Jaegeon Ryu

List of Publications by Year in Descending Order

35 papers	1,184 citations	18 h-index	34 g-index
39 ext. papers	1,408 ext. citations	12.2 avg, IF	4.81 L-index

#	Paper	IF	Citations
35	Vinyl-Integrated In Situ Cross-Linked Composite Gel Electrolytes for Stable Lithium Metal Anodes. *ACS Applied Energy Materials*, **2021**, 4, 2922-2931	6.1	4
34	Electrochemical scissoring of disordered silicon-carbon composites for high-performance lithium storage. *Energy Storage Materials*, **2021**, 36, 139-146	19.4	9
33	Nanoscale anodes for rechargeable batteries: Fundamentals and design principles **2021**, 91-157		0
32	Lithium Accommodation in a Redox-Active Covalent Triazine Framework for High Areal Capacity and Fast-Charging Lithium-Ion Batteries. *Advanced Functional Materials*, **2020**, 30, 2003761	15.6	29
31	Revisiting Classical Rocking Chair Lithium-Ion Battery. *Macromolecular Research*, **2020**, 28, 1175-1191	1.9	5
30	Room-Temperature Crosslinkable Natural Polymer Binder for High-Rate and Stable Silicon Anodes. *Advanced Functional Materials*, **2020**, 30, 1908433	15.6	52
29	Electrolyte-mediated nanograin intermetallic formation enables superionic conduction and electrode stability in rechargeable batteries. *Energy Storage Materials*, **2020**, 33, 164-172	19.4	6
28	Rational Structure Design of Fast-Charging NiSb Bimetal Nanosheet Anode for Lithium Ion Batteries. *Energy & Fuels*, **2020**, 34, 10211-10217	4.1	2
27	Dual Buffering Inverse Design of Three-Dimensional Graphene-Supported Sn-TiO Anodes for Durable Lithium-Ion Batteries. *Small*, **2020**, 16, e2004861	11	6
26	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	3.3	0
25	A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. *Advanced Functional Materials*, **2020**, 30, 1902499	15.6	28
24	Ultrafast-Charging Silicon-Based Coral-Like Network Anodes for Lithium-Ion Batteries with High Energy and Power Densities. *ACS Nano*, **2019**, 13, 2307-2315	16.7	93
23	Infinitesimal sulfur fusion yields quasi-metallic bulk silicon for stable and fast energy storage. *Nature Communications*, **2019**, 10, 2351	17.4	37
22	Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. *Nature Communications*, **2019**, 10, 2364	17.4	29
21	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	13	21
20	Three-Dimensional Monolithic Organic Battery Electrodes. *ACS Nano*, **2019**, 13, 14357-14367	16.7	11
19	Directed Self-Assembly of Asymmetric Block Copolymers in Thin Films Driven by Uniaxially Aligned Topographic Patterns. *ACS Nano*, **2018**, 12, 1642-1649	16.7	12

18	Folding Graphene Film Yields High Areal Energy Storage in Lithium-Ion Batteries. *ACS Nano*, **2018**, 12, 1739-1746	16.7	94
17	Fundamental Understanding of Nanostructured Si Electrodes: Preparation and Characterization. *ChemNanoMat*, **2018**, 4, 319-337	3.5	17
16	Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. *Nature Communications*, **2018**, 9, 2924	17.4	69
15	Revealing salt-expedited reduction mechanism for hollow silicon microsphere formation in bi-functional halide melts. *Communications Chemistry*, **2018**, 1,	6.3	24
14	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	13	11
13	Synthesis of dual porous structured germanium anodes with exceptional lithium-ion storage performance. *Journal of Power Sources*, **2018**, 374, 217-224	8.9	28
12	Cost-effective approach for structural evolution of Si-based multicomponent for Li-ion battery anodes. *Journal of Materials Chemistry A*, **2017**, 5, 2095-2101	13	17
11	Sliding chains keep particles together. *Science*, **2017**, 357, 250-251	33.3	9
10	Practical considerations of Si-based anodes for lithium-ion battery applications. *Nano Research*, **2017**, 10, 3970-4002	10	70
9	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	13	18
8	Multiscale Hyperporous Silicon Flake Anodes for High Initial Coulombic Efficiency and Cycle Stability. *ACS Nano*, **2016**, 10, 10589-10597	16.7	81
7	Generalized Redox-Responsive Assembly of Carbon-Sheathed Metallic and Semiconducting Nanowire Heterostructures. *Nano Letters*, **2016**, 16, 1179-85	11.5	18
6	Synthesis of Ultrathin Si Nanosheets from Natural Clays for Lithium-Ion Battery Anodes. *ACS Nano*, **2016**, 10, 2843-51	16.7	216
5	Revisiting Surface Modification of Graphite: Dual-Layer Coating for High-Performance Lithium Battery Anode Materials. *Chemistry - an Asian Journal*, **2016**, 11, 1711-7	4.5	16
4	A multi-stacked hyperporous silicon flake for highly active solar hydrogen production. *Chemical Communications*, **2016**, 52, 10221-4	5.8	16
3	All-in-one synthesis of mesoporous silicon nanosheets from natural clay and their applicability to hydrogen evolution. *NPG Asia Materials*, **2016**, 8, e248-e248	10.3	45
2	Nanotubular structured Si-based multicomponent anodes for high-performance lithium-ion batteries with controllable pore size via coaxial electro-spinning. *Nanoscale*, **2015**, 7, 6126-35	7.7	36
1	Revisit of metallothermic reduction for macroporous Si: compromise between capacity and volume expansion for practical Li-ion battery. *Nano Energy*, **2015**, 12, 161-168	17.1	54