

# Chao Shan

## List of Publications by Year in descending order

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77  
papers

5,668  
citations

81434

41  
h-index

87275

74  
g-index

77  
all docs

77  
docs citations

77  
times ranked

5275  
citing authors

#	ARTICLE	IF	CITATIONS
1	Construction of model platforms to probe the confinement effect of nanocomposite-enabled water treatment. <i>Chemical Engineering Journal Advances</i> , 2022, 9, 100229.	2.4	8
2	Self-Enhanced Selective Oxidation of Phosphonate into Phosphate by Cu(II)/H <sub>2</sub> O <sub>2</sub> : Performance, Mechanism, and Validation. <i>Environmental Science &amp; Technology</i> , 2022, 56, 634-641.	4.6	39
3	Rapid Synthesis of $\hat{\pm}$ -Chiral Piperidines via a Highly Diastereoselective Continuous Flow Protocol. <i>Organic Letters</i> , 2022, 24, 3205-3210.	2.4	5
4	Catalytic aerobic oxidation of P(I)/P(III) into P(V) over PdNi <sub>10</sub> as a low-cost alternative catalyst rivaling Pd. <i>Chemical Engineering Journal</i> , 2022, 446, 136892.	6.6	1
5	Mn(II) Acceleration of the Picolinic Acid-Assisted Fenton Reaction: New Insight into the Role of Manganese in Homogeneous Fenton AOPs. <i>Environmental Science &amp; Technology</i> , 2022, 56, 6621-6630.	4.6	31
6	Construction of an $\hat{\pm}$ -chiral pyrrolidine library with a rapid and scalable continuous flow protocol. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 1779-1785.	1.9	2
7	Practical and rapid construction of 2-pyridyl ketone library in continuous flow. <i>Journal of Flow Chemistry</i> , 2021, 11, 91-98.	1.2	4
8	Ferroelectric membrane for water purification with arsenic as model pollutant. <i>Chemical Engineering Journal</i> , 2021, 403, 126426.	6.6	5
9	Facet-dependent phosphate adsorptive reactivity by lanthanum hydroxides of different crystal structure: Role of surface hydroxyl groups. <i>Applied Surface Science</i> , 2021, 538, 147910.	3.1	17
10	Unveiling the transformation of dissolved organic matter during ozonation of municipal secondary effluent based on FT-ICR-MS and spectral analysis. <i>Water Research</i> , 2021, 188, 116484.	5.3	99
11	Enhancing the performance of Fenton-like oxidation by a dual-layer membrane: A sequential interception-oxidation process. <i>Journal of Hazardous Materials</i> , 2021, 402, 123766.	6.5	18
12	Temperature regulated adsorption and desorption of heavy metals to A-MIL-121: Mechanisms and the role of exchangeable protons. <i>Water Research</i> , 2021, 189, 116599.	5.3	46
13	Three-Step One-Pot Process of 3-Methyl-5-Benzofuranol from Amine, Aldehydes, and <i>p</i> -Benzoquinone. <i>Organic Process Research and Development</i> , 2021, 25, 810-816.	1.3	2
14	Adsorption of inorganic phosphorus of different valences on metal oxides: A first-principles study. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2021, 51, 591-600.	0.3	1
15	Trace Co <sup>2+</sup> coupled with phosphate triggers efficient peroxymonosulfate activation for organic degradation. <i>Journal of Hazardous Materials</i> , 2021, 409, 124920.	6.5	46
16	The Fenton Reaction in Water Assisted by Picolinic Acid: Accelerated Iron Cycling and Co-generation of a Selective Fe-Based Oxidant. <i>Environmental Science &amp; Technology</i> , 2021, 55, 8299-8308.	4.6	84
17	Unravelling molecular transformation of dissolved effluent organic matter in UV/H <sub>2</sub> O <sub>2</sub> , UV/persulfate, and UV/chlorine processes based on FT-ICR-MS analysis. <i>Water Research</i> , 2021, 199, 117158.	5.3	84
18	Roles of oxygen-containing functional groups of O-doped g-C <sub>3</sub> N <sub>4</sub> in catalytic ozonation: Quantitative relationship and first-principles investigation. <i>Applied Catalysis B: Environmental</i> , 2021, 292, 120155.	10.8	137

