

# Daqin Guan

## List of Publications by Year in descending order

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42  
papers

3,045  
citations

172207

29  
h-index

301761

39  
g-index

44  
all docs

44  
docs citations

44  
times ranked

2277  
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-catalyzed formation of strongly interconnected multiphase molybdenum-based composites for efficient hydrogen evolution. , 2022, 4, 77-87.		45
2	The BaCe <sub>0.16</sub> Y <sub>0.04</sub> Fe <sub>0.8</sub> O <sub>3</sub> nanocomposite: a new high-performance cobalt-free triple-conducting cathode for protonic ceramic fuel cells operating at reduced temperatures. Journal of Materials Chemistry A, 2022, 10, 5381-5390.	5.2	69
3	A New Durable Surface Nanoparticles-Modified Perovskite Cathode for Protonic Ceramic Fuel Cells from Selective Cation Exsolution under Oxidizing Atmosphere. Advanced Materials, 2022, 34, e2106379.	11.1	79
4	New Undisputed Evidence and Strategy for Enhanced Lattice-Oxygen Participation of Perovskite Electrocatalyst through Cation Deficiency Manipulation. Advanced Science, 2022, 9, e2200530.	5.6	75
5	A universal chemical-induced tensile strain tuning strategy to boost oxygen-evolving electrocatalysis on perovskite oxides. Applied Physics Reviews, 2022, 9, .	5.5	67
6	Hydrogen spillover in complex oxide multifunctional sites improves acidic hydrogen evolution electrocatalysis. Nature Communications, 2022, 13, 1189.	5.8	122
7	Bridging the Charge Accumulation and High Reaction Order for High-Rate Oxygen Evolution and Long Stable Zn-Air Batteries. Advanced Functional Materials, 2022, 32, .	7.8	49
8	Fast operando spectroscopy tracking in situ generation of rich defects in silver nanocrystals for highly selective electrochemical CO <sub>2</sub> reduction. Nature Communications, 2021, 12, 660.	5.8	68
9	A molecular-level strategy to boost the mass transport of perovskite electrocatalyst for enhanced oxygen evolution. Applied Physics Reviews, 2021, 8, .	5.5	20
10	Thermal-expansion offset for high-performance fuel cell cathodes. Nature, 2021, 591, 246-251.	13.7	328
11	High-Performance Perovskite Composite Electrocatalysts Enabled by Controllable Interface Engineering. Small, 2021, 17, e2101573.	5.2	128
12	Engineering Charge Redistribution within Perovskite Oxides for Synergistically Enhanced Overall Water Splitting. , 2021, 3, 1258-1265.		30
13	Nanocomposites: A New Opportunity for Developing Highly Active and Durable Bifunctional Air Electrodes for Reversible Protonic Ceramic Cells. Advanced Energy Materials, 2021, 11, 2101899.	10.2	70
14	Rational Design of Superior Electrocatalysts for Water Oxidation: Crystalline or Amorphous Structure?. Small Science, 2021, 1, 2100030.	5.8	44
15	Exceptionally Robust Face-Sharing Motifs Enable Efficient and Durable Water Oxidation. Advanced Materials, 2021, 33, e2103392.	11.1	36
16	High activity and durability of a Pt-Cu-Co ternary alloy electrocatalyst and its large-scale preparation for practical proton exchange membrane fuel cells. Composites Part B: Engineering, 2021, 222, 109082.	5.9	29
17	Synergistic effects in ordered Co oxides for boosting catalytic activity in advanced oxidation processes. Applied Catalysis B: Environmental, 2021, 297, 120463.	10.8	30
18	Exceptional lattice-oxygen participation on artificially controllable electrochemistry-induced crystalline-amorphous phase to boost oxygen-evolving performance. Applied Catalysis B: Environmental, 2021, 297, 120484.	10.8	41

