

# Xiyang Wang

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

1,945  
citations

279798

23  
h-index

265206

42  
g-index

48  
all docs

48  
docs citations

48  
times ranked

2566  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coordination of Atomic Coâ€“Pt Coupling Species at Carbon Defects as Active Sites for Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 10757-10763.	13.7	464
2	Atomicâ€“Scale Insights into Surface Lattice Oxygen Activation at the Spinel/Perovskite interface of Co<sub>3</sub>O<sub>4</sub>/La<sub>0.3</sub>Sr<sub>0.7</sub>CoO<sub>3</sub>. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11720-11725.	13.8	140
3	Hollowâ€“Structured Metal Oxides as Oxygenâ€“Related Catalysts. <i>Advanced Materials</i> , 2019, 31, e1801430.	21.0	99
4	MOF-derived N-doped ZnO carbon skeleton@hierarchical Bi <sub>2</sub> MoO <sub>6</sub> S-scheme heterojunction for photodegradation of SMX: Mechanism, pathways and DFT calculation. <i>Journal of Hazardous Materials</i> , 2022, 426, 128106.	12.4	98
5	Black Phosphorus-Modified Co<sub>3</sub>O<sub>4</sub> through Tuning the Electronic Structure for Enhanced Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 17459-17466.	8.0	87
6	Engineering the surface of perovskite La<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> for catalytic activity of CO oxidation. <i>Chemical Communications</i> , 2014, 50, 9200-9203.	4.1	84
7	Activation of Surface Oxygen Sites in a Cobalt-Based Perovskite Model Catalyst for CO Oxidation. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4146-4154.	4.6	67
8	Integrating Catalysis of Methane Decomposition and Electrocatalytic Hydrogen Evolution with Ni/CeO<sub>2</sub> for Improved Hydrogen Production Efficiency. <i>ChemSusChem</i> , 2019, 12, 1000-1010.	6.8	58
9	Co<sub>3</sub>O<sub>4</sub>â€“CuCoO<sub>2</sub> Nanomesh: An Interface-Enhanced Substrate that Simultaneously Promotes CO Adsorption and O<sub>2</sub> Activation in H<sub>2</sub> Purification. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 6042-6053.	8.0	55
10	Highly Efficient B-Site Exsolution Assisted by Co Doping in Lanthanum Ferrite toward High-Performance Electrocatalysts for Oxygen Evolution and Oxygen Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 302-310.	6.7	48
11	Cationâ€“Exchangeâ€“Induced Metal and Alloy Dualâ€“Exsolution in Perovskite Ferrite Oxides Boosting the Performance of Liâ€“O<sub>2</sub> Battery. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23380-23387.	13.8	47
12	Molten Salt Flux Synthesis, Crystal Facet Design, Characterization, Electronic Structure, and Catalytic Properties of Perovskite Cobaltite. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 28219-28231.	8.0	46
13	Silver-Intermediated Perovskite La<sub>0.9</sub>FeO<sub>3âˆ’ $\delta$ </sub> toward High-Performance Cathode Catalysts for Nonaqueous Lithiumâ€“Oxygen Batteries. <i>ACS Catalysis</i> , 2019, 9, 11743-11752.	11.2	46
14	Remarkable Improvement in Photocatalytic Performance for Tannery Wastewater Processing via SnS<sub>2</sub> Modified with Nâ€“Doped Carbon Quantum Dots: Synthesis, Characterization, and 4â€“Nitrophenolâ€“Aided Cr(VI) Photoreduction. <i>Small</i> , 2019, 15, e1804515.	10.0	44
15	Defect Engineering, Electronic Structure, and Catalytic Properties of Perovskite Oxide La<sub>0.5</sub>Sr<sub>0.5</sub>CoO<sub>3âˆ’ $\delta$ </sub>. <i>Chemistry - A European Journal</i> , 2017, 23, 1093-1100.	3.3	37
16	Modulating Ti<sup>t</sup><sub>2g</sub> Orbital Occupancy in a Cu/TiO<sub>2</sub> Composite for Selective Photocatalytic CO<sub>2</sub> Reduction to CO. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	35
17	Cation Segregation of A-Site Deficiency Perovskite La<sub>0.85</sub>FeO<sub>3âˆ’ $\delta$ </sub> Nanoparticles toward High-Performance Cathode Catalysts for Rechargeable Li-O<sub>2</sub> Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 25465-25472.	8.0	31
18	Optimized Co<sup>2+</sup><sub>(Td)</sub>â€“Oâ€“Fe<sup>3+</sup><sub>(Oh)</sub> electronic states in a spinel electrocatalyst for highly efficient oxygen evolution reaction performance. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 3295-3301.	6.0	29

