

Zhangquan Peng

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161 papers	11,764 citations	48 h-index	106 g-index
171 ext. papers	13,611 ext. citations	10.8 avg, IF	6.76 L-index

#	Paper	IF	Citations
161	A reversible and higher-rate Li-O ₂ battery. <i>Science</i> , 2012 , 337, 563-6	33.3	1559
160	Reactions in the rechargeable lithium-O ₂ battery with alkyl carbonate electrolytes. <i>Journal of the American Chemical Society</i> , 2011 , 133, 8040-7	16.4	1049
159	The carbon electrode in nonaqueous Li-O ₂ cells. <i>Journal of the American Chemical Society</i> , 2013 , 135, 494-500	16.4	1014
158	Charging a Li-O ₂ battery using a redox mediator. <i>Nature Chemistry</i> , 2013 , 5, 489-94	17.6	675
157	A stable cathode for the aprotic Li-O ₂ battery. <i>Nature Materials</i> , 2013 , 12, 1050-6	27	617
156	Oxygen reactions in a non-aqueous Li ⁺ electrolyte. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 6351-5	16.4	472
155	Li-O ₂ battery with a dimethylformamide electrolyte. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7952-7	16.4	319
154	N-Doping and Defective Nanographitic Domain Coupled Hard Carbon Nanoshells for High Performance Lithium/Sodium Storage. <i>Advanced Functional Materials</i> , 2018 , 28, 1706294	15.6	268
153	Eutectic-Derived Mesoporous Ni-Fe-O Nanowire Network Catalyzing Oxygen Evolution and Overall Water Splitting. <i>Advanced Energy Materials</i> , 2018 , 8, 1701347	21.8	217
152	Boosting Potassium-Ion Battery Performance by Encapsulating Red Phosphorus in Free-Standing Nitrogen-Doped Porous Hollow Carbon Nanofibers. <i>Nano Letters</i> , 2019 , 19, 1351-1358	11.5	186
151	Metal-Organic Framework-Induced Synthesis of Ultrasmall Encased NiFe Nanoparticles Coupling with Graphene as an Efficient Oxygen Electrode for a Rechargeable Zn-Air Battery. <i>ACS Catalysis</i> , 2016 , 6, 6335-6342	13.1	167
150	Three-Dimensional Ordered Macroporous Metal-Organic Framework Single Crystal-Derived Nitrogen-Doped Hierarchical Porous Carbon for High-Performance Potassium-Ion Batteries. <i>Nano Letters</i> , 2019 , 19, 4965-4973	11.5	152
149	Reversibility of Noble Metal-Catalyzed Aprotic Li-O ₂ Batteries. <i>Nano Letters</i> , 2015 , 15, 8084-90	11.5	139
148	Unlocking the Energy Capabilities of Lithium Metal Electrode with Solid-State Electrolytes. <i>Joule</i> , 2018 , 2, 1674-1689	27.8	133
147	Identifying Reactive Sites and Transport Limitations of Oxygen Reactions in Aprotic Lithium-O ₂ Batteries at the Stage of Sudden Death. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 5201-5	16.4	128
146	Achilles' Heel of Lithium-Air Batteries: Lithium Carbonate. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3874-3886	16.4	127
145	Bismuthene for highly efficient carbon dioxide electroreduction reaction. <i>Nature Communications</i> , 2020 , 11, 1088	17.4	125

144	A High-Performance Li-O Battery with a Strongly Solvating Hexamethylphosphoramide Electrolyte and a LiPON-Protected Lithium Anode. <i>Advanced Materials</i> , 2017 , 29, 1701568	24	123
143	Potential-Dependent Generation of O ₂ ^{•−} and LiO ₂ and Their Critical Roles in O ₂ Reduction to Li ₂ O ₂ in Aprotic LiO ₂ Batteries. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3690-3698	3.8	121
142	Oxygen Reactions in a Non-Aqueous Li ⁺ Electrolyte. <i>Angewandte Chemie</i> , 2011 , 123, 6475-6479	3.6	118
141	Verifying the Rechargeability of Li-CO Batteries on Working Cathodes of Ni Nanoparticles Highly Dispersed on N-Doped Graphene. <i>Advanced Science</i> , 2018 , 5, 1700567	13.6	117
