

Advances in understanding mechanisms underpinning

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Citation Report

#	ARTICLE	IF	CITATIONS
1	A critical review of macroscopic modeling studies on Li ⁺ O ₂ and Li ⁺ air batteries using organic electrolyte: Challenges and opportunities. <i>Journal of Power Sources</i> , 2016, 332, 420-446.	4.0	60
2	Hierarchically porous Pd/NiO nanomembranes as cathode catalysts in Li-O ₂ batteries. <i>Nano Energy</i> , 2016, 30, 69-76.	8.2	34
3	Nanostructured energy materials for electrochemical energy conversion and storage: A review. <i>Journal of Energy Chemistry</i> , 2016, 25, 967-984.	7.1	409
4	Stability of Glyme Solvate Ionic Liquid as an Electrolyte for Rechargeable Li ⁺ O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6014-6021.	4.0	52
5	Status and prospects of polymer electrolytes for solid-state Li ⁺ O ₂ (air) batteries. <i>Energy and Environmental Science</i> , 2017, 10, 860-884.	15.6	211
6	The importance of solvent selection in Li ⁺ O ₂ cells. <i>Chemical Communications</i> , 2017, 53, 3269-3272.	2.2	26
7	Recent Advances in Perovskite Oxides as Electrode Materials for Nonaqueous Lithium ⁺ Oxygen Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602674.	10.2	129
8	Hybrid Na ⁺ air flow batteries using an acidic catholyte: effect of the catholyte pH on the cell performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11592-11600.	5.2	24
9	Poly(vinylidene fluoride) (PVDF) Binder Degradation in Li ⁺ O ₂ Batteries: A Consideration for the Characterization of Lithium Superoxide. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1169-1174.	2.1	110
10	Proton enhanced dynamic battery chemistry for aprotic lithium ⁺ oxygen batteries. <i>Nature Communications</i> , 2017, 8, 14308.	5.8	104
11	Two-dimensional Metal Oxide Nanomaterials for Next-generation Rechargeable Batteries. <i>Advanced Materials</i> , 2017, 29, 1700176.	11.1	317
12	Mesoporous Co-CoO/N-CNR nanostructures as high-performance air cathode for lithium-oxygen batteries. <i>Journal of Power Sources</i> , 2017, 354, 48-56.	4.0	32
13	Oxygen Reduction Reaction in Highly Concentrated Electrolyte Solutions of Lithium Bis(trifluoromethanesulfonyl)amide/Dimethyl Sulfoxide. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9162-9172.	1.5	70
14	Designer interphases for the lithium-oxygen electrochemical cell. <i>Science Advances</i> , 2017, 3, e1602809.	4.7	84
15	A Practical High-energy Cathode for Sodium-ion Batteries Based on Uniform P ₂ Na _{0.7} CoO ₂ Microspheres. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5801-5805.	7.2	197
16	Effect of oxygen adsorbability on the control of Li ₂ O ₂ growth in Li-O ₂ batteries: Implications for cathode catalyst design. <i>Nano Energy</i> , 2017, 36, 68-75.	8.2	93
17	Reaction chemistry in rechargeable Li ⁺ O ₂ batteries. <i>Chemical Society Reviews</i> , 2017, 46, 2873-2888.	18.7	314
18	An Advanced Separator for Li ⁺ O ₂ Batteries: Maximizing the Effect of Redox Mediators. <i>Advanced Energy Materials</i> , 2017, 7, 1602417.	10.2	100

