Hyeokjun Park

List of Publications by Year
in descending order

Version: 2024-02-01

55 papers	2,632 citations	201674 27 h-index	233421 45 g-index
59 all docs	59 docs citations	59 times ranked	3380 citing authors

#	Article	IF	Citations
1	Coupling structural evolution and oxygen-redox electrochemistry in layered transition metal oxides. Nature Materials, 2022, 21, 664-672.	27.5	89
2	In situ multiscale probing of the synthesis of a Ni-rich layered oxide cathode reveals reaction heterogeneity driven by competing kinetic pathways. Nature Chemistry, 2022, 14, 614-622.	13.6	52
3	Probing Lithium Metals in Batteries by Advanced Characterization and Analysis Tools. Advanced Energy Materials, 2021, 11, 2003039.	19.5	30
4	Permselective metalâ€“organic framework gel membrane enables long-life cycling of rechargeable organic batteries. Nature Nanotechnology, 2021, 16, 77-84.	31.5	105
5	A pâ€“n fusion strategy to design bipolar organic materials for high-energy-density symmetric batteries. Journal of Materials Chemistry A, 2021, 9, 14485-14494.	10.3	30
6	Liquidâ€Based Janus Electrolyte for Sustainable Redox Mediation in Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2021, 11, 2102096.	19.5	9
7	High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. ACS Energy Letters, 2021, 6, 4416-4425.	17.4	63
8	Enhancing the cycle stability of Liâ€“O₂ batteries via functionalized carbon nanotube-based electrodes. Journal of Materials Chemistry A, 2020, 8, 4263-4273.	10.3	15
9	Stable and Highâ€Power Calciumâ€Ion Batteries Enabled by Calcium Intercalation into Graphite. Advanced Materials, 2020, 32, e1904411.	21.0	87
10	Controlling Residual Lithium in Highâ€Nickel (>90â€‰%) Lithium Layered Oxides for Cathodes in Lithiumâ€Ion Batteries. Angewandte Chemie, 2020, 132, 18821-18828.	2.0	2
11	Controlling Residual Lithium in Highâ€Nickel (>90â€‰%) Lithium Layered Oxides for Cathodes in Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 18662-18669.	13.8	81
12	Tailoring Ion-Conducting Interphases on Magnesium Metals for High-Efficiency Rechargeable Magnesium Metal Batteries. ACS Energy Letters, 2020, 5, 3733-3740.	17.4	30
13	Dualâ€Functioning Molecular Carrier of Superoxide Radicals for Stable and Efficient Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2020, 10, 1904187.	19.5	20
14	Anionic Redox Activity Regulated by Transition Metal in Lithiumâ€Rich Layered Oxides. Advanced Energy Materials, 2020, 10, 2001207.	19.5	45
15	Calciumâ€Ion Batteries: Stable and Highâ€Power Calciumâ€Ion Batteries Enabled by Calcium Intercalation into Graphite (Adv. Mater. 4/2020). Advanced Materials, 2020, 32, 2070029.	21.0	3
16	Anchored Mediator Enabling Shuttleâ€Free Redox Mediation in Lithiumâ€Oxygen Batteries. Angewandte Chemie - International Edition, 2020, 59, 5376-5380.	13.8	31
17	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
18	Anchored Mediator Enabling Shuttleâ€Free Redox Mediation in Lithiumâ€Oxygen Batteries. Angewandte Chemie, 2020, 132, 5414-5418.	2.0	10