140	A Dealloying Synthetic Strategy for Nanoporous Bismuth-Antimony Anodes for Sodium Ion Batteries. <i>ACS Nano</i> , 2018 , 12, 3568-3577	16.7	115
139	Heterostructures of 2D Molybdenum Dichalcogenide on 2D Nitrogen-Doped Carbon: Superior Potassium-Ion Storage and Insight into Potassium Storage Mechanism. <i>Advanced Materials</i> , 2020 , 32, e2000958	24	113
138	An Aluminum-Sulfur Battery with a Fast Kinetic Response. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1898-1902	16.4	111
137	Amorphous Li ₂ O ₂ : Chemical Synthesis and Electrochemical Properties. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 10717-21	16.4	106
136	Laser-assisted synthesis of Au-Ag alloy nanoparticles in solution. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 2549-54	3.4	92
135	A versatile functionalized ionic liquid to boost the solution-mediated performances of lithium-oxygen batteries. <i>Nature Communications</i> , 2019 , 10, 602	17.4	90
134	Heteroatom-doped carbon materials and their composites as electrocatalysts for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18782-18793	13	89
133	NiO nanorod array anchored Ni foam as a binder-free anode for high-rate lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 20022-20029	13	77
132	High-Capacity and High-Rate Discharging of a Coenzyme Q -Catalyzed Li-O Battery. <i>Advanced Materials</i> , 2018 , 30, 1705571	24	71
131	Hierarchical Porous Carbon Spheres for High-Performance Na-O Batteries. <i>Advanced Materials</i> , 2017 , 29, 1606816	24	70
130	Micelle-assisted one-pot synthesis of water-soluble polyaniline-gold composite particles. <i>Langmuir</i> , 2006 , 22, 10915-8	4	68
129	A Carbon- and Binder-Free Nanostructured Cathode for High-Performance Nonaqueous Li-O Battery. <i>Advanced Science</i> , 2015 , 2, 1500092	13.6	65
128	Direct Detection of the Superoxide Anion as a Stable Intermediate in the Electroreduction of Oxygen in a Non-Aqueous Electrolyte Containing Phenol as a Proton Source. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 8165-8	16.4	64
127	The 2021 battery technology roadmap. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 183001	3	63

126	The Salt Matters: Enhanced Reversibility of Li-O Batteries with a Li[(CF ₃ SO ₂)(n-C ₄ F ₉ SO ₂)N]-Based Electrolyte. <i>Advanced Materials</i> , 2018 , 30, 1704841	24	58
125	Alloying boosting superior sodium storage performance in nanoporous tin-antimony alloy anode for sodium ion batteries. <i>Nano Energy</i> , 2018 , 54, 349-359	17.1	57
124	LiO: Cryosynthesis and Chemical/Electrochemical Reactivities. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 2334-2338	6.4	55
123	Enabling an intrinsically safe and high-energy-density 4.5 V-class Li-ion battery with nonflammable electrolyte. <i>Information Materials</i> , 2020 , 2, 984-992	23.1	54
122	A mesoporous antimony-based nanocomposite for advanced sodium ion batteries. <i>Energy Storage Materials</i> , 2018 , 13, 247-256	19.4	53
121	Compactly Coupled Nitrogen-Doped Carbon Nanosheets/Molybdenum Phosphide Nanocrystal Hollow Nanospheres as Polysulfide Reservoirs for High-Performance Lithium-Sulfur Chemistry. <i>Small</i> , 2019 , 15, e1902491	11	53
120	Tungsten diselenide nanoplates as advanced lithium/sodium ion electrode materials with different storage mechanisms. <i>Nano Research</i> , 2017 , 10, 2584-2598	10	51