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19	Scenario oriented strategies for phosphorus management by using environmental nanotechnology. <i>Current Opinion in Chemical Engineering</i> , 2021, 34, 100720.	3.8	0
20	Toward Selective Oxidation of Contaminants in Aqueous Systems. <i>Environmental Science &amp; Technology</i> , 2021, 55, 14494-14514.	4.6	145
21	Removal of model dyes on charged UF membranes: Experiment and simulation. <i>Chemosphere</i> , 2020, 240, 124940.	4.2	22
22	Molecular identification guided process design for advanced treatment of electroless nickel plating effluent. <i>Water Research</i> , 2020, 168, 115211.	5.3	28
23	Occurrence and transformation of phosphonates in textile dyeing wastewater along full-scale combined treatment processes. <i>Water Research</i> , 2020, 184, 116173.	5.3	35
24	Enhancing the Fenton-like Catalytic Activity of nFe <sub>2</sub> O <sub>3</sub> by MIL-53(Cu) Support: A Mechanistic Investigation. <i>Environmental Science &amp; Technology</i> , 2020, 54, 5258-5267.	4.6	103
25	Electrochemically mediated nitrate reduction on nanoconfined zerovalent iron: Properties and mechanism. <i>Water Research</i> , 2020, 173, 115596.	5.3	60
26	Enhanced Fenton-like Oxidation of As(III) over Ce-Ti Binary Oxide: A New Strategy to Tune Catalytic Activity via Balancing Bimolecular Adsorption Energies. <i>Environmental Science &amp; Technology</i> , 2020, 54, 5893-5901.	4.6	32
27	Dual-functional millisphere of anion-exchanger-supported nanoceria for synergistic As(III) removal with stoichiometric H <sub>2</sub> O <sub>2</sub> : Catalytic oxidation and sorption. <i>Chemical Engineering Journal</i> , 2019, 360, 982-989.	6.6	27
28	Non-radical pathway dominated catalytic oxidation of As(III) with stoichiometric H <sub>2</sub> O <sub>2</sub> over nanoceria. <i>Environment International</i> , 2019, 124, 393-399.	4.8	34
29	Durable activation of peroxymonosulfate mediated by Co-doped mesoporous FePO <sub>4</sub> via charge redistribution for atrazine degradation. <i>Chemical Engineering Journal</i> , 2019, 375, 122009.	6.6	73
30	Analysis of trace phosphonates in authentic water samples by pre-methylation and LC-Orbitrap MS/MS. <i>Water Research</i> , 2019, 161, 78-88.	5.3	42
31	Development of Fe-doped g-C <sub>3</sub> N <sub>4</sub> /graphite mediated peroxymonosulfate activation for degradation of aromatic pollutants via nonradical pathway. <i>Science of the Total Environment</i> , 2019, 675, 62-72.	3.9	108
32	Effect of 3-D distribution of ZVI nanoparticles confined in polymeric anion exchanger on EDTA-chelated Cu(II) removal. <i>Environmental Science and Pollution Research</i> , 2019, 26, 10013-10022.	2.7	6
33	Transformation of dissolved organic matter during full-scale treatment of integrated chemical wastewater: Molecular composition correlated with spectral indexes and acute toxicity. <i>Water Research</i> , 2019, 157, 472-482.	5.3	143
34	Activation of zero-valent iron through ball-milling synthesis of hybrid Fe <sub>0</sub> /Fe <sub>3</sub> O <sub>4</sub> /FeCl <sub>2</sub> microcomposite for enhanced nitrobenzene reduction. <i>Journal of Hazardous Materials</i> , 2019, 368, 698-704.	6.5	50
35	MIL-PVDF blend ultrafiltration membranes with ultrahigh MOF loading for simultaneous adsorption and catalytic oxidation of methylene blue. <i>Journal of Hazardous Materials</i> , 2019, 365, 312-321.	6.5	131
36	Unexpected Favorable Role of Ca <sup>2+</sup> in Phosphate Removal by Using Nanosized Ferric Oxides Confined in Porous Polystyrene Beads. <i>Environmental Science &amp; Technology</i> , 2019, 53, 365-372.	4.6	88

