102	One-Step and Nondestructive Reduction of Cr(VI) in Pork by High-Energy Electron Beam Irradiation. <i>Journal of Food Science</i> , 2018, 83, 1173-1178.	1.5	1
103	Tobacco Waste Liquid-Based Organic Fertilizer Particle for Controlled-Release Fulvic Acid and Immobilization of Heavy Metals in Soil. <i>Nanomaterials</i> , 2022, 12, 2056.	1.9	1
104	Remediation of Cd-contaminated acid soil with shell powder-based nanocomposite. <i>Surfaces and Interfaces</i> , 2022, 32, 102117.	1.5	1
105	Degradation of nitrobenzene by trisynergetic attapulgite-supported nanoscale zero-valent iron biofilm. <i>Research on Chemical Intermediates</i> , 2018, 44, 6963-6977.	1.3	0