119	Unlocking the energy capabilities of micron-sized LiFePO ₄ . <i>Nature Communications</i> , 2015 , 6, 7898	17.4	51
118	A self-supported, three-dimensional porous copper film as a current collector for advanced lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 1092-1098	13	50
117	[001] preferentially-oriented 2D tungsten disulfide nanosheets as anode materials for superior lithium storage. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17811-17819	13	50
116	Understanding oxygen electrochemistry in aprotic Li-O ₂ batteries. <i>Green Energy and Environment</i> , 2017 , 2, 186-203	5.7	49
115	Co ₉ S ₈ @carbon porous nanocages derived from a metal-organic framework: a highly efficient bifunctional catalyst for aprotic Li-O ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8595-8603	13	49
114	Enhanced methanol electro-oxidation and oxygen reduction reaction performance of ultrafine nanoporous platinum-copper alloy: Experiment and density functional theory calculation. <i>Journal of Power Sources</i> , 2015 , 279, 334-344	8.9	48
113	Dual phase enhanced superior electrochemical performance of nanoporous bismuth-tin alloy anodes for magnesium-ion batteries. <i>Energy Storage Materials</i> , 2018 , 14, 351-360	19.4	48
112	Monodispersed Ru Nanoparticles Functionalized Graphene Nanosheets as Efficient Cathode Catalysts for O-Assisted Li-CO Battery. <i>ACS Omega</i> , 2017 , 2, 9280-9286	3.9	47
111	Unraveling the Nature of Excellent Potassium Storage in Small-Molecule Se@Peapod-Like N-Doped Carbon Nanofibers. <i>Advanced Materials</i> , 2020 , 32, e2003879	24	47
110	Decomposing lithium carbonate with a mobile catalyst. <i>Nano Energy</i> , 2017 , 36, 390-397	17.1	46
109	Unraveling the catalytic activities of ruthenium nanocrystals in high performance aprotic Li-O ₂ batteries. <i>Nano Energy</i> , 2016 , 28, 486-494	17.1	46

108	PdPdO Interface as Active Site for HCOOH Selective Dehydrogenation at Ambient Condition. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2081-2088	3.8	45
107	Thermoresponsive polymer-stabilized silver nanoparticles. <i>Journal of Colloid and Interface Science</i> , 2008 , 319, 175-81	9.3	43
106	Advanced Lithium Metal-Carbon Nanotube Composite Anode for High-Performance Lithium-Oxygen Batteries. <i>Nano Letters</i> , 2019 , 19, 6377-6384	11.5	42
105	Sodium storage mechanisms of bismuth in sodium ion batteries: An operando X-ray diffraction study. <i>Journal of Power Sources</i> , 2018 , 379, 1-9	8.9	41
104	Ruthenium nanocrystal decorated vertical graphene nanosheets@Ni foam as highly efficient cathode catalysts for lithium-oxygen batteries. <i>NPG Asia Materials</i> , 2016 , 8, e286-e286	10.3	39
103	Ternary mesoporous cobalt-iron-nickel oxide efficiently catalyzing oxygen/hydrogen evolution reactions and overall water splitting. <i>Nano Research</i> , 2019 , 12, 2281-2287	10	38
102	A highly selective tin-copper bimetallic electrocatalyst for the electrochemical reduction of aqueous CO ₂ to formate. <i>Applied Catalysis B: Environmental</i> , 2019 , 259, 118040	21.8	38
101	Unveiling the Complex Effects of HO on Discharge-Recharge Behaviors of Aprotic Lithium-O Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3333-3339	6.4	38
100	Interstitial Hydrogen Atom Modulation to Boost Hydrogen Evolution in Pd-Based Alloy Nanoparticles. <i>ACS Nano</i> , 2019 , 13, 12987-12995	16.7	36
99	Probing Lithium Carbonate Formation in Trace-O-Assisted Aprotic Li-CO Batteries Using in Situ Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 322-328	6.4	36
