

Rui Gao

List of Publications by Year in descending order

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61
papers

3,416
citations

136740

32
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149479

56
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all docs

62
docs citations

62
times ranked

3053
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-high-voltage Ni-rich layered cathodes in practical Li metal batteries enabled by a sulfonamide-based electrolyte. <i>Nature Energy</i> , 2021, 6, 495-505.	19.8	323
2	Revealing the Rapid Electrocatalytic Behavior of Ultrafine Amorphous Defective Nb ₂ O ₅ Nanocluster toward Superior Li-S Performance. <i>ACS Nano</i> , 2020, 14, 4849-4860.	7.3	201
3	FSI-inspired solvent and full fluorosulfonyl electrolyte for 4 V class lithium-metal batteries. <i>Energy and Environmental Science</i> , 2020, 13, 212-220.	15.6	198
4	High strength and thermal stability of bulk Cu/Ta nanolamellar multilayers fabricated by cross accumulative roll bonding. <i>Acta Materialia</i> , 2016, 110, 341-351.	3.8	160
5	Two Ships in a Bottle Design for Zn-Ag-O Catalyst Enabling Selective and Long-Lasting CO ₂ Electroreduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 6855-6864.	6.6	139
6	Magnetic Field Stimulated Efficient Photocatalytic N ₂ Fixation over Defective BaTiO ₃ Perovskites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11910-11918.	7.2	119
7	Gradient-morph LiCoO ₂ single crystals with stabilized energy density above 3400 W h L ⁻¹ . <i>Energy and Environmental Science</i> , 2020, 13, 1865-1878.	15.6	118
8	Self-Templated Hierarchically Porous Carbon Nanorods Embedded with Atomic Fe-N Active Sites as Efficient Oxygen Reduction Electrocatalysts in Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2008085.	7.8	117
9	A Surface Se-Substituted LiCo[O ₂] ₂ Se ₂ Cathode with Ultrastable High-Voltage Cycling in Pouch Full Cells. <i>Advanced Materials</i> , 2020, 32, e2005182.	11.1	110
10	d-Orbital steered active sites through ligand editing on heterometal imidazole frameworks for rechargeable zinc-air battery. <i>Nature Communications</i> , 2020, 11, 5858.	5.8	109
11	Graphene Quantum Dots-Based Advanced Electrode Materials: Design, Synthesis and Their Applications in Electrochemical Energy Storage and Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 2001275.	10.2	109
12	Modulating Metal-Organic Frameworks as Advanced Oxygen Electrocatalysts. <i>Advanced Energy Materials</i> , 2021, 11, 2003291.	10.2	105
13	Nano-crumpled induced Sn-Bi bimetallic interface pattern with moderate electron bank for highly efficient CO ₂ electroreduction. <i>Nature Communications</i> , 2022, 13, 2486.	5.8	99
14	Electrolyte Design for Lithium Metal Anode-Based Batteries Toward Extreme Temperature Application. <i>Advanced Science</i> , 2021, 8, e2101051.	5.6	95
15	Tailoring Oxygen Vacancies of BiVO ₄ toward Highly Efficient Noble-Metal-Free Electrocatalyst for Artificial N ₂ Fixation under Ambient Conditions. <i>Small Methods</i> , 2019, 3, 1800333.	4.6	84
16	Stabilizing electrode-electrolyte interfaces to realize high-voltage Li LiCoO ₂ batteries by a sulfonamide-based electrolyte. <i>Energy and Environmental Science</i> , 2021, 14, 6030-6040.	15.6	84
17	Effect of zirconium addition on the microstructure and mechanical properties of ODS ferritic steels containing aluminum. <i>Journal of Nuclear Materials</i> , 2014, 444, 462-468.	1.3	80
18	Stabilized Co-Free Li-Rich Oxide Cathode Particles with An Artificial Surface Preconstruction. <i>Advanced Energy Materials</i> , 2020, 10, 2001120.	10.2	74

