Allen Pei

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/12087174/publications.pdf

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40 papers	10,946 citations	87723 38 h-index	288905 40 g-index
40 all docs	40 docs citations	40 times ranked	9685 citing authors

#	Article	IF	Citations
1	Underpotential lithium plating on graphite anodes caused by temperature heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29453-29461.	3.3	94
2	Electrotunable liquid sulfurÂmicrodroplets. Nature Communications, 2020, 11, 606.	5.8	22
3	Transient Voltammetry with Ultramicroelectrodes Reveals the Electron Transfer Kinetics of Lithium Metal Anodes. ACS Energy Letters, 2020, 5, 701-709.	8.8	91
4	Tortuosity Effects in Lithium-Metal Host Anodes. Joule, 2020, 4, 938-952.	11.7	150
5	Improving cyclability of Li metal batteries at elevated temperatures and its origin revealed by cryo-electron microscopy. Nature Energy, 2019, 4, 664-670.	19.8	336
6	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. Joule, 2019, 3, 2761-2776.	11.7	176
7	Fast galvanic lithium corrosion involving a Kirkendall-type mechanism. Nature Chemistry, 2019, 11, 382-389.	6.6	180
8	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 1326-1335.	4.5	193
9	Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries. Nature Communications, 2019, 10, 2067.	5.8	177
10	Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. Advanced Energy Materials, 2019, 9, 1900858.	10.2	333
11	An ultrathin ionomer interphase for high efficiency lithium anode in carbonate based electrolyte. Nature Communications, 2019, 10, 5824.	5.8	62
12	An Interconnected Channelâ€Like Framework as Host for Lithium Metal Composite Anodes. Advanced Energy Materials, 2019, 9, 1802720.	10.2	83
13	Breathing-Mimicking Electrocatalysis for Oxygen Evolution and Reduction. Joule, 2019, 3, 557-569.	11.7	132
14	Nanostructural and Electrochemical Evolution of the Solid-Electrolyte Interphase on CuO Nanowires Revealed by Cryogenic-Electron Microscopy and Impedance Spectroscopy. ACS Nano, 2019, 13, 737-744.	7.3	78
15	Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. Joule, 2018, 2, 2167-2177.	11.7	284
16	Solubility-mediated sustained release enabling nitrate additive in carbonate electrolytes for stable lithium metal anode. Nature Communications, 2018, 9, 3656.	5.8	371
17	Materials for lithium-ion battery safety. Science Advances, 2018, 4, eaas9820.	4.7	958
18	Lithium metal stripping beneath the solid electrolyte interphase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8529-8534.	3.3	150

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19	Efficient electrocatalytic CO2 reduction on a three-phase interface. Nature Catalysis, 2018, 1, 592-600.	16.1	336
20	Engineering stable interfaces for three-dimensional lithium metal anodes. Science Advances, 2018, 4, eaat5168.	4.7	153
21	Effects of Polymer Coatings on Electrodeposited Lithium Metal. Journal of the American Chemical Society, 2018, 140, 11735-11744.	6.6	307
22	An Ultrastrong Double-Layer Nanodiamond Interface for Stable Lithium Metal Anodes. Joule, 2018, 2, 1595-1609.	11.7	155
23	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. Nano Letters, 2017, 17, 1132-1139.	4.5	1,081
24	Nanoscale perspective: Materials designs and understandings in lithium metal anodes. Nano Research, 2017, 10, 4003-4026.	5.8	130
25	Lithium Metal Anodes with an Adaptive â€œSolid-Liquidâ€•Interfacial Protective Layer. Journal of the American Chemical Society, 2017, 139, 4815-4820.	6.6	460
26	Atomic structure of sensitive battery materials and interfaces revealed by cryoâ€“electron microscopy. Science, 2017, 358, 506-510.	6.0	1,039
27	Strong texturing of lithium metal in batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12138-12143.	3.3	188
28	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. Journal of the American Chemical Society, 2017, 139, 11550-11558.	6.6	398
29	ZnO-based microrockets with light-enhanced propulsion. Nanoscale, 2017, 9, 15027-15032.	2.8	53
30	Stitching h-BN by atomic layer deposition of LiF as a stable interface for lithium metal anode. Science Advances, 2017, 3, eaao3170.	4.7	252
31	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. ACS Energy Letters, 2016, 1, 1247-1255.	8.8	281
32	Stabilizing Lithium Metal Anodes by Uniform Li-Ion Flux Distribution in Nanochannel Confinement. Journal of the American Chemical Society, 2016, 138, 15443-15450.	6.6	386
33	Highly Efficient Light-Driven TiO₂â€“Au Janus Micromotors. ACS Nano, 2016, 10, 839-844.	7.3	392
34	Motion-based threat detection using microrods: experiments and numerical simulations. Nanoscale, 2015, 7, 7833-7840.	2.8	26
35	Catalytic Iridium-Based Janus Micromotors Powered by Ultralow Levels of Chemical Fuels. Journal of the American Chemical Society, 2014, 136, 2276-2279.	6.6	300
36	Nanomotor lithography. Nature Communications, 2014, 5, 5026.	5.8	141

#	Article	IF	Citations
37	Organized Self-Assembly of Janus Micromotors with Hydrophobic Hemispheres. Journal of the American Chemical Society, 2013, 135, 998-1001.	6.6	189
38	Seawater-driven magnesium based Janus micromotors for environmental remediation. Nanoscale, 2013, 5, 4696.	2.8	333
39	Water-Driven Micromotors. ACS Nano, 2012, 6, 8432-8438.	7.3	326
40	Polymer-based tubular microbots: role of composition and preparation. Nanoscale, 2012, 4, 2447.	2.8	150