Ruoqian Lin

List of Publications by Year
in descending order

43 papers	5,016 citations	126858 33 h-index	265120 42 g-index
46 all docs	46 docs citations	46 times ranked	6773 citing authors

#	Article	IF	Citations
1	Engineering and characterization of interphases for lithium metal anodes. Chemical Science, 2022, 13, 1547-1568.	3.7	17
2	Additive engineering for robust interphases to stabilize high-Ni layered structures at ultra-high voltage of 4.8â€‰V. Nature Energy, 2022, 7, 484-494.	19.8	138
3	A single-atom library for guided monometallic and concentration-complex multimetallic designs. Nature Materials, 2022, 21, 681-688.	13.3	145
4	Characterization of the structure and chemistry of the solidâ€"electrolyte interface by cryo-EM leads to high-performance solid-state Li-metal batteries. Nature Nanotechnology, 2022, 17, 768-776.	15.6	75
5	Review on organosulfur materials for rechargeable lithium batteries. Materials Horizons, 2021, 8, 471-500.	6.4	82
6	Identification of LiH and nanocrystalline LiF in the solidâ€"electrolyte interphase of lithium metal anodes. Nature Nanotechnology, 2021, 16, 549-554.	15.6	171
7	TEMImageNet training library and AtomSegNet deep-learning models for high-precision atom segmentation, localization, denoising, and deblurring of atomic-resolution images. Scientific Reports, 2021, 11, 5386.	1.6	55
8	Hierarchical nickel valence gradient stabilizes high-nickel content layered cathode materials. Nature Communications, 2021, 12, 2350.	5.8	59
9	A disordered rock salt anode for fast-charging lithium-ion batteries. Nature, 2020, 585, 63-67.	13.7	326
10	AtomSegNet and TomoFillNetâ€"Two Deep Learning Open-Source Apps for Superresolution Processing of Atomic Resolution Images and Missing-wedge Information Inpainting in Electron Tomograms. Microscopy and Microanalysis, 2020, 26, 926-926.	0.2	1
11	Electronic structure and oxophilicity optimization of mono-layer Pt for efficient electrocatalysis. Nano Energy, 2020, 74, 104877.	8.2	39
12	Sulphur modulated Ni3FeN supported on N/S co-doped graphene boosts rechargeable/flexible Zn-air battery performance. Applied Catalysis B: Environmental, 2020, 274, 119086.	10.8	73
13	Stable and Efficient Single-Atom Zn Catalyst for CO_2 Reduction to CH_4. Journal of the American Chemical Society, 2020, 142, 12563-12567.	6.6	358
14	Interfacial engineering for stabilizing polymer electrolytes with 4V cathodes in lithium metal batteries at elevated temperature. Nano Energy, 2020, 72, 104655.	8.2	68
15	Diagnostic Study of Lithium-Rich Cathode Materials at Primary and Sub-Primary Particle Level by Using Chemical-Sensitive STEM Tomography, Aberration-Corrected Imaging and EELS. Microscopy and Microanalysis, 2019, 25, 2056-2057.	0.2	0
16	Elucidating the Limit of Li Insertion into the Spinel $Li_4Ti_5O_{12}$. , 2019, 1, 96-102.		45
17	Review of Recent Development of In Situ/Operando Characterization Techniques for Lithium Battery Research. Advanced Materials, 2019, 31, e1806620.	11.1	390
18	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. Nature Communications, 2019, 10, 1650.	5.8	60

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19	One-Nanometer-Thick Pt_3Ni Bimetallic Alloy Nanowires Advanced Oxygen Reduction Reaction: Integrating Multiple Advantages into One Catalyst. ACS Catalysis, 2019, 9, 4488-4494.	5.5	126
20	Highly Active and Stable Carbon Nanosheets Supported Iron Oxide for Fischer–Tropsch to Olefins Synthesis. ChemCatChem, 2019, 11, 1625-1632.	1.8	8
21	Optimizing PtFe intermetallics for oxygen reduction reaction: from DFT screening to *in situ* XAFS characterization. Nanoscale, 2019, 11, 20301-20306.	2.8	33
22	Innenrücktitelbild: Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation (Angew. Chem. 8/2019). Angewandte Chemie, 2019, 131, 2547-2547.	1.6	7
23	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. Angewandte Chemie - International Edition, 2019, 58, 2321-2325.	7.2	543
24	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. Angewandte Chemie, 2019, 131, 2343-2347.	1.6	95
25	Regioselective surface encoding of nanoparticles for programmable self-assembly. Nature Materials, 2019, 18, 169-174.	13.3	153
26	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. Nano Letters, 2018, 18, 3241-3249.	4.5	237
27	Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the "size shackles". Nano Research, 2018, 11, 4774-4785.	5.8	49
28	Atomic rearrangement from disordered to ordered Pd-Fe nanocatalysts with trace amount of Pt decoration for efficient electrocatalysis. Nano Energy, 2018, 50, 70-78.	8.2	66
29	Tuning the electrocatalytic activity of Pt by structurally ordered PdFe/C for the hydrogen oxidation reaction in alkaline media. Journal of Materials Chemistry A, 2018, 6, 11346-11352.	5.2	41
30	In situ/operando synchrotron-based X-ray techniques for lithium-ion battery research. NPG Asia Materials, 2018, 10, 563-580.	3.8	261
31	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. Nature Energy, 2018, 3, 690-698.	19.8	675
32	Nitrogen-doped carbon nanofibers derived from polypyrrole coated bacterial cellulose as high-performance electrode materials for supercapacitors and Li-ion batteries. Electrochimica Acta, 2016, 210, 130-137.	2.6	59
33	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. Nature Communications, 2016, 7, 11941.	5.8	67
34	Increasing the Dimensionality of In-situ Electron Microscopy Data Sets by On-the-fly and Analytical Electron Tomography. Microscopy and Microanalysis, 2016, 22, 724-725.	0.2	1
35	Hollow–Structured Carbon–Supported Nickel Cobaltite Nanoparticles as an Efficient Bifunctional Electrocatalyst for the Oxygen Reduction and Evolution Reactions. ChemCatChem, 2016, 8, 736-742.	1.8	70
36	Supramolecular gel-assisted synthesis of double shelled Co@CoO@N–C/C nanoparticles with synergistic electrocatalytic activity for the oxygen reduction reaction. Nanoscale, 2016, 8, 4681-4687.	2.8	74

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37	Nitrogen and sulfur co-doping of partially exfoliated MWCNTs as 3-D structured electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 5678-5684.	5.2	66
38	Three-dimensional hollow-structured binary oxide particles as an advanced anode material for high-rate and long cycle life lithium-ion batteries. Nano Energy, 2016, 20, 212-220.	8.2	53
39	Toward 5D Imaging in an In-Situ Environmental TEM. Microscopy and Microanalysis, 2015, 21, 795-796.	0.2	0
40	Interfacing Solution‐Grown C$_{60}$ and (3‐Pyrrolinium)(CdCl$_3$) Single Crystals for High‐Mobility Transistor‐Based Memory Devices. Advanced Materials, 2015, 27, 4476-4480.	11.1	48
41	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. Nano Letters, 2015, 15, 5755-5763.	4.5	122
42	Structurally ordered Pt‐Zn/C series nanoparticles as efficient anode catalysts for formic acid electrooxidation. Journal of Materials Chemistry A, 2015, 3, 22129-22135.	5.2	46
43	Interfacial dislocations in (111) oriented (Ba0.7Sr0.3)TiO3 films on SrTiO3 single crystal. Applied Physics Letters, 2015, 107, 141605.	1.5	2