

# Xijun Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1990996/publications.pdf>

Version: 2024-02-01

57  
papers

3,446  
citations

172457

29  
h-index

138484

58  
g-index

61  
all docs

61  
docs citations

61  
times ranked

5028  
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective catalytic oxidation of ammonia to nitric oxide via chemical looping. <i>Nature Communications</i> , 2022, 13, 718.	12.8	18
2	High-throughput oxygen chemical potential engineering of perovskite oxides for chemical looping applications. <i>Energy and Environmental Science</i> , 2022, 15, 1512-1528.	30.8	35
3	One-step synthesis of single-site vanadium substitution in 1T-WS <sub>2</sub> monolayers for enhanced hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 709.	12.8	137
4	Edge-effect enhanced catalytic CO oxidation by atomically dispersed Pt on nitride-graphene. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2093-2098.	10.3	5
5	A tailored multi-functional catalyst for ultra-efficient styrene production under a cyclic redox scheme. <i>Nature Communications</i> , 2021, 12, 1329.	12.8	35
6	Spatial Confinement of a Carbon Nanocone for an Efficient Oxygen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2252-2258.	4.6	4
7	Electronic Spin Moment As a Catalytic Descriptor for Fe Single-Atom Catalysts Supported on C <sub>2</sub> N. <i>Journal of the American Chemical Society</i> , 2021, 143, 4405-4413.	13.7	138
8	Net Electronic Charge as an Effective Electronic Descriptor for Oxygen Release and Transport Properties of SrFeO <sub>3</sub> -Based Oxygen Sorbents. <i>Chemistry of Materials</i> , 2021, 33, 2446-2456.	6.7	22
9	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19262-19271.	13.8	275
10	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. <i>Angewandte Chemie</i> , 2021, 133, 19411-19420.	2.0	32
11	Liquid Metal Shell as an Effective Iron Oxide Modifier for Redox-Based Hydrogen Production at Intermediate Temperatures. <i>ACS Catalysis</i> , 2021, 11, 10228-10238.	11.2	13
12	Regulating Electronic Spin Moments of Single-Atom Catalyst Sites via Single-Atom Promoter Tuning on S-Vacancy MoS <sub>2</sub> for Efficient Nitrogen Fixation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8355-8362.	4.6	63
13	Tunable Electric and Magnetic Properties of Transition Metal@N <sub>x</sub> C <sub>y</sub> @Graphene Materials by Different Metal and Defect Types. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3230-3235.	3.3	3
14	A- and B-site Codoped SrFeO <sub>3</sub> Oxygen Sorbents for Enhanced Chemical Looping Air Separation. <i>ChemSusChem</i> , 2020, 13, 385-393.	6.8	49
15	Ohmic contact formation mechanisms of TiN film on 4H-SiC. <i>Ceramics International</i> , 2020, 46, 7142-7148.	4.8	3
16	Azopyrazole-Based Photoswitchable Anion Receptor for Dihydrogen Phosphate Transport. <i>Journal of Physical Chemistry A</i> , 2020, 124, 9692-9697.	2.5	9
17	Regulation of Electronic Structure of Graphene Nanoribbon by Tuning Long-Range Dopant-Dopant Coupling at Distance of Tens of Nanometers. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6907-6913.	4.6	5
18	Realizing a Not-Strong-Not-Weak Polarization Electric Field in Single-Atom Catalysts Sandwiched by Boron Nitride and Graphene Sheets for Efficient Nitrogen Fixation. <i>Journal of the American Chemical Society</i> , 2020, 142, 19308-19315.	13.7	170

#	ARTICLE	IF	CITATIONS
19	Substituted SrFeO <sub>3</sub> as robust oxygen sorbents for thermochemical air separation: correlating redox performance with compositional and structural properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8924-8932.	2.8	43
20	Sharp-tip enhanced catalytic CO oxidation by atomically dispersed Pt <sub>1</sub> /Pt <sub>2</sub> on a raised graphene oxide platform. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12485-12494.	10.3	9
21	Carbon Monoxide Oxidation Promoted by Surface Polarization Charges in a CuO/Ag Hybrid Catalyst. <i>Scientific Reports</i> , 2020, 10, 2552.	3.3	3
22	Tuning Phase Transitions in Metal Oxides by Hydrogen Doping: A First-Principles Study. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1075-1080.	4.6	12
23	A molten carbonate shell modified perovskite redox catalyst for anaerobic oxidative dehydrogenation of ethane. <i>Science Advances</i> , 2020, 6, eaaz9339.	10.3	61
24	Sr <sub>1-x</sub> Ca <sub>x</sub> Fe <sub>1-y</sub> Co <sub>y</sub> O <sub>3-δ</sub> as facile and tunable oxygen sorbents for chemical looping air separation. <i>JPhys Energy</i> , 2020, 2, 025007.	5.3	18
25	Using Machine Learning to Predict the Dissociation Energy of Organic Carbonyls. <i>Journal of Physical Chemistry A</i> , 2020, 124, 3844-3850.	2.5	18
26	Electric Dipole Descriptor for Machine Learning Prediction of Catalyst Surface-Molecular Adsorbate Interactions. <i>Journal of the American Chemical Society</i> , 2020, 142, 7737-7743.	13.7	65
27	Enabling Efficient Charge Separation for Optoelectronic Conversion via an Energy-Dependent Z-Scheme n-Semiconductor-Metal-p-Semiconductor Schottky Heterojunction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3313-3319.	4.6	9
28	Protecting the Nanoscale Properties of Ag Nanowires with a Solution-Grown SnO <sub>2</sub> Monolayer as Corrosion Inhibitor. <i>Journal of the American Chemical Society</i> , 2019, 141, 13977-13986.	13.7	45
29	Modified Ceria for Low-Temperature CO <sub>2</sub> Utilization: A Chemical Looping Route to Exploit Industrial Waste Heat. <i>Advanced Energy Materials</i> , 2019, 9, 1901963.	19.5	43
30	Physically Close yet Chemically Separate Reduction and Oxidation Sites in Double-Walled Nanotubes for Photocatalytic Hydrogen Generation. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3739-3743.	4.6	9
31	Protecting Single Atom Catalysts with Graphene/Carbon-Nitride Chainmail. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3129-3133.	4.6	33
32	Immobilizing copper-supported graphene with surface hydrogenation or hydroxylation: A first-principle study. <i>Chemical Physics</i> , 2019, 523, 183-190.	1.9	2
33	Catalytic Chemistry Predicted by a Charge Polarization Descriptor: Synergistic O <sub>2</sub> Activation and CO Oxidation by Au-Cu Bimetallic Clusters on TiO <sub>2</sub> (101). <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 9629-9640.	8.0	28
34	Isolating hydrogen from oxygen in photocatalytic water splitting with a carbon-quantum-dot/carbon-nitride hybrid. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6143-6148.	10.3	32
35	Bimetallic Pd/Co Embedded in Two-Dimensional Carbon-Nitride for Z-Scheme Photocatalytic Water Splitting. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1846-1851.	3.1	10
36	Bandgap tuning of C <sub>3</sub> N monolayer: A first-principles study. <i>Chemical Physics</i> , 2019, 520, 40-46.	1.9	19

