

Hyeokjun Park

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8792971/publications.pdf>

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	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. <i>Nature Materials</i> , 2020, 19, 419-427.	27.5	328
2	Reaction chemistry in rechargeable LiO_2 batteries. <i>Chemical Society Reviews</i> , 2017, 46, 2873-2888.	38.1	314
3	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. <i>Nature Communications</i> , 2019, 10, 2598.	12.8	195
4	Toward a low-cost high-voltage sodium aqueous rechargeable battery. <i>Materials Today</i> , 2019, 29, 26-36.	14.2	156
5	Dissolution and ionization of sodium superoxide in sodium-oxygen batteries. <i>Nature Communications</i> , 2016, 7, 10670.	12.8	129
6	Abnormal self-discharge in lithium-ion batteries. <i>Energy and Environmental Science</i> , 2018, 11, 970-978.	30.8	114
7	Permselective metal-organic framework gel membrane enables long-life cycling of rechargeable organic batteries. <i>Nature Nanotechnology</i> , 2021, 16, 77-84.	31.5	105
8	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in High-Energy Layered Lithium-Rich Electrodes. <i>Advanced Energy Materials</i> , 2018, 8, 1800606.	19.5	97
9	Coupling structural evolution and oxygen-redox electrochemistry in layered transition metal oxides. <i>Nature Materials</i> , 2022, 21, 664-672.	27.5	89
10	Stable and High-Power Calcium-Ion Batteries Enabled by Calcium Intercalation into Graphite. <i>Advanced Materials</i> , 2020, 32, e1904411.	21.0	87
11	Controlling Residual Lithium in High-Nickel (>90%) Lithium Layered Oxides for Cathodes in Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18662-18669.	13.8	81
12	Anisotropic Surface Modulation of Pt Catalysts for Highly Reversible LiO_2 Batteries: High Index Facet as a Critical Descriptor. <i>ACS Catalysis</i> , 2018, 8, 9006-9015.	11.2	68
13	High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. <i>ACS Energy Letters</i> , 2021, 6, 4416-4425.	17.4	63
14	Enhanced Stability of Coated Carbon Electrode for LiO_2 Batteries and Its Limitations. <i>Advanced Energy Materials</i> , 2018, 8, 1702661.	19.5	57
15	Direct Observation of Redox Mediator-Assisted Solution-Phase Discharging of LiO_2 Battery by Liquid-Phase Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 8047-8052.	13.7	54
16	In situ multiscale probing of the synthesis of a Ni-rich layered oxide cathode reveals reaction heterogeneity driven by competing kinetic pathways. <i>Nature Chemistry</i> , 2022, 14, 614-622.	13.6	52
17	Redox Mediators: A Solution for Advanced Lithium-Oxygen Batteries. <i>Trends in Chemistry</i> , 2019, 1, 349-360.	8.5	50
18	Biological Redox Mediation in Electron Transport Chain of Bacteria for Oxygen Reduction Reaction Catalysts in Lithium-Oxygen Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1805623.	14.9	50