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19	Insights into dimethyl sulfoxide decomposition in Li-O ₂ battery: Understanding carbon dioxide evolution. <i>Electrochemistry Communications</i> , 2017, 80, 16-19.	2.3	22
20	Phenolâ€Catalyzed Discharge in the Aprotic Lithiumâ€Oxygen Battery. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6539-6543.	7.2	55
21	Phenolâ€Catalyzed Discharge in the Aprotic Lithiumâ€Oxygen Battery. <i>Angewandte Chemie</i> , 2017, 129, 6639-6643.	1.6	24
22	Emerging 3Dâ€Printed Electrochemical Energy Storage Devices: A Critical Review. <i>Advanced Energy Materials</i> , 2017, 7, 1700127.	10.2	300
23	A Practical Highâ€Energy Cathode for Sodiumâ€Ion Batteries Based on Uniform P2â€Na _{0.7} CoO ₂ Microspheres. <i>Angewandte Chemie</i> , 2017, 129, 5895-5899.	1.6	25
24	Solid-State Lithium Metal Batteries Promoted by Nanotechnology: Progress and Prospects. <i>ACS Energy Letters</i> , 2017, 2, 1385-1394.	8.8	314
25	Objectively Evaluating the Cathode Performance of Lithiumâ€Oxygen Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602938.	10.2	33
26	Full Performance Nanoporous Graphene Based Liâ€O ₂ Batteries through Solution Phase Oxygen Reduction and Redoxâ€Additive Mediated Li ₂ O ₂ Oxidation. <i>Advanced Energy Materials</i> , 2017, 7, 1601933.	10.2	65
27	A 3D hierarchical porous Co ₃ O ₄ nanotube network as an efficient cathode for rechargeable lithiumâ€oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14673-14681.	5.2	50
28	Understanding oxygen electrochemistry in aprotic Li O ₂ batteries. <i>Green Energy and Environment</i> , 2017, 2, 186-203.	4.7	59
29	Modified Tetrathiafulvalene as an Organic Conductor for Improving Performances of Liâ€O ₂ Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8505-8509.	7.2	90
30	Sodium Peroxide Dihydrate or Sodium Superoxide: The Importance of the Cell Configuration for Sodiumâ€Oxygen Batteries. <i>Small Methods</i> , 2017, 1, 1700102.	4.6	34
31	On the incompatibility of lithiumâ€O ₂ battery technology with CO ₂ . <i>Chemical Science</i> , 2017, 8, 6117-6122.	3.7	30
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33	The impact of solvent properties on the performance of oxygen reduction and evolution in mixed tetraglyme-dimethyl sulfoxide electrolytes for Li-O ₂ batteries: Mechanism and stability. <i>Electrochimica Acta</i> , 2017, 245, 967-980.	2.6	23
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35	Modified Tetrathiafulvalene as an Organic Conductor for Improving Performances of Liâ€O ₂ Batteries. <i>Angewandte Chemie</i> , 2017, 129, 8625-8629.	1.6	11
36	Polydopamine-Derived Nitrogen-Doped Graphitic Carbon for a Bifunctional Oxygen Electrode in a Non-Aqueous Li-O ₂ Battery. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1595-A1600.	1.3	17

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37	A Rechargeable Li ⁺ CO ₂ Battery with a Gel Polymer Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9126-9130.	7.2	154
38	A Rechargeable Li ⁺ CO ₂ Battery with a Gel Polymer Electrolyte. <i>Angewandte Chemie</i> , 2017, 129, 9254-9258.	1.6	22
39	Revealing the reaction mechanisms of Li ⁺ O ₂ batteries using environmental transmission electron microscopy. <i>Nature Nanotechnology</i> , 2017, 12, 535-539.	15.6	160
40	Bonding interactions in Li/Na oxides, peroxides and superoxides and their implication to the performance of the Li/Na-air batteries. <i>Solid State Ionics</i> , 2017, 303, 24-28.	1.3	3
41	Mechanistic Evolution of Aprotic Lithium ⁺ Oxygen Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602934.	10.2	130
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43	Singlet oxygen generation as a major cause for parasitic reactions during cycling of aprotic lithium ⁺ oxygen batteries. <i>Nature Energy</i> , 2017, 2, .	19.8	328
44	One-pot surface engineering of battery electrode materials with metallic SWCNT-enriched, ivy-like conductive nanonets. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12103-12112.	5.2	7
45	Exploring Solvent Stability against Nucleophilic Attack by Solvated LiO ₂ [•] in an Aprotic Li-O ₂ Battery. <i>Journal of the Electrochemical Society</i> , 2017, 164, A284-A289.	1.3	14
46	A Viewpoint on Heterogeneous Electrocatalysis and Redox Mediation in Nonaqueous Li-O ₂ Batteries. <i>ACS Catalysis</i> , 2017, 7, 772-778.	5.5	82
47	Modeling of an aprotic Li-O ₂ battery incorporating multiple-step reactions. <i>Applied Energy</i> , 2017, 187, 706-716.	5.1	22
48	Understanding LiOH Chemistry in a Ruthenium ⁺ Catalyzed Li ⁺ O ₂ Battery. <i>Angewandte Chemie</i> , 2017, 129, 16273-16278.	1.6	24
49	Cell Concepts of Metal ⁺ Sulfur Batteries (Metal ⁺ =Li, Na, K, Mg): Strategies for Using Sulfur in Energy Storage Applications. <i>Topics in Current Chemistry</i> , 2017, 375, 81.	3.0	51
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52	Temperature Dependence of the Oxygen Reduction Mechanism in Nonaqueous Li ⁺ O ₂ Batteries. <i>ACS Energy Letters</i> , 2017, 2, 2525-2530.	8.8	30
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54	Porous Perovskite La _{0.6} Sr _{0.4} Co _{0.8} Mn _{0.2} O ₃ Nanofibers Loaded with RuO ₂ Nanosheets as an Efficient and Durable Bifunctional Catalyst for Rechargeable Li ⁺ O ₂ Batteries. <i>ACS Catalysis</i> , 2017, 7, 7737-7747.	5.5	102

