Sihui Zhan

List of Publications by Year
in descending order

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Version: 2024-02-01

83 papers	4,866 citations	126907 33 h-index	95266 68 g-index
83 all docs	83 docs citations	83 times ranked	5018 citing authors

#	Article	IF	Citations
1	Almost 100â€‰% Peroxymonosulfate Conversion to Singlet Oxygen on Singleâ€Atom CoN₂₊₂ Sites. Angewandte Chemie - International Edition, 2021, 60, 4588-4593.	13.8	337
2	Efficient NH3-SCR removal of NOx with highly ordered mesoporous WO3(Ï‡)-CeO2 at low temperatures. Applied Catalysis B: Environmental, 2017, 203, 199-209.	20.2	249
3	Almost 100â€‰% Peroxymonosulfate Conversion to Singlet Oxygen on Singleâ€Atom CoN₂₊₂ Sites. Angewandte Chemie, 2021, 133, 4638-4643.	2.0	224
4	Fabrication of TiO₂â€“Bi₂WO₆ Binanosheet for Enhanced Solar Photocatalytic Disinfection of E. coli: Insights on the Mechanism. ACS Applied Materials & Interfaces, 2016, 8, 6841-6851.	8.0	200
5	Low-Temperature Selective Catalytic Reduction of NO with NH₃ over Mn₂O₃-Doped Fe₂O₃ Hexagonal Microsheets. ACS Applied Materials & Interfaces, 2016, 8, 5224-5233.	8.0	194
6	Highly Efficient Antibacterial and Pb(II) Removal Effects of Ag-CoFe₂O₄-GO Nanocomposite. ACS Applied Materials & Interfaces, 2015, 7, 10576-10586.	8.0	187
7	Superior Antibacterial Activity of Fe₃O₄-TiO₂ Nanosheets under Solar Light. ACS Applied Materials & Interfaces, 2015, 7, 21875-21883.	8.0	170
8	Atomic Insights for Optimum and Excess Doping in Photocatalysis: A Case Study of Fewâ€Layer Cuâ€ZnIn₂S₄. Advanced Functional Materials, 2019, 29, 1807013.	14.9	165
9	3D Grapheneâ€Based Macrostructures for Water Treatment. Advanced Materials, 2020, 32, e1806843.	21.0	158
10	Regulating Local Electron Density of Iron Single Sites by Introducing Nitrogen Vacancies for Efficient Photoâ€Fenton Process. Angewandte Chemie - International Edition, 2021, 60, 21261-21266.	13.8	158
11	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zâ€Scheme Photocatalyst. Angewandte Chemie - International Edition, 2019, 58, 11329-11334.	13.8	152
12	Unravelling the Synergy between Oxygen Vacancies and Oxygen Substitution in BiO_{2â^’x} for Efficient Molecularâ€Oxygen Activation. Angewandte Chemie - International Edition, 2020, 59, 3685-3690.	13.8	147
13	Efficient Fenton-like Process for Pollutant Removal in Electron-Rich/Poor Reaction Sites Induced by Surface Oxygen Vacancy over Cobaltâ€“Zinc Oxides. Environmental Science & Technology, 2020, 54, 8333-8343.	10.0	137
14	Recent advances in microfluidic platforms for single-cell analysis in cancer biology, diagnosis and therapy. TrAC - Trends in Analytical Chemistry, 2019, 117, 13-26.	11.4	121
15	Facile preparation of MnO₂ doped Fe₂O₃ hollow nanofibers for low temperature SCR of NO with NH₃. Journal of Materials Chemistry A, 2014, 2, 20486-20493.	10.3	118
16	Efficient removal of pathogenic bacteria and viruses by multifunctional amine-modified magnetic nanoparticles. Journal of Hazardous Materials, 2014, 274, 115-123.	12.4	117
17	The Role of Alkali Metal in Î±â€MnO₂ Catalyzed Ammoniaâ€Selective Catalysis. Angewandte Chemie - International Edition, 2019, 58, 6351-6356.	13.8	110
18	Facile preparation of ordered mesoporous MnCo₂O₄ for low-temperature selective catalytic reduction of NO with NH₃. Nanoscale, 2015, 7, 2568-2577.	5.6	109

