Ruijuan Xiao

List of Publications by Year
in descending order

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30 papers	3,144 citations	331670 21 h-index	501196 28 g-index
30 all docs	30 docs citations	30 times ranked	4096 citing authors

#	Article	IF	Citations
1	Trace doping of multiple elements enables stable battery cycling of LiCoO2 at 4.6â€‰V. Nature Energy, 2019, 4, 594-603.	39.5	572
2	A zero-strain layered metal oxide as the negative electrode for long-life sodium-ion batteries. Nature Communications, 2013, 4, 2365.	12.8	515
3	P2-Na0.6[Cr0.6Ti0.4]O2 cation-disordered electrode for high-rate symmetric rechargeable sodium-ion batteries. Nature Communications, 2015, 6, 6954.	12.8	426
4	Atomic Structure of Li₂MnO₃ after Partial Delithiation and Reâ€Lithiation. Advanced Energy Materials, 2013, 3, 1358-1367.	19.5	211
5	Temperature-Sensitive Structure Evolution of Lithiumâ€“Manganese-Rich Layered Oxides for Lithium-Ion Batteries. Journal of the American Chemical Society, 2018, 140, 15279-15289.	13.7	163
6	Correlated Migration Invokes Higher Na⁺â€Ion Conductivity in NaSICONâ€Type Solid Electrolytes. Advanced Energy Materials, 2019, 9, 1902373.	19.5	162
7	In Situ Atomic-Scale Observation of Electrochemical Delithiation Induced Structure Evolution of LiCoO₂ Cathode in a Working All-Solid-State Battery. Journal of the American Chemical Society, 2017, 139, 4274-4277.	13.7	142
8	Interfacial engineering to achieve an energy density of over 200â€‰Whâ€‰kgâ^’1 in sodium batteries. Nature Energy, 2022, 7, 511-519.	39.5	130
9	High-throughput design and optimization of fast lithium ion conductors by the combination of bond-valence method and density functional theory. Scientific Reports, 2015, 5, 14227.	3.3	117
10	Mn-Rich Phosphate Cathodes for Na-Ion Batteries with Superior Rate Performance. ACS Energy Letters, 2022, 7, 97-107.	17.4	91
11	Oxygen-driven transition from two-dimensional to three-dimensional transport behaviour in Î²-Li₃PS₄ electrolyte. Physical Chemistry Chemical Physics, 2016, 18, 21269-21277.	2.8	66
12	Three-dimensional atomic-scale observation of structural evolution of cathode material in a working all-solid-state battery. Nature Communications, 2018, 9, 3341.	12.8	60
13	Mn Ion Dissolution Mechanism for Lithium-Ion Battery with LiMn₂O₄ Cathode: In Situ Ultravioletâ€“Visible Spectroscopy and Ab Initio Molecular Dynamics Simulations. Journal of Physical Chemistry Letters, 2020, 11, 3051-3057.	4.6	60
14	Oxysulfide LiAlSO: A Lithium Superionic Conductor from First Principles. Physical Review Letters, 2017, 118, 195901.	7.8	58
15	Candidate structures for inorganic lithium solid-state electrolytes identified by high-throughput bond-valence calculations. Journal of Materiomics, 2015, 1, 325-332.	5.7	50
16	Compressibility and hardness of Co-based bulk metallic glass: A combined experimental and density functional theory study. Applied Physics Letters, 2011, 99, .	3.3	49
17	Screening possible solid electrolytes by calculating the conduction pathways using Bond Valence method. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1526-1536.	5.1	36
18	Direct Observation of Ordered Oxygen Defects on the Atomic Scale in Li₂O₂ for Liâ€O₂ Batteries. Advanced Energy Materials, 2015, 5, 1400664.	19.5	32

#	Article	IF	Citations
19	Another Strategy, Detouring Potential Decay by Fast Completion of Cation Mixing. Advanced Energy Materials, 2018, 8, 1703092.	19.5	30
20	Design and preparation of nanoporous Agâ€“Cu alloys by dealloying Mgâ€“(Ag,Cu)â€“Y metallic glasses for antibacterial applications. Journal of Materials Chemistry B, 2019, 7, 4169-4176.	5.8	30
21	High-throughput computational discovery of K₂CdO₂ as an ion conductor for solid-state potassium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 5157-5162.	10.3	23
22	The Role of Electron Localization in Covalency and Electrochemical Properties of Lithiumâ€ion Battery Cathode Materials. Advanced Functional Materials, 2021, 31, 2001633.	14.9	21
23	Localizedâ€domains staging structure and evolution in lithiated graphite. , 2023, 5, .		21
24	Structural stability and stabilization of Li₂MoO₃. Physical Chemistry Chemical Physics, 2017, 19, 17538-17543.	2.8	20
25	First-Principles Simulations for the Surface Evolution and Mn Dissolution in the Fully Delithiated Spinel LiMn₂O₄. Langmuir, 2021, 37, 5252-5259.	3.5	17
26	Reaction Mechanisms of Ta-Substituted Cubic Li₇La₃Zr₂O₁₂ with Solvents During Storage. ACS Applied Materials & Interfaces, 2021, 13, 38384-38393.	8.0	14
27	Screening LiMn₂O₄ Surface Modification Schemes under Theoretical Guidance. ACS Applied Materials & Interfaces, 2022, 14, 10353-10362.	8.0	14
28	New insights into the mechanism of cation migration induced by cationâ€“anion dynamic coupling in superionic conductors. Journal of Materials Chemistry A, 2022, 10, 3093-3101.	10.3	11
29	Ionic Conductivity of LiSiON and the Effect of Amorphization/Heterovalent Doping on Li+ Diffusion. Inorganics, 2022, 10, 45.	2.7	2
30	Accelerated strategy for fast ion conductor materials screening and optimal doping scheme exploration. Journal of Materiomics, 2022, 8, 1038-1047.	5.7	1