

# Ruoqian Lin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9051671/publications.pdf>

Version: 2024-02-01

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	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. <i>Nature Energy</i> , 2018, 3, 690-698.	19.8	675
2	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2321-2325.	7.2	543
3	Review of Recent Development of In Situ/Operando Characterization Techniques for Lithium Battery Research. <i>Advanced Materials</i> , 2019, 31, e1806620.	11.1	390
4	Stable and Efficient Single-Atom Zn Catalyst for CO <sub>2</sub> Reduction to CH <sub>4</sub> . <i>Journal of the American Chemical Society</i> , 2020, 142, 12563-12567.	6.6	358
5	A disordered rock salt anode for fast-charging lithium-ion batteries. <i>Nature</i> , 2020, 585, 63-67.	13.7	326
6	In situ/operando synchrotron-based X-ray techniques for lithium-ion battery research. <i>NPG Asia Materials</i> , 2018, 10, 563-580.	3.8	261
7	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. <i>Nano Letters</i> , 2018, 18, 3241-3249.	4.5	237
8	Identification of LiH and nanocrystalline LiF in the solidâ€“electrolyte interphase of lithium metal anodes. <i>Nature Nanotechnology</i> , 2021, 16, 549-554.	15.6	171
9	Regioselective surface encoding of nanoparticles for programmable self-assembly. <i>Nature Materials</i> , 2019, 18, 169-174.	13.3	153
10	A single-atom library for guided monometallic and concentration-complex multimetallic designs. <i>Nature Materials</i> , 2022, 21, 681-688.	13.3	145
11	Additive engineering for robust interphases to stabilize high-Ni layered structures at ultra-high voltage of 4.8â€“V. <i>Nature Energy</i> , 2022, 7, 484-494.	19.8	138
12	One-Nanometer-Thick Pt <sub>3</sub> Ni Bimetallic Alloy Nanowires Advanced Oxygen Reduction Reaction: Integrating Multiple Advantages into One Catalyst. <i>ACS Catalysis</i> , 2019, 9, 4488-4494.	5.5	126
13	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. <i>Nano Letters</i> , 2015, 15, 5755-5763.	4.5	122
14	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie</i> , 2019, 131, 2343-2347.	1.6	95
15	Review on organosulfur materials for rechargeable lithium batteries. <i>Materials Horizons</i> , 2021, 8, 471-500.	6.4	82
16	Characterization of the structure and chemistry of the solidâ€“electrolyte interface by cryo-EM leads to high-performance solid-state Li-metal batteries. <i>Nature Nanotechnology</i> , 2022, 17, 768-776.	15.6	75
17	Supramolecular gel-assisted synthesis of double shelled Co@CoO@Nâ€“C/C nanoparticles with synergistic electrocatalytic activity for the oxygen reduction reaction. <i>Nanoscale</i> , 2016, 8, 4681-4687.	2.8	74
18	Sulphur modulated Ni <sub>3</sub> FeN supported on N/S co-doped graphene boosts rechargeable/flexible Zn-air battery performance. <i>Applied Catalysis B: Environmental</i> , 2020, 274, 119086.	10.8	73

#	ARTICLE	IF	CITATIONS
19	Hollow-Structured Carbon-Supported Nickel Cobaltite Nanoparticles as an Efficient Bifunctional Electrocatalyst for the Oxygen Reduction and Evolution Reactions. <i>ChemCatChem</i> , 2016, 8, 736-742.	1.8	70
20	Interfacial engineering for stabilizing polymer electrolytes with 4V cathodes in lithium metal batteries at elevated temperature. <i>Nano Energy</i> , 2020, 72, 104655.	8.2	68
21	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. <i>Nature Communications</i> , 2016, 7, 11941.	5.8	67
22	Nitrogen and sulfur co-doping of partially exfoliated MWCNTs as 3-D structured electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5678-5684.	5.2	66
23	Atomic rearrangement from disordered to ordered Pd-Fe nanocatalysts with trace amount of Pt decoration for efficient electrocatalysis. <i>Nano Energy</i> , 2018, 50, 70-78.	8.2	66
24	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. <i>Nature Communications</i> , 2019, 10, 1650.	5.8	60
25	Nitrogen-doped carbon nanofibers derived from polypyrrole coated bacterial cellulose as high-performance electrode materials for supercapacitors and Li-ion batteries. <i>Electrochimica Acta</i> , 2016, 210, 130-137.	2.6	59
26	Hierarchical nickel valence gradient stabilizes high-nickel content layered cathode materials. <i>Nature Communications</i> , 2021, 12, 2350.	5.8	59
27	TEMLImageNet training library and AtomSegNet deep-learning models for high-precision atom segmentation, localization, denoising, and deblurring of atomic-resolution images. <i>Scientific Reports</i> , 2021, 11, 5386.	1.6	55
28	Three-dimensional hollow-structured binary oxide particles as an advanced anode material for high-rate and long cycle life lithium-ion batteries. <i>Nano Energy</i> , 2016, 20, 212-220.	8.2	53
29	Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the "size shackles". <i>Nano Research</i> , 2018, 11, 4774-4785.	5.8	49
30	Interfacial Solution-Grown $C_{60}$ and $(3\text{-Pyrrrolinium})(\text{CdCl}_3)$ Single Crystals for High-Mobility Transistor-Based Memory Devices. <i>Advanced Materials</i> , 2015, 27, 4476-4480.	11.1	48
31	Structurally ordered Pt-Zn/C series nanoparticles as efficient anode catalysts for formic acid electrooxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22129-22135.	5.2	46
32	Elucidating the Limit of Li Insertion into the Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$ . , 2019, 1, 96-102.		45
33	Tuning the electrocatalytic activity of Pt by structurally ordered PdFe/C for the hydrogen oxidation reaction in alkaline media. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11346-11352.	5.2	41
34	Electronic structure and oxophilicity optimization of mono-layer Pt for efficient electrocatalysis. <i>Nano Energy</i> , 2020, 74, 104877.	8.2	39
35	Optimizing PtFe intermetallics for oxygen reduction reaction: from DFT screening to <i>in situ</i> XAFS characterization. <i>Nanoscale</i> , 2019, 11, 20301-20306.	2.8	33
36	Engineering and characterization of interphases for lithium metal anodes. <i>Chemical Science</i> , 2022, 13, 1547-1568.	3.7	17

#	ARTICLE	IF	CITATIONS
37	Highly Active and Stable Carbon Nanosheets Supported Iron Oxide for Fischer-Tropsch to Olefins Synthesis. ChemCatChem, 2019, 11, 1625-1632.	1.8	8
38	InnenrÄ¼cktitelbild: Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation (Angew. Chem. 8/2019). Angewandte Chemie, 2019, 131, 2547-2547.	1.6	7
39	Interfacial dislocations in (111) oriented (Ba <sub>0.7</sub> Sr <sub>0.3</sub> )TiO <sub>3</sub> films on SrTiO <sub>3</sub> single crystal. Applied Physics Letters, 2015, 107, 141605.	1.5	2
40	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
41	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
42	Toward 5D Imaging in an In-Situ Environmental TEM. Microscopy and Microanalysis, 2015, 21, 795-796.	0.2	0
43	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