#	ARTICLE	IF	CITATIONS
37	Metal-enhanced hydrogenation of graphene with atomic pattern. <i>Carbon</i> , 2019, 143, 700-705.	10.3	14
38	Energy Materials Design for Steering Charge Kinetics. <i>Advanced Materials</i> , 2018, 30, e1801988.	21.0	10
39	Material descriptors for photocatalyst/catalyst design. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018, 8, e1369.	14.6	34
40	Insight into Electronic and Structural Reorganizations for Defect-Induced VO <sub>2</sub> Metal-Insulator Transition. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3129-3132.	4.6	24
41	“Healing” Effect of Graphene Oxide in Achieving Robust Dilute Ferromagnetism in Oxygen-Deficient Titanium Dioxide. <i>Journal of Physical Chemistry C</i> , 2017, 121, 22806-22814.	3.1	8
42	Combining photocatalytic hydrogen generation and capsule storage in graphene based sandwich structures. <i>Nature Communications</i> , 2017, 8, 16049.	12.8	86
43	Integration of Multiple Plasmonic and Co-Catalyst Nanostructures on TiO <sub>2</sub> Nanosheets for Visible-Near-Infrared Photocatalytic Hydrogen Evolution. <i>Small</i> , 2016, 12, 1640-1648.	10.0	136
44	Graphitic carbon nitride supported single-atom catalysts for efficient oxygen evolution reaction. <i>Chemical Communications</i> , 2016, 52, 13233-13236.	4.1	176
45	Aggregation-induced intersystem crossing: a novel strategy for efficient molecular phosphorescence. <i>Nanoscale</i> , 2016, 8, 17422-17426.	5.6	151
46	The Dynamic Phase Transition Modulation of Ion-Liquid Gating VO <sub>2</sub> Thin Film: Formation, Diffusion, and Recovery of Oxygen Vacancies. <i>Advanced Functional Materials</i> , 2016, 26, 3532-3541.	14.9	52
47	Trimetallic TriStar Nanostructures: Tuning Electronic and Surface Structures for Enhanced Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2016, 28, 2077-2084.	21.0	181
48	Efficient and tunable fluorescence energy transfer via long-lived polymer excitons. <i>Polymer Chemistry</i> , 2015, 6, 1698-1702.	3.9	7
49	Atomic Scale Analysis of the Enhanced Electro- and Photo-Catalytic Activity in High-Index Faceted Porous NiO Nanowires. <i>Scientific Reports</i> , 2015, 5, 8557.	3.3	12
50	Polymerization-Enhanced Intersystem Crossing: New Strategy to Achieve Long-Lived Excitons. <i>Macromolecular Rapid Communications</i> , 2015, 36, 298-303.	3.9	59
51	Metal-Organic Frameworks: Integration of an Inorganic Semiconductor with a Metal-Organic Framework: A Platform for Enhanced Gaseous Photocatalytic Reactions ( <i>Adv. Mater.</i> 28/2014). <i>Advanced Materials</i> , 2014, 26, 4907-4907.	21.0	3
52	Designing p-Type Semiconductor-Metal Hybrid Structures for Improved Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5107-5111.	13.8	176
53	Two-dimensional g-C <sub>3</sub> N <sub>4</sub> : an ideal platform for examining facet selectivity of metal co-catalysts in photocatalysis. <i>Chemical Communications</i> , 2014, 50, 6094-6097.	4.1	225
54	Controllably Interfacing with Metal: A Strategy for Enhancing CO Oxidation on Oxide Catalysts by Surface Polarization. <i>Journal of the American Chemical Society</i> , 2014, 136, 14650-14653.	13.7	89

#	ARTICLE	IF	CITATIONS
55	Integration of an Inorganic Semiconductor with a Metal-Organic Framework: A Platform for Enhanced Gaseous Photocatalytic Reactions. <i>Advanced Materials</i> , 2014, 26, 4783-4788.	21.0	380
56	Multifunctional Fluorescent Probe for Sequential Detections of Glutathione and Caspase-3 in Vitro and in Cells. <i>Analytical Chemistry</i> , 2013, 85, 6203-6207.	6.5	62
57	Labeling Thiols on Proteins, Living Cells and Tissues with Enhanced Emission Induced by FRET. <i>Scientific Reports</i> , 2013, 3, 3523.	3.3	26