Nengwu Zhu

List of Publications by Year
in descending order

70	2,472	186265 28	206112 48
papers	citations	h-index	g-index

70	70	70	3005
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bioleaching of copper from waste printed circuit boards by bacterial consortium enriched from acid mine drainage. Journal of Hazardous Materials, 2010, 184, 812-818.	12.4	215
2	Nickel oxide and carbon nanotube composite (NiO/CNT) as a novel cathode non-precious metal catalyst in microbial fuel cells. Biosensors and Bioelectronics, 2015, 72, 332-339.	10.1	162
3	FeOOH-loaded MnO2 nano-composite: An efficient emergency material for thallium pollution incident. Journal of Environmental Management, 2017, 192, 31-38.	7.8	97
4	Biomass-derived heteroatoms-doped mesoporous carbon for efficient oxygen reduction in microbial fuel cells. Biosensors and Bioelectronics, 2017, 98, 350-356.	10.1	92
5	Batch interaction of emerging tetracycline contaminant with novel phosphoric acid activated corn straw porous carbon: Adsorption rate and nature of mechanism. Environmental Research, 2020, 181, 108899.	7.5	91
6	Bioreduction of Precious Metals by Microorganism: Efficient Gold@Nâ€Doped Carbon Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2016, 55, 8416-8420.	13.8	88
7	Amphoteric modified vermiculites as adsorbents for enhancing removal of organic pollutants: Bisphenol A and Tetrabromobisphenol A. Environmental Pollution, 2017, 228, 277-286.	7.5	79
8	Highly enhanced adsorption for the removal of Hg(II) from aqueous solution by Mercaptoethylamine/Mercaptopropyltrimethoxysilane functionalized vermiculites. Journal of Colloid and Interface Science, 2015, 445, 348-356.	9.4	75
9	Enhancing peroxymonosulfate activation of Fe-Al layered double hydroxide by dissolved organic matter: Performance and mechanism. Water Research, 2020, 185, 116246.	11.3	74
10	Biosynthesis of gold nanoparticles assisted by the intracellular protein extract of Pycnoporus sanguineus and its catalysis in degradation of 4-nitroaniline. Nanoscale Research Letters, 2015, 10, 147.	5.7	73
11	Simultaneous electricity production and antibiotics removal by microbial fuel cells. Journal of Environmental Management, 2018, 217, 565-572.	7.8	71
12	Fabrication and photocatalytic properties of a visible-light responsive nanohybrid based on self-assembly of carboxyl graphene and ZnAl layered double hydroxides. Journal of Materials Chemistry A, 2014, 2, 5534.	10.3	70
13	Efficient removal of cesium from aqueous solution with vermiculite of enhanced adsorption property through surface modification by ethylamine. Journal of Colloid and Interface Science, 2014, 428, 295-301.	9.4	66
14	Environmental application of MgMn-layered double oxide for simultaneous efficient removal of tetracycline and Cd pollution: Performance and mechanism. Journal of Environmental Management, 2019, 246, 164-173.	7.8	64
15	Synergistic deep removal of As(III) and Cd(II) by a calcined multifunctional MgZnFe-CO3 layered double hydroxide: Photooxidation, precipitation and adsorption. Chemosphere, 2019, 225, 115-125.	8.2	64
16	Ecotoxicity monitoring and bioindicator screening of oil-contaminated soil during bioremediation. Ecotoxicology and Environmental Safety, 2016, 124, 120-128.	6.0	55
17	Isolation of Acidithiobacillus ferrooxidans strain <scp>Z1</scp> and its mechanism of bioleaching copper from waste printed circuit boards. Journal of Chemical Technology and Biotechnology, 2015, 90, 714-721.	3.2	45
18	Bioreduction of Precious Metals by Microorganism: Efficient Gold@Nâ€Doped Carbon Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie, 2016, 128, 8556-8560.	2.0	44

