

# Xiang Gao

## List of Publications by Year in descending order

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Version: 2024-02-01

18  
papers

809  
citations

759233

12  
h-index

888059

17  
g-index

18  
all docs

18  
docs citations

18  
times ranked

712  
citing authors

#	ARTICLE	IF	CITATIONS
1	Safety issues and mechanisms of lithium-ion battery cell upon mechanical abusive loading: A review. <i>Energy Storage Materials</i> , 2020, 24, 85-112.	18.0	395
2	Data-Driven Safety Risk Prediction of Lithium-Ion Battery. <i>Advanced Energy Materials</i> , 2021, 11, 2003868.	19.5	55
3	Modeling of contact stress among compound particles in high energy lithium-ion battery. <i>Energy Storage Materials</i> , 2019, 18, 23-33.	18.0	54
4	Coupled crack propagation and dendrite growth in solid electrolyte of all-solid-state battery. <i>Nano Energy</i> , 2021, 86, 106057.	16.0	51
5	Unlocking multiphysics design guidelines on Si/C composite nanostructures for high-energy-density and robust lithium-ion battery anode. <i>Nano Energy</i> , 2021, 81, 105591.	16.0	40
6	Modeling framework for multiphysics-multiscale behavior of Si-C composite anode. <i>Journal of Power Sources</i> , 2020, 449, 227501.	7.8	39
7	A Multiphysics Computational Framework for Cylindrical Battery Behavior upon Mechanical Loading Based on LS-DYNA. <i>Journal of the Electrochemical Society</i> , 2019, 166, A1160-A1169.	2.9	36
8	Insights into the Li Diffusion Mechanism in Si/C Composite Anodes for Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 21362-21370.	8.0	27
9	Effective thermo-electro-mechanical modeling framework of lithium-ion batteries based on a representative volume element approach. <i>Journal of Energy Storage</i> , 2021, 33, 102090.	8.1	22
10	Fabrication and multiphysics modeling of modified carbon fiber as structural anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2020, 476, 228532.	7.8	21
11	Design of composite lattice materials combined with fabrication approaches. <i>Journal of Composite Materials</i> , 2019, 53, 393-404.	2.4	19
12	Mechanics-Driven Anode Material Failure in Battery Safety and Capacity Deterioration Issues: A Review. <i>Applied Mechanics Reviews</i> , 2022, 74, .	10.1	16
13	Improving the Performance of Micro-Silicon Anodes in Lithium-Ion Batteries with a Functional Carbon Nanotube Interlayer. <i>ChemElectroChem</i> , 2018, 5, 3143-3149.	3.4	11
14	Multiscale Modeling of Electro-Chemo-Mechanical Degradation in Si/C Core-Shell Anode for the Lithium-Ion Battery of High Energy Density. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2021, 18, .	2.1	8
15	Strain Rate and Anisotropic Microstructure Dependent Mechanical Behaviors of Silkworm Cocoon Shells. <i>PLoS ONE</i> , 2016, 11, e0149931.	2.5	7
16	Three-Dimensional Modeling of Electrochemical Behavior in SiO/Graphite Composite Anode for High Energy Density Lithium-Ion Battery. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2022, 19, .	2.1	7
17	Thermal decomposition followed by acid etching to synthesize Fe <sub>3</sub> O <sub>4</sub> @C for lithium storage. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 91-97.	2.2	1
18	Exploration on Nonaxisymmetric Flow Phenomenon in a Slinger Injector. <i>Journal of the American Helicopter Society</i> , 2022, , .	0.8	0