

# Zhaohui Wang

## List of Publications by Year in descending order

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110  
papers

10,766  
citations

53751

45  
h-index

30894

102  
g-index

112  
all docs

112  
docs citations

112  
times ranked

10126  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorptive removal of PPCPs from aqueous solution using carbon-based composites: A review. Chinese Chemical Letters, 2022, 33, 3585-3593.	4.8	53
2	Photocatalytic degradation of tetracycline antibiotic by a novel Bi <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> /Bi <sub>2</sub> MoO <sub>6</sub> S-scheme heterojunction: Performance, mechanism insight and toxicity assessment. Chemical Engineering Journal, 2022, 429, 132519.	6.6	279
3	Synergistic effects of hybrid advanced oxidation processes (AOPs) based on hydrodynamic cavitation phenomenon " A review. Chemical Engineering Journal, 2022, 432, 134191.	6.6	117
4	Role of halide ions on organic pollutants degradation by peroxygens-based advanced oxidation processes: A critical review. Chemical Engineering Journal, 2022, 433, 134546.	6.6	28
5	EPR Evidence for Mechanistic Diversity of Cu(II)/Peroxygen Oxidation Systems by Tracing the Origin of DMPO Spin Adducts. Environmental Science & Technology, 2022, 56, 8796-8806.	4.6	52
6	Spent rather than pristine LiFePO <sub>4</sub> cathode materials can catalytically activate sulfite for organic pollutants decontamination. Chemical Engineering Journal, 2022, 446, 137123.	6.6	3
7	Spent LiFePO <sub>4</sub> : An old but vigorous peroxymonosulfate activator for degradation of organic pollutants in water. Environmental Research, 2022, 214, 113780.	3.7	6
8	Performance of UV/acetylacetone process for saline dye wastewater treatment: Kinetics and mechanism. Journal of Hazardous Materials, 2021, 406, 124774.	6.5	17
9	Uncertainty and misinterpretation over identification, quantification and transformation of reactive species generated in catalytic oxidation processes: A review. Journal of Hazardous Materials, 2021, 408, 124436.	6.5	297
10	Non-radical reactions in persulfate-based homogeneous degradation processes: A review. Chemical Engineering Journal, 2021, 421, 127818.	6.6	103
11	Photochemical origin of reactive radicals and halogenated organic substances in natural waters: A review. Journal of Hazardous Materials, 2021, 401, 123884.	6.5	37
12	Resistance of alkyl chloride on chloramphenicol to oxidative degradation by sulfate radicals: Kinetics and mechanism. Chemical Engineering Journal, 2021, 415, 129041.	6.6	21
13	Insights into paracetamol degradation in aqueous solutions by ultrasound-assisted heterogeneous electro-Fenton process: Key operating parameters, mineralization and toxicity assessment. Separation and Purification Technology, 2021, 266, 118533.	3.9	113
14	Current analytical methods for the determination of persulfate in aqueous solutions: A historical review. Chemical Engineering Journal, 2021, 416, 129143.	6.6	27
15	Abiotic oxidation of arsenite in natural and engineered systems: Mechanisms and related controversies over the last two decades (1999"2020). Journal of Hazardous Materials, 2021, 414, 125488.	6.5	22
16	Effects of exogenic chloride on oxidative degradation of chlorinated azo dye by UV-activated peroxydisulfate. Chinese Chemical Letters, 2021, 32, 2544-2550.	4.8	18
17	Enabling simultaneous redox transformation of toxic chromium(VI) and arsenic(III) in aqueous media" A review. Journal of Hazardous Materials, 2021, 417, 126041.	6.5	34
18	Resolving the kinetic and intrinsic constraints of heat-activated peroxydisulfate oxidation of iopromide in aqueous solution. Journal of Hazardous Materials, 2020, 384, 121281.	6.5	3