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19	Structurally Regulating Cation Migration Suppresses Voltage Fade and Redox Asymmetry in Lithium-Rich Layered Oxides. ECS Meeting Abstracts, 2020, MA2020-02, 105-105.	0.0	0
20	Anchored Mediator Enabling Shuttleâ€“Free Redox Mediation in Lithiumâ€“Oxygen Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 493-493.	0.0	0
21	Biological Nicotinamide Cofactor as a Redoxâ€Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie - International Edition, 2019, 58, 16764-16769.	13.8	19
22	Biological Nicotinamide Cofactor as a Redoxâ€Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie, 2019, 131, 16920-16925.	2.0	3
23	A bifunctional auxiliary electrode for safe lithium metal batteries. Journal of Materials Chemistry A, 2019, 7, 24807-24813.	10.3	4
24	Bifunctional Oxygen Electrocatalysts for Lithiumâ^'Oxygen Batteries. Batteries and Supercaps, 2019, 2, 311-325.	4.7	22
25	Investigation of Liâ€“O₂ Battery Performance Integrated with RuO₂ Inverse Opal Cathodes in DMSO. ACS Applied Energy Materials, 2019, 2, 5109-5115.	5.1	10
26	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. Nature Communications, 2019, 10, 2598.	12.8	195
27	Direct Observation of Redox Mediator-Assisted Solution-Phase Discharging of Liâ€“O₂ Battery by Liquid-Phase Transmission Electron Microscopy. Journal of the American Chemical Society, 2019, 141, 8047-8052.	13.7	54
28	Bifunctional Oxygen Electrocatalysts for Lithiumâ€Oxygen Batteries. Batteries and Supercaps, 2019, 2, 269-269.	4.7	1
29	Redox Mediators: A Solution for Advanced Lithiumâ€“Oxygen Batteries. Trends in Chemistry, 2019, 1, 349-360.	8.5	50
30	Toward a low-cost high-voltage sodium aqueous rechargeable battery. Materials Today, 2019, 29, 26-36.	14.2	156
31	A comparative kinetic study of redox mediators for high-power lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2019, 7, 6491-6498.	10.3	27
32	Frontispiz: Biological Nicotinamide Cofactor as a Redoxâ€Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie, 2019, 131, .	2.0	0
33	Frontispiece: Biological Nicotinamide Cofactor as a Redoxâ€Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie - International Edition, 2019, 58, .	13.8	0
34	Enhancing Bifunctional Catalytic Activity via a Nanostructured La(Sr)Fe(Co)O_{3â^'Î´}@Pd Matrix as an Efficient Electrocatalyst for Liâ€“O₂Batteries. ACS Applied Energy Materials, 2019, 2, 8633-8640.	5.1	9
35	Biological Redox Mediation in Electron Transport Chain of Bacteria for Oxygen Reduction Reaction Catalysts in Lithiumâ€“Oxygen Batteries. Advanced Functional Materials, 2019, 29, 1805623.	14.9	50
36	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in High-Energy Layered Lithium-Rich Electrodes. ECS Meeting Abstracts, 2019, , .	0.0	0

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37	Abnormal self-discharge in lithium-ion batteries. Energy and Environmental Science, 2018, 11, 970-978.	30.8	114
38	Enhanced Stability of Coated Carbon Electrode for Liâ€Ō₂ Batteries and Its Limitations. Advanced Energy Materials, 2018, 8, 1702661.	19.5	57
39	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
40	Roll-to-Roll Laser-Printed Grapheneâ€“Graphitic Carbon Electrodes for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 1033-1038.	8.0	29
41	Highly Durable and Stable Sodium Superoxide in Concentrated Electrolytes for Sodiumâ€“Oxygen Batteries. Advanced Energy Materials, 2018, 8, 1801760.	19.5	15
42	Enhancement of Oxygen Reduction Reaction Catalytic Activity via the Modified Surface of La0.6Sr0.4Co0.2Fe0.8O3â^Î´ with Palladium Nanoparticles as Cathode for Lithiumâ€“Air Battery. ACS Applied Energy Materials, 2018, , .	5.1	11
43	Anisotropic Surface Modulation of Pt Catalysts for Highly Reversible Liâ€“O₂ Batteries: High Index Facet as a Critical Descriptor. ACS Catalysis, 2018, 8, 9006-9015.	11.2	68
44	Highly Durable and Stable Sodium Superoxide in Concentrated Electrolytes for Sodiumâ€“Oxygen Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
45	Enhanced Stability of Coated Carbon Electrode for Liâ€“O2 Batteries and Its Limitations. ECS Meeting Abstracts, 2018, , .	0.0	0
46	Abnormal Self-Discharge in Lithium-Ion Batteries. ECS Meeting Abstracts, 2018, MA2018-01, 294-294.	0.0	1
47	Simple and Effective Gas-Phase Doping for Lithium Metal Protection in Lithium Metal Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
48	Biological Redox Mediation for Oxygen Reduction Reaction Catalysts in Lithiumâ€“Oxygen Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
49	Reaction chemistry in rechargeable Liâ€“O₂batteries. Chemical Society Reviews, 2017, 46, 2873-2888.	38.1	314
50	High-efficiency and high-power rechargeable lithiumâ€“sulfur dioxide batteries exploiting conventional carbonate-based electrolytes. Nature Communications, 2017, 8, 14989.	12.8	40
51	Simple and Effective Gas-Phase Doping for Lithium Metal Protection in Lithium Metal Batteries. Chemistry of Materials, 2017, 29, 9182-9191.	6.7	32
52	Tuning the Carbon Crystallinity for Highly Stable Liâ€“O₂ Batteries. Chemistry of Materials, 2016, 28, 8160-8169.	6.7	47
53	Dissolution and ionization of sodium superoxide in sodiumâ€“oxygen batteries. Nature Communications, 2016, 7, 10670.	12.8	129
54	A New Perspective on Liâ€“SO₂ Batteries for Rechargeable Systems. Angewandte Chemie - International Edition, 2015, 54, 9663-9667.	13.8	37

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55	RÃ¼cktitelbild: A New Perspective on Li-SO2Batteries for Rechargeable Systems (Angew. Chem. 33/2015). Angewandte Chemie, 2015, 127, 9860-9860.	2.0	0