Xiaomin Xu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2426628/publications.pdf

Version: 2024-02-01

69	6,495	61984 43	82547 72
papers	citations	h-index	g-index

74	74	74	6629
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent Progress in Metalâ€Organic Frameworks for Applications in Electrocatalytic and Photocatalytic Water Splitting. Advanced Science, 2017, 4, 1600371.	11.2	594
2	A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 6442-6448.	21.0	429
3	Direct evidence of boosted oxygen evolution over perovskite by enhanced lattice oxygen participation. Nature Communications, 2020, 11, 2002.	12.8	366
4	Enhancing Electrocatalytic Activity for Hydrogen Evolution by Strongly Coupled Molybdenum Nitride@Nitrogen-Doped Carbon Porous Nano-Octahedrons. ACS Catalysis, 2017, 7, 3540-3547.	11.2	306
5	Recent Advances in Novel Nanostructuring Methods of Perovskite Electrocatalysts for Energyâ€Related Applications. Small Methods, 2018, 2, 1800071.	8.6	285
6	Perovskite Oxide Based Electrodes for Highâ€Performance Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2020, 59, 136-152.	13.8	253
7	Coâ€doping Strategy for Developing Perovskite Oxides as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. Advanced Science, 2016, 3, 1500187.	11.2	245
8	Double Perovskites in Catalysis, Electrocatalysis, and Photo(electro)catalysis. Trends in Chemistry, 2019, 1, 410-424.	8.5	227
9	Metal-organic frameworks derived porous carbon, metal oxides and metal sulfides-based compounds for supercapacitors application. Energy Storage Materials, 2020, 26, 1-22.	18.0	208
10	Designing Highâ€Valence Metal Sites for Electrochemical Water Splitting. Advanced Functional Materials, 2021, 31, 2009779.	14.9	195
11	Ruddlesdenâ€“Popper perovskites in electrocatalysis. Materials Horizons, 2020, 7, 2519-2565.	12.2	139
12	Recent advances in anion-doped metal oxides for catalytic applications. Journal of Materials Chemistry A, 2019, 7, 7280-7300.	10.3	133
13	Highâ€Performance Perovskite Composite Electrocatalysts Enabled by Controllable Interface Engineering. Small, 2021, 17, e2101573.	10.0	128
14	SrCo_{0.9}Ti_{0.1}O_{3â^'Î´} As a New Electrocatalyst for the Oxygen Evolution Reaction in Alkaline Electrolyte with Stable Performance. ACS Applied Materials & Interfaces, 2015, 7, 17663-17670.	8.0	125
15	Recent Advances in Metalâ€Organic Framework Derivatives as Oxygen Catalysts for Zincâ€Air Batteries. Batteries and Supercaps, 2019, 2, 272-289.	4.7	121
16	Boosting Oxygen Reduction Reaction Activity of Palladium by Stabilizing Its Unusual Oxidation States in Perovskite. Chemistry of Materials, 2015, 27, 3048-3054.	6.7	117
17	Fundamental Understanding and Application of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3â^'Î´}Perovskite in Energy Storage and Conversion: Past, Present, and Future. Energy & Fuels, 2021, 35, 13585-13609.	5.1	113
18	Rational Design of Agâ€Based Catalysts for the Electrochemical CO₂ Reduction to CO: A Review. ChemSusChem, 2020, 13, 39-58.	6.8	106

