

Recent advances in understanding of the mechanism and  
 $\text{Li}_2\text{O}_2$  formation in aprotic Li-ion

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Direct Determination of Electron Transfer Properties of Dicopper-Bound Reduced Dioxygen Species by a Cryo-Spectroelectrochemical Approach. <i>Chemistry - A European Journal</i> , 2017, 23, 18314-18319.	1.7	12
2	A review of transition metal chalcogenide/graphene nanocomposites for energy storage and conversion. <i>Chinese Chemical Letters</i> , 2017, 28, 2180-2194.	4.8	176
3	Co <sub>3</sub> O <sub>4</sub> functionalized porous carbon nanotube oxygen-cathodes to promote Li <sub>2</sub> O <sub>2</sub> surface growth for improved cycling stability of Li-O <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25501-25508.	5.2	31
4	O-O bond cleavage via electrochemical reduction of a side-on peroxo dicopper model of hemocyanin. <i>Chemical Communications</i> , 2018, 54, 4931-4934.	2.2	4
5	Strongly Coupled Carbon Nanosheets/Molybdenum Carbide Nanocluster Hollow Nanospheres for High-Performance Aprotic Li-O <sub>2</sub> Battery. <i>Small</i> , 2018, 14, e1704366.	5.2	39
6	Critically Examining the Role of Nanocatalysts in Li-O <sub>2</sub> Batteries: Viability toward Suppression of Recharge Overpotential, Rechargeability, and Cyclability. <i>ACS Energy Letters</i> , 2018, 3, 592-597.	8.8	82
7	A combined approach for high-performance Li-O <sub>2</sub> batteries: A binder-free carbon electrode and atomic layer deposition of RuO <sub>2</sub> as an inhibitor-promoter. <i>APL Materials</i> , 2018, 6, .	2.2	12
8	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
9	A single ion conducting separator and dual mediator-based electrolyte for high-performance lithium-oxygen batteries with non-carbon cathodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9816-9822.	5.2	37
10	3D hierarchical Co/CoO/C nanocomposites with mesoporous microsheets grown on nickel foam as cathodes for Li-O <sub>2</sub> batteries. <i>Journal of Alloys and Compounds</i> , 2018, 749, 378-384.	2.8	18
11	Facile fabrication of two-dimensional reduced graphene oxide/CoAl-layered double hydroxides nanocomposites for lithium-oxygen battery with improved electrochemical performance. <i>Journal of Alloys and Compounds</i> , 2018, 744, 196-203.	2.8	21
12	Functional and stability orientation synthesis of materials and structures in aprotic Li-O <sub>2</sub> batteries. <i>Chemical Society Reviews</i> , 2018, 47, 2921-3004.	18.7	282
13	Towards Synergistic Electrode-Electrolyte Design Principles for Nonaqueous Li-O <sub>2</sub> batteries. <i>Topics in Current Chemistry</i> , 2018, 376, 11.	3.0	5
14	MnCo <sub>2</sub> O <sub>4</sub> /MoO <sub>2</sub> Nanosheets Grown on Ni foam as Carbon- and Binder-Free Cathode for Lithium-Oxygen Batteries. <i>ChemSusChem</i> , 2018, 11, 574-579.	3.6	32
15	Ionic liquid/ether-plasticized quasi-solid-state electrolytes for long-life lithium-oxygen cells. <i>New Journal of Chemistry</i> , 2018, 42, 19521-19527.	1.4	4
16	Reduced Co <sub>3</sub> O <sub>4</sub> nanowires with abundant oxygen vacancies as an efficient free-standing cathode for Li-O <sub>2</sub> batteries. <i>Catalysis Science and Technology</i> , 2018, 8, 6478-6485.	2.1	18
17	Atomic-Thick TiO <sub>2</sub> (B) Nanosheets Decorated with Ultrafine Co <sub>3</sub> O <sub>4</sub> Nanocrystals As a Highly Efficient Catalyst for Lithium-Oxygen Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 41398-41406.	4.0	37
