

Feifei Fan

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

3,852
citations

304368

22
h-index

476904

29
g-index

30
all docs

30
docs citations

30
times ranked

5095
citing authors

#	ARTICLE	IF	CITATIONS
1	Fracture toughness of graphene. Nature Communications, 2014, 5, 3782.	5.8	567
2	In situ atomic-scale imaging of electrochemical lithiation in silicon. Nature Nanotechnology, 2012, 7, 749-756.	15.6	533
3	Two-Phase Electrochemical Lithiation in Amorphous Silicon. Nano Letters, 2013, 13, 709-715.	4.5	377
4	In Situ Transmission Electron Microscopy Study of Electrochemical Sodiation and Potassiation of Carbon Nanofibers. Nano Letters, 2014, 14, 3445-3452.	4.5	263
5	Orientation-Dependent Interfacial Mobility Governs the Anisotropic Swelling in Lithiated Silicon Nanowires. Nano Letters, 2012, 12, 1953-1958.	4.5	212
6	Self-Limiting Lithiation in Silicon Nanowires. ACS Nano, 2013, 7, 1495-1503.	7.3	212
7	Tough Germanium Nanoparticles under Electrochemical Cycling. ACS Nano, 2013, 7, 3427-3433.	7.3	184
8	Stress generation during lithiation of high-capacity electrode particles in lithium ion batteries. Acta Materialia, 2013, 61, 4354-4364.	3.8	183
9	A chemo-mechanical model of lithiation in silicon. Journal of the Mechanics and Physics of Solids, 2014, 70, 349-361.	2.3	181
10	Griffith Criterion for Brittle Fracture in Graphene. Nano Letters, 2015, 15, 1918-1924.	4.5	180
11	A Hierarchical Particle-Shell Architecture for Long-Term Cycle Stability of Li_2S Cathodes. Advanced Materials, 2015, 27, 5579-5586.	11.1	111
12	Mechanical properties of amorphous Li_xSi alloys: a reactive force field study. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 074002.	0.8	103
13	A Phase-Field Model Coupled with Large Elasto-Plastic Deformation: Application to Lithiated Silicon Electrodes. Journal of the Electrochemical Society, 2014, 161, F3164-F3172.	1.3	99
14	Nanovoid Formation and Annihilation in Gallium Nanodroplets under Lithiation-Delithiation Cycling. Nano Letters, 2013, 13, 5212-5217.	4.5	96
15	Structural Evolution and Pulverization of Tin Nanoparticles during Lithiation-Delithiation Cycling. Journal of the Electrochemical Society, 2014, 161, F3019-F3024.	1.3	96
16	High damage tolerance of electrochemically lithiated silicon. Nature Communications, 2015, 6, 8417.	5.8	96
17	Cybersecurity for digital manufacturing. Journal of Manufacturing Systems, 2018, 48, 3-12.	7.6	83
18	In situ observation of shear-driven amorphization in silicon crystals. Nature Nanotechnology, 2016, 11, 866-871.	15.6	74

#	ARTICLE	IF	CITATIONS
19	Tuning the Outward to Inward Swelling in Lithiated Silicon Nanotubes via Surface Oxide Coating. Nano Letters, 2016, 16, 5815-5822.	4.5	45
20	High capacity 3D structured tin-based electroplated Li-ion battery anodes. Energy Storage Materials, 2019, 17, 151-156.	9.5	36
21	Nanoscale Deformation Analysis With High-Resolution Transmission Electron Microscopy and Digital Image Correlation. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	1.1	26
22	Modeling of fatigue crack growth of stainless steel 304L. Mechanics of Materials, 2008, 40, 961-973.	1.7	25
23	An atomistic perspective on lithiation-induced stress in silicon nanopillars. Scripta Materialia, 2018, 152, 74-78.	2.6	19
24	Ultrahigh Malleability of the Lithiation-Induced Li_xSi Phase. ACS Applied Energy Materials, 2018, 1, 4211-4220.	2.5	16
25	Stress generation during anisotropic lithiation in silicon nanopillar electrodes: A reactive force field study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125955.	0.9	11
26	In Situ TEM of Phosphorus-Dopant-Induced Nanopore Formation in Delithiated Silicon Nanowires. ACS Applied Materials & Interfaces, 2019, 11, 17313-17320.	4.0	11
27	Deformation and instability of three-dimensional graphene honeycombs under in-plane compression: Atomistic simulations. Extreme Mechanics Letters, 2020, 39, 100861.	2.0	10
28	Effect of lattice defects on the plastic Poisson's ratio of nanoporous gold. Scripta Materialia, 2020, 185, 175-180.	2.6	2
29	Lithium Sulfide Cathodes: A Hierarchical Particle-Shell Architecture for Long-Term Cycle Stability of Li_2S Cathodes (Adv. Mater. 37/2015). Advanced Materials, 2015, 27, 5578-5578.	11.1	1
30	Modeling of Lithiation in Silicon Electrodes. Springer Series in Materials Science, 2016, , 489-506.	0.4	0