Sujong Chae

List of Publications by Year
in descending order

39 papers	5,986 citations	136950 32 h-index	289244 40 g-index
44 all docs	44 docs citations	44 times ranked	7015 citing authors

#	Article	IF	Citations
1	Nickelâ€Rich Layered Lithium Transitionâ€Metal Oxide for Highâ€Energy Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 4440-4457.	13.8	1,512
2	Scalable synthesis of silicon-nanolayer-embedded graphite for high-energy lithium-ion batteries. Nature Energy, 2016, 1, .	39.5	563
3	Metal (Ni, Co)â€Metal Oxides/Graphene Nanocomposites as Multifunctional Electrocatalysts. Advanced Functional Materials, 2015, 25, 5799-5808.	14.9	490
4	Integration of Graphite and Silicon Anodes for the Commercialization of Highâ€Energy Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 110-135.	13.8	460
5	Confronting Issues of the Practical Implementation of Si Anode in High-Energy Lithium-Ion Batteries. Joule, 2017, 1, 47-60.	24.0	329
6	Fast-charging high-energy lithium-ion batteries via implantation of amorphous silicon nanolayer in edge-plane activated graphite anodes. Nature Communications, 2017, 8, 812.	12.8	274
7	Challenges in Accommodating Volume Change of Si Anodes for Liâ€Ion Batteries. ChemElectroChem, 2015, 2, 1645-1651.	3.4	204
8	Elastic a-Silicon Nanoparticle Backboned Graphene Hybrid as a Self-Compacting Anode for High-Rate Lithium Ion Batteries. ACS Nano, 2014, 8, 8591-8599.	14.6	180
9	Unsymmetrical fluorinated malonatoborate as an amphoteric additive for high-energy-density lithium-ion batteries. Energy and Environmental Science, 2018, 11, 1552-1562.	30.8	154
10	Micron-sized Feâ€“Cuâ€“Si ternary composite anodes for high energy Li-ion batteries. Energy and Environmental Science, 2016, 9, 1251-1257.	30.8	147
11	Flexible High-Energy Li-Ion Batteries with Fast-Charging Capability. Nano Letters, 2014, 14, 4083-4089.	9.1	122
12	Advances and Prospects of Sulfide Allâ€Solidâ€State Lithium Batteries via Oneâ€toâ€One Comparison with Conventional Liquid Lithium Ion Batteries. Advanced Materials, 2019, 31, e1900376.	21.0	119
13	Calenderingâ€Compatible Macroporous Architecture for Siliconâ€“Graphite Composite toward Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2003286.	21.0	111
14	Robust Pitch on Silicon Nanolayerâ€“Embedded Graphite for Suppressing Undesirable Volume Expansion. Advanced Energy Materials, 2019, 9, 1803121.	19.5	107
15	Subnano-sized silicon anode via crystal growth inhibition mechanism and its application in a prototype battery pack. Nature Energy, 2021, 6, 1164-1175.	39.5	107
16	Oneâ€toâ€One Comparison of Graphiteâ€Blended Negative Electrodes Using Silicon Nanolayerâ€Embedded Graphite versus Commercial Benchmarking Materials for Highâ€Energy Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1700071.	19.5	100
17	A Micrometerâ€Sized Silicon/Carbon Composite Anode Synthesized by Impregnation of Petroleum Pitch in Nanoporous Silicon. Advanced Materials, 2021, 33, e2103095.	21.0	99
18	Towards maximized volumetric capacity via pore-coordinated design for large-volume-change lithium-ion battery anodes. Nature Communications, 2019, 10, 475.	12.8	79

