Jaecheol Choi

List of Publications by Year
in descending order

31 papers	2,823 citations	394421 19 h-index	434195 31 g-index
31 all docs	31 docs citations	31 times ranked	3037 citing authors

#	Article	IF	Citations
1	A Roadmap to the Ammonia Economy. Joule, 2020, 4, 1186-1205.	24.0	782
2	Nitrogen reduction to ammonia at high efficiency and rates based on a phosphonium proton shuttle. Science, 2021, 372, 1187-1191.	12.6	289
3	Identification and elimination of false positives in electrochemical nitrogen reduction studies. Nature Communications, 2020, 11, 5546.	12.8	264
4	Steric Modification of a Cobalt Phthalocyanine/Graphene Catalyst To Give Enhanced and Stable Electrochemical CO₂ Reduction to CO. ACS Energy Letters, 2019, 4, 666-672.	17.4	183
5	Room temperature CO2 reduction to solid carbon species on liquid metals featuring atomically thin ceria interfaces. Nature Communications, 2019, 10, 865.	12.8	179
6	Electroreduction of Nitrates, Nitrites, and Gaseous Nitrogen Oxides: A Potential Source of Ammonia in Dinitrogen Reduction Studies. ACS Energy Letters, 2020, 5, 2095-2097.	17.4	170
7	Energy efficient electrochemical reduction of CO₂ to CO using a three-dimensional porphyrin/graphene hydrogel. Energy and Environmental Science, 2019, 12, 747-755.	30.8	125
8	Highly Adhesive and Soluble Copolyimide Binder: Improving the Long-Term Cycle Life of Silicon Anodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 14851-14858.	8.0	96
9	Measurement and Analysis of Adhesion Property of Lithium-Ion Battery Electrodes with SAICAS. ACS Applied Materials & Interfaces, 2014, 6, 526-531.	8.0	88
10	A Porphyrin/Graphene Framework: A Highly Efficient and Robust Electrocatalyst for Carbon Dioxide Reduction. Advanced Energy Materials, 2018, 8, 1801280.	19.5	88
11	Electrospun Three-Dimensional Mesoporous Silicon Nanofibers as an Anode Material for High-Performance Lithium Secondary Batteries. ACS Applied Materials & Interfaces, 2013, 5, 12005-12010.	8.0	82
12	A comparative investigation of carbon black (Super-P) and vapor-grown carbon fibers (VGCFs) as conductive additives for lithium-ion battery cathodes. RSC Advances, 2015, 5, 95073-95078.	3.6	57
13	High Performance Fe Porphyrin/Ionic Liquid Coâ€catalyst for Electrochemical CO₂ Reduction. Chemistry - A European Journal, 2016, 22, 14158-14161.	3.3	55
14	Effect of cathode/anode area ratio on electrochemical performance ofÂlithium-ion batteries. Journal of Power Sources, 2013, 243, 641-647.	7.8	51
15	Liquefied Sunshine: Transforming Renewables into Fertilizers and Energy Carriers with Electromaterials. Advanced Materials, 2020, 32, e1904804.	21.0	49
16	Comparative study on experiments and simulation of blended cathode active materials for lithium ion batteries. Electrochimica Acta, 2016, 187, 422-432.	5.2	48
17	Improved high-temperature performance of lithium-ion batteries through use of a thermally stable co-polyimide-based cathode binder. Journal of Power Sources, 2014, 252, 138-143.	7.8	38
18	Mechanical robustness of composite electrode for lithium ion battery: Insight into entanglement & crystallinity of polymeric binder. Electrochimica Acta, 2020, 332, 135471.	5.2	23

#	Article	IF	Citations
19	Effect of LiCoO₂Cathode Density and Thickness on Electrochemical Performance of Lithium-Ion Batteries. Journal of Electrochemical Science and Technology, 2013, 4, 27-33.	2.2	21
20	Highly ordered mesoporous carbon/iron porphyrin nanoreactor for the electrochemical reduction of CO₂. Journal of Materials Chemistry A, 2020, 8, 14966-14974.	10.3	19
21	Elucidating the Polymeric Binder Distribution within Lithiumâ€ion Battery Electrodes Using SAICAS. ChemPhysChem, 2018, 19, 1627-1634.	2.1	18
22	Effect of LiFePO4 cathode density and thickness on electrochemical performance of lithium metal polymer batteries prepared by in situ thermal polymerization. Electrochimica Acta, 2015, 154, 149-156.	5.2	17
23	Binder-free metal fibril-supported Fe2O3 anodes for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 2906.	10.3	15
24	Reassessment of the catalytic activity of bismuth for aqueous nitrogen electroreduction. Nature Catalysis, 2022, 5, 382-384.	34.4	14
25	Effect of back-side-coated electrodes on electrochemical performances of lithium-ion batteries. Journal of Power Sources, 2015, 275, 712-719.	7.8	12
26	Synergistic Amplification of Water Oxidation Catalysis on Pt by a Thin-Film Conducting Polymer Composite. ACS Applied Energy Materials, 2018, 1, 4235-4246.	5.1	8
27	Competition between metal-catalysed electroreduction of dinitrogen, protons, and nitrogen oxides: a DFT perspective. Catalysis Science and Technology, 2022, 12, 2856-2864.	4.1	8
28	Synergistic amplification of catalytic hydrogen generation by a thin-film conducting polymer composite. Catalysis Science and Technology, 2018, 8, 4169-4179.	4.1	7
29	Synergistic Amplification of Oxygen Generation in (Photo)Catalytic Water Splitting by a PEDOT/Nanoâ€Co 3 O 4 /MWCNT Thin Film Composite. ChemCatChem, 2020, 12, 1580-1584.	3.7	6
30	Synergistic amplification of (photo)catalytic oxygen and hydrogen generation from water by thin-film polypyrrole composites. Molecular Catalysis, 2020, 490, 110955.	2.0	6
31	Unraveling the cohesive and interfacial adhesive strengths of electrodes for automotive fuel cells. Journal of Power Sources, 2020, 455, 227928.	7.8	5