Xiao Chen

List of Publications by Year in Descending Order

65 papers	3,679 citations	32 h-index	60 g-index
76 ext. papers	5,142 ext. citations	15.6 avg, IF	5.96 L-index

#	Paper	IF	Citations
65	Highly Selective Conversion of CO2 or CO into Precursors for Kerosene-Based Aviation Fuel via an Aldol□Aromatic Mechanism. *ACS Catalysis*, **2022**, 12, 2023-2033	13.1	1
64	Rational Design of Zinc/Zeolite Catalyst: Selective Formation of p-Xylene from Methanol to Aromatics Reaction.. *Angewandte Chemie - International Edition*, **2022**,	16.4	2
63	Superdurable Bifunctional Oxygen Electrocatalyst for High-Performance Zinc-Air Batteries.. *Journal of the American Chemical Society*, **2022**,	16.4	9
62	Distinct Crystal-Facet-Dependent Behaviors for Single-Atom Palladium-on-Ceria Catalysts: Enhanced Stabilization and Catalytic Properties.. *Advanced Materials*, **2022**, e2107721	24	4
61	Atomic-dispersed copper simultaneously achieve high-efficiency removal and high-value-added conversion to ammonia of nitrate in sewage. *Journal of Hazardous Materials*, **2022**, 424, 127319	12.8	9
60	A current-limiting DC circuit breaker with power flow control capability. *IET Generation, Transmission and Distribution*, **2022**, 16, 1877-1889	2.5	0
59	A clicking confinement strategy to fabricate transition metal single-atom sites for bifunctional oxygen electrocatalysis.. *Science Advances*, **2022**, 8, eabn5091	14.3	14
58	High-Entropy Carbonitride MAX Phases and Their Derivative MXenes. *Advanced Energy Materials*, **2022**, 12, 2103228	21.8	9
57	Atom-dispersed copper and nano-palladium in the boron-carbon-nitrogen matric cooperate to realize the efficient purification of nitrate wastewater and the electrochemical synthesis of ammonia.. *Journal of Hazardous Materials*, **2022**, 434, 128909	12.8	0
56	In situ imaging of the sorption-induced subcell topological flexibility of a rigid zeolite framework.. *Science*, **2022**, 376, 491-496	33.3	9
55	Hybridization of iron phthalocyanine and MoS2 for high-efficiency and durable oxygen reduction reaction. *Journal of Energy Chemistry*, **2022**, 71, 528-538	12	0
54	Ultrafast Nonvolatile Ionic Liquids-Based Supercapacitors with Al Foam-Enhanced Carbon Electrode. *ACS Applied Materials & Interfaces*, **2021**, 13, 53904-53914	9.5	2
53	High-order superlattices by rolling up van der Waals heterostructures. *Nature*, **2021**, 591, 385-390	50.4	47
52	A □□= 0.63 V Bifunctional Oxygen Electrocatalyst Enables High-Rate and Long-Cycling Zinc-Air Batteries. *Advanced Materials*, **2021**, 33, e2008606	24	55
51	Zinc-Air Batteries: A □□= 0.63 V Bifunctional Oxygen Electrocatalyst Enables High-Rate and Long-Cycling Zinc□Air Batteries (Adv. Mater. 15/2021). *Advanced Materials*, **2021**, 33, 2170117	24	4
50	Resolving atomic SAPO-34/18 intergrowth architectures for methanol conversion by identifying light atoms and bonds. *Nature Communications*, **2021**, 12, 2212	17.4	6
49	A single-molecule van der Waals compass. *Nature*, **2021**, 592, 541-544	50.4	28