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19	Enhanced degradation of phenol by Sphingomonas sp. GY2B with resistance towards suboptimal environment through adsorption on kaolinite. Chemosphere, 2016, 148, 388-394.	8.2	42
20	Cr(VI) reduction and Cr(III) immobilization by resting cells of Pseudomonas aeruginosa CCTCC AB93066: spectroscopic, microscopic, and mass balance analysis. Environmental Science and Pollution Research, 2017, 24, 5949-5963.	5.3	42
21	Leaching characteristics of heavy metals in tailings and their simultaneous immobilization with triethylenetetramine functioned montmorillonite (TETA-Mt) against simulated acid rain. Environmental Pollution, 2020, 266, 115236.	7.5	42
22	Mechanism insight into efficient peroxydisulfate activation by novel nano zero-valent iron anchored yCo3O4 (nZVI/yCo3O4) composites. Journal of Hazardous Materials, 2020, 400, 123157.	12.4	39
23	Bioreduction of hexavalent chromium on goethite in the presence of Pseudomonas aeruginosa. Environmental Pollution, 2020, 265, 114765.	7.5	39
24	Synthesis and characterization of Fullerene modified ZnAlTi-LDO in photo-degradation of Bisphenol A under simulated visible light irradiation. Environmental Pollution, 2017, 228, 234-244.	7.5	37
25	A novel strategy for harmlessness and reduction of copper smelting slags by alkali disaggregation of fayalite (Fe2SiO4) coupling with acid leaching. Journal of Hazardous Materials, 2021, 402, 123791.	12.4	37
26	Efficient degradation of sodium diclofenac via heterogeneous Fenton reaction boosted by Pd/Fe@Fe3O4 nanoparticles derived from bio-recovered palladium. Journal of Environmental Management, 2020, 260, 110072.	7.8	34
27	Promoting the photogeneration of hydrochar reactive oxygen species based on FeAl layered double hydroxide for diethyl phthalate degradation. Journal of Hazardous Materials, 2020, 388, 122120.	12.4	32
28	Effects of medical waste incineration fly ash on the promotion of heavy metal chlorination volatilization from incineration residues. Journal of Hazardous Materials, 2022, 425, 128037.	12.4	32
29	Bioleaching of copper from metal concentrates of waste printed circuit boards by a newly isolated Acidithiobacillus ferrooxidans strain Z1. Journal of Material Cycles and Waste Management, 2017, 19, 247-255.	3.0	31
30	Efficient peroxydisulfate activation with nZVI/CuO@BC nanocomposite derived from wastes for degradation of tetrabromobisphenol A in alkaline environment. Journal of Hazardous Materials, 2021, 417, 126029.	12.4	28
31	The regulatory mechanism of Chryseobacterium sp. resistance mediated by montmorillonite upon cadmium stress. Chemosphere, 2020, 240, 124851.	8.2	27
32	Synthesis and catalytic properties of La or Ce doped hydroxy-FeAl intercalated montmorillonite used as heterogeneous photo Fenton catalysts under sunlight irradiation. RSC Advances, 2014, 4, 6500.	3.6	25
33	Kinetics and mechanisms of phenolic compounds by Ferrate(VI) assisted with density functional theory. Journal of Hazardous Materials, 2021, 415, 125563.	12.4	24
34	Dry anaerobic digestion of ammoniated straw: Performance and microbial characteristics. Bioresource Technology, 2022, 351, 126952.	9.6	24
35	Efficient catalytic degradation of bisphenol A by novel Fe0- vermiculite composite in photo-Fenton system: Mechanism and effect of iron oxide shell. Chemosphere, 2018, 208, 335-342.	8.2	23
36	Enhanced photo-degradation of bisphenol a under simulated solar light irradiation by Znâ€“Ti mixed metal oxides loaded on graphene from aqueous media. RSC Advances, 2016, 6, 26495-26504.	3.6	22

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37	Efficient separation of aluminum foil from mixed-type spent lithium-ion power batteries. Journal of Environmental Management, 2021, 298, 113500.	7.8	22
38	Understanding the role of clay minerals in the chromium(VI) bioremoval by Pseudomonas aeruginosa CCTCC AB93066 under growth condition: microscopic, spectroscopic and kinetic analysis. World Journal of Microbiology and Biotechnology, 2015, 31, 1765-1779.	3.6	21
39	Synergetic effect of functionalized carbon nanotubes on ZnCrâ€“mixed metal oxides for enhanced solar light-driven photocatalytic performance. RSC Advances, 2016, 6, 37689-37700.	3.6	21
40	Biorecovery of gold as nanoparticles and its catalytic activities for p-nitrophenol degradation. Environmental Science and Pollution Research, 2016, 23, 7627-7638.	5.3	21
41	Adhesion of Sphingomonas sp. GY2B onto montmorillonite: A combination study by thermodynamics and the extended DLVO theory. Colloids and Surfaces B: Biointerfaces, 2020, 192, 111085.	5.0	21
42	Bioleaching of indium from waste LCD panels by Aspergillus niger: Method optimization and mechanism analysis. Science of the Total Environment, 2021, 790, 148151.	8.0	21
43	Bioelectricity generation by wetland plant-sediment microbial fuel cells (P-SMFC) and effects on the transformation and mobility of arsenic and heavy metals in sediment. Environmental Geochemistry and Health, 2019, 41, 2157-2168.	3.4	17
44	Three-Dimensional Multi-Doped Porous Carbon/Graphene Derived from Sewage Sludge with Template-Assisted Fe-pillared Montmorillonite for Enhanced Oxygen Reduction Reaction. Scientific Reports, 2017, 7, 4158.	3.3	16
45	Study on the adsorption of DNA on the layered double hydroxides (LDHs). Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 121, 387-393.	3.9	15
46	The heteroaggregation and deposition behavior of nanoplastics on Al2O3 in aquatic environments. Journal of Hazardous Materials, 2022, 435, 128964.	12.4	15
47	Successful intercalation of DNA into CTAB-modified clay minerals for gene protection. Journal of Materials Science, 2014, 49, 7273-7281.	3.7	12
48	Immobilization of Acidithiobacillus ferrooxidans on Cotton Gauze for the Bioleaching of Waste Printed Circuit Boards. Applied Biochemistry and Biotechnology, 2015, 177, 675-688.	2.9	12
49	Enhancing the adsorption behavior and mechanism of Sr(<scp>ii</scp>) by functionalized montmorillonite with different 3-aminopropyltriethoxysilane (APTES) ratios. RSC Advances, 2016, 6, 83288-83295.	3.6	12
50	Preparation and characterization of ZnTiO3â€“TiO2/pillared montmorillonite composite catalyst for enhanced photocatalytic activity. Research on Chemical Intermediates, 2016, 42, 5253-5268.	2.7	12
51	Layer-by-layer assembly surface modified microbial biomass for enhancing biorecovery of secondary gold. Waste Management, 2017, 60, 552-560.	7.4	11
52	Induced fluorescent enhancement of protein-directed synthesized gold nanoclusters for selective and sensitive detection of flame retardants. Science of the Total Environment, 2020, 713, 136488.	8.0	11
53	Efficient recovery of rare earth elements from discarded NdFeB magnets by mechanical activation coupled with acid leaching. Environmental Science and Pollution Research, 2022, 29, 25532-25543.	5.3	11
54	Molecular Phylogenetic Diversity and Spatial Distribution of Bacterial Communities in Cooling Stage during Swine Manure Composting. Asian-Australasian Journal of Animal Sciences, 2015, 28, 888-895.	2.4	10