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37	Autocatalytic Decomplexation of Cu(II)-EDTA and Simultaneous Removal of Aqueous Cu(II) by UV/Chlorine. <i>Environmental Science &amp; Technology</i> , 2019, 53, 2036-2044.	4.6	79
38	Photochemical activation of seemingly inert SO <sub>4</sub> <sup>2-</sup> in specific water environments. <i>Chemosphere</i> , 2019, 214, 399-407.	4.2	11
39	Preparation of mesoporous Ce-Ti oxide millispheres for efficient catalytic ozonation: Performance and mechanism. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2019, 49, 565-578.	0.3	1
40	Enhanced Fe(III)-mediated Fenton oxidation of atrazine in the presence of functionalized multi-walled carbon nanotubes. <i>Water Research</i> , 2018, 137, 37-46.	5.3	231
41	Enhanced Photochemical/Electrochemical Performance of Graphene Benefited from Morphological Change as Substrate of Typical Composites. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800035.	1.9	2
42	Fe(III)-Doped g-C <sub>3</sub> N <sub>4</sub> Mediated Peroxymonosulfate Activation for Selective Degradation of Phenolic Compounds via High-Valent Iron-Oxo Species. <i>Environmental Science &amp; Technology</i> , 2018, 52, 2197-2205.	4.6	687
43	Enhanced Nitrobenzene reduction by zero valent iron pretreated with H <sub>2</sub> O <sub>2</sub> /HCl. <i>Chemosphere</i> , 2018, 197, 494-501.	4.2	26
44	Enhanced removal of Se(VI) from water via pre-corrosion of zero-valent iron using H <sub>2</sub> O <sub>2</sub> /HCl: Effect of solution chemistry and mechanism investigation. <i>Water Research</i> , 2018, 133, 173-181.	5.3	44
45	Mesoporous Ce-Ti-Zr ternary oxide millispheres for efficient catalytic ozonation in bubble column. <i>Chemical Engineering Journal</i> , 2018, 338, 261-270.	6.6	51
46	Efficient removal of EDTA-complexed Cu(II) by a combined Fe(III)/UV/alkaline precipitation process: Performance and role of Fe(II). <i>Chemosphere</i> , 2018, 193, 1235-1242.	4.2	63
47	Environmentally Friendly in Situ Regeneration of Graphene Aerogel as a Model Conductive Adsorbent. <i>Environmental Science &amp; Technology</i> , 2018, 52, 739-746.	4.6	54
48	Improving reductive performance of zero valent iron by H <sub>2</sub> O <sub>2</sub> /HCl pretreatment: A case study on nitrate reduction. <i>Chemical Engineering Journal</i> , 2018, 334, 2255-2263.	6.6	47
49	Efficient adsorption of Selenium(IV) from water by hematite modified magnetic nanoparticles. <i>Chemosphere</i> , 2018, 193, 134-141.	4.2	79
50	Enhanced removal of selenate from mining effluent by H <sub>2</sub> O <sub>2</sub> /HCl-pretreated zero-valent iron. <i>Water Science and Technology</i> , 2018, 78, 2404-2413.	1.2	7
51	Peroxymonosulfate activation by iron(III)-tetraamidomacrocyclic ligand for degradation of organic pollutants via high-valent iron-oxo complex. <i>Water Research</i> , 2018, 147, 233-241.	5.3	161
52	Enhanced Defluoridation Using Novel Millispheres Nanocomposite of La-Doped Li-Al Layered Double Hydroxides Supported by Polymeric Anion Exchanger. <i>Scientific Reports</i> , 2018, 8, 11741.	1.6	41
53	A novel combined process for efficient removal of Se(VI) from sulfate-rich water: Sulfite/UV/Fe(III) coagulation. <i>Chemosphere</i> , 2018, 211, 867-874.	4.2	21
54	Water Decontamination from Cr(III)-Organic Complexes Based on Pyrite/H <sub>2</sub> O <sub>2</sub> : Performance, Mechanism, and Validation. <i>Environmental Science &amp; Technology</i> , 2018, 52, 10657-10664.	4.6	111

