

# Binbin Huang

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

4,379  
citations

147566

31  
h-index

143772

57  
g-index

60  
all docs

60  
docs citations

60  
times ranked

5918  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of humic/fulvic acid on the removal of heavy metals from aqueous solutions using nanomaterials: A review. <i>Science of the Total Environment</i> , 2014, 468-469, 1014-1027.	3.9	605
2	Chlorinated volatile organic compounds (Cl-VOCs) in environment " sources, potential human health impacts, and current remediation technologies. <i>Environment International</i> , 2014, 71, 118-138.	4.8	586
3	Biochar for environmental management: Mitigating greenhouse gas emissions, contaminant treatment, and potential negative impacts. <i>Chemical Engineering Journal</i> , 2019, 373, 902-922.	6.6	256
4	Facile construction of novel direct solid-state Z-scheme AgI/BiOBr photocatalysts for highly effective removal of ciprofloxacin under visible light exposure: Mineralization efficiency and mechanisms. <i>Journal of Colloid and Interface Science</i> , 2018, 522, 82-94.	5.0	207
5	Modulation of Bi <sub>2</sub> MoO <sub>6</sub> -Based Materials for Photocatalytic Water Splitting and Environmental Application: a Critical Review. <i>Small</i> , 2019, 15, e1901008.	5.2	179
6	Phase transformation of crystalline iron oxides and their adsorption abilities for Pb and Cd. <i>Chemical Engineering Journal</i> , 2016, 284, 247-259.	6.6	155
7	pH-dependent degradation of p-nitrophenol by sulfidated nanoscale zerovalent iron under aerobic or anoxic conditions. <i>Journal of Hazardous Materials</i> , 2016, 320, 581-590.	6.5	147
8	Catalytic reduction+adsorption for removal of p-nitrophenol and its conversion p-aminophenol from water by gold nanoparticles supported on oxidized mesoporous carbon. <i>Journal of Colloid and Interface Science</i> , 2016, 469, 78-85.	5.0	128
9	Seed-mediated growth of MOF-encapsulated Pd@Ag core-shell nanoparticles: toward advanced room temperature nanocatalysts. <i>Chemical Science</i> , 2016, 7, 228-233.	3.7	128
10	Polyaniline@magnetic chitosan nanomaterials for highly efficient simultaneous adsorption and in-situ chemical reduction of hexavalent chromium: Removal efficacy and mechanisms. <i>Science of the Total Environment</i> , 2020, 733, 139316.	3.9	125
11	State-of-the-Art Advances and Challenges of Iron-Based Metal Organic Frameworks from Attractive Features, Synthesis to Multifunctional Applications. <i>Small</i> , 2019, 15, e1803088.	5.2	111
12	Pd/Fe <sub>3</sub> O <sub>4</sub> nanocatalysts for highly effective and simultaneous removal of humic acids and Cr(VI) by electro-Fenton with H <sub>2</sub> O <sub>2</sub> in situ electro-generated on the catalyst surface. <i>Journal of Catalysis</i> , 2017, 352, 337-350.	3.1	101
13	Rational design of hollow N/Co-doped carbon spheres from bimetal-ZIFs for high-efficiency electrocatalysis. <i>Chemical Engineering Journal</i> , 2017, 330, 736-745.	6.6	97
14	Modified stannous sulfide nanoparticles with metal-organic framework: Toward efficient and enhanced photocatalytic reduction of chromium (VI) under visible light. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 481-492.	5.0	89
15	Electrocatalytic properties of transition metals toward reductive dechlorination of polychloroethanes. <i>Electrochimica Acta</i> , 2012, 70, 50-61.	2.6	88
16	Ternary Z-scheme heterojunction of Bi <sub>2</sub> WO <sub>6</sub> with reduced graphene oxide (rGO) and meso-tetra (4-carboxyphenyl) porphyrin (TCPP) for enhanced visible-light photocatalysis. <i>Journal of Colloid and Interface Science</i> , 2019, 540, 115-125.	5.0	88
17	Electrochemical reductive dechlorination of chlorinated volatile organic compounds (Cl-VOCs): Effects of molecular structure on the dehalogenation reactivity and mechanisms. <i>Chemical Engineering Journal</i> , 2019, 358, 1054-1064.	6.6	88
18	Complementary effects of torrefaction and co-pelletization: Energy consumption and characteristics of pellets. <i>Bioresource Technology</i> , 2015, 185, 254-262.	4.8	84

