Zhangquan Peng

List of Publications by Year in Descending Order

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 long-life lithium-oxygen battery via a molecular quenching/mediating mechanism.. *Science Advances*, **2022**, 8, eabm1899	14.3	9
160	Hunting the Culprits: Reactive Oxygen Species in Aprotic Lithium□Oxygen Batteries. *Journal of Physical Chemistry C*, **2022**, 126, 1243-1255	3.8	4
159	Deciphering CO2 Reduction Reaction Mechanism in Aprotic Li□CO2 Batteries using In Situ Vibrational Spectroscopy Coupled with Theoretical Calculations. *ACS Energy Letters*, **2022**, 7, 624-631	20.1	3
158	Interfacial Barrier of Ion Transport in Poly(ethylene oxide)-LiLaZrO Composite Electrolytes Illustrated by Li-Tracer Nuclear Magnetic Resonance Spectroscopy.. *Journal of Physical Chemistry Letters*, **2022**, 1500-1505	6.4	1
157	Dual-function redox mediator enhanced lithium-oxygen battery based on polymer electrolyte. *Journal of Materials Science and Technology*, **2022**, 113, 199-206	9.1	1
156	Redox mediators for high-performance lithium-oxygen batteries.. *National Science Review*, **2022**, 9, nwac048	16.8	7
155	A primitive model for intercalation□onversion bifunctional battery materials **2022**, 1, 20210016		
154	Revealing the Sulfur Redox Paths in a Li-S Battery by an In-Situ Hyphenated Technique of Electrochemistry and Mass Spectrometry. *Advanced Materials*, **2021**, e2106618	24	8
153	Formation, lithium storage properties, and mechanism of nanoporous germanium fabricated by dealloying. *Journal of Chemical Physics*, **2021**, 155, 184702	3.9	1
152	Interrogating Lithium□Oxygen Battery Reactions and Chemistry with Isotope-Labeling Techniques: A Mini Review. *Energy & Fuels*, **2021**, 35, 4743-4750	4.1	5
151	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
150	Reversible Cycling of Graphite Electrodes in Propylene Carbonate Electrolytes Enabled by Ethyl Isothiocyanate. *ACS Applied Materials & Interfaces*, **2021**, 13, 26023-26033	9.5	3
149	Orthorhombic Cobalt Ditelluride with Te Vacancy Defects Anchoring on Elastic MXene Enables Efficient Potassium-Ion Storage. *Advanced Materials*, **2021**, 33, e2100272	24	20
148	Intermetallic interphases in lithium metal and lithium ion batteries. *Informa□□Materi□y*, **2021**, 3, 1083	23.1	15
147	Confining Li2O2 in tortuous pores of mesoporous cathodes to facilitate low charge overpotentials for Li-O2 batteries. *Journal of Energy Chemistry*, **2021**, 55, 55-61	12	6
146	Kinetics of the CO2 reduction reaction in aprotic Li□CO2 batteries: a model study. *Journal of Materials Chemistry A*, **2021**, 9, 3290-3296	13	10
145	Tailoring P2/P3 Biphases of Layered Na MnO by Co Substitution for High-Performance Sodium-Ion Battery. *Small*, **2021**, 17, e2007103	11	12

144	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
143	Progress and Perspective: MXene and MXene-Based Nanomaterials for High-Performance Energy Storage Devices. *Advanced Electronic Materials*, **2021**, 7, 2000967	6.4	28
142	The 2021 battery technology roadmap. *Journal Physics D: Applied Physics*, **2021**, 54, 183001	3	63
141	Dealloying-constructed hierarchical nanoporous bismuth-antimony anode for potassium ion batteries. *Fundamental Research*, **2021**, 1, 408-417		1
140	Clear Representation of Surface Pathway Reactions at Ag Nanowire Cathodes in All-Solid Li-O Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 39157-39164	9.5	8
139	Oxygen electrochemistry in Li-O2 batteries probed by in situ