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55	Simultaneous removal of As(V) and Cr(VI) from water by macroporous anion exchanger supported nanoscale hydrous ferric oxide composite. <i>Chemosphere</i> , 2017, 171, 126-133.	4.2	56
56	Efficient Removal of Trace Se(VI) by Millimeter-Sized Nanocomposite of Zerovalent Iron Confined in Polymeric Anion Exchanger. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 5309-5317.	1.8	23
57	Effects of brining on the corrosion of ZVI and its subsequent As(III/V) and Se(IV/VI) removal from water. <i>Chemosphere</i> , 2017, 170, 251-259.	4.2	44
58	Flat Graphene-Enhanced Electron Transfer Involved in Redox Reactions. <i>Environmental Science &amp; Technology</i> , 2017, 51, 8597-8605.	4.6	39
59	Decomplexation of Cu(II)-EDTA by UV/persulfate and UV/H <sub>2</sub> O <sub>2</sub> : Efficiency and mechanism. <i>Applied Catalysis B: Environmental</i> , 2017, 200, 439-447.	10.8	185
60	Enhanced removal of EDTA-chelated Cu(II) by polymeric anion-exchanger supported nanoscale zero-valent iron. <i>Journal of Hazardous Materials</i> , 2017, 321, 290-298.	6.5	85
61	One-step removal of Cr(VI) at alkaline pH by UV/sulfite process: Reduction to Cr(III) and in situ Cr(III) precipitation. <i>Chemical Engineering Journal</i> , 2017, 308, 791-797.	6.6	251
62	Chromium speciation in tannery effluent after alkaline precipitation: Isolation and characterization. <i>Journal of Hazardous Materials</i> , 2016, 316, 169-177.	6.5	107
63	Coupled Cu(II)-EDTA degradation and Cu(II) removal from acidic wastewater by ozonation: Performance, products and pathways. <i>Chemical Engineering Journal</i> , 2016, 299, 23-29.	6.6	140
64	Temporospatial evolution and removal mechanisms of As(V) and Se(VI) in ZVI column with H <sub>2</sub> O <sub>2</sub> as corrosion accelerator. <i>Water Research</i> , 2016, 106, 461-469.	5.3	44
65	Enhanced HO production from ozonation activated by EDTA. <i>Chemical Engineering Journal</i> , 2016, 288, 562-568.	6.6	24
66	Arsenate Adsorption by Hydrous Ferric Oxide Nanoparticles Embedded in Cross-linked Anion Exchanger: Effect of the Host Pore Structure. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 3012-3020.	4.0	85
67	Enhanced Phosphate Removal by Nanosized Hydrated La(III) Oxide Confined in Cross-linked Polystyrene Networks. <i>Environmental Science &amp; Technology</i> , 2016, 50, 1447-1454.	4.6	265
68	Bactericidal mechanisms of Au@TNBs under visible light irradiation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 128, 211-218.	2.5	19
69	Bactericidal mechanism of BiO <sub>2</sub> @AgI under visible light irradiation. <i>Chemical Engineering Journal</i> , 2015, 279, 277-285.	6.6	81
70	Efficient removal of free and nitrilotriacetic acid complexed Cd(II) from water by poly(1-vinylimidazole)-grafted Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> magnetic nanoparticles. <i>Journal of Hazardous Materials</i> , 2015, 299, 479-485.	6.5	18
71	Efficient bacteria capture and inactivation by cetyltrimethylammonium bromide modified magnetic nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 136, 659-665.	2.5	47
72	Removal of Hg(II) by poly(1-vinylimidazole)-grafted Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> magnetic nanoparticles. <i>Water Research</i> , 2015, 69, 252-260.	5.3	175

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73	Efficient removal of trace antimony(III) through adsorption by hematite modified magnetic nanoparticles. Journal of Hazardous Materials, 2014, 268, 229-236.	6.5	148
74	Efficient bacterial capture with amino acid modified magnetic nanoparticles. Water Research, 2014, 50, 124-134.	5.3	125
75	Optical phonon behaviors and unstable polar mode in transparent conducting Ba <sub>1-x</sub> La <sub>x</sub> SnO <sub>3</sub> films from temperature dependent far-infrared reflectance spectra. RSC Advances, 2014, 4, 34987.	1.7	4
76	Enhanced removal of trace arsenate by magnetic nanoparticles modified with arginine and lysine. Chemical Engineering Journal, 2014, 254, 340-348.	6.6	35
77	Efficient removal of trace arsenite through oxidation and adsorption by magnetic nanoparticles modified with Fe-Mn binary oxide. Water Research, 2013, 47, 3411-3421.	5.3	196