20	Controlling Reversible Expansion of Li <sub>2</sub> O <sub>2</sub> Formation and Decomposition by Modifying Electrolyte in Li-O <sub>2</sub> Batteries. <i>CheM</i> , 2018, 4, 2685-2698.	5.8	49

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21	Stretchable Electrode Breakthrough: Archimedean Spiral Coil Lithium Anode. <i>Joule</i> , 2018, 2, 1654-1656.	11.7	7
22	Hollow NiCo <sub>2</sub> Embedded in Nitrogen-Doped Carbon Nanocomposites Derived from Metal-Organic Frameworks for High-Rate Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38845-38852.	4.0	51
23	Hierarchical porous Nickel Cobaltate Nanotube as Electrocatalyst for Lithium-Oxygen Batteries. <i>International Journal of Electrochemical Science</i> , 2018, , 3309-3316.	0.5	4
24	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous Li <sub>2</sub> O Batteries: Recent Progress and Perspective. <i>Advanced Energy Materials</i> , 2018, 8, 1800348.	10.2	137
25	PdNi alloy decorated 3D hierarchically N, S co-doped macro-mesoporous carbon composites as efficient free-standing and binder-free catalysts for Li <sub>2</sub> O batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10856-10867.	5.2	47
26	Two-dimensional $\gamma$ -cobalt hydroxide phase transition exfoliated to atom layers as efficient catalyst for lithium-oxygen batteries. <i>Electrochimica Acta</i> , 2018, 281, 420-428.	2.6	14
27	Polyoxometalate as a Nature-Inspired Bifunctional Catalyst for Lithium-Oxygen Batteries. <i>ACS Catalysis</i> , 2018, 8, 7213-7221.	5.5	35
28	Formation of Nanosized Defective Lithium Peroxides through Si-Coated Carbon Nanotube Cathodes for High Energy Efficiency Li <sub>2</sub> O Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 18754-18760.	4.0	27
29	Transition metal oxide-based oxygen reduction reaction electrocatalysts for energy conversion systems with aqueous electrolytes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10595-10626.	5.2	162
30	C <sub>x</sub> N <sub>y</sub> particles@N-doped porous graphene: a novel cathode catalyst with a remarkable cyclability for Li <sub>2</sub> O batteries. <i>Nanoscale</i> , 2018, 10, 12763-12770.	2.8	17
31	High-Surface-Area and Porous Co <sub>2</sub> P Nanosheets as Cost-Effective Cathode Catalysts for Li <sub>2</sub> O Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21281-21290.	4.0	52
32	Improved structural design of single- and double-wall MnCo <sub>2</sub> O <sub>4</sub> nanotube cathodes for long-life Li <sub>2</sub> O <sub>2</sub> batteries. <i>Nanoscale</i> , 2018, 10, 13149-13158.	2.8	26
33	Li <sup>+</sup> -clipping for edge S-vacancy MoS <sub>2</sub> quantum dots as an efficient bifunctional electrocatalyst enabling discharge growth of amorphous Li <sub>2</sub> O <sub>2</sub> film. <i>Nano Energy</i> , 2019, 65, 103996.	8.2	56
34	Structural and electronic properties of small lithium peroxide clusters in view of the charge process in Li <sub>2</sub> O <sub>2</sub> batteries. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19935-19943.	1.3	5
35	Vanadium(III) Acetylacetonate as an Efficient Soluble Catalyst for Lithium-Oxygen Batteries. <i>Angewandte Chemie</i> , 2019, 131, 12683-12687.	1.6	22
36	Vanadium(III) Acetylacetonate as an Efficient Soluble Catalyst for Lithium-Oxygen Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12553-12557.	7.2	53
37	Ligand Identity-Induced Generation of Enhanced Oxidative Hydrogen Atom Transfer Reactivity for a CuI <sub>2</sub> (O <sub>2</sub> â€¢) Complex Driven by Formation of a CuI <sub>2</sub> (â€”OOH) Compound with a Strong Oâ€”H Bond. <i>Journal of the American Chemical Society</i> , 2019, 141, 12682-12696.	6.6	28