#	Article	IF	Citations
19	Searching General Sufficientâ€andâ€Necessary Conditions for Ultrafast Hydrogenâ€Evolving Electrocatalysis. Advanced Functional Materials, 2019, 29, 1900704.	14.9	94
20	Activity and Stability of Ruddlesdenâ€“Popperâ€Type La_{n+1}Ni_nO_{3n+1} (n=1, 2, 3, and â^ž) Electrocatalysts for Oxygen Reduction and Evolution Reactions in Alkaline Media. Chemistry - A European Journal, 2016, 22, 2719-2727.	3.3	90
21	Electrochemical Water Splitting: Bridging the Gaps Between Fundamental Research and Industrial Applications. Energy and Environmental Materials, 2023, 6, .	12.8	89
22	A Universal and Facile Way for the Development of Superior Bifunctional Electrocatalysts for Oxygen Reduction and Evolution Reactions Utilizing the Synergistic Effect. Chemistry - A European Journal, 2014, 20, 15533-15542.	3.3	87
23	Modulating metalâ€“organic frameworks for catalyzing acidic oxygen evolution for proton exchange membrane water electrolysis. SusMat, 2021, 1, 460-481.	14.9	86
24	A Functionâ€Separated Design of Electrode for Realizing Highâ€Performance Hybrid Zinc Battery. Advanced Energy Materials, 2020, 10, 2002992.	19.5	84
25	Self-Recovery Chemistry and Cobalt-Catalyzed Electrochemical Deposition of Cathode for Boosting Performance of Aqueous Zinc-Ion Batteries. IScience, 2020, 23, 100943.	4.1	83
26	Boosting Electrocatalytic Activity of Single Atom Catalysts Supported on Nitrogenâ€Doped Carbon through N Coordination Environment Engineering. Small, 2022, 18, e2105329.	10.0	78
27	Multifunctional Iron Oxide Nanoflake/Graphene Composites Derived from Mechanochemical Synthesis for Enhanced Lithium Storage and Electrocatalysis. ACS Applied Materials & Interfaces, 2015, 7, 14446-14455.	8.0	75
28	New Undisputed Evidence and Strategy for Enhanced Latticeâ€Oxygen Participation of Perovskite Electrocatalyst through Cation Deficiency Manipulation. Advanced Science, 2022, 9, e2200530.	11.2	75
29	Rational Design of a Waterâ€Storable Hierarchical Architecture Decorated with Amorphous Barium Oxide and Nickel Nanoparticles as a Solid Oxide Fuel Cell Anode with Excellent Sulfur Tolerance. Advanced Science, 2017, 4, 1700337.	11.2	74
30	Recent progress in metalâ€“organic frameworks for lithiumâ€“sulfur batteries. Polyhedron, 2018, 155, 464-484.	2.2	74
31	Toward Enhanced Oxygen Evolution on Perovskite Oxides Synthesized from Different Approaches: A Case Study of Ba 0.5 Sr 0.5 Co 0.8 Fe 0.2 O 3â^Î´. Electrochimica Acta, 2016, 219, 553-559.	5.2	72
32	A universal chemical-induced tensile strain tuning strategy to boost oxygen-evolving electrocatalysis on perovskite oxides. Applied Physics Reviews, 2022, 9, .	11.3	67
33	Pt/Câ€“LiCoO₂composites with ultralow Pt loadings as synergistic bifunctional electrocatalysts for oxygen reduction and evolution reactions. Journal of Materials Chemistry A, 2016, 4, 4516-4524.	10.3	65
34	Recent Progress on Structurally Ordered Materials for Electrocatalysis. Advanced Energy Materials, 2021, 11, 2101937.	19.5	65
35	Boosting the oxygen evolution reaction activity of a perovskite through introducing multi-element synergy and building an ordered structure. Journal of Materials Chemistry A, 2019, 7, 9924-9932.	10.3	62
36	Hierarchical carbon-coated acanthosphere-like Li4Ti5O12 microspheres for high-power lithium-ion batteries. Journal of Power Sources, 2016, 314, 18-27.	7.8	59

#	Article	IF	Citations
37	Superstructures with Atomic-Level Arranged Perovskite and Oxide Layers for Advanced Oxidation with an Enhanced Non-Free Radical Pathway. ACS Sustainable Chemistry and Engineering, 2022, 10, 1899-1909.	6.7	59
38	Surfactant-free self-assembly of reduced graphite oxide-MoO2 nanobelt composites used as electrode for lithium-ion batteries. Electrochimica Acta, 2016, 211, 972-981.	5.2	53
39	Earthâ€Abundant Silicon for Facilitating Water Oxidation over Ironâ€Based Perovskite Electrocatalyst. Advanced Materials Interfaces, 2018, 5, 1701693.	3.7	53
40	A Porous Nano-Micro-Composite as a High-Performance Bi-Functional Air Electrode with Remarkable Stability for Rechargeable Zincâ€“Air Batteries. Nano-Micro Letters, 2020, 12, 130.	27.0	52
41	3D ordered macroporous SmCoO3 perovskite for highly active and selective hydrogen peroxide detection. Electrochimica Acta, 2018, 260, 372-383.	5.2	48
42	Understanding the doping effect toward the design of CO2-tolerant perovskite membranes with enhanced oxygen permeability. Journal of Membrane Science, 2016, 519, 11-21.	8.2	47
43	From scheelite BaMoO4 to perovskite BaMoO3: Enhanced electrocatalysis toward the hydrogen evolution in alkaline media. Composites Part B: Engineering, 2020, 198, 108214.	12.0	46
44	Ni2+/Co2+ doped Au-Fe7S8 nanoplatelets with exceptionally high oxygen evolution reaction activity. Nano Energy, 2021, 89, 106463.	16.0	45
45	A top-down strategy for the synthesis of mesoporous Ba0.5Sr0.5Co0.8Fe0.2O3â^' as a cathode precursor for buffer layer-free deposition on stabilized zirconia electrolyte with a superior electrochemical performance. Journal of Power Sources, 2015, 274, 1024-1033.	7.8	44
46	Materials Engineering in Perovskite for Optimized Oxygen Evolution Electrocatalysis in Alkaline Condition. Small, 2021, 17, e2006638.	10.0	41
47	Exceptional lattice-oxygen participation on artificially controllable electrochemistry-induced crystalline-amorphous phase to boost oxygen-evolving performance. Applied Catalysis B: Environmental, 2021, 297, 120484.	20.2	41
48	Building Ruddlesdenâ€“Popper and Single Perovskite Nanocomposites: A New Strategy to Develop Highâ€Performance Cathode for Protonic Ceramic Fuel Cells. Small, 2021, 17, e2101872.	10.0	38
49	Enhancing the triiodide reduction activity of a perovskite-based electrocatalyst for dye-sensitized solar cells through exsolved silver nanoparticles. Journal of Materials Chemistry A, 2019, 7, 17489-17497.	10.3	35
50	Adsorption-based synthesis of Co 3 O 4 /C composite anode for high performance lithium-ion batteries. Energy, 2017, 125, 569-575.	8.8	34
51	Activation-free supercapacitor electrode based on surface-modified Sr2CoMo1-xNixO6-Î´ perovskite. Chemical Engineering Journal, 2020, 390, 124645.	12.7	34
52	Smart Control of Composition for Double Perovskite Electrocatalysts toward Enhanced Oxygen Evolution Reaction. ChemSusChem, 2019, 12, 5111-5116.	6.8	33
53	Modified template synthesis and electrochemical performance of a Co₃O₄/mesoporous cathode for lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 16132-16141.	10.3	31
54	Rational Design of Metal Oxideâ€Based Cathodes for Efficient Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2018, 8, 1800172.	19.5	30

