Sung-Kyun Jung

List of Publications by Year
in descending order

27 papers	3,535 citations	361413 20 h-index	501196 28 g-index
29 all docs	29 docs citations	29 times ranked	4833 citing authors

#	Article	IF	Citations
1	Understanding the Degradation Mechanisms of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode Material in Lithium Ion Batteries. Advanced Energy Materials, 2014, 4, 1300787.	19.5	893
2	Recent Progress in Organic Electrodes for Li and Na Rechargeable Batteries. Advanced Materials, 2018, 30, e1704682.	21.0	366
3	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. Nature Materials, 2020, 19, 419-427.	27.5	328
4	Unexpected discovery of low-cost maricite NaFePO₄as a high-performance electrode for Na-ion batteries. Energy and Environmental Science, 2015, 8, 540-545.	30.8	299
5	Anomalous Jahnâ€“Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. Energy and Environmental Science, 2015, 8, 3325-3335.	30.8	175
6	A new catalyst-embedded hierarchical air electrode for high-performance Liâ€“O2 batteries. Energy and Environmental Science, 2013, 6, 3570.	30.8	152
7	Nanoscale Phenomena in Lithium-Ion Batteries. Chemical Reviews, 2020, 120, 6684-6737.	47.7	142
8	Reviewâ€”Lithium-Excess Layered Cathodes for Lithium Rechargeable Batteries. Journal of the Electrochemical Society, 2015, 162, A2447-A2467.	2.9	141
9	Highâ€Performance Hybrid Supercapacitor Based on Grapheneâ€Wrapped Li₄Ti₅O₁₂ and Activated Carbon. ChemElectroChem, 2014, 1, 125-130.	3.4	137
10	Multi-redox Molecule for High-Energy Redox Flow Batteries. Joule, 2018, 2, 1771-1782.	24.0	123
11	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in Highâ€Energy Layered Lithiumâ€Rich Electrodes. Advanced Energy Materials, 2018, 8, 1800606.	19.5	97
12	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	39.5	94
13	Highâ€Voltageâ€Driven Surface Structuring and Electrochemical Stabilization of Niâ€Rich Layered Cathode Materials for Li Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2000521.	19.5	90
14	Understanding the effects of chemical reactions at the cathodeâ€“electrolyte interface in sulfide based all-solid-state batteries. Journal of Materials Chemistry A, 2019, 7, 22967-22976.	10.3	80
15	Unveiling the Intrinsic Cycle Reversibility of a LiCoO₂ Electrode at 4.8-V Cutoff Voltage through Subtractive Surface Modification for Lithium-Ion Batteries. Nano Letters, 2019, 19, 29-37.	9.1	78
16	Charge-transfer complexes for high-power organic rechargeable batteries. Energy Storage Materials, 2019, 20, 462-469.	18.0	70
17	Bio-inspired Molecular Redesign of a Multi-redox Catholyte for High-Energy Non-aqueous Organic Redox Flow Batteries. CheM, 2019, 5, 2642-2656.	11.7	61
18	Pliable Lithium Superionic Conductor for All-Solid-State Batteries. ACS Energy Letters, 2021, 6, 2006-2015.	17.4	46

#	Article	IF	Citations
19	A new lithium diffusion model in layered oxides based on asymmetric but reversible transition metal migration. Energy and Environmental Science, 2020, 13, 1269-1278.	30.8	39
20	Simultaneous anionic and cationic redox. Nature Energy, 2017, 2, 912-913.	39.5	21
21	Unveiling the Role of Transitionâ€Metal Ions in the Thermal Degradation of Layered Niâ€“Coâ€“Mn Cathodes for Lithium Rechargeable Batteries. Advanced Functional Materials, 2022, 32, .	14.9	21
22	New Iron-Based Intercalation Host for Lithium-Ion Batteries. Chemistry of Materials, 2018, 30, 1956-1964.	6.7	20
23	NaFâ€“FeF2 nanocomposite: New type of Na-ion battery cathode material. Nano Research, 2017, 10, 4388-4397.	10.4	17
24	Intrinsic Nanodomains in Triplite LiFeSO₄F and Its Implication in Lithiumâ€Ion Diffusion. Advanced Energy Materials, 2018, 8, 1701408.	19.5	16
25	Highly Stable Fe²⁺/Ti³⁺â€Based Fluoride Cathode Enabling Lowâ€Cost and Highâ€Performance Naâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	14.9	11
26	In operando formation of new iron-oxyfluoride host structure for Na-ion storage from NaFâ€“FeO nanocomposite. Energy Storage Materials, 2019, 23, 427-433.	18.0	8
27	Chemical Origins of Electrochemical Overpotential in Surfaceâ€Conversion Nanocomposite Cathodes. Advanced Energy Materials, 2019, 9, 1900503.	19.5	6