48	Hierarchically porous Fe,N-doped carbon nanorods derived from 1D Fe-doped MOFs as highly efficient oxygen reduction electrocatalysts in both alkaline and acidic media. *Nanoscale*, **2021**, 13, 10500-10508	7.7	6
47	Synergistic Effect of Mn Formation-Migration and Oxygen Loss on the Near Surface and Bulk Structural Changes in Single Crystalline Lithium-Rich Oxides. *ACS Applied Materials & Interfaces* , **2021**, 13, 3891-3898	9.5	5
46	Selective Etching Quaternary MAX Phase toward Single Atom Copper Immobilized MXene (TiCCl) for Efficient CO Electroreduction to Methanol. *ACS Nano*, **2021**, 15, 4927-4936	16.7	41
45	Synergetic effect of high Ni ratio and low oxygen defect interface zone of single crystals on the capacity retention of lithium rich layered oxides. *Journal of Colloid and Interface Science*, **2021**, 594, 485-492	9.3	2
44	Perovskite Quantum Dots Encapsulated in a Mesoporous Metal-Organic Framework as Synergistic Photocathode Materials. *Journal of the American Chemical Society*, **2021**, 143, 14253-14260	16.4	29
43	Two-Dimensional Metal-Organic Framework Nanosheet Supported Noble Metal Nanocrystals for High-Efficiency Water Oxidation. *Advanced Materials Interfaces*, **2021**, 8, 2002034	4.6	7
42	R□ktitelbild: Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion (Angew. Chem. 23/2020). *Angewandte Chemie*, **2020**, 132, 9278-9278	3.6	1
41	Imaging the node-linker coordination in the bulk and local structures of metal-organic frameworks. *Nature Communications*, **2020**, 11, 2692	17.4	27
40	Suppressing the Side Reaction by a Selective Blocking Layer to Enhance the Performance of Si-Based Anodes. *Nano Letters*, **2020**, 20, 5176-5184	11.5	20
39	Coordination Tunes Selectivity: Two-Electron Oxygen Reduction on High-Loading Molybdenum Single-Atom Catalysts. *Angewandte Chemie - International Edition*, **2020**, 59, 9171-9176	16.4	206
38	Coordination Tunes Selectivity: Two-Electron Oxygen Reduction on High-Loading Molybdenum Single-Atom Catalysts. *Angewandte Chemie*, **2020**, 132, 9256-9261	3.6	59
37	Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion. *Angewandte Chemie - International Edition*, **2020**, 59, 9011-9017	16.4	106
36	Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion. *Angewandte Chemie*, **2020**, 132, 9096-9102	3.6	21
35	Multiscale Construction of Bifunctional Electrocatalysts for Long-Lifespan Rechargeable Zinc□Air Batteries. *Advanced Functional Materials*, **2020**, 30, 2003619	15.6	34
34	Precise anionic regulation of NiFe hydroxysulfide assisted by electrochemical reactions for efficient electrocatalysis. *Energy and Environmental Science*, **2020**, 13, 1711-1716	35.4	57
33	Cobalt Nanoparticles and Atomic Sites in Nitrogen-Doped Carbon Frameworks for Highly Sensitive Sensing of Hydrogen Peroxide. *Small*, **2020**, 16, e1902860	11	17
32	Analytical expression for predicting the reduced settling velocity of small particles in turbulence. *Environmental Fluid Mechanics*, **2020**, 20, 905-922	2.2	2
31	Revealing Principles for Design of Lean-Electrolyte Lithium Metal Anode via In Situ Spectroscopy. *Journal of the American Chemical Society*, **2020**, 142, 2012-2022	16.4	84