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19	Difunctional chitosan-stabilized Fe/Cu bimetallic nanoparticles for removal of hexavalent chromium wastewater. <i>Science of the Total Environment</i> , 2018, 644, 1181-1189.	3.9	76
20	Photocatalysis: Modulation of Bi <sub>2</sub> MoO <sub>6</sub> -Based Materials for Photocatalytic Water Splitting and Environmental Application: a Critical Review ( <i>Small</i> 23/2019). <i>Small</i> , 2019, 15, 1970122.	5.2	70
21	Electrocatalytic dechlorination of volatile organic compounds at a copper cathode. Part I: Polychloromethanes. <i>Applied Catalysis B: Environmental</i> , 2012, 126, 347-354.	10.8	61
22	One pot synthesis of palladium-cobalt nanoparticles over carbon nanotubes as a sensitive non-enzymatic sensor for glucose and hydrogen peroxide detection. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 1016-1025.	4.0	56
23	Electrocatalytic dechlorination of volatile organic compounds at copper cathode. Part II: Polychloroethanes. <i>Applied Catalysis B: Environmental</i> , 2012, 126, 355-362.	10.8	53
24	Effective catalytic hydrodechlorination of o-, p- and m-chloronitrobenzene over Ni/Fe nanoparticles: Effects of experimental parameter and molecule structure on the reduction kinetics and mechanisms. <i>Chemical Engineering Journal</i> , 2016, 306, 607-618.	6.6	53
25	Modified crystal structure and improved photocatalytic activity of MIL-53 via inorganic acid modulator. <i>Applied Catalysis B: Environmental</i> , 2019, 255, 117746.	10.8	46
26	Catalytic properties of transition metals modified nanoscale zero-valent iron for simultaneous removal of 4-chlorophenol and Cr(VI): Efficacy, descriptor and reductive mechanisms. <i>Journal of Hazardous Materials</i> , 2021, 403, 123827.	6.5	44
27	A proactive task dispatching method based on future bottleneck prediction for the smart factory. <i>International Journal of Computer Integrated Manufacturing</i> , 2019, 32, 278-293.	2.9	42
28	Porous carbon supported Fe-N-C composite as an efficient electrocatalyst for oxygen reduction reaction in alkaline and acidic media. <i>Applied Surface Science</i> , 2017, 411, 487-493.	3.1	40
29	Insights into Electroreductive Dehalogenation Mechanisms of Chlorinated Environmental Pollutants. <i>ChemElectroChem</i> , 2020, 7, 1825-1837.	1.7	39
30	Sensitive determination of capsaicin on Ag/Ag <sub>2</sub> O nanoparticles/reduced graphene oxide modified screen-printed electrode. <i>Journal of Electroanalytical Chemistry</i> , 2016, 776, 93-100.	1.9	34
31	Electrochemical-driven carbocatalysis as highly efficient advanced oxidation processes for simultaneous removal of humic acid and Cr(VI). <i>Chemical Engineering Journal</i> , 2020, 396, 125156.	6.6	33
32	Highly selective electrochemical hydrogenation of acetylene to ethylene at Ag and Cu cathodes. <i>Electrochemistry Communications</i> , 2013, 34, 90-93.	2.3	30
33	Paragenesis of Palladium-Cobalt Nanoparticle in Nitrogen-Rich Carbon Nanotubes as a Bifunctional Electrocatalyst for Hydrogen Evolution Reaction and Oxygen Reduction Reaction. <i>Chemistry - A European Journal</i> , 2017, 23, 7710-7718.	1.7	29
34	A framework for shopfloor material delivery based on real-time manufacturing big data. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 2019, 10, 1093-1108.	3.3	29
35	A sensitive and selective amperometric hydrazine sensor based on palladium nanoparticles loaded on cobalt-wrapped nitrogen-doped carbon nanotubes. <i>Journal of Electroanalytical Chemistry</i> , 2017, 801, 215-223.	1.9	28
36	2,4,6-Trichlorophenol-promoted catalytic wet oxidation of humic substances and stabilized landfill leachate. <i>Chemical Engineering Journal</i> , 2014, 247, 216-222.	6.6	27