#	ARTICLE	IF	CITATIONS
19	Utilizing the charge-transfer model to design promising electrocatalysts. <i>Current Opinion in Electrochemistry</i> , 2021, 30, 100805.	2.5	4
20	Interface engineered perovskite oxides for enhanced catalytic oxidation: The vital role of lattice oxygen. <i>Chemical Engineering Science</i> , 2021, 245, 116944.	1.9	26
21	One Pot-Synthesized Ag/Ag-Doped CeO <sub>2</sub> Nanocomposite with Rich and Stable 3D Interfaces and Ce <sup>3+</sup> for Efficient Carbon Dioxide Electroreduction. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 59993-60001.	4.0	12
22	Postsynthesis Oxygen Nonstoichiometric Regulation: A New Strategy for Performance Enhancement of Perovskites in Advanced Oxidation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 99-109.	1.8	17
23	High-Performance Platinum-Perovskite Composite Bifunctional Oxygen Electrocatalyst for Rechargeable Zn-Air Battery. <i>Advanced Energy Materials</i> , 2020, 10, 1903271.	10.2	98
24	Efficient Water Splitting Actualized through an Electrochemistry-Induced Hetero-Structured Antiperovskite/(Oxy)Hydroxide Hybrid. <i>Small</i> , 2020, 16, e2006800.	5.2	36
25	Single-phase perovskite oxide with super-exchange induced atomic-scale synergistic active centers enables ultrafast hydrogen evolution. <i>Nature Communications</i> , 2020, 11, 5657.	5.8	134
26	Monoclinic SrIrO <sub>3</sub> : An Easily Synthesized Conductive Perovskite Oxide with Outstanding Performance for Overall Water Splitting in Alkaline Solution. <i>Chemistry of Materials</i> , 2020, 32, 4509-4517.	3.2	72
27	High-performance metal-organic framework-perovskite hybrid as an important component of the air-electrode for rechargeable Zn-Air battery. <i>Journal of Power Sources</i> , 2020, 468, 228377.	4.0	52
28	Utilizing ion leaching effects for achieving high oxygen-evolving performance on hybrid nanocomposite with self-optimized behaviors. <i>Nature Communications</i> , 2020, 11, 3376.	5.8	122
29	Bulk and Surface Properties Regulation of Single/Double Perovskites to Realize Enhanced Oxygen Evolution Reactivity. <i>ChemSusChem</i> , 2020, 13, 3045-3052.	3.6	32
30	Manipulating cation nonstoichiometry towards developing better electrolyte for self-humidified dual-ion solid oxide fuel cells. <i>Journal of Power Sources</i> , 2020, 460, 228105.	4.0	26
31	Efficient Wastewater Remediation Enabled by Self-Assembled Perovskite Oxide Heterostructures with Multiple Reaction Pathways. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6033-6042.	3.2	44
32	Fast cation exchange of layered sodium transition metal oxides for boosting oxygen evolution activity and enhancing durability. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8075-8083.	5.2	9
33	Direct evidence of boosted oxygen evolution over perovskite by enhanced lattice oxygen participation. <i>Nature Communications</i> , 2020, 11, 2002.	5.8	366
34	Super-Exchange Interaction Induced Overall Optimization in Ferromagnetic Perovskite Oxides Enables Ultrafast Water Oxidation. <i>Small</i> , 2019, 15, e1903120.	5.2	67
35	Screening highly active perovskites for hydrogen-evolving reaction via unifying ionic electronegativity descriptor. <i>Nature Communications</i> , 2019, 10, 3755.	5.8	139
36	Morphology, crystal structure and electronic state one-step co-tuning strategy towards developing superior perovskite electrocatalysts for water oxidation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19228-19233.	5.2	39

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37	Searching General Sufficient and Necessary Conditions for Ultrafast Hydrogen-Evolving Electrocatalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1900704.	7.8	94
38	Earth-Abundant Silicon for Facilitating Water Oxidation over Iron-Based Perovskite Electrocatalyst. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701693.	1.9	53
39	New Phosphorus-Doped Perovskite Oxide as an Oxygen Reduction Reaction Electrocatalyst in an Alkaline Solution. <i>Chemistry - A European Journal</i> , 2018, 24, 6950-6957.	1.7	34
40	Postsynthesis Growth of CoOOH Nanostructure on SrCo <sub>0.6</sub> Ti <sub>0.4</sub> O <sub>3</sub> Perovskite Surface for Enhanced Degradation of Aqueous Organic Contaminants. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15737-15748.	3.2	69
41	Frontispiece: New Phosphorus-Doped Perovskite Oxide as an Oxygen Reduction Reaction Electrocatalyst in an Alkaline Solution. <i>Chemistry - A European Journal</i> , 2018, 24, .	1.7	0
42	Two orders of magnitude enhancement in oxygen evolution reactivity on amorphous Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3</sub> nanofilms with tunable oxidation state. <i>Science Advances</i> , 2017, 3, e1603206.	4.7	170