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19	Transformation of endogenic and exogenic Cl/Br in peroxymonosulfate-based processes: The importance of position of Cl/Br attached to the phenolic ring. <i>Chemical Engineering Journal</i> , 2020, 381, 122634.	6.6	26
20	3D mesoporous $\gamma$ -Co(OH) <sub>2</sub> nanosheets electrodeposited on nickel foam: A new generation of macroscopic cobalt-based hybrid for peroxymonosulfate activation. <i>Chemical Engineering Journal</i> , 2020, 380, 122447.	6.6	127
21	Synergistic effect of TiO <sub>2</sub> photocatalytic advanced oxidation processes in the treatment of refinery effluents. <i>Chemical Engineering Journal</i> , 2020, 391, 123488.	6.6	117
22	Is addition of reductive metals (Mo, W) a panacea for accelerating transition metals-mediated peroxymonosulfate activation?. <i>Journal of Hazardous Materials</i> , 2020, 386, 121877.	6.5	44
23	Pivotal effects of external Fe <sup>2+</sup> on remediation of arsenite by zero-valent iron/persulfate: Efficiencies and mechanism. <i>Environmental Research</i> , 2020, 189, 109922.	3.7	3
24	Efficient degradation of industrial pollutants with sulfur (IV) mediated by LiCoO <sub>2</sub> cathode powders of spent lithium ion batteries: A "treating waste with waste" strategy. <i>Journal of Hazardous Materials</i> , 2020, 399, 123090.	6.5	19
25	Hierarchical MnO <sub>2</sub> nanoflowers blooming on 3D nickel foam: A novel micro-macro catalyst for peroxymonosulfate activation. <i>Journal of Colloid and Interface Science</i> , 2020, 571, 142-154.	5.0	94
26	A Bimetallic Fe-Mn Oxide-Activated Oxone for In Situ Chemical Oxidation (ISCO) of Trichloroethylene in Groundwater: Efficiency, Sustained Activity, and Mechanism Investigation. <i>Environmental Science &amp; Technology</i> , 2020, 54, 3714-3724.	4.6	72
27	In situ nitrogen functionalization of biochar via one-pot synthesis for catalytic peroxymonosulfate activation: Characteristics and performance studies. <i>Separation and Purification Technology</i> , 2020, 241, 116702.	3.9	81
28	Accelerated oxidation of 2,4,6-trichlorophenol in Cu(II)/H <sub>2</sub> O <sub>2</sub> /Cl <sup>-</sup> system: A unique "halotolerant" Fenton-like process?. <i>Environment International</i> , 2019, 132, 105128.	4.8	22
29	In situ construction of WO <sub>3</sub> nanoparticles decorated Bi <sub>2</sub> MoO <sub>6</sub> microspheres for boosting photocatalytic degradation of refractory pollutants. <i>Journal of Colloid and Interface Science</i> , 2019, 556, 335-344.	5.0	219
30	Ultrahigh-flux (>190,000 L·m <sup>-2</sup> ·h <sup>-1</sup> ) separation of oil and water by a robust and durable Cu(OH) <sub>2</sub> nanoneedles mesh with inverse wettability. <i>Journal of Colloid and Interface Science</i> , 2019, 555, 569-582.	5.0	18
31	The mixed marriage of copper and carbon ring-g-C <sub>3</sub> N <sub>4</sub> nanosheet: A visible-light-driven heterogeneous Fenton-like catalyst. <i>Applied Surface Science</i> , 2019, 488, 728-738.	3.1	38
32	Pivotal roles of MoS <sub>2</sub> in boosting catalytic degradation of aqueous organic pollutants by Fe(II)/PMS. <i>Chemical Engineering Journal</i> , 2019, 375, 121989.	6.6	192
33	An often-overestimated adverse effect of halides in heat/persulfate-based degradation of wastewater contaminants. <i>Environment International</i> , 2019, 130, 104918.	4.8	36
34	Chlorine incorporation into dye degradation by-product (coumarin) in UV/peroxymonosulfate process: A negative case of end-of-pipe treatment. <i>Chemosphere</i> , 2019, 229, 374-382.	4.2	25
35	Oxidative degradation of iodinated X-ray contrast media (iomeprol and iohexol) with sulfate radical: An experimental and theoretical study. <i>Chemical Engineering Journal</i> , 2019, 368, 999-1012.	6.6	41
36	Highly efficient and rapid removal of arsenic (<sc>iii</sc>) from aqueous solutions by nanoscale zero-valent iron supported on a zirconium 1,4-dicarboxybenzene metal-organic framework (UiO-66) Tj ETQq0 0 0.7gBT /Ovlock 10 T		

