Sung Chul Jung

List of Publications by Year
in descending order

28 papers	1,760 citations	361413 20 h-index	526287 27 g-index
28 all docs	28 docs citations	28 times ranked	3078 citing authors

#	Article	IF	Citations
1	Ultra-low overpotential and high rate capability in Liâ€"O2 batteries through surface atom arrangement of PdCu nanocatalysts. Energy and Environmental Science, 2014, 7, 1362.	30.8	193
2	How Do Li Atoms Pass through the Al₂O₃ Coating Layer during Lithiation in Li-ion Batteries?. Journal of Physical Chemistry Letters, 2013, 4, 2681-2685.	4.6	166
3	Flexible Few-Layered Graphene for the Ultrafast Rechargeable Aluminum-Ion Battery. Journal of Physical Chemistry C, 2016, 120, 13384-13389.	3.1	164
4	Atom-Level Understanding of the Sodiation Process in Silicon Anode Material. Journal of Physical Chemistry Letters, 2014, 5, 1283-1288.	4.6	127
5	Anisotropic Volume Expansion of Crystalline Silicon during Electrochemical Lithium Insertion: An Atomic Level Rationale. Nano Letters, 2012, 12, 5342-5347.	9.1	116
6	Two-Dimensional Phosphorene-Derived Protective Layers on a Lithium Metal Anode for Lithium-Oxygen Batteries. ACS Nano, 2018, 12, 4419-4430.	14.6	115
7	Polyoxometalateâ€coupled Graphene via Polymeric Ionic Liquid Linker for Supercapacitors. Advanced Functional Materials, 2014, 24, 7301-7309.	14.9	107
8	Atomic-Level Understanding toward a High-Capacity and High-Power Silicon Oxide (SiO) Material. Journal of Physical Chemistry C, 2016, 120, 886-892.	3.1	105
9	Sodium Ion Diffusion in Al₂O₃: A Distinct Perspective Compared with Lithium Ion Diffusion. Nano Letters, 2014, 14, 6559-6563.	9.1	91
10	Important Role of Functional Groups for Sodium Ion Intercalation in Expanded Graphite. Chemistry of Materials, 2015, 27, 5402-5406.	6.7	79
11	Origin of excellent rate and cycle performance of Na + -solvent cointercalated graphite vs. poor performance of Li + -solvent case. Nano Energy, 2017, 34, 456-462.	16.0	75
12	Cointercalation of Mg²⁺ Ions into Graphite for Magnesium-Ion Batteries. Chemistry of Materials, 2018, 30, 3199-3203.	6.7	71
13	Siteâ€Selective In Situ Electrochemical Doping for Mnâ€Rich Layered Oxide Cathode Materials in Lithiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1702514.	19.5	57
14	Facet-dependent lithium intercalation into Si crystals: Si(100) vs. Si(111). Physical Chemistry Chemical Physics, 2011, 13, 21282.	2.8	49
15	The origin of excellent rate and cycle performance of Sn₄P₃ binary electrodes for sodium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 1772-1779.	10.3	42
16	First-principles molecular dynamics study on ultrafast potassium ion transport in silicon anode. Journal of Power Sources, 2019, 415, 119-125.	7.8	36
17	Fe₂CS₂ MXene: a promising electrode for Al-ion batteries. Nanoscale, 2020, 12, 5324-5331.	5.6	35
18	Monoclinic sulfur cathode utilizing carbon for high-performance lithiumâ€"sulfur batteries. Journal of Power Sources, 2016, 325, 495-500.	7.8	28

#	Article	IF	Citations
19	Thermodynamic and Kinetic Origins of Lithiation-Induced Amorphous-to-Crystalline Phase Transition of Phosphorus. Journal of Physical Chemistry C, 2015, 119, 12130-12137.	3.1	25
20	Fast Magnesium Ion Transport in the Bi/Mg₃Bi₂ Two-Phase Electrode. Journal of Physical Chemistry C, 2018, 122, 17643-17649.	3.1	24
21	Lithium intercalation behaviors in Ge and Sn crystalline surfaces. Physical Chemistry Chemical Physics, 2013, 15, 13586.	2.8	13
22	Silicon as the Anode Material for Multivalent-Ion Batteries: A First-Principles Dynamics Study. ACS Applied Materials & Interfaces, 2020, 12, 55746-55755.	8.0	12
23	The molecular sieving mechanism of a polysulfide-blocking metalâ€“organic framework separator for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 23929-23940.	10.3	10
24	Boron-, nitrogen-, aluminum-, and phosphorus-doped graphite electrodes for non-lithium ion batteries. Current Applied Physics, 2020, 20, 988-993.	2.4	8
25	Strong lithium-polysulfide anchoring effect of amorphous carbon for lithiumâ€“sulfur batteries. Current Applied Physics, 2021, 22, 94-103.	2.4	6
26	Comment on â€œAtomistic Mechanisms of Mg Insertion Reactions in Group XIV Anodes for Mg-Ion Batteriesâ€• ACS Applied Materials & Interfaces, 2019, 11, 45365-45367.	8.0	4
27	Side reaction in the hydrogen and carbothermal reductions of BaO and BaCO3: The role of an infinitesimal amount of water. Current Applied Physics, 2022, 34, 19-23.	2.4	1
28	Cation-assisted lithium ion diffusion in a lithium oxythioborate halide glass solid electrolyte. Electrochimica Acta, 2022, 426, 140806.	5.2	1