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19	A Ternary Ni₄₆Co₄₀Fe₁₄ Nanoalloyâ€Based Oxygen Electrocatalyst for Highly Efficient Rechargeable Zincâ€“Air Batteries. Advanced Materials, 2018, 30, e1803372.	21.0	73
20	Considering Critical Factors of Liâ€rich Cathode and Si Anode Materials for Practical Liâ€ion Cell Applications. Small, 2015, 11, 4058-4073.	10.0	67
21	Hollow Silicon Nanostructures via the Kirkendall Effect. Nano Letters, 2015, 15, 6914-6918.	9.1	67
22	Rational Design of Electrolytes for Long-Term Cycling of Si Anodes over a Wide Temperature Range. ACS Energy Letters, 2021, 6, 387-394.	17.4	58
23	Fabrication of Lamellar Nanosphere Structure for Effective Stressâ€Management in Largeâ€Volumeâ€Variation Anodes of Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2019, 31, e1900970.	21.0	52
24	Strategic Pore Architecture for Accommodating Volume Change from High Si Content in Lithiumâ€Ion Battery Anodes. Advanced Energy Materials, 2020, 10, 1903400.	19.5	50
25	An Antiaging Electrolyte Additive for Highâ€Energyâ€Density Lithiumâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2000563.	19.5	50
26	Gas phase synthesis of amorphous silicon nitride nanoparticles for high-energy LIBs. Energy and Environmental Science, 2020, 13, 1212-1221.	30.8	48
27	Low-Temperature Carbon Coating of Nanosized Li_{1.015}Al_{0.06}Mn_{1.925}O₄ and High-Density Electrode for High-Power Li-Ion Batteries. Nano Letters, 2017, 17, 3744-3751.	9.1	45
28	Optimized Electrolyte with High Electrochemical Stability and Oxygen Solubility for Lithiumâ€“Oxygen and Lithiumâ€“Air Batteries. ACS Energy Letters, 2020, 5, 2182-2190.	17.4	45
29	Novel design of ultra-fast Si anodes for Li-ion batteries: crystalline Si@amorphous Si encapsulating hard carbon. Nanoscale, 2014, 6, 10604-10610.	5.6	40
30	Effects of Fluorinated Diluents in Localized Highâ€Concentration Electrolytes for Lithiumâ€“Oxygen Batteries. Advanced Functional Materials, 2021, 31, 2002927.	14.9	39
31	Native Void Space for Maximum Volumetric Capacity in Silicon-Based Anodes. Nano Letters, 2019, 19, 8793-8800.	9.1	36
32	Scalable Synthesis of Hollow Î²-SiC/Si Anodes via Selective Thermal Oxidation for Lithium-Ion Batteries. ACS Nano, 2020, 14, 11548-11557.	14.6	32
33	Graphitâ€undâ€Siliciumâ€Anoden fÃ¼r Lithiumionenâ€Hochenergiebatterien. Angewandte Chemie, 2020, 132, 112-138.	2.0	23
34	Stable Solid Electrolyte Interphase Layer Formed by Electrochemical Pretreatment of Gel Polymer Coating on Li Metal Anode for Lithiumâ€“Oxygen Batteries. ACS Energy Letters, 2021, 6, 3321-3331.	17.4	17
35	Evaluation of the Volumetric Activity of the Air Electrode in a Zincâ€“Air Battery Using a Nitrogen and Sulfur Co-doped Metal-free Electrocatalyst. ACS Applied Materials & Interfaces, 2020, 12, 57064-57070.	8.0	6
36	Crosslinked Polyethyleneimine Gel Polymer Interface to Improve Cycling Stability of RFBs. Energy Material Advances, 2022, 2022, .	11.0	3

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37	Zinc-Air Batteries: A Ternary Ni46 Co40 Fe14 Nanoalloy-Based Oxygen Electrocatalyst for Highly Efficient Rechargeable Zinc-Air Batteries (Adv. Mater. 46/2018). Advanced Materials, 2018, 30, 1870346.	21.0	1
38	(Invited) Rational Design of Localized High Concentration Electrolytes to Enable Long-Term Cycling of Si Anodes. ECS Meeting Abstracts, 2021, MA2021-01, 120-120.	0.0	0
39	Achieving Highly Reproducible Results in Graphite-Based Li-Ion Full Coin Cells. ECS Meeting Abstracts, 2021, MA2021-02, 408-408.	0.0	0