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37	On peroxymonosulfate-based treatment of saline wastewater: when phosphate and chloride co-exist. RSC Advances, 2018, 8, 13865-13870.	1.7	26
38	Nanostructured Co <sub>3</sub> O <sub>4</sub> grown on nickel foam: An efficient and readily recyclable 3D catalyst for heterogeneous peroxymonosulfate activation. Chemosphere, 2018, 198, 204-215.	4.2	109
39	Peroxymonosulfate/base process in saline wastewater treatment: The fight between alkalinity and chloride ions. Chemosphere, 2018, 199, 84-88.	4.2	93
40	pH-dependent roles of polycarboxylates in electron transfer between Cr(VI) and weak electron donors. Chemosphere, 2018, 197, 367-374.	4.2	25
41	Facile synthesis of cerium oxide nanoparticles decorated flower-like bismuth molybdate for enhanced photocatalytic activity toward organic pollutant degradation. Journal of Colloid and Interface Science, 2018, 530, 171-178.	5.0	167
42	Co <sub>3</sub> O <sub>4</sub> nanocrystals/3D nitrogen-doped graphene aerogel: A synergistic hybrid for peroxymonosulfate activation toward the degradation of organic pollutants. Chemosphere, 2018, 210, 877-888.	4.2	81
43	Deciphering the degradation/chlorination mechanisms of maleic acid in the Fe(II)/peroxymonosulfate process: An often overlooked effect of chloride. Water Research, 2018, 145, 453-463.	5.3	73
44	Significantly enhanced base activation of peroxymonosulfate by polyphosphates: Kinetics and mechanism. Chemosphere, 2017, 173, 529-534.	4.2	96
45	Monochlorophenols degradation by UV/persulfate is immune to the presence of chloride: Illusion or reality?. Chemical Engineering Journal, 2017, 323, 124-133.	6.6	65
46	Synthesis of n-type TaON microspheres decorated by p-type Ag <sub>2</sub> O with enhanced visible light photocatalytic activity. Molecular Catalysis, 2017, 435, 135-143.	1.0	40
47	Facile synthesis of flower-like Ag <sub>3</sub> VO <sub>4</sub> /Bi <sub>2</sub> WO <sub>6</sub> heterojunction with enhanced visible-light photocatalytic activity. Journal of Colloid and Interface Science, 2017, 501, 156-163.	5.0	152
48	Trace bromide ion impurity leads to formation of chlorobromoaromatic by-products in peroxymonosulfate-based oxidation of chlorophenols. Chemosphere, 2017, 182, 624-629.	4.2	16
49	On the kinetics of organic pollutant degradation with Co <sup>2+</sup> /peroxymonosulfate process: When ammonium meets chloride. Chemosphere, 2017, 179, 331-336.	4.2	37
50	Both degradation and AOX accumulation are significantly enhanced in UV/peroxymonosulfate/4-chlorophenol/Cl <sup>-</sup> system: two sides of the same coin?. RSC Advances, 2017, 7, 12318-12321.	1.7	33
51	Effects of chloride on PMS-based pollutant degradation: A substantial discrepancy between dyes and their common decomposition intermediate (phthalic acid). Chemosphere, 2017, 187, 338-346.	4.2	45
52	Chemical instability of graphene oxide following exposure to highly reactive radicals in advanced oxidation processes. Journal of Colloid and Interface Science, 2017, 507, 51-58.	5.0	20
53	Degradation of azo dye with activated peroxygens: when zero-valent iron meets chloride. RSC Advances, 2017, 7, 30941-30948.	1.7	45
54	Oxidative transformation of iron monosulfides and pyrite in estuarine sediments: Implications for trace metals mobilisation. Journal of Environmental Management, 2017, 186, 158-166.	3.8	15