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19	Efficient photocatalytic oxygen activation by oxygen-vacancy-rich CeO2-based heterojunctions: Synergistic effect of photoexcited electrons transfer and oxygen chemisorption. Applied Catalysis B: Environmental, 2021, 289, 120020.	20.2	102
20	Efficient water disinfection with Ag 2 WO 4 -doped mesoporous g-C 3 N 4 under visible light. Journal of Hazardous Materials, 2017, 338, 33-46.	12.4	99
21	Atomically Dispersed Semimetallic Selenium on Porous Carbon Membrane as an Electrode for Hydrazine Fuel Cells. Angewandte Chemie - International Edition, 2019, 58, 13466-13471.	13.8	99
22	Boosting the activation of molecular oxygen and the degradation of tetracycline over high loading Ag single atomic catalyst. Water Research, 2021, 201, 117314.	11.3	99
23	Highly Efficient Removal of Pathogenic Bacteria with Magnetic Graphene Composite. ACS Applied Materials & Interfaces, 2015, 7, 4290-4298.	8.0	98
24	Cationâˆ'Ï€ structure inducing efficient peroxymonosulfate activation for pollutant degradation over atomically dispersed cobalt bonding graphene-like nanospheres. Applied Catalysis B: Environmental, 2021, 286, 119912.	20.2	71
25	Enhanced catalytic degradation by using RGO-Ce/WO3 nanosheets modified CF as electro-Fenton cathode: Influence factors, reaction mechanism and pathways. Journal of Hazardous Materials, 2019, 367, 365-374.	12.4	69
26	Facilitating Redox Cycles of Copper Species by Pollutants in Peroxymonosulfate Activation. Environmental Science & Technology, 2022, 56, 2637-2646.	10.0	67
27	Highly efficient removal of NO with ordered mesoporous manganese oxide at low temperature. RSC Advances, 2015, 5, 29353-29361.	3.6	62
28	Tailoring of electronic and surface structures boosts exciton-triggering photocatalysis for singlet oxygen generation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	61
29	Ptâ€“Cu Interaction Induced Construction of Single Pt Sites for Synchronous Electron Capture and Transfer in Photocatalysis. Advanced Functional Materials, 2021, 31, 2104343.	14.9	50
30	Mesoporous Fe2O3-doped TiO2 nanostructured fibers with higher photocatalytic activity. Journal of Colloid and Interface Science, 2011, 355, 328-333.	9.4	47
31	Structureâ€“performance relationships of MnO₂ nanocatalyst for the low-temperature SCR removal of NO_X under ammonia. RSC Advances, 2016, 6, 54926-54937.	3.6	43
32	Mechanistic insights for efficient inactivation of antibiotic resistance genes: a synergistic interfacial adsorption and photocatalytic-oxidation process. Science Bulletin, 2020, 65, 2107-2119.	9.0	37
33	Towards singleâ€atom photocatalysts for future carbonâ€neutral application. SmartMat, 2022, 3, 417-446.	10.7	35
34	The effects of copper oxide nanoparticles on dorsoventral patterning, convergent extension, and neural and cardiac development of zebrafish. Aquatic Toxicology, 2017, 188, 130-137.	4.0	34
35	Enhanced redox activity and oxygen vacancies of perovskite triggered by copper incorporation for the improvement of electro-Fenton activity. Chemical Engineering Journal, 2022, 428, 131352.	12.7	34
36	Energy-saving removal of methyl orange in high salinity wastewater by electrochemical oxidation via a novel Ti/SnO2-Sb anodeâ€"Air diffusion cathode system. Catalysis Today, 2015, 258, 156-161.	4.4	33