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37	Electrochemical reduction of p-chloronitrobenzene (p-CNB) at silver cathode in dimethylformamide. <i>Electrochimica Acta</i> , 2019, 296, 980-988.	2.6	26
38	Electrochemical-driven nanoparticulate catalysis for highly efficient dechlorination of chlorinated environmental pollutant. <i>Journal of Catalysis</i> , 2021, 395, 362-374.	3.1	26
39	Determination of inequable fate and toxicity of Ag nanoparticles in a <i>Phanerochaete chrysosporium</i> biofilm system through different sulfide sources. <i>Environmental Science: Nano</i> , 2016, 3, 1027-1035.	2.2	25
40	<i>Phanerochaete chrysosporium</i> inoculation shapes the indigenous fungal communities during agricultural waste composting. <i>Biodegradation</i> , 2014, 25, 669-680.	1.5	22
41	Uncovering the intrinsic relationship of electrocatalysis and molecular electrochemistry for dissociative electron transfer to polychloroethanes at silver cathode. <i>Electrochimica Acta</i> , 2017, 231, 590-600.	2.6	22
42	One-step electrochemical deposition of Schiff base cobalt complex as effective water oxidation catalyst. <i>Applied Surface Science</i> , 2017, 396, 121-128.	3.1	21
43	Ultrafine Pd nanoparticles@g-C <sub>3</sub> N <sub>4</sub> for highly efficient dehalogenation of chlorinated environmental pollutant: Structure, efficacy and mechanisms. <i>Science of the Total Environment</i> , 2021, 775, 145178.	3.9	21
44	Linear free energy relationships of electrochemical and thermodynamic parameters for the electrochemical reductive dechlorination of chlorinated volatile organic compounds (Cl-VOCs). <i>Electrochimica Acta</i> , 2016, 208, 195-201.	2.6	20
45	Neuron-inspired design of hierarchically porous carbon networks embedded with single-iron sites for efficient oxygen reduction. <i>Science China Chemistry</i> , 2022, 65, 1445-1452.	4.2	17
46	A trinuclear copper(I) complex modified Au electrode based on a nonelectrocatalytic mechanism as hydrogen peroxide sensor. <i>Journal of Electroanalytical Chemistry</i> , 2015, 759, 194-200.	1.9	15
47	Highly efficient and selective catalytic hydrogenation of acetylene in N,N-dimethylformamide at room temperature. <i>Journal of Catalysis</i> , 2016, 339, 14-20.	3.1	15
48	Iron-Based Bimetallic Nanocatalysts for Highly Selective Hydrogenation of Acetylene in N,N-Dimethylformamide at Room Temperature. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1668-1674.	3.2	14
49	Electrocatalytic activation of organic chlorides via direct and indirect electron transfer using atomic vacancy control of palladium-based catalyst. <i>Cell Reports Physical Science</i> , 2022, 3, 100713.	2.8	14
50	Polypyrrole supported Pd/Fe bimetallic nanoparticles with enhanced catalytic activity for simultaneous removal of 4-chlorophenol and Cr(VI). <i>Science of the Total Environment</i> , 2022, 831, 154754.	3.9	13
51	Conductive-polymer-supported palladium-iron bimetallic nanocatalyst for simultaneous 4-chlorophenol and Cr(VI) removal: Enhanced interfacial electron transfer and mechanism. <i>Journal of Hazardous Materials</i> , 2022, 424, 127748.	6.5	12
52	A feasible strategy for promoting activated sludge hydrolysis by using ironporphyrin modified Fe <sub>3</sub> O <sub>4</sub> nanoparticles as an efficient biomimic catalyst. <i>Chemical Engineering Journal</i> , 2015, 280, 248-255.	6.6	11
53	Surfactant-directed Pd nanoparticle assemblies as efficient nanoreactors for water remediation. <i>EcoMat</i> , 2020, 2, e12046.	6.8	11
54	Electric-Field-Driven Nanoparticles Produce Dual-Functional Bipolar Electrodes and Nanoelectrolytic Cells for Water Remediation. <i>Cell Reports Physical Science</i> , 2021, 2, 100299.	2.8	10

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55	Mesoporous ferrihydrite-supported Pd nanoparticles for enhanced catalytic dehalogenation of chlorinated environmental pollutant. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2907-2920.	5.0	6
56	An Approach to Synthesize Schiff Base Cobalt Complex with Different Shape by Electrochemical Deposition. <i>Journal of the Electrochemical Society</i> , 2016, 163, G26-G32.	1.3	4
57	Reversible Self-Assembly/Regulation of pH-Responsive Poly(ester-palladium) to Create New Catalytic Nanoreactors for Efficient Reduction of Nitrophenol. <i>ACS Applied Nano Materials</i> , 2021, 4, 6995-7006.	2.4	1
58	Pd/Fe <sub>3</sub> O <sub>4</sub> Nanocatalysts for Highly Effective and Simultaneous Removal of Humic Acids and Cr(VI) By Electro-Fenton with H <sub>2</sub> O <sub>2</sub> in-Situ Electro-Generated on the Catalyst Surface. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	1
59	Paragenesis of Palladium-Cobalt Nanoparticle in Nitrogen-Rich Carbon Nanotubes as a Bifunctional Electrocatalyst for Hydrogen-Evolution Reaction and Oxygen-Reduction Reaction. <i>Chemistry - A European Journal</i> , 2017, 23, 7625-7625.	1.7	0