98	Photofragmentation of phase-transferred gold nanoparticles by intense pulsed laser light. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 15735-40	3.4	35
97	Influence of intense pulsed laser irradiation on optical and morphological properties of gold nanoparticle aggregates produced by surface acid-base reactions. <i>Langmuir</i> , 2005 , 21, 4249-53	4	35
96	Nanoporous Iridium-Based Alloy Nanowires as Highly Efficient Electrocatalysts Toward Acidic Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39728-39736	9.5	34
95	Covalent Sidewall Functionalization of Carbon Nanotubes by a Formation/Degradation Approach. <i>Chemistry of Materials</i> , 2008 , 20, 6068-6075	9.6	33
94	Incorporation of surface-derivatized gold nanoparticles into electrochemically generated polymer films. <i>Electrochemistry Communications</i> , 2002 , 4, 210-213	5.1	33
93	Formation of a Supported Hybrid Bilayer Membrane on Gold: A Sterically Enhanced Hydrophobic Effect. <i>Langmuir</i> , 2002 , 18, 4834-4839	4	31
92	Disproportionation of Sodium Superoxide in Metal-Air Batteries. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 9906-9910	16.4	30
91	Conformation change of horseradish peroxidase in lipid membrane. <i>Chemistry and Physics of Lipids</i> , 2002 , 120, 119-29	3.7	30

90	An Aluminum-Sulfur Battery with a Fast Kinetic Response. <i>Angewandte Chemie</i> , 2018 , 130, 1916-1920	3.6	29
89	Hierarchically nanoporous nickel-based actuators with giant reversible strain and ultrahigh work density. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 45-52	7.1	29
88	Oriented polyoxometalate-polycation multilayers on a carbon substrate. <i>Journal of Materials Chemistry</i> , 2000 , 10, 2727-2733		29
87	Amorphous Li ₂ O ₂ : Chemical Synthesis and Electrochemical Properties. <i>Angewandte Chemie</i> , 2016 , 128, 10875-10879	3.6	28
86	Progress and Perspective: MXene and MXene-Based Nanomaterials for High-Performance Energy Storage Devices. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000967	6.4	28
85	Scalable Fabrication of Core-Shell Sb@Co(OH) Nanosheet Anodes for Advanced Sodium-Ion Batteries via Magnetron Sputtering. <i>ACS Nano</i> , 2018 , 12, 11678-11688	16.7	28
84	A High-Performance Carbonate-Free Lithium Garnet Interface Enabled by a Trace Amount of Sodium. <i>Advanced Materials</i> , 2020 , 32, e2000575	24	28
83	Polyphenylene Wrapped Sulfur/Multi-Walled Carbon Nano-Tubes via Spontaneous Grafting of Diazonium Salt for Improved Electrochemical Performance of Lithium-Sulfur Battery. <i>Electrochimica Acta</i> , 2015 , 165, 136-141	6.7	27
82	Tackling Grand Challenges of the 21st Century with Electroanalytical Chemistry. <i>Journal of the American Chemical Society</i> , 2018 , 140, 10629-10638	16.4	27
81	Promoting Solution Discharge of Li-O Batteries with Immobilized Redox Mediators. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5915-5920	6.4	27
80	Composition- and size-modulated porous bismuth-tin biphasic alloys as anodes for advanced magnesium ion batteries. <i>Nanoscale</i> , 2019 , 11, 15279-15288	7.7	26
79	One-pot synthesis of carbon nanotube-polyaniline-gold nanoparticle and carbon nanotube-gold nanoparticle composites by using aromatic amine chemistry. <i>Langmuir</i> , 2008 , 24, 8971-5	4	25
78	Surface charge influence on the surface plasmon absorbance of electroactive thiol-protected gold nanoparticles. <i>Langmuir</i> , 2004 , 20, 2519-22	4	24