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19	Thermal migration towards constructing W-W dual-sites for boosted alkaline hydrogen evolution reaction. <i>Nature Communications</i> , 2022, 13, 763.	5.8	68
20	Materials Engineering toward Durable Electrocatalysts for Proton Exchange Membrane Fuel Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	61
21	Dissolving Vanadium into Titanium Nitride Lattice Framework for Rational Polysulfide Regulation in Liâ€“S Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003020.	10.2	52
22	Effect of hot rolling and annealing on the mechanical properties and thermal conductivity of W-0.5wt.% TaC alloys. <i>International Journal of Refractory Metals and Hard Materials</i> , 2016, 56, 8-17.	1.7	48
23	Pressureless two-step sintering of ultrafine-grained tungsten. <i>Acta Materialia</i> , 2020, 186, 116-123.	3.8	48
24	A Gasâ€“Phase Migration Strategy to Synthesize Atomically Dispersed Mnâ€“Nâ€“C Catalysts for Znâ€“Air Batteries. <i>Small Methods</i> , 2021, 5, e2100024.	4.6	44
25	A Combined Ordered Macroâ€“Mesoporous Architecture Design and Surface Engineering Strategy for Highâ€“Performance Sulfur Immobilizer in Lithiumâ€“Sulfur Batteries. <i>Small</i> , 2020, 16, e2001089.	5.2	43
26	Nanorodâ€“nanosheet hierarchically structured ZnO crystals on zinc foil as flexible photoanodes for dye-sensitized solar cells. <i>Nanoscale</i> , 2013, 5, 1894.	2.8	42
27	Superconducting Cu/Nb nanolaminate by coded accumulative roll bonding and its helium damage characteristics. <i>Acta Materialia</i> , 2020, 197, 212-223.	3.8	41
28	Evolution of atomic-scale dispersion of FeNx in hierarchically porous 3D air electrode to boost the interfacial electrocatalysis of oxygen reduction in PEMFC. <i>Nano Energy</i> , 2021, 83, 105734.	8.2	41
29	Deep-Breathing Honeycomb-like Co-Nx-C Nanopolyhedron Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. <i>IScience</i> , 2020, 23, 101404.	1.9	38
30	Establishing the Preferential Adsorption of Anionâ€“Dominated Solvation Structures in the Electrolytes for Highâ€“Energyâ€“Density Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2011109.	7.8	37
31	Eutectic Etching toward Inâ€“Plane Porosity Manipulation of Clâ€“Terminated MXene for Highâ€“Performance Dualâ€“Ion Battery Anode. <i>Advanced Energy Materials</i> , 2022, 12, 2102493.	10.2	37
32	Properties and origins of highâ€“performance poly(phenylene oxide)/cyanate ester resins for highâ€“frequency copperâ€“clad laminates. <i>Journal of Applied Polymer Science</i> , 2011, 121, 1675-1684.	1.3	36
33	Self-Perpetuating Carbon Foam Microwave Plasma Conversion of Hydrocarbon Wastes into Useful Fuels and Chemicals. <i>Environmental Science & Technology</i> , 2021, 55, 6239-6247.	4.6	34
34	Characterization of oxide dispersion strengthened ferritic steel fabricated by electron beam selective melting. <i>Materials and Design</i> , 2016, 89, 1171-1180.	3.3	33
35	High-temperature order-disorder phase transition in Fe-18Ga alloy evaluated by internal friction method. <i>Journal of Alloys and Compounds</i> , 2018, 750, 669-676.	2.8	30
36	The effect of Zr, Ti addition on the particle size and microstructure evolution of yttria nanoparticle in ODS steel. <i>Powder Technology</i> , 2017, 319, 172-182.	2.1	29