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37	Conjugated Ï€ Electrons of MOFs Drive Charge Separation at Heterostructures Interface for Enhanced Photoelectrochemical Water Oxidation. Small, 2021, 17, e2100367.	10.0	33
38	Fast degradation of methylene blue with electrospun hierarchical Î±-Fe2O3 nanostructured fibers. Journal of Sol-Gel Science and Technology, 2011, 58, 716-723.	2.4	32
39	Ce-Directed Double-Layered Nanosheet Architecture of NiFe-Based Hydroxide as Highly Efficient Water Oxidation Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 15411-15418.	6.7	32
40	Photo-electro-Fenton-like process for rapid ciprofloxacin removal: The indispensable role of polyvalent manganese in Fe-free system. Science of the Total Environment, 2021, 768, 144368.	8.0	30
41	Efficient mineralization of ciprofloxacin using a 3D Ce_xZr_{1â^'x}O₂/RGO composite cathode. Environmental Science: Nano, 2017, 4, 425-436.	4.3	28
42	A novel Fe-free photo-electro-Fenton-like system for enhanced ciprofloxacin degradation: bifunctional Z-scheme WO3/g-C3N4. Environmental Science: Nano, 2019, 6, 2850-2862.	4.3	27
43	Efficient removal for multiple pollutants via Ag2O/BiOBr heterojunction: A promoted photocatalytic process by valid electron transfer pathway. Chinese Chemical Letters, 2020, 31, 2698-2704.	9.0	26
44	Evaluation of ciprofloxacin destruction between ordered mesoporous and bulk NiMn₂O₄/CF cathode: efficient mineralization in a heterogeneous electro-Fenton-like process. Environmental Science: Nano, 2019, 6, 661-671.	4.3	25
45	Highly Efficient Degradation of Polyacrylamide by an Fe-Doped Ce_{0.75}Zr_{0.25}O₂ Solid Solution/CF Composite Cathode in a Heterogeneous Electro-Fenton Process. ACS Applied Materials & Interfaces, 2019, 11, 30703-30712.	8.0	24
46	Modified carbon felt made using Ce_xA_{1â^'x}O₂ composites as a cathode in electro-Fenton system to degrade ciprofloxacin. RSC Advances, 2017, 7, 27065-27078.	3.6	23
47	Coaxial-Electrospun Magnetic Coreâ€“Shell Fe@TiSi Nanofibers for the Rapid Purification of Typical Dye Wastewater. ACS Applied Materials & Interfaces, 2014, 6, 16841-16850.	8.0	22
48	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zâ€Scheme Photocatalyst. Angewandte Chemie, 2019, 131, 11451-11456.	2.0	22
49	Novel hollow microspheres MnxCo3â^'xO4 (xâ€‰=â€‰1, 2) with remarkable performance for low-temperature selective catalytic reduction of NO with NH3. Journal of Sol-Gel Science and Technology, 2017, 81, 576-585.	2.4	20
50	Unravelling the Synergy between Oxygen Vacancies and Oxygen Substitution in BiO_{2â^'x} for Efficient Molecularâ€Oxygen Activation. Angewandte Chemie, 2020, 132, 3714-3719.	2.0	19
51	Novel Flexible Self-Standing Pt/Al₂O₃ Nanofibrous Membranes: Synthesis and Multifunctionality for Environmental Remediation. ACS Applied Materials & Interfaces, 2018, 10, 26396-26404.	8.0	18
52	Enhanced electron transfer and hydrogen peroxide activation capacity with N, P-codoped carbon encapsulated CeO2 in heterogeneous electro-Fenton process. Chemosphere, 2022, 287, 132154.	8.2	18
53	LiCoO2Hollow Nanofibers by Coâ€Electrospinning Solâ€Gel Precursor. Journal of Dispersion Science and Technology, 2008, 29, 702-705.	2.4	17
54	Core-Shell Nanostructure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi><mml:mtext>-</mml:mtext><mml:msub><mml:mtext>Fe< Synthesis and Photocatalysis for Methyl Orange. Journal of Nanomaterials, 2011, 2011, 1-5.	2.0	17