77	(CH ₃) ₃ Si-N[(FSO ₂)(n-C ₄ F ₉ SO ₂)]: An additive for dendrite-free lithium metal anode. <i>Journal of Power Sources</i> , 2018 , 400, 225-231	8.9	23
76	Preparation of a phosphopolyoxomolybdate P ₂ Mo ₁₈ O ₆₂ and doped polypyrrole modified electrode and its catalytic properties. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 566, 63-71	4.1	23
75	Formation of a Self-Assembled Monolayer of 2-Mercapto-3-n-octylthiophene on Gold. <i>Langmuir</i> , 2001 , 17, 4904-4909	4	23
74	A New Defect-Rich CoGa Layered Double Hydroxide as Efficient and Stable Oxygen Evolution Electrocatalyst. <i>Small Methods</i> , 2019 , 3, 1800286	12.8	23
73	Operando X-ray diffraction analysis of the degradation mechanisms of a spinel LiMn ₂ O ₄ cathode in different voltage windows. <i>Journal of Energy Chemistry</i> , 2020 , 44, 138-146	12	22

72	Core-Shell Structured NiCo ₂ O ₄ @FeOOH Nanowire Arrays as Bifunctional Electrocatalysts for Efficient Overall Water Splitting. <i>ChemCatChem</i> , 2018 , 10, 4119-4125	5.2	22
71	Understanding the Reaction Interface in Lithium-Oxygen Batteries. <i>Batteries and Supercaps</i> , 2019 , 2, 37-48	5.6	21
70	Identifying the anionic redox activity in cation-disordered Li _{1.25} Nb _{0.25} Fe _{0.50} O ₂ /C oxide cathodes for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 5115-5127	13	21
69	'Painting' nanostructured metals-playing with liquid metal. <i>Nanoscale Horizons</i> , 2018 , 3, 408-416	10.8	21
68	Probing the Reaction Interface in Li-Oxygen Batteries Using Dynamic Electrochemical Impedance Spectroscopy: Discharge-Charge Asymmetry in Reaction Sites and Electronic Conductivity. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3403-3408	6.4	21
67	Immobilization of the nanoparticle monolayer onto self-assembled monolayers by combined sterically enhanced hydrophobic and electrophoretic forces. <i>Langmuir</i> , 2004 , 20, 5-10	4	21
66	Orthorhombic Cobalt Ditungstate with Te Vacancy Defects Anchoring on Elastic MXene Enables Efficient Potassium-Ion Storage. <i>Advanced Materials</i> , 2021 , 33, e2100272	24	20
65	Direct Detection of the Superoxide Anion as a Stable Intermediate in the Electroreduction of Oxygen in a Non-Aqueous Electrolyte Containing Phenol as a Proton Source. <i>Angewandte Chemie</i> , 2015 , 127, 8283-8286	3.6	19
64	Electrochemistry and spectroscopy study on the interaction of microperoxidase-11 with lipid membrane. <i>Biophysical Chemistry</i> , 2001 , 94, 165-73	3.5	19
63	Identifying Reactive Sites and Transport Limitations of Oxygen Reactions in Aprotic Lithium-O ₂ Batteries at the Stage of Sudden Death. <i>Angewandte Chemie</i> , 2016 , 128, 5287-5291	3.6	19
62	Engineering Solid Electrolyte Interphase in Lithium Metal Batteries by Employing an Ionic Liquid Ether Double-Solvent Electrolyte with Li[(CF ₃ SO ₂)(n-C ₄ F ₉ SO ₂)N] as the Salt. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4426-4431	6.1	18
61	Mechanistic origin of low polarization in aprotic Na-O batteries. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 12375-12383	3.6	17
60	Direct monitoring of trace water in Li-ion batteries using fluorescence spectroscopy. <i>Chemical Science</i> , 2018 , 9, 231-237	9.4	16
59	Li ₂ CO ₃ : Die Achillesferse von Lithium-Luft-Batterien. <i>Angewandte Chemie</i> , 2018 , 130, 3936-3949	3.6	16
58	Promoting defective-Li ₂ O ₂ formation via Na doping for Li-O ₂ batteries with low charge overpotentials. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 10389-10396	13	15
