Jaegeon Ryu

List of Publications by Year
in descending order

38 papers	1,653 citations	361045 20 h-index	344852 36 g-index
39 all docs	39 docs citations	39 times ranked	2537 citing authors

#	Article	IF	Citations
1	Synthesis of Ultrathin Si Nanosheets from Natural Clays for Lithium-Ion Battery Anodes. ACS Nano, 2016, 10, 2843-2851.	7.3	274
2	Ultrafast-Charging Silicon-Based Coral-Like Network Anodes for Lithium-Ion Batteries with High Energy and Power Densities. ACS Nano, 2019, 13, 2307-2315.	7.3	115
3	Folding Graphene Film Yields High Areal Energy Storage in Lithium-Ion Batteries. ACS Nano, 2018, 12, 1739-1746.	7.3	111
4	Practical considerations of Si-based anodes for lithium-ion battery applications. Nano Research, 2017, 10, 3970-4002.	5.8	102
5	Multiscale Hyperporous Silicon Flake Anodes for High Initial Coulombic Efficiency and Cycle Stability. ACS Nano, 2016, 10, 10589-10597.	7.3	95
6	Roomâ€Temperature Crosslinkable Natural Polymer Binder for Highâ€Rate and Stable Silicon Anodes. Advanced Functional Materials, 2020, 30, 1908433.	7.8	95
7	Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. Nature Communications, 2018, 9, 2924.	5.8	94
8	Lithium Accommodation in a Redoxâ€Active Covalent Triazine Framework for High Areal Capacity and Fastâ€Charging Lithiumâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 2003761.	7.8	86
9	Revisit of metallothermic reduction for macroporous Si: compromise between capacity and volume expansion for practical Li-ion battery. Nano Energy, 2015, 12, 161-168.	8.2	62
10	Infinitesimal sulfur fusion yields quasi-metallic bulk silicon for stable and fast energy storage. Nature Communications, 2019, 10, 2351.	5.8	57
11	All-in-one synthesis of mesoporous silicon nanosheets from natural clay and their applicability to hydrogen evolution. NPG Asia Materials, 2016, 8, e248-e248.	3.8	56
12	Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. Nature Communications, 2019, 10, 2364.	5.8	44
13	A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. Advanced Functional Materials, 2020, 30, 1902499.	7.8	41
14	Nanotubular structured Si-based multicomponent anodes for high-performance lithium-ion batteries with controllable pore size via coaxial electro-spinning. Nanoscale, 2015, 7, 6126-6135.	2.8	40
15	Homogeneous Li deposition through the control of carbon dot-assisted Li-dendrite morphology for high-performance Li-metal batteries. Journal of Materials Chemistry A, 2019, 7, 20325-20334.	5.2	35
16	Synthesis of dual porous structured germanium anodes with exceptional lithium-ion storage performance. Journal of Power Sources, 2018, 374, 217-224.	4.0	33
17	Revealing salt-expedited reduction mechanism for hollow silicon microsphere formation in bi-functional halide melts. Communications Chemistry, 2018, 1, .	2.0	31
18	Hybridizing germanium anodes with polysaccharide-derived nitrogen-doped carbon for high volumetric capacity of Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 15828-15837.	5.2	23

#	Article	IF	Citations
19	Three-Dimensional Monolithic Organic Battery Electrodes. ACS Nano, 2019, 13, 14357-14367.	7.3	22
20	A multi-stacked hyperporous silicon flake for highly active solar hydrogen production. Chemical Communications, 2016, 52, 10221-10224.	2.2	21
21	Revisiting Surface Modification of Graphite: Dualâ€Layer Coating for Highâ€Performance Lithium Battery Anode Materials. Chemistry - an Asian Journal, 2016, 11, 1711-1717.	1.7	20
22	Generalized Redox-Responsive Assembly of Carbon-Sheathed Metallic and Semiconducting Nanowire Heterostructures. Nano Letters, 2016, 16, 1179-1185.	4.5	20
23	Cost-effective approach for structural evolution of Si-based multicomponent for Li-ion battery anodes. Journal of Materials Chemistry A, 2017, 5, 2095-2101.	5.2	20
24	Electrochemical scissoring of disordered silicon-carbon composites for high-performance lithium storage. Energy Storage Materials, 2021, 36, 139-146.	9.5	20
25	Fundamental Understanding of Nanostructured Si Electrodes: Preparation and Characterization. ChemNanoMat, 2018, 4, 319-337.	1.5	19
26	Intramolecular deformation of zeotype-borogermanate toward a three-dimensional porous germanium anode for high-rate lithium storage. Journal of Materials Chemistry A, 2018, 6, 15961-15967.	5.2	17
27	Electrolyte-mediated nanograin intermetallic formation enables superionic conduction and electrode stability in rechargeable batteries. Energy Storage Materials, 2020, 33, 164-172.	9.5	17
28	Directed Self-Assembly of Asymmetric Block Copolymers in Thin Films Driven by Uniaxially Aligned Topographic Patterns. ACS Nano, 2018, 12, 1642-1649.	7.3	15
29	Revisiting Classical Rocking Chair Lithium-Ion Battery. Macromolecular Research, 2020, 28, 1175-1191.	1.0	14
30	Dual Buffering Inverse Design of Threeâ€Dimensional Grapheneâ€Supported Snâ€TiO 2 Anodes for Durable Lithiumâ€Ion Batteries. Small, 2020, 16, 2004861.	5.2	13
31	Vinyl-Integrated In Situ Cross-Linked Composite Gel Electrolytes for Stable Lithium Metal Anodes. ACS Applied Energy Materials, 2021, 4, 2922-2931.	2.5	12
32	Sliding chains keep particles together. Science, 2017, 357, 250-251.	6.0	11
33	Rational Structure Design of Fast-Charging NiSb Bimetal Nanosheet Anode for Lithium Ion Batteries. Energy & Fuels, 2020, 34, 10211-10217.	2.5	8
34	Surficial amide-enabled integrated organic anodeâ€“binder electrode for electrochemical reversibility and fast redox kinetics in lithiumâ€“ion batteries. Applied Surface Science, 2022, 601, 154220.	3.1	5
35	Nanoscale anodes for rechargeable batteries: Fundamentals and design principles. , 2021, , 91-157.		2
36	An Electrochemically Activated Nanofilm for Sustainable Mg Anode with Fast Charge Transfer Kinetics. Journal of the Electrochemical Society, 2021, 168, 120519.	1.3	2

#	Article	IF	Citations
37	Salt-mediated extraction of nanoscale Si building blocks: composite anode for Li-ion full battery with high energy density. Materials Advances, 2020, 1, 2797-2803.	2.6	1
38	Toward a Metallic Silicon Anode for Practical Lithium-Ion Battery Applications. ECS Meeting Abstracts, 2019, , .	0.0	0