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55	A Novel Heterostructure of BiOI Nanosheets Anchored onto MWCNTs with Excellent Visible-Light Photocatalytic Activity. <i>Nanomaterials</i> , 2017, 7, 22.	1.9	45
56	Nanoscale in Photocatalysis. <i>Nanomaterials</i> , 2017, 7, 86.	1.9	3
57	Response to Comment on "Synergetic Transformations of Multiple Pollutants Driven by Cr(VI)-Sulfite Reactions". <i>Environmental Science &amp; Technology</i> , 2016, 50, 6109-6111.	4.6	2
58	Is UV/Ce(IV) process a chloride-resistant AOPs for organic pollutants decontamination?. <i>RSC Advances</i> , 2016, 6, 93558-93563.	1.7	7
59	Importance of reagent addition order in contaminant degradation in an Fe(II)/PMS system. <i>RSC Advances</i> , 2016, 6, 70271-70276.	1.7	39
60	Comparison of UV/hydrogen peroxide and UV/peroxydisulfate processes for the degradation of humic acid in the presence of halide ions. <i>Environmental Science and Pollution Research</i> , 2016, 23, 4778-4785.	2.7	42
61	The roles of polycarboxylates in Cr(VI)/sulfite reaction system: Involvement of reactive oxygen species and intramolecular electron transfer. <i>Journal of Hazardous Materials</i> , 2016, 304, 457-466.	6.5	49
62	Enhanced AOX accumulation and aquatic toxicity during 2,4,6-trichlorophenol degradation in a Co(II)/peroxymonosulfate/Cl <sup>-</sup> system. <i>Chemosphere</i> , 2016, 144, 2415-2420.	4.2	72
63	Fe <sub>3</sub> O <sub>4</sub> nanocages derived from nanoscale metal-organic frameworks for removal of bisphenol A by activation of peroxymonosulfate. <i>Applied Catalysis B: Environmental</i> , 2016, 181, 788-799.	10.8	388
64	Transformations of chloro and nitro groups during the peroxymonosulfate-based oxidation of 4-chloro-2-nitrophenol. <i>Chemosphere</i> , 2015, 134, 446-451.	4.2	100
65	Coprecipitated arsenate inhibits thermal transformation of 2-line ferrihydrite: Implications for long-term stability of ferrihydrite. <i>Chemosphere</i> , 2015, 122, 88-93.	4.2	38
66	Fe-catalyzed photoreduction of Cr(VI) with dicarboxylic acid (C <sub>2</sub> -C <sub>5</sub> ): divergent reaction pathways. <i>Desalination and Water Treatment</i> , 2015, 56, 1020-1028.	1.0	7
67	Can electrochemical oxidation techniques really decontaminate saline dyes wastewater?. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1648-1653.	3.3	14
68	Quantitative evaluation of potential ecological risk of heavy metals in sewage sludge from three wastewater treatment plants in the main urban area of Wuxi, China. <i>Chemistry and Ecology</i> , 2015, 31, 235-251.	0.6	38
69	Synergetic Transformations of Multiple Pollutants Driven by Cr(VI)-Sulfite Reactions. <i>Environmental Science &amp; Technology</i> , 2015, 49, 12363-12371.	4.6	163
70	A green approach towards simultaneous remediations of chromium(VI) and arsenic(III) in aqueous solution. <i>Chemical Engineering Journal</i> , 2015, 262, 1144-1151.	6.6	58
71	Iron species in layered clay: Efficient electron shuttles for simultaneous conversion of dyes and Cr(VI). <i>Chemosphere</i> , 2014, 95, 643-646.	4.2	20
72	Distinct effects of oxalate versus malonate on the iron redox chemistry: Implications for the photo-Fenton reaction. <i>Chemosphere</i> , 2014, 103, 354-358.	4.2	26

