Hyeokjo Gwon

List of Publications by Year
in descending order

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33 papers	6,445 citations	136740 32 h-index	360668 35 g-index
38 all docs	38 docs citations	38 times ranked	8700 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.	10.2	893
2	Flexible energy storage devices based on graphene paper. Energy and Environmental Science, 2011, 4, 1277.	15.6	536
3	A Novel Highâ€Energy Hybrid Supercapacitor with an Anatase TiO₂â€“Reduced Graphene Oxide Anode and an Activated Carbon Cathode. Advanced Energy Materials, 2013, 3, 1500-1506.	10.2	510
4	Superior Rechargeability and Efficiency of Lithiumâ€“Oxygen Batteries: Hierarchical Air Electrode Architecture Combined with a Soluble Catalyst. Angewandte Chemie - International Edition, 2014, 53, 3926-3931.	7.2	407
5	Recent progress on flexible lithium rechargeable batteries. Energy and Environmental Science, 2014, 7, 538-551.	15.6	355
6	Rational design of redox mediators for advanced Liâ€“O2 batteries. Nature Energy, 2016, 1, .	19.8	321
7	Toward a Lithiumâ€“â€œAirâ€•Battery: The Effect of CO₂ on the Chemistry of a Lithiumâ€“Oxygen Cell. Journal of the American Chemical Society, 2013, 135, 9733-9742.	6.6	307
8	A combined first principles and experimental study on Na3V2(PO4)2F3 for rechargeable Na batteries. Journal of Materials Chemistry, 2012, 22, 20535.	6.7	306
9	Enhanced Power and Rechargeability of a Liâ€“O₂ Battery Based on a Hierarchicalâ€Fibril CNT Electrode. Advanced Materials, 2013, 25, 1348-1352.	11.1	299
10	Fabrication of FeF₃ Nanoflowers on CNT Branches and Their Application to High Power Lithium Rechargeable Batteries. Advanced Materials, 2010, 22, 5260-5264.	11.1	270
11	Structural evolution of layered Li1.2Ni0.2Mn0.6O2 upon electrochemical cycling in a Li rechargeable battery. Journal of Materials Chemistry, 2010, 20, 10179.	6.7	211
12	Fabrication and Electrochemical Characterization of TiO₂ Three-Dimensional Nanonetwork Based on Peptide Assembly. ACS Nano, 2009, 3, 1085-1090.	7.3	195
13	SnO2/graphene composite with high lithium storage capability for lithium rechargeable batteries. Nano Research, 2010, 3, 813-821.	5.8	178
14	A new catalyst-embedded hierarchical air electrode for high-performance Liâ€“O2 batteries. Energy and Environmental Science, 2013, 6, 3570.	15.6	152
15	Reviewâ€”Lithium-Excess Layered Cathodes for Lithium Rechargeable Batteries. Journal of the Electrochemical Society, 2015, 162, A2447-A2467.	1.3	141
16	Combined Firstâ€Principle Calculations and Experimental Study on Multiâ€Component Olivine Cathode for Lithium Rechargeable Batteries. Advanced Functional Materials, 2009, 19, 3285-3292.	7.8	121
17	Sodiumâ€Ion Storage in Pyroproteinâ€Based Carbon Nanoplates. Advanced Materials, 2015, 27, 6914-6921.	11.1	120
18	Sodiumâ€“oxygen batteries with alkyl-carbonate and ether based electrolytes. Physical Chemistry Chemical Physics, 2013, 15, 3623.	1.3	118

#	Article	IF	Citations
19	Phase Stability Study of Li[sub 1â^'x]MnPO[sub 4] (0â‰¤xâ‰¤1) Cathode for Li Rechargeable Battery. Journal of the Electrochemical Society, 2009, 156, A635.	1.3	113
20	The potential for long-term operation of a lithiumâ€“oxygen battery using a non-carbonate-based electrolyte. Chemical Communications, 2012, 48, 8374.	2.2	100
21	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	19.8	94
22	Multicomponent Olivine Cathode for Lithium Rechargeable Batteries: A First-Principles Study. Chemistry of Materials, 2010, 22, 518-523.	3.2	91
23	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.	5.2	80
24	Synthesis of Multicomponent Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization. Chemistry of Materials, 2010, 22, 2573-2581.	3.2	66
25	A safe and sustainable bacterial cellulose nanofiber separator for lithium rechargeable batteries. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19288-19293.	3.3	57
26	Lithium-excess olivine electrode for lithium rechargeable batteries. Energy and Environmental Science, 2016, 9, 2902-2915.	15.6	49
27	Mechanism of Co3O4/graphene catalytic activity in Liâ€“O2 batteries using carbonate based electrolytes. Electrochimica Acta, 2013, 90, 63-70.	2.6	48
28	Pliable Lithium Superionic Conductor for All-Solid-State Batteries. ACS Energy Letters, 2021, 6, 2006-2015.	8.8	46
29	Energy storage in composites of a redox couple host and a lithium ion host. Nano Today, 2012, 7, 168-173.	6.2	44
30	Ion-Exchange Mechanism of Layered Transition-Metal Oxides: Case Study of LiNi_{0.5}Mn_{0.5}O₂. Inorganic Chemistry, 2014, 53, 8083-8087.	1.9	43
31	A New Perspective on Liâ€“SO₂ Batteries for Rechargeable Systems. Angewandte Chemie - International Edition, 2015, 54, 9663-9667.	7.2	37
32	Comparative study of Li(Li1/3Ti5/3)O4 and Li(Ni1/2â^'Li2/3Ti/3)Ti3/2O4 (x= 1/3) anodes for Li rechargeable batteries. Electrochimica Acta, 2009, 54, 5914-5918.	2.6	32
33	RÃ¼cktitelbild: A New Perspective on Li-SO2Batteries for Rechargeable Systems (Angew. Chem. 33/2015). Angewandte Chemie, 2015, 127, 9860-9860.	1.6	0