38	Computational study on catalytic performance of BC <sub>3</sub> and NC <sub>3</sub> nanosheets as cathode electrocatalysts for nonaqueous Li <sub>2</sub> O <sub>2</sub> batteries. <i>Journal of Power Sources</i> , 2019, 436, 226845.	4.0	24

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39	Realizing Interfacial Electronic Interaction within ZnS Quantum Dots/NiCrGO Heterostructures for Efficient Li <sup>+</sup> CO <sub>2</sub> Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901806.	10.2	101
40	Recent advances in confining metal-based nanoparticles into carbon nanotubes for electrochemical energy conversion and storage devices. <i>Energy and Environmental Science</i> , 2019, 12, 2924-2956.	15.6	176
41	Advanced Hybrid Electrolyte Li-O <sub>2</sub> Battery Realized by Dual Superlyophobic Membrane. <i>Joule</i> , 2019, 3, 2986-3001.	11.7	56
42	Morphology regulation of Li <sub>2</sub> O <sub>2</sub> by flower-like ZnCo <sub>2</sub> S <sub>4</sub> enabling high performance Li-O <sub>2</sub> battery. <i>Journal of Power Sources</i> , 2019, 441, 227168.	4.0	49
43	Inverting the Triiodide Formation Reaction by the Synergy between Strong Electrolyte Solvation and Cathode Adsorption for Lithium-Oxygen Batteries. <i>Angewandte Chemie</i> , 2019, 131, 18565-18569.	1.6	2
44	Inverting the Triiodide Formation Reaction by the Synergy between Strong Electrolyte Solvation and Cathode Adsorption for Lithium-Oxygen Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18394-18398.	7.2	25
45	Materials Design for Rechargeable Metal-Air Batteries. <i>Matter</i> , 2019, 1, 565-595.	5.0	383
46	In Situ Coupling of Colloidal Silica and Li Salt Anion toward Stable Li Anode for Long-Cycle-Life Li-O <sub>2</sub> Batteries. <i>Matter</i> , 2019, 1, 881-892.	5.0	33
47	Design strategies toward catalytic materials and cathode structures for emerging Li <sup>+</sup> CO <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21605-21633.	5.2	75
48	Oxygen reduction/evolution reactions engineering for lithium-oxygen battery scaling-up. <i>Chemical Engineering Science</i> , 2019, 209, 115164.	1.9	4
49	Recent advances in nanostructured electrode-electrolyte design for safe and next-generation electrochemical energy storage. <i>Materials Today Nano</i> , 2019, 8, 100057.	2.3	31
50	Recent advances in understanding Li <sup>+</sup> CO <sub>2</sub> electrochemistry. <i>Energy and Environmental Science</i> , 2019, 12, 887-922.	15.6	215
51	Insights into Structural Evolution of Lithium Peroxides with Reduced Charge Overpotential in Li <sup>+</sup> O <sub>2</sub> System. <i>Advanced Energy Materials</i> , 2019, 9, 1900662.	10.2	38
52	Lithium-oxygen batteries with triplex Li <sup>+</sup> -selective solid membranes. <i>Chemical Communications</i> , 2019, 55, 7643-7646.	2.2	7
53	Safe Lithium-Metal Anodes for Li <sup>+</sup> O <sub>2</sub> Batteries: From Fundamental Chemistry to Advanced Characterization and Effective Protection. <i>Batteries and Supercaps</i> , 2019, 2, 638-658.	2.4	67
54	Ultrathin Porous NiCo <sub>2</sub> O <sub>4</sub> Nanosheets for Lithium-Oxygen Batteries: An Excellent Performance Deriving from an Enhanced Solution Mechanism. <i>ACS Applied Energy Materials</i> , 2019, 2, 4215-4223.	2.5	18
55	Recent Progress on Catalysts for the Positive Electrode of Aprotic Lithium-Oxygen Batteries. <i>Inorganics</i> , 2019, 7, 69.	1.2	8