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73	Enhanced degradation of Tetrabromobisphenol A in water by a UV/base/persulfate system: Kinetics and intermediates. <i>Chemical Engineering Journal</i> , 2014, 254, 538-544.	6.6	106
74	Probing the importance of planar surfaces and crystal edges for electron transfer within iron-bearing clays. <i>RSC Advances</i> , 2014, 4, 31476-31480.	1.7	6
75	A novel photosensitized Fenton reaction catalyzed by sandwiched iron in synthetic nontronite. <i>RSC Advances</i> , 2014, 4, 12958.	1.7	30
76	Enhanced Cr(VI) removal from aqueous solutions using Ni/Fe bimetallic nanoparticles: characterization, kinetics and mechanism. <i>RSC Advances</i> , 2014, 4, 50699-50707.	1.7	76
77	Diverse redox chemistry of photo/ferrioxalate system. <i>RSC Advances</i> , 2014, 4, 44654-44658.	1.7	22
78	Selective Oxidation of Arsenite by Peroxymonosulfate with High Utilization Efficiency of Oxidant. <i>Environmental Science &amp; Technology</i> , 2014, 48, 3978-3985.	4.6	113
79	Peroxymonosulfate activation by phosphate anion for organics degradation in water. <i>Chemosphere</i> , 2014, 117, 582-585.	4.2	186
80	Semiconductor heterojunction photocatalysts: design, construction, and photocatalytic performances. <i>Chemical Society Reviews</i> , 2014, 43, 5234.	18.7	3,257
81	Probing the radical chemistry in UV/persulfate-based saline wastewater treatment: Kinetics modeling and byproducts identification. <i>Chemosphere</i> , 2014, 109, 106-112.	4.2	91
82	New insight into photochemical oxidation of Fe(II): The roles of Fe(III) and reactive oxygen species. <i>Catalysis Today</i> , 2014, 224, 244-250.	2.2	18
83	Fenton-like Degradation of Reactive Dyes Catalyzed by Biogenic Jarosite. <i>Journal of Advanced Oxidation Technologies</i> , 2014, 17, .	0.5	0
84	Arsenic(III) and iron(II) co-oxidation by oxygen and hydrogen peroxide: Divergent reactions in the presence of organic ligands. <i>Chemosphere</i> , 2013, 93, 1936-1941.	4.2	43
85	Sulfate radical-induced degradation of 2,4,6-trichlorophenol: A de novo formation of chlorinated compounds. <i>Chemical Engineering Journal</i> , 2013, 217, 169-173.	6.6	97
86	Rapid dye degradation with reactive oxidants generated by chloride-induced peroxymonosulfate activation. <i>Environmental Science and Pollution Research</i> , 2013, 20, 6317-6323.	2.7	56
87	Novel Photo-Sulfite System: Toward Simultaneous Transformations of Inorganic and Organic Pollutants. <i>Environmental Science &amp; Technology</i> , 2013, 47, 11174-11181.	4.6	149
88	Leaching of heavy metals from Dexing copper mine tailings pond. <i>Transactions of Nonferrous Metals Society of China</i> , 2013, 23, 3068-3075.	1.7	66
89	Simultaneous Redox Conversion of Chromium(VI) and Arsenic(III) under Acidic Conditions. <i>Environmental Science &amp; Technology</i> , 2013, 47, 6486-6492.	4.6	115
90	Multiwall Carbon Nanotubes-Modified Glassy Carbon Electrode for Square-Wave Stripping Voltammetric Determination of Aqueous Antimony (III) Ion. <i>Advanced Materials Research</i> , 2012, 518-523, 1571-1575.	0.3	4