#	ARTICLE	IF	CITATIONS
19	Tuning the Carbon Crystallinity for Highly Stable Li ⁺ O ₂ Batteries. Chemistry of Materials, 2016, 28, 8160-8169.	6.7	47
20	Anionic Redox Activity Regulated by Transition Metal in Lithium-Rich Layered Oxides. Advanced Energy Materials, 2020, 10, 2001207.	19.5	45
21	High-efficiency and high-power rechargeable lithium-sulfur dioxide batteries exploiting conventional carbonate-based electrolytes. Nature Communications, 2017, 8, 14989.	12.8	40
22	A New Perspective on Li ⁺ SO ₂ Batteries for Rechargeable Systems. Angewandte Chemie - International Edition, 2015, 54, 9663-9667.	13.8	37
23	Simple and Effective Gas-Phase Doping for Lithium Metal Protection in Lithium Metal Batteries. Chemistry of Materials, 2017, 29, 9182-9191.	6.7	32
24	Anchored Mediator Enabling Shuttle-Free Redox Mediation in Lithium-Oxygen Batteries. Angewandte Chemie - International Edition, 2020, 59, 5376-5380.	13.8	31
25	Tailoring Ion-Conducting Interphases on Magnesium Metals for High-Efficiency Rechargeable Magnesium Metal Batteries. ACS Energy Letters, 2020, 5, 3733-3740.	17.4	30
26	Probing Lithium Metals in Batteries by Advanced Characterization and Analysis Tools. Advanced Energy Materials, 2021, 11, 2003039.	19.5	30
27	A <i>in situ</i> 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
28	Roll-to-Roll Laser-Printed Graphene-Graphitic Carbon Electrodes for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 1033-1038.	8.0	29
29	A comparative kinetic study of redox mediators for high-power lithium-oxygen batteries. Journal of Materials Chemistry A, 2019, 7, 6491-6498.	10.3	27
30	Bifunctional Oxygen Electrocatalysts for Lithium-Oxygen Batteries. Batteries and Supercaps, 2019, 2, 311-325.	4.7	22
31	Dual-Functioning Molecular Carrier of Superoxide Radicals for Stable and Efficient Lithium-Oxygen Batteries. Advanced Energy Materials, 2020, 10, 1904187.	19.5	20
32	Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie - International Edition, 2019, 58, 16764-16769.	13.8	19
33	Highly Durable and Stable Sodium Superoxide in Concentrated Electrolytes for Sodium-Oxygen Batteries. Advanced Energy Materials, 2018, 8, 1801760.	19.5	15
34	Enhancing the cycle stability of Li ⁺ O ₂ batteries via functionalized carbon nanotube-based electrodes. Journal of Materials Chemistry A, 2020, 8, 4263-4273.	10.3	15
35	Enhancement of Oxygen Reduction Reaction Catalytic Activity via the Modified Surface of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ with Palladium Nanoparticles as Cathode for Lithium-Air Battery. ACS Applied Energy Materials, 2018, , .	5.1	11
36	Investigation of Li ⁺ O ₂ Battery Performance Integrated with RuO ₂ Inverse Opal Cathodes in DMSO. ACS Applied Energy Materials, 2019, 2, 5109-5115.	5.1	10

#	ARTICLE	IF	CITATIONS
37	Anchored Mediator Enabling Shuttle-Free Redox Mediation in Lithium-Oxygen Batteries. <i>Angewandte Chemie</i> , 2020, 132, 5414-5418.	2.0	10
38	Enhancing Bifunctional Catalytic Activity via a Nanostructured $\text{La}(\text{Sr})\text{Fe}(\text{Co})\text{O}_{3-\delta}$ @Pd Matrix as an Efficient Electrocatalyst for Li-O_2 Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 8633-8640.	5.1	9
39	Liquid-Based Janus Electrolyte for Sustainable Redox Mediation in Lithium-Oxygen Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2102096.	19.5	9
40	A bifunctional auxiliary electrode for safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24807-24813.	10.3	4
41	Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. <i>Angewandte Chemie</i> , 2019, 131, 16920-16925.	2.0	3
42	Calcium-Ion Batteries: Stable and High-Power Calcium-Ion Batteries Enabled by Calcium Intercalation into Graphite (<i>Adv. Mater.</i> 4/2020). <i>Advanced Materials</i> , 2020, 32, 2070029.	21.0	3
43	Controlling Residual Lithium in High-Nickel (>90%) Lithium Layered Oxides for Cathodes in Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2020, 132, 18821-18828.	2.0	2
44	Bifunctional Oxygen Electrocatalysts for Lithium-Oxygen Batteries. <i>Batteries and Supercaps</i> , 2019, 2, 269-269.	4.7	1
45	Abnormal Self-Discharge in Lithium-Ion Batteries. <i>ECS Meeting Abstracts</i> , 2018, MA2018-01, 294-294.	0.0	1
46	Titelbild: A New Perspective on Li-SO_2 Batteries for Rechargeable Systems (<i>Angew. Chem.</i> 33/2015). <i>Angewandte Chemie</i> , 2015, 127, 9860-9860.	2.0	0
47	Frontispiz: Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. <i>Angewandte Chemie</i> , 2019, 131, .	2.0	0
48	Frontispiece: Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2019, 58, .	13.8	0
49	Highly Durable and Stable Sodium Superoxide in Concentrated Electrolytes for Sodium-Oxygen Batteries. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
50	Enhanced Stability of Coated Carbon Electrode for Li-O_2 Batteries and Its Limitations. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
51	Simple and Effective Gas-Phase Doping for Lithium Metal Protection in Lithium Metal Batteries. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
52	Biological Redox Mediation for Oxygen Reduction Reaction Catalysts in Lithium-Oxygen Batteries. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
53	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in High-Energy Layered Lithium-Rich Electrodes. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
54	Structurally Regulating Cation Migration Suppresses Voltage Fade and Redox Asymmetry in Lithium-Rich Layered Oxides. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 105-105.	0.0	0

#	ARTICLE	IF	CITATIONS
55	Anchored Mediator Enabling Shuttle-Free Redox Mediation in Lithium-Oxygen Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 493-493.	0.0	0