#	Article	IF	Citations
55	A new highly active and CO2-stable perovskite-type cathode material for solid oxide fuel cells developed from A- and B-site cation synergy. Journal of Power Sources, 2020, 457, 227995.	7.8	30
56	Rational design of NiCo2O4/g-C3N4 composite as practical anode of lithium-ion batteries with outstanding electrochemical performance from multiple aspects. Journal of Alloys and Compounds, 2019, 805, 522-530.	5.5	27
57	Materials design for ceramic oxygen permeation membranes: Single perovskite vs. single/double perovskite composite, a case study of tungsten-doped barium strontium cobalt ferrite. Journal of Membrane Science, 2018, 566, 278-287.	8.2	26
58	Ternary Phase Diagram-Facilitated Rapid Screening of Double Perovskites As Electrocatalysts for the Oxygen Evolution Reaction. Chemistry of Materials, 2019, 31, 5919-5926.	6.7	26
59	Silver-doped strontium niobium cobaltite as a new perovskite-type ceramic membrane for oxygen separation. Journal of Membrane Science, 2018, 563, 617-624.	8.2	25
60	Three Strongly Coupled Allotropes in a Functionalized Porous Allâ€Carbon Nanocomposite as a Superior Anode for Lithiumâ€Ion Batteries. ChemElectroChem, 2016, 3, 698-703.	3.4	23
61	Facilitating Oxygen Redox on Manganese Oxide Nanosheets by Tuning Active Species and Oxygen Defects for Zincâ€Air Batteries. ChemElectroChem, 2020, 7, 4949-4955.	3.4	23
62	A low resistance and stable lithium-garnet electrolyte interface enabled by a multifunctional anode additive for solid-state lithium batteries. Journal of Materials Chemistry A, 2022, 10, 2519-2527.	10.3	22
63	An Intrinsically Conductive Phosphorusâ€Doped Perovskite Oxide as a New Cathode for Highâ€Performance Dyeâ€Sensitized Solar Cells by Providing Internal Conducting Pathways. Solar Rrl, 2019, 3, 1900108.	5.8	18
64	One-pot combustion synthesis of Li3VO4-Li4Ti5O12 nanocomposite as anode material of lithium-ion batteries with improved performance. Electrochimica Acta, 2016, 222, 587-595.	5.2	12
65	Perowskitoxidâ€Elektroden zur leistungsstarken photoelektrochemischen Wasserspaltung. Angewandte Chemie, 2020, 132, 140-158.	2.0	8
66	Spontaneous Formation of Heterodimer Auâ€“Fe₇S₈ Nanoplatelets by a Seeded Growth Approach. Journal of Physical Chemistry C, 2019, 123, 10604-10613.	3.1	7
67	A New Sodium-ion-conducting Layered Perovskite Oxide as Highly Active and Sulfur Tolerant Electrocatalyst for Solid Oxide Fuel Cells. Energy Procedia, 2019, 158, 1660-1665.	1.8	4
68	Perovskite Materials in Electrocatalysis. Materials Horizons, 2020, , 209-250.	0.6	4
69	Electrocatalysis: Coâ€doping Strategy for Developing Perovskite Oxides as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction (Adv. Sci. 2/2016). Advanced Science, 2016, 3, .	11.2	1