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55	Cobalt diselenide (001) surface with short-range Co-Co interaction triggering high-performance electrocatalytic oxygen evolution. Nano Research, 2021, 14, 4848-4856.	10.4	17
56	Enhanced localized dipole of Pt-Au single-site catalyst for solar water splitting. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	17
57	Preparation of novel CeMo(x) hollow microspheres for low-temperature SCR removal of NO_x with NH₃. RSC Advances, 2016, 6, 59185-59194.	3.6	15
58	AgBr/g-C₃N₄nanocomposites for enhanced visible-light-driven photocatalytic inactivation ofEscherichia coli. RSC Advances, 2018, 8, 34428-34436.	3.6	15
59	Ordered Mesoporous Ni_yMnO_x Nanocatalysts for the Low-Temperature Selective Reduction of NO_x with NH₃. ACS Applied Nano Materials, 2019, 2, 505-516.	5.0	14
60	Oxygen-vacancy mediated acidity and redox properties on WOx/Cu-doped CeO2 for the removal of NOx. Journal of Environmental Chemical Engineering, 2021, 9, 106024.	6.7	13
61	Regulating Local Electron Density of Iron Single Sites by Introducing Nitrogen Vacancies for Efficient Photoâ€Fenton Process. Angewandte Chemie, 2021, 133, 21431-21436.	2.0	12
62	Accelerating Fe^{III}-Aqua Complex Reduction in an Efficient Solidâ€“Liquid-Interfacial Fenton Reaction over the Mnâ€“CNH Co-catalyst at Near-Neutral pH. Environmental Science & Technology, 2021, 55, 13326-13334.	10.0	12
63	Reinforced upconversion and charge separation via mid-gap states in WO3 nanosheet with infrared light driven tetracycline degradation. Chemical Engineering Journal, 2022, 431, 134134.	12.7	12
64	Co-Electrospun BaTiO3 Hollow Fibers Combined with Sol-Gel Method. Journal of Dispersion Science and Technology, 2008, 29, 1345-1348.	2.4	11
65	Sol-gel preparation of mesoporous cerium-doped FeTi nanocatalysts and its SCR activity of NOx with NH3 at low temperature. Journal of Sol-Gel Science and Technology, 2015, 73, 443-451.	2.4	11
66	A Mini Review: Electrospun Hierarchical Nanofibers. Journal of Dispersion Science and Technology, 2010, 31, 760-769.	2.4	10
67	High-efficiency photocatalytic degradation of rhodamine 6G by organic semiconductor tetrathiafulvalene in weak acidâ€“base environment. Chemical Communications, 2022, 58, 4251-4254.	4.1	9
68	In-situ-formed red phosphorus nanosheet on bulk red phosphorus for boosting charge separation in photocatalysisï¼šThe role of multiple interfacial effects. Applied Catalysis B: Environmental, 2022, 312, 121373.	20.2	9
69	Facile fabrication of cerium niobate nano-crystalline fibers by electrospinning technology. Journal of Sol-Gel Science and Technology, 2011, 58, 394-399.	2.4	8
70	Constructing Cu₂O/Bi₂MoO₆ pâ€“n heterojunction towards boosted photo-assisted-electro-Fenton-like synergy degradation of ciprofloxacin. Environmental Science: Nano, 2021, 8, 3629-3642.	4.3	8
71	Enhanced carriers separation in novel in-plane amorphous carbon/g-C3N4 nanosheets for photocatalytic environment remediation. Chemosphere, 2022, 294, 133581.	8.2	8
72	Mechanistic insight into the dynamic transformation of acid sites on ceria supported molybdenum oxide catalyst for NOx reduction. Journal of Environmental Chemical Engineering, 2022, 10, 108114.	6.7	8

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73	Noncovalent Functionalization of Multiwalled Carbon Nanotubes by Anionic Polymer Poly(Sodium) Tj ETQq1 1 0.784314 rgBT /Overlo	2.4	7
74	Electrospun Nickel Oxide Hollow Nanostructured Fibers. Journal of Dispersion Science and Technology, 2009, 30, 246-249.	2.4	7
75	Identification of the Stable Pt Single Sites in the Environment of Ions: From Mechanism to Design Principle. Advanced Materials, 2022, 34, e2108504.	21.0	6
76	The Role of Alkali Metal in Î±â€MnO₂ Catalyzed Ammoniaâ€Selective Catalysis. Angewandte Chemie, 2019, 131, 6417-6422.	2.0	4
77	Ultra-Thin Red Phosphor Nanosheets as an Efficient Photocatalyst for Hydrogen Evolution Under Visible Light. Topics in Catalysis, 2021, 64, 559-566.	2.8	3
78	Electroformed Giant Vesicles from a Binary Mixture of Phospholipids and Quaternary Ammonium Salts. Journal of Dispersion Science and Technology, 2014, 35, 672-676.	2.4	2
79	Electrochemical Behaviors of C60/TTAL Films in Aqueous Solutions. Journal of Dispersion Science and Technology, 2009, 30, 313-317.	2.4	1
80	High Yield of Supergiant Vesicles on Glyoxylic Acid Modified Aluminum Electrode. Journal of Dispersion Science and Technology, 2014, 35, 1169-1173.	2.4	1
81	Removal of PCP-Na from aqueous systems using monodispersed pompon-like magnetic nanoparticles as adsorbents. Water Science and Technology, 2013, 68, 2704-2711.	2.5	0
82	Optimal Conditions for Existence of Vesicles Under Electric Field. Journal of Dispersion Science and Technology, 2015, 36, 1564-1568.	2.4	0
83	Rapid and Efficient Formation of Reverse Vesicle on Carbon Fibers. Journal of Dispersion Science and Technology, 2016, 37, 245-250.	2.4	0