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56	Singlet Sauerstoff in der aprotischen Natrium ² Batterie. <i>Angewandte Chemie</i> , 2017, 129, 15934-15938.	1.6	14
57	Probing the reaction interface in Li ² O ₂ batteries using electrochemical impedance spectroscopy: dual roles of Li ₂ O ₂ . <i>Chemical Communications</i> , 2017, 53, 11418-11421.	2.2	23
58	A Rational Design of High-Performance Sandwich-Structured Quasisolid State Li ² O ₂ Battery with Redox Mediator. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700693.	1.9	34
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62	Understanding LiOH Chemistry in a Ruthenium-Catalyzed Li ² O ₂ Battery. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 16057-16062.	7.2	78
63	Synergistic Integration of Soluble Catalysts with Carbon-Free Electrodes for Li ² O ₂ Batteries. <i>ACS Catalysis</i> , 2017, 7, 8192-8199.	5.5	21
64	Effects of oxygen partial pressure on Li-air battery performance. <i>Journal of Power Sources</i> , 2017, 364, 280-287.	4.0	23
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67	Lithium cell-assisted low-overpotential Li ² O ₂ batteries by in situ discharge activation. <i>Chemical Communications</i> , 2017, 53, 10568-10571.	2.2	5
68	Recent advances in understanding of the mechanism and control of Li ₂ O ₂ formation in aprotic Li ² O ₂ batteries. <i>Chemical Society Reviews</i> , 2017, 46, 6046-6072.	18.7	314
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73	Direct Observations of the Formation and Redox-Mediator-Assisted Decomposition of Li_2O in a Liquid-Cell Li_2O Microbattery by Scanning Transmission Electron Microscopy. <i>Advanced Materials</i> , 2017, 29, 1702752.	11.1	41
74	Flexible Zn and Li air batteries: recent advances, challenges, and future perspectives. <i>Energy and Environmental Science</i> , 2017, 10, 2056-2080.	15.6	477
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77	High-Performance Lithium-Oxygen Battery Electrolyte Derived from Optimum Combination of Solvent and Lithium Salt. <i>Advanced Science</i> , 2017, 4, 1700235.	5.6	43
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82	Perspective: The Correct Assessment of Standard Potentials of Reference Electrodes in Non-Aqueous Solution. <i>Journal of the Electrochemical Society</i> , 2017, 164, A2295-A2297.	1.3	42
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92	Elucidating electrolyte decomposition under electron-rich environments at the lithium-metal anode. Physical Chemistry Chemical Physics, 2017, 19, 30861-30873.	1.3	65
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105	Kinetics of lithium peroxide oxidation by redox mediators and consequences for the lithium ^{air} oxygen cell. Nature Communications, 2018, 9, 767.	5.8	93
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107	A High-Capacity Lithium ^{gas} Battery Based on Sulfur Fluoride Conversion. Journal of Physical Chemistry C, 2018, 122, 7128-7138.	1.5	23
108	Fast ion transport at solid ^{solid} interfaces in hybrid battery anodes. Nature Energy, 2018, 3, 310-316.	19.8	413

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110	Elektrochemische Oxidation von Lithiumcarbonat generiert Singulettâ€Sauerstoff. <i>Angewandte Chemie</i> , 2018, 130, 5627-5631.	1.6	13
111	Nature inspired cathodes using high-density carbon papers with an eddy current effect for high-rate performance lithiumâ€air batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9550-9560.	5.2	16
112	Nitrogen-doped porous carbon: highly efficient trifunctional electrocatalyst for oxygen reversible catalysis and nitrogen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7762-7769.	5.2	131
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119	Nanostructuring one-dimensional and amorphous lithium peroxide for high round-trip efficiency in lithium-oxygen batteries. <i>Nature Communications</i> , 2018, 9, 680.	5.8	85
120	Elektrolytadditive fÃ¼r Lithiummetallanoden und wiederaufladbare Lithiummetallbatterien: Fortschritte und Perspektiven. <i>Angewandte Chemie</i> , 2018, 130, 15220-15246.	1.6	54
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128	Electrolyte Additives for Lithium Metal Anodes and Rechargeable Lithium Metal Batteries: Progress and Perspectives. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15002-15027.	7.2	551
129	Research progresses on materials and electrode design towards key challenges of Li-air batteries. <i>Energy Storage Materials</i> , 2018, 13, 29-48.	9.5	84
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138	Revealing the Reaction Mechanism of Na_2O_2 Batteries using Environmental Transmission Electron Microscopy. <i>ACS Energy Letters</i> , 2018, 3, 393-399.	8.8	30
139	A Highly Active Oxygen Evolution Catalyst for Lithium-Oxygen Batteries Enabled by High-Surface-Energy Facets. <i>Joule</i> , 2018, 2, 1511-1521.	11.7	59
140	Graphene Nanoplatelet-Polysulfone Composite Cathodes for High-Power Aluminum Rechargeable Batteries. <i>Electrochemistry</i> , 2018, 86, 72-76.	0.6	11
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#	ARTICLE	IF	CITATIONS
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