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37	A novel design of 3D carbon host for stable lithium metal anode. , 2022, 4, 654-664.		29
38	Microstructure, hardness and defect structure of the He irradiated ODS ferritic steel. Journal of Alloys and Compounds, 2017, 691, 653-658.	2.8	25
39	Development of 9Cr-ODS ferritic/martensitic steel prepared by chemical reduction and mechanical milling. Journal of Alloys and Compounds, 2014, 598, 243-247.	2.8	24
40	Effects of annealing temperature and layer thickness on hardening behavior in cross accumulative roll bonded Cu/Fe nanolamellar composite. Journal of Alloys and Compounds, 2020, 827, 154312.	2.8	23
41	Cationic/anionic redox couple gradient to immunize against irreversible processes of Li-rich layered oxides. Journal of Materials Chemistry A, 2021, 9, 2325-2333.	5.2	20
42	Reusable Polyacrylonitrile-Sulfur Extractor of Heavy Metal Ions from Wastewater. Advanced Functional Materials, 2021, 31, 2105845.	7.8	20
43	Hierarchical Architecture of Well-Aligned Nanotubes Supported Bimetallic Catalysis for Efficient Oxygen Redox. Advanced Functional Materials, 2022, 32, .	7.8	20
44	Magnetic-Field-Stimulated Efficient Photocatalytic N ₂ Fixation over Defective BaTiO ₃ Perovskites. Angewandte Chemie, 2021, 133, 12017-12025.	1.6	18
45	Oxidation resistance in LBE and air and tensile properties of ODS ferritic steels containing Al/Zr elements. Journal of Nuclear Materials, 2014, 455, 407-411.	1.3	16
46	He irradiation effects in bulk Cu/V nanolayered composites fabricated by cross accumulative roll bonding. Journal of Nuclear Materials, 2018, 508, 354-360.	1.3	15
47	Anodic Shock-Triggered Exsolution of Metal Nanoparticles from Perovskite Oxide. Journal of the American Chemical Society, 2022, 144, 7657-7666.	6.6	15
48	Study on thermal stability and irradiation response of copper/iron nano-multilayer composite fabricated by cross accumulative roll bonding. Journal of Nuclear Materials, 2021, 543, 152548.	1.3	13
49	Annealing effects on the microstructure and mechanical properties of hot-rolled 14Cr-ODS steel. Journal of Nuclear Materials, 2015, 465, 268-279.	1.3	11
50	Behavior and mechanism of internal friction peak in quenched Fe-18 at.% Ga alloy. Journal of Alloys and Compounds, 2021, 856, 158178.	2.8	11
51	Corrosion resistance of W-Cr-C coatings fabricated by spark plasma sintering method. Surface and Coatings Technology, 2014, 254, 202-206.	2.2	10
52	Hybrid diffusive-displacive helium outgassing in Cu/Nb multilayer composites. Scripta Materialia, 2021, 194, 113706.	2.6	10
53	Fabrication of an ultrafine-grained W-ZrC-Re alloy with high thermal stability. Fusion Engineering and Design, 2021, 164, 112208.	1.0	9
54	Mechanical properties and thermal shock resistance of tungsten alloys strengthened by laser fragmentation-processed zirconium carbide nanoparticles. Tungsten, 2020, 2, 381-389.	2.0	8

#	ARTICLE	IF	CITATIONS
55	Annealing effect on the microstructure and magnetic properties of 14%Cr-ODS ferritic steel. Fusion Engineering and Design, 2015, 100, 371-377.	1.0	7
56	Hot rolling and annealing effects on the microstructure and mechanical properties of ODS austenitic steel fabricated by electron beam selective melting. Frontiers of Materials Science, 2016, 10, 73-79.	1.1	6
57	Reusable Polyacrylonitrile-Sulfur Extractor of Heavy Metal Ions from Wastewater (Adv. Funct. Mater.) Tj ETQq1 1 0,784314,5rgBT /O	7.8	5
58	Effects of ZrC content on the mechanical properties and microstructures of hot-rolled W-ZrC composites. Nuclear Materials and Energy, 2019, 20, 100705.	0.6	4
59	Helium desorption behavior and growth mechanism of helium bubbles in FeCrNi film. Nuclear Materials and Energy, 2019, 21, 100710.	0.6	3
60	Low-temperature mechanical and magnetic properties of the reduced activation martensitic steel. Frontiers of Materials Science, 2015, 9, 264-271.	1.1	2
61	Magnetic-Field-Stimulated Efficient Photocatalytic N ₂ Fixation over Defective BaTiO ₃ Perovskites (Angew. Chem. 21/2021). Angewandte Chemie, 2021, 133, 12252-12252.	1.6	1