56	Nitrogen and iodine dual-doped 3D porous graphene as a bi-functional cathode catalyst for Li-O <sub>2</sub> batteries. <i>Electrochimica Acta</i> , 2019, 318, 354-361.	2.6	20

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57	Direct Observation of Redox Mediator-Assisted Solution-Phase Discharging of $\text{Li}^{\ominus}\text{O}_{2}$ Battery by Liquid-Phase Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 8047-8052.	6.6	54
58	Lithium-air batteries: Challenges coexist with opportunities. <i>APL Materials</i> , 2019, 7, .	2.2	47
59	A functionalized membrane for lithium $^{\ominus}$ oxygen batteries to suppress the shuttle effect of redox mediators. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14260-14270.	5.2	40
60	Interlayers for lithium-based batteries. <i>Energy Storage Materials</i> , 2019, 23, 112-136.	9.5	37
61	Controlling Fluoride $^{\ominus}$ Forming Reactions for Improved Rate Capability in Lithium $^{\ominus}$ Perfluorinated Gas Conversion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900393.	10.2	17
62	Improved Cyclability of Lithium $^{\ominus}$ Oxygen Batteries by Synergistic Catalytic Effects of Two-Dimensional $\text{MoS}_{2}$ Nanosheets Anchored on Hollow Carbon Spheres. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6929-6938.	3.2	31
63	Materials for advanced Li-O <sub>2</sub> batteries: Explorations, challenges and prospects. <i>Materials Today</i> , 2019, 26, 87-99.	8.3	120
64	Polysulfide-driven low charge overpotential for aprotic lithium $^{\ominus}$ oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8777-8784.	5.2	3
66	Carboxymethyl Cellulose Binder Greatly Stabilizes Porous Hollow Carbon Submicrospheres in Capacitive K-Ion Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 15581-15590.	4.0	58
67	Metal $^{\ominus}$ organic framework derived Co $^{\ominus}$ N-reduced graphene oxide as electrode materials for rechargeable $\text{Li}^{\ominus}\text{O}_{2}$ batteries. <i>New Journal of Chemistry</i> , 2019, 43, 7574-7581.	1.4	5
68	Promoting defective- $\text{Li}_{2}\text{O}_{2}$ formation <i>via</i> Na doping for $\text{Li}^{\ominus}\text{O}_{2}$ batteries with low charge overpotentials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10389-10396.	5.2	17
69	$\text{Co}_{3}\text{O}_{4}$ nanocage derived from metal-organic frameworks: An excellent cathode catalyst for rechargeable Li-O <sub>2</sub> battery. <i>Nano Research</i> , 2019, 12, 1555-1562.	5.8	38
70	Understanding the Reaction Chemistry during Charging in Aprotic Lithium $^{\ominus}$ Oxygen Batteries: Existing Problems and Solutions. <i>Advanced Materials</i> , 2019, 31, e1804587.	11.1	254
71	Visualizing the Oxidation Mechanism and Morphological Evolution of the Cubic $^{\ominus}$ Shaped Superoxide Discharge Product in Na $^{\ominus}$ Air Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1808332.	7.8	30
72	Defect chemistry in 2D materials for electrocatalysis. <i>Materials Today Energy</i> , 2019, 12, 215-238.	2.5	110
73	Multistaged discharge constructing heterostructure with enhanced solid-solution behavior for long-life lithium-oxygen batteries. <i>Nature Communications</i> , 2019, 10, 5810.	5.8	80
74	Formation of toroidal $\text{Li}_{2}\text{O}_{2}$ in non-aqueous $\text{Li}^{\ominus}\text{O}_{2}$ batteries with $\text{Mo}_{2}\text{CT}_{x}$ MXene/CNT composite. <i>RSC Advances</i> , 2019, 9, 41120-41125.	1.7	16