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19	Optimizing the surface state of cobalt-iron bimetallic phosphide <i>in situ</i> regulating phosphorus vacancies. <i>Chemical Communications</i> , 2020, 56, 2602-2605.	4.1	29
20	Switching Optimally Balanced Fe-N Interaction Enables Extremely Stable Energy Storage. <i>Energy and Environmental Materials</i> , 2023, 6, .	12.8	29
21	Mechanistic Origin of Enhanced CO Catalytic Oxidation over $\text{Co}_3\text{O}_4/\text{LaCoO}_3$ at Lower Temperature. <i>ChemCatChem</i> , 2017, 9, 3102-3106.	3.7	28
22	Crystal Growth of Bimetallic Oxides $\text{CuMnO}_2$ with Tailored Valence States for Optimum Electrochemical Energy Storage. <i>Crystal Growth and Design</i> , 2018, 18, 6107-6116.	3.0	28
23	Surface Reconstruction of a Mullite-Type Catalyst via Selective Dissolution for NO Oxidation. <i>ACS Catalysis</i> , 2021, 11, 14507-14520.	11.2	27
24	Atomic-Scale Insights into Surface Lattice Oxygen Activation at the Spinel/Perovskite interface of $\text{Co}_3\text{O}_4/\text{La}_0.3\text{Sr}_0.7\text{CoO}_3$ . <i>Angewandte Chemie</i> , 2019, 131, 11846-11851.	2.0	26
25	Jahn-Teller Disproportionation Induced Exfoliation of Unit-Cell Scale $\gamma\text{-MnO}_2$ . <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22659-22666.	13.8	26
26	Composition-controlled synthesis of $\text{Ni}_2\text{Co}_x\text{P}$ nanocrystals as bifunctional catalysts for water splitting. <i>RSC Advances</i> , 2017, 7, 7906-7913.	3.6	24
27	In Situ Growth of Amorphous NiFe Hydroxides on Spinel $\text{NiFe}_2\text{O}_4$ via Ultrasonic-Assisted Reduction for an Enhanced Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17194-17200.	6.7	23
28	Manipulating Surface Termination of Perovskite Manganate for Oxygen Activation. <i>Advanced Functional Materials</i> , 2021, 31, 2006439.	14.9	18
29	Two-dimensional materials for electrochemical $\text{CO}_2$ reduction: materials, <i>in situ</i> characterizations, and perspective. <i>Nanoscale</i> , 2021, 13, 19712-19739.	5.6	18
30	High-density/efficient surface active sites on modified separators to boost Li-S batteries via atomic $\text{Co}_3\text{-Se}$ termination. <i>Nano Research</i> , 2022, 15, 7199-7208.	10.4	18
31	Architecture of Biomimetic Water Oxidation Catalyst with $\text{Mn}_4\text{CaO}_5$ Clusterlike Structure Unit. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37948-37954.	8.0	14
32	A symbiotic hetero-nanocomposite that stabilizes unprecedented $\text{CaCl}_2$ -type $\text{TiO}_2$ for enhanced solar-driven hydrogen evolution reaction. <i>Chemical Science</i> , 2019, 10, 8323-8330.	7.4	14
33	High-quality borophene quantum dot realization and their application in a photovoltaic device. <i>Journal of Materials Chemistry A</i> , 2021, 9, 24036-24043.	10.3	14
34	Raw cellulose/polyvinyl alcohol blending separators prepared by phase inversion for high-performance supercapacitors. <i>Nanotechnology</i> , 2021, 32, 095403.	2.6	14
35	Activating Surface Lattice Oxygen of a $\text{Cu/Zn}_1\text{-Cu}_x\text{O}$ Catalyst through Interface Interactions for CO Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 9882-9890.	8.0	13
36	Fluorine induced surface reconstruction of perovskite ferrite oxide as cathode catalyst for prolong-life Li-O <sub>2</sub> battery. <i>Chemical Engineering Journal</i> , 2022, 448, 137684.	12.7	13

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37	Cation-Exchange-Induced Metal and Alloy Dual-Exsolution in Perovskite Ferrite Oxides Boosting the Performance of Li-O <sub>2</sub> Battery. <i>Angewandte Chemie</i> , 2021, 133, 23568-23575.	2.0	11
38	Electron transfer in Cu/Cu <sub>2</sub> O generated by disproportionation promoting efficient CO <sub>2</sub> photoreduction. <i>Nano Research</i> , 0, , .	10.4	9
39	Synergistic Effects of a CeO <sub>2</sub> /SmMn <sub>2</sub> O <sub>5</sub> -H Diesel Oxidation Catalyst Induced by Acid-Selective Dissolution Drive the Catalytic Oxidation Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2860-2870.	8.0	8
40	The interplay between selective etching induced cation defects and active oxygen species for volatile organic compounds degradation. <i>Journal of Colloid and Interface Science</i> , 2022, 625, 363-372.	9.4	8
41	Engineering surface segregation of perovskite oxide through wet exsolution for CO catalytic oxidation. <i>Journal of Hazardous Materials</i> , 2022, 436, 129110.	12.4	7
42	Role of double interfaces in inspiring energy storage devices in CC@Ni(OH)Cl@NiO flexible electrodes. <i>Materials Chemistry Frontiers</i> , 2020, 4, 231-242.	5.9	5
43	Jahn-Teller Disproportionation Induced Exfoliation of Unit-Cell Scale ĩMnO <sub>2</sub> . <i>Angewandte Chemie</i> , 2020, 132, 22848-22855.	2.0	4
44	Cation-/Anion-Based Physicochemical Mechanisms for Anodically-Coloring Electrochromic Nickel Oxide Thin Films. <i>ChemElectroChem</i> , 0, , .	3.4	1
45	Modulating Ti <i>t</i> / <i>i</i> <sub>2g</sub> Orbital Occupancy in a Cu/TiO <sub>2</sub> Composite for Selective Photocatalytic CO <sub>2</sub> Reduction to CO. <i>Angewandte Chemie</i> , 0, , .	2.0	1