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55	N2O emission in short-cut simultaneous nitrification and denitrification process: dynamic emission characteristics and succession of ammonia-oxidizing bacteria. Water Science and Technology, 2014, 69, 2541-2547.	2.5	9
56	Rapid and efficient reduction of chromate by novel Pd/Fe@biomass derived from Enterococcus faecalis. Environmental Research, 2022, 204, 112005.	7.5	9
57	Insights into photocatalytic degradation of phthalate esters over MSnO3 perovskites (M = Mg, Ca): Experiments and density functional theory. Journal of Environmental Management, 2022, 307, 114511.	7.8	9
58	Sorption of Cd2+ on Bone Chars with or without Hydrogen Peroxide Treatment under Various Pyrolysis Temperatures: Comparison of Mechanisms and Performance. Processes, 2022, 10, 618.	2.8	9
59	Simultaneous heavy metals removal and municipal sewage sludge dewaterability improvement in bioleaching processes by various inoculums. World Journal of Microbiology and Biotechnology, 2015, 31, 1719-1728.	3.6	8
60	Evaluation of the physiochemical properties and catalytic performance of mixed metal oxides-carbon nanotubes nanohybrids containing carbon nanotubes with different diameters. Applied Clay Science, 2017, 135, 95-102.	5.2	7
61	Sorption of Pyrene by Clay Minerals Coated with Dissolved Organic Matter (DOM) from Landfill Leachate. Journal of Chemistry, 2015, 2015, 1-10.	1.9	6
62	CoMn2O4-supported functionalized carbon nanotube: efficient catalyst for oxygen reduction in microbial fuel cells. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	5
63	Adsorption of lead and antimony in the presence and absence of EDTA by a new vermiculite product with potential recyclability. Environmental Science and Pollution Research, 2021, 28, 49112-49124.	5.3	5
64	Spatial Heterogeneity of Bacteria: Evidence from Hot Composts by Culture-independent Analysis. Asian-Australasian Journal of Animal Sciences, 2012, 25, 1045-1054.	2.4	4
65	Impacts of ammonium ion on triclinic birnessites towards the transformation of As(III). Environmental Pollution, 2022, 298, 118815.	7.5	4
66	Immobilization of Acidithiobacillus ferrooxidans on cotton gauze for biological oxidation of ferrous ions in a batch bioreactor. Biotechnology and Applied Biochemistry, 2017, 64, 727-734.	3.1	3
67	Sorptionâ€“reduction coupled gold recovery process boosted by Pycnoporus sanguineus biomass: Uptake pattern and performance enhancement via biomass surface modification. Biotechnology Progress, 2017, 33, 1314-1322.	2.6	3
68	Intensification of sorptionâ€“reduction coupled gold biorecovery process through microbial surface modification: effect on gold sorption and reduction. World Journal of Microbiology and Biotechnology, 2020, 36, 38.	3.6	2
69	Effects of Extracellular Polymeric Substances and Specific Compositions on Enhancement of Copper Bioleaching Efficiency from Waste Printed Circuit Boards. Sustainability, 2022, 14, 2503.	3.2	2
70	Highâ€efficiency Nitric Acidâ€PPy/AQDS Coupling Treated Bioanodes Based Microbial Fuel Cell. Electroanalysis, 2017, 29, 2036-2043.	2.9	1