57	Rechargeable Aluminium-Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 22963-22967	16.4	15
56	Intermetallic interphases in lithium metal and lithium ion batteries. <i>Information Materials</i> , 2021 , 3, 1083	23.1	15
55	Self-supporting, eutectic-like, nanoporous biphasic bismuth-tin film for high-performance magnesium storage. <i>Nano Research</i> , 2019 , 12, 801-808	10	14

- 54 Li₂O₂ oxidation: the charging reaction in the aprotic Li-O₂ batteries. *Science Bulletin*, **2015**, 60, 1227-1234 14
- 53 Co-assembly of ferrocene-terminated and alkylthiophene thiols on gold and its redox chemistry modulated by surfactant adsorption. *Journal of Electroanalytical Chemistry*, **2004**, 563, 291-298 4.1 14
- 52 Understanding the boosted sodium storage behavior of a nanoporous bismuth-nickel anode using operando X-ray diffraction and density functional theory calculations. *Journal of Materials Chemistry A*, **2019**, 7, 13602-13613 13 13
- 51 Identifying compatibility of lithium salts with LiFePO₄ cathode using a symmetric cell. *Journal of Power Sources*, **2018**, 384, 80-85 8.9 13
- 50 Taming Interfacial Instability in Lithium-Oxygen Batteries: A Polymeric Ionic Liquid Electrolyte Solution. *Advanced Energy Materials*, **2019**, 9, 1901967 21.8 13
- 49 Identifying a Stable Counter/Reference Electrode for the Study of Aprotic Na-O₂ Batteries. *Journal of the Electrochemical Society*, **2016**, 163, A1270-A1274 3.9 13
- 48 Identification of a better charge redox mediator for lithium-oxygen batteries. *Energy Storage Materials*, **2020**, 25, 795-800 19.4 13
- 47 Inhibition of Discharge Side Reactions by Promoting Solution-Mediated Oxygen Reduction Reaction with Stable Quinone in Li-O Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 10607-10615 9.5 12
- 46 The origin of potential rise during charging of Li-O₂ batteries. *Science China Chemistry*, **2017**, 60, 1527-1532 7.9 12
- 45 Tailoring P2/P3 Biphases of Layered Na MnO₂ by Co Substitution for High-Performance Sodium-Ion Battery. *Small*, **2021**, 17, e2007103 11 12
- 44 Relieving the "Sudden Death" of Li-O Batteries by Grafting an Antifouling Film on Cathode Surfaces. *ACS Applied Materials & Interfaces*, **2019**, 11, 14753-14758 9.5 11
- 43 Spectroscopic Identification of the Au-C Bond Formation upon Electroreduction of an Aryl Diazonium Salt on Gold. *Langmuir*, **2016**, 32, 11514-11519 4 11
- 42 Disproportionation of Sodium Superoxide in Metal-Air Batteries. *Angewandte Chemie*, **2018**, 130, 10054-10058 10.5 11
- 41 Liquid-like Poly(ionic liquid) as Electrolyte for Thermally Stable Lithium-Ion Battery. *ACS Omega*, **2018**, 3, 10564-10571 3.9 11
- 40 A Novel Zwitterionic Ionic Liquid-Based Electrolyte for More Efficient and Safer Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 11635-11642 9.5 10
- 39 Kinetics of the CO₂ reduction reaction in aprotic Li-O₂ batteries: a model study. *Journal of Materials Chemistry A*, **2021**, 9, 3290-3296 13 10
- 38 Decisive Intermediates Responsible for the Carbonaceous Products of CO₂ Electro-reduction on Nitrogen-Doped sp² Nanocarbon Catalysts in NaHCO₃ Aqueous Electrolyte. *ChemElectroChem*, **2017**, 4, 1274-1278 4.3 9
- 37 Understanding oxygen reactions in aprotic Li-O₂ batteries. *Chinese Physics B*, **2016**, 25, 018204 1.2 9

36	A long-life lithium-oxygen battery via a molecular quenching/mediating mechanism.. <i>Science Advances</i> , 2022 , 8, eabm1899	14.3	9