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91	Experimental measurements of short-term adsorption of <i>Acidithiobacillus ferrooxidans</i> onto chalcopyrite. <i>Transactions of Nonferrous Metals Society of China</i> , 2012, 22, 442-446.	1.7	9
92	Photochemical Coupling of Iron Redox Reactions and Transformation of Low-Molecular-Weight Organic Matter. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2044-2051.	2.1	44
93	Concentration profiles of chlorine radicals and their significances in $\text{H}_2\text{O}_2$ -induced dye degradation: Kinetic modeling and reaction pathways. <i>Chemical Engineering Journal</i> , 2012, 209, 38-45.	6.6	60
94	Sequential reduction-oxidation for photocatalytic degradation of tetrabromobisphenol A: Kinetics and intermediates. <i>Journal of Hazardous Materials</i> , 2012, 241-242, 301-306.	6.5	48
95	Photocatalytic degradation and chlorination of azo dye in saline wastewater: Kinetics and AOX formation. <i>Chemical Engineering Journal</i> , 2012, 192, 171-178.	6.6	123
96	Photocatalytic Oxidation of Organic Pollutants Catalyzed by an Iron Complex at Biocompatible pH Values: Using $\text{O}_2$ as Main Oxidant in a Fenton-like Reaction. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4089-4095.	1.5	38
97	Effects of chloride ion on degradation of Acid Orange 7 by sulfate radical-based advanced oxidation process: Implications for formation of chlorinated aromatic compounds. <i>Journal of Hazardous Materials</i> , 2011, 196, 173-179.	6.5	502
98	Degradation of reactive dyes by contact glow discharge electrolysis in the presence of $\text{Cl}^-$ ions: Kinetics and AOX formation. <i>Electrochimica Acta</i> , 2011, 58, 364-371.	2.6	40
99	Probing paramagnetic species in titania-based heterogeneous photocatalysis by electron spin resonance (ESR) spectroscopy—A mini review. <i>Chemical Engineering Journal</i> , 2011, 170, 353-362.	6.6	280
100	Effects of chloride ions on bleaching of azo dyes by $\text{Co}^{2+}$ /oxone reagent: Kinetic analysis. <i>Journal of Hazardous Materials</i> , 2011, 190, 1083-1087.	6.5	273
101	Photodegradation mechanism of chlorophenols pollutants by $\text{TiO}_2$ photocatalysis. <i>Scientia Sinica Chimica</i> , 2011, 41, 1286-1297.	0.2	2
102	Comparative study of interaction between pyrite and cysteine by thermogravimetric and electrochemical techniques. <i>Hydrometallurgy</i> , 2010, 101, 88-92.	1.8	27
103	Adsorption behavior of glucose on pyrite surface investigated by TG, FTIR and XRD analyses. <i>Hydrometallurgy</i> , 2010, 102, 87-90.	1.8	20
104	Application of N-F-Codoped $\text{TiO}_2$ for the Photocatalytic Reduction of Cr(VI) under Visible Light Irradiation. <i>International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering</i> , 2010, , .	0.0	0
105	Photochemical Cycling of Iron Mediated by Dicarboxylates: Special Effect of Malonate. <i>Environmental Science &amp; Technology</i> , 2010, 44, 263-268.	4.6	60
106	Light-assisted decomposition of dyes over iron-bearing soil clays in the presence of $\text{H}_2\text{O}_2$ . <i>Journal of Hazardous Materials</i> , 2009, 168, 1246-1252.	6.5	41
107	Photochemical Coupling Reactions between Fe(III)/Fe(II), Cr(VI)/Cr(III), and Polycarboxylates: Inhibitory Effect of Cr Species. <i>Environmental Science &amp; Technology</i> , 2008, 42, 7260-7266.	4.6	45
108	Interfacial electrokinetic characteristics before and after bioleaching microorganism adhesion to pyrite. <i>Transactions of Nonferrous Metals Society of China</i> , 2006, 16, 676-680.	1.7	8

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109	Interaction between pyrite and cysteine. Transactions of Nonferrous Metals Society of China, 2006, 16, 943-946.	1.7	16
110	Bacterial oxidation activity in heap leaching. Central South University, 2004, 11, 375-379.	0.5	5