30	Atomic Spatial and Temporal Imaging of Local Structures and Light Elements inside Zeolite Frameworks. *Advanced Materials*, **2020**, 32, e1906103	24	38
29	Single-Step Conversion of H2-Deficient Syngas into High Yield of Tetramethylbenzene. *ACS Catalysis*, **2019**, 9, 2203-2212	13.1	42
28	Battery Separators Functionalized with Edge-Rich MoS/C Hollow Microspheres for the Uniform Deposition of LiS in High-Performance Lithium-Sulfur Batteries. *Nano-Micro Letters*, **2019**, 11, 43	19.5	37
27	Framework-Porphyrin-Derived Single-Atom Bifunctional Oxygen Electrocatalysts and their Applications in Zn-Air Batteries. *Advanced Materials*, **2019**, 31, e1900592	24	179
26	Rational design of a tubular, interlayer expanded MoS2/N/O doped carbon composite for excellent potassium-ion storage. *Journal of Materials Chemistry A*, **2019**, 7, 9305-9315	13	71
25	Silicon Carbide as a Protective Layer to Stabilize Si-Based Anodes by Inhibiting Chemical Reactions. *Nano Letters*, **2019**, 19, 5124-5132	11.5	48
24	Implanting Atomic Cobalt within Mesoporous Carbon toward Highly Stable Lithium-Sulfur Batteries. *Advanced Materials*, **2019**, 31, e1903813	24	215
23	Dopant Segregation Boosting High-Voltage Cyclability of Layered Cathode for Sodium Ion Batteries. *Advanced Materials*, **2019**, 31, e1904816	24	46
22	Expediting redox kinetics of sulfur species by atomic-scale electrocatalysts in lithium–sulfur batteries. *InformaMaterily*, **2019**, 1, 533-541	23.1	196
21	Tuning element distribution, structure and properties by composition in high-entropy alloys. *Nature* , **2019**, 574, 223-227	50.4	404
20	A Gradient Heterostructure Based on Tolerance Factor in High-Performance Perovskite Solar Cells with 0.84 Fill Factor. *Advanced Materials*, **2019**, 31, e1804217	24	70
19	Uniform Lithium Nucleation Guided by Atomically Dispersed Lithiophilic CoNx Sites for Safe Lithium Metal Batteries. *Small Methods*, **2019**, 3, 1800354	12.8	51
18	Innentitelbild: Activating Inert Metallic Compounds for High-Rate Lithium–Sulfur Batteries Through In Situ Etching of Extrinsic Metal (Angew. Chem. 12/2019). *Angewandte Chemie*, **2019**, 131, 3692-3692	3.6	1
17	Conductive and Catalytic Triple-Phase Interfaces Enabling Uniform Nucleation in High-Rate Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2019**, 9, 1802768	21.8	347
16	Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. *Angewandte Chemie - International Edition*, **2019**, 58, 3779-3783	16.4	204
15	Activating Inert Metallic Compounds for High-Rate Lithium–Sulfur Batteries Through In Situ Etching of Extrinsic Metal. *Angewandte Chemie*, **2019**, 131, 3819-3823	3.6	34
14	A Nanosized CoNi Hydroxide@Hydroxysulfide Core-Shell Heterostructure for Enhanced Oxygen Evolution. *Advanced Materials*, **2019**, 31, e1805658	24	144
13	Surface Electronic Modification of Perovskite Thin Film with Water-Resistant Electron Delocalized Molecules for Stable and Efficient Photovoltaics. *Advanced Energy Materials*, **2018**, 8, 1703143	21.8	62

12	A Solution-Processed Transparent NiO Hole-Extraction Layer for High-Performance Inverted Perovskite Solar Cells. *Chemistry - A European Journal*, **2018**, 24, 2845-2849	4.8	40
11	Direct Chirality Recognition of Single-Crystalline and Single-Walled Transition Metal Oxide Nanotubes on Carbon Nanotube Templates. *Advanced Materials*, **2018**, 30, e1803368	24	10
10	A Band-Edge Potential Gradient Heterostructure to Enhance Electron Extraction Efficiency of the Electron Transport Layer in High-Performance Perovskite Solar Cells. *Advanced Functional Materials* , **2017**, 27, 1700878	15.6	58
9	Surface-functionalized perovskite films for stable photoelectrochemical water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 910-913	13	44
8	Thermally Induced Crystallization of High Quality CH NH PbI Film with Large Grains for Highly Efficient Perovskite Solar Cells. *Chemistry - A European Journal*, **2017**, 23, 5658-5662	4.8	6
7	Formation of high-quality perovskite thin film for planar heterojunction solar cells. *RSC Advances*, **2015**, 5, 69502-69508	3.7	15
6	Direct insight into crystallization and stability of hybrid perovskite CH3NH3PbI3via solvothermal synthesis. *Journal of Materials Chemistry A*, **2015**, 3, 15854-15857	13	20
5	Thermal-Induced Volmer□Weber Growth Behavior for Planar Heterojunction Perovskites Solar Cells. *Chemistry of Materials*, **2015**, 27, 5116-5121	9.6	92
4	Novel PtO decorated MWCNTs as a highly efficient counter electrode for dye-sensitized solar cells. *RSC Advances*, **2015**, 5, 8307-8310	3.7	5
3	Formation Mechanism of Freestanding CH3NH3PbI3 Functional Crystals: In Situ Transformation vs Dissolution□Crystallization. *Chemistry of Materials*, **2014**, 26, 6705-6710	9.6	130
2	A novel strategy to prepare a Pt□SnO2 nanocomposite as a highly efficient counter electrode for dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 17253-17257	13	27
1	Low-cost SnS(x) counter electrodes for dye-sensitized solar cells. *Chemical Communications*, **2013**, 49, 5793-5	5.8	99