35	Recent Advances in Li Anode for Aprotic Li-O ₂ Batteries. <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , 2017 , 33, 486-499	3.8	8
34	Revealing the Sulfur Redox Paths in a Li-S Battery by an In-Situ Hyphenated Technique of Electrochemistry and Mass Spectrometry. <i>Advanced Materials</i> , 2021 , e2106618	24	8
33	Clear Representation of Surface Pathway Reactions at Ag Nanowire Cathodes in All-Solid Li-O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 39157-39164	9.5	8
32	In Situ Imaging Polysulfides Electrochemistry of Li-S Batteries in a Hollow Carbon Nanotubule Wet Electrochemical Cell. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55971-55981	9.5	7
31	Loosely packed self-assembled monolayer of N-hexadecyl-3,6-di(p-mercaptophenylacetylene)carbazole on gold and its application in biomimetic membrane research. <i>Langmuir</i> , 2004 , 20, 10992-7	4	7
30	Atomic Force Microscopic and Electrochemical Investigations of an Electrostatically Fabricated Single-Wall Carbon Nanotubes Modified Electrode. <i>Electroanalysis</i> , 2005 , 17, 59-64	3	7
29	Surface Electronegativity as an Activity Descriptor to Screen Oxygen Evolution Reaction Catalysts of Li-O ₂ Battery. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27166-27175	9.5	7
28	Casting nanoporous nanowires: revitalizing the ancient process for designing advanced catalysts. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10525-10534	13	7
27	Oxygen electrochemistry in Li-O ₂ batteries probed by in situ surface-enhanced Raman spectroscopy. <i>SusMat</i> , 2021 , 1, 345-358		7
26	Strongly coupled Te-SnS ₂ /MXene superstructure with self-autoadjustable function for fast and stable potassium ion storage. <i>Journal of Energy Chemistry</i> , 2021 , 61, 416-424	12	7
25	Redox mediators for high-performance lithium-oxygen batteries.. <i>National Science Review</i> , 2022 , 9, nwac048	14.8	7
24	In situ imaging electrocatalytic CO reduction and evolution reactions in all-solid-state Li-CO nanobatteries. <i>Nanoscale</i> , 2020 , 12, 23967-23974	7.7	6
23	Confining Li ₂ O ₂ in tortuous pores of mesoporous cathodes to facilitate low charge overpotentials for Li-O ₂ batteries. <i>Journal of Energy Chemistry</i> , 2021 , 55, 55-61	12	6
22	Selective Penetration of Liquid-Phase Organic Probe Molecules into SAM of 2-Mercapto-3-n-octylthiophene. <i>Journal of the Electrochemical Society</i> , 2003 , 150, E197	3.9	5
21	Rechargeable Aluminium-Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. <i>Angewandte Chemie</i> , 2020 , 132, 23163-23167	3.6	5
20	Interrogating Lithium-Oxygen Battery Reactions and Chemistry with Isotope-Labeling Techniques: A Mini Review. <i>Energy & Fuels</i> , 2021 , 35, 4743-4750	4.1	5
19	Hunting the Culprits: Reactive Oxygen Species in Aprotic Lithium-Oxygen Batteries. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 1243-1255	3.8	4

- 18 Deciphering the Enigma of LiCO Oxidation Using a Solid-State Li-Air Battery Configuration. *ACS Applied Materials & Interfaces*, **2021**, 13, 14321-14326 9.5 4
- 17 Phase control of ultrafine FeSe nanocrystals in a N-doped carbon matrix for highly efficient and stable oxygen reduction reaction. *Journal of Materials Chemistry A*, **2021**, 9, 3464-3471 13 4
- 16 Polysulfide-driven low charge overpotential for aprotic lithium-oxygen batteries. *Journal of Materials Chemistry A*, **2019**, 7, 8777-8784 13 3
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