75	A Stable Lithium $^{\ominus}$ Oxygen Battery Electrolyte Based on Fully Methylated Cyclic Ether. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2345-2349.	7.2	42

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76	A Stable Lithium–Oxygen Battery Electrolyte Based on Fully Methylated Cyclic Ether. <i>Angewandte Chemie</i> , 2019, 131, 2367-2371.	1.6	29
77	Synthesis of Ag/Co@CoO NPs anchored within N-doped hierarchical porous hollow carbon nanofibers as a superior free-standing cathode for Li–O <sub>2</sub> batteries. <i>Carbon</i> , 2019, 144, 280-288.	5.4	34
78	Fundamental Understanding of Water-Induced Mechanisms in Li–O <sub>2</sub> Batteries: Recent Developments and Perspectives. <i>Advanced Materials</i> , 2019, 31, e1805602.	11.1	52
79	Promoting Li–O <sub>2</sub> Batteries With Redox Mediators. <i>ChemSusChem</i> , 2019, 12, 104-114.	3.6	47
80	Defect Chemistry in Discharge Products of Li–O <sub>2</sub> Batteries. <i>Small Methods</i> , 2019, 3, 1800358.	4.6	34
81	3D-Printed MOF-Derived Hierarchically Porous Frameworks for Practical High-Energy Density Li–O <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1806658.	7.8	197
82	Enhanced cycling performance of rechargeable Li–O <sub>2</sub> batteries via LiOH formation and decomposition using high-performance MOF-74@CNTs hybrid catalysts. <i>Energy Storage Materials</i> , 2019, 17, 167-177.	9.5	52
83	Novel and highly efficient cathodes for Li–O <sub>2</sub> batteries: 3D self-standing NiFe@NC-functionalized N-doped carbon nanonet derived from Prussian blue analogues/biomass composites. <i>Applied Catalysis B: Environmental</i> , 2019, 245, 721-732.	10.8	45
84	NiCo <sub>2</sub> S <sub>4</sub> Nanorod Arrays Supported on Carbon Textile as a Free-Standing Electrode for Stable and Long-Life Lithium–Oxygen Batteries. <i>ChemElectroChem</i> , 2019, 6, 349-358.	1.7	15
85	Phosphorene as a Catalyst for Highly Efficient Nonaqueous Li–Air Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 499-510.	4.0	27
86	Biomass-derived 3D hierarchical N-doped porous carbon anchoring cobalt-iron phosphide nanodots as bifunctional electrocatalysts for Li–O <sub>2</sub> batteries. <i>Journal of Power Sources</i> , 2019, 412, 433-441.	4.0	23
87	Atomic Modulation and Structure Design of Carbons for Bifunctional Electrocatalysis in Metal–Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1803800.	11.1	208
88	Interface-engineered metallic 1T-MoS <sub>2</sub> nanosheet array induced via palladium doping enabling catalysis enhancement for lithium–oxygen battery. <i>Chemical Engineering Journal</i> , 2020, 382, 122854.	6.6	52
89	The synergistic effect of nickel cobalt sulfide nanoflakes and sulfur-doped porous carbonaceous nanostructure as bifunctional electrocatalyst for enhanced rechargeable Li–O <sub>2</sub> batteries. <i>Applied Catalysis B: Environmental</i> , 2020, 263, 118283.	10.8	52
90	3D-printed electrodes for lithium metal batteries with high areal capacity and high-rate capability. <i>Energy Storage Materials</i> , 2020, 24, 336-342.	9.5	105
91	Surface engineering donor and acceptor sites with enhanced charge transport for low-overpotential lithium–oxygen batteries. <i>Energy Storage Materials</i> , 2020, 25, 52-61.	9.5	28
92	Electrochemical Oxidation of Li <sub>2</sub> O <sub>2</sub> Surface-Doped with Li <sub>2</sub> CO <sub>3</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 6627-6632.	4.0	11
93	Configuration of gradient-porous ultrathin FeCo <sub>2</sub> S <sub>4</sub> nanosheets vertically aligned on Ni foam as a noncarbonaceous freestanding oxygen electrode for lithium–oxygen batteries. <i>Nanoscale</i> , 2020, 12, 1864-1874.	2.8	22

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94	Superior efficient rechargeable lithium-air batteries using a bifunctional biological enzyme catalyst. <i>Energy and Environmental Science</i> , 2020, 13, 144-151.	15.6	13
95	Mechanistic evaluation of Li <sub>2</sub> O <sub>2</sub> adsorption on carbon nanotube electrodes: A theoretical study. <i>Applied Surface Science</i> , 2020, 506, 145050.	3.1	9
96	Structural and Electronic Properties of Small Stoichiometric (Li <sub>2</sub> O <sub>2</sub> ) <sub>n</sub> Clusters and Relevance to Li-O <sub>2</sub> Batteries. <i>Journal of Cluster Science</i> , 2020, 31, 643-649.	1.7	1
97	Novel and highly efficient catalyst for Li-O <sub>2</sub> battery: Porous LaCo <sub>0.6</sub> Ni <sub>0.4</sub> O <sub>3</sub> nanofibers decorated with ultrafine Co <sub>3</sub> O <sub>4</sub> nanoparticles. <i>Electrochimica Acta</i> , 2020, 363, 137235.	2.6	7
98	Electrospun carbon fibers as air cathodes for aprotic Li-O <sub>2</sub> battery: Towards cathode design for enhanced capacity. <i>Electrochimica Acta</i> , 2020, 354, 136643.	2.6	7
99	Recent advances in nanostructured transition metal phosphides: synthesis and energy-related applications. <i>Energy and Environmental Science</i> , 2020, 13, 4564-4582.	15.6	268
100	Anionic vacancy-dependent activity of the CoSe <sub>2</sub> with a tunable interfacial electronic structure on the N-doped carbon cloth for advanced Li-O <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16636-16648.	5.2	31
101	NiFeRu Layered Double Hydroxide and Its Derivatives Supported on Graphite Foam as Binder-Free Cathode for Nonaqueous Li-O <sub>2</sub> Batteries. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	2
102	Free-Standing Carbon Nanofibers Protected by a Thin Metallic Iridium Layer for Extended Life-Cycle Li-Oxygen Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 55756-55765.	4.0	16
103	Organogermanium Nanowire Cathodes for Efficient Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2020, 14, 15894-15903.	7.3	8
104	Recent advances and future perspectives of two-dimensional materials for rechargeable Li-O <sub>2</sub> batteries. <i>Energy Storage Materials</i> , 2020, 31, 470-491.	9.5	34
105	Structural Design of Oxygen Reduction Redox Mediators (ORRMs) Based on Anthraquinone (AQ) for the Li-O <sub>2</sub> Battery. <i>ACS Catalysis</i> , 2020, 10, 9790-9803.	5.5	20
106	Porous Materials Applied in Nonaqueous Li-O <sub>2</sub> Batteries: Status and Perspectives. <i>Advanced Materials</i> , 2020, 32, e2002559.	11.1	115
107	Highly Reversible O <sub>2</sub> Conversions by Coupling LiO <sub>2</sub> Intermediate through a Dual-Site Catalyst in Li-O <sub>2</sub> Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2001592.	10.2	33
108	Electrocatalyst design for aprotic Li-CO <sub>2</sub> batteries. <i>Energy and Environmental Science</i> , 2020, 13, 4717-4737.	15.6	65
109	Enhancing the Bifunctional Catalytic Performance of Porous La <sub>0.9</sub> Mn <sub>0.6</sub> Ni <sub>0.4</sub> O <sub>3</sub> Nanofibers for Li-O <sub>2</sub> Batteries through Exsolution of Ni Nanoparticles. <i>ACS Applied Energy Materials</i> , 2020, 3, 10015-10022.	2.5	9
110	Challenges and Strategy on Parasitic Reaction for High-Performance Nonaqueous Lithium-Oxygen Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2001789.	10.2	62
111	Kinetically Stable Oxide Overlayers on Mo <sub>3</sub> P Nanoparticles Enabling Lithium-Air Batteries with Low Overpotentials and Long Cycle Life. <i>Advanced Materials</i> , 2020, 32, e2004028.	11.1	42

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112	Unconventional stable stoichiometry of vanadium peroxide. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 11460-11466.	1.3	4
113	Ni <sub>3</sub> Se <sub>2</sub> /NiSe <sub>2</sub> heterostructure nanoforests as an efficient bifunctional electrocatalyst for high-capacity and long-life Li-O <sub>2</sub> batteries. <i>Journal of Power Sources</i> , 2020, 468, 228308.	4.0	38
114	The Stabilization Effect of CO <sub>2</sub> in Lithium-Oxygen/CO <sub>2</sub> Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 16661-16667.	7.2	71
115	Dissociation of (Li <sub>2</sub> O <sub>2</sub> ) <sub>0,+</sub> on graphene and boron-doped graphene: insights from first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14216-14224.	1.3	11
116	The Stabilization Effect of CO <sub>2</sub> in Lithium-Oxygen/CO <sub>2</sub> Batteries. <i>Angewandte Chemie</i> , 2020, 132, 16804.	1.6	6
117	Atomically dispersed materials for rechargeable batteries. <i>Nano Energy</i> , 2020, 76, 105085.	8.2	18
118	Nonaqueous Lithium-Oxygen batteries: Reaction mechanism and critical open questions. <i>Energy Storage Materials</i> , 2020, 28, 235-246.	9.5	103
119	Two-Dimensional Transition Metal Chalcogenides for Alkali Metal Ions Storage. <i>ChemSusChem</i> , 2020, 13, 1114-1154.	3.6	69
120	Three-Dimensional Carbon-Supported MoS <sub>2</sub> With Sulfur Defects as Oxygen Electrodes for Li-O <sub>2</sub> Batteries. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	9
121	Recent progresses, challenges and perspectives on rechargeable Li-O <sub>2</sub> batteries. <i>Nano Select</i> , 2020, 1, 79-93.	1.9	9
122	A Safe Organic Oxygen Battery Built with Li-Based Liquid Anode and MOFs Separator. <i>Advanced Energy Materials</i> , 2020, 10, 1903953.	10.2	33
123	Metal-organic framework-derived MnO/CoMn <sub>2</sub> O <sub>4</sub> @N-C nanorods with nanoparticle interstitial decoration in core-shell structure as improved bifunctional electrocatalytic cathodes for Li-O <sub>2</sub> batteries. <i>Electrochimica Acta</i> , 2020, 338, 135809.	2.6	29
124	Heterostructured NiS <sub>2</sub> /ZnIn <sub>2</sub> S <sub>4</sub> Realizing Toroid-like Li <sub>2</sub> O <sub>2</sub> Deposition in Lithium-Oxygen Batteries with Low-Donor-Number Solvents. <i>ACS Nano</i> , 2020, 14, 3490-3499.	7.3	113
125	A 3D free-standing Co doped Ni <sub>2</sub> P nanowire oxygen electrode for stable and long-life lithium-oxygen batteries. <i>Nanoscale</i> , 2020, 12, 6785-6794.	2.8	30
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128	Potassium Doping Facilitated Formation of Tunable Superoxides in Li <sub>2</sub> O <sub>2</sub> for Improved Electrochemical Kinetics. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 4558-4564.	4.0	8
129	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. <i>Advanced Science</i> , 2020, 7, 1903088.	5.6	403



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131	A Liquid/Liquid Electrolyte Interface that Inhibits Corrosion and Dendrite Growth of Lithium in Lithium-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6397-6405.	7.2	50
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135	3D-printed functional electrodes towards Zn-Air batteries. <i>Materials Today Energy</i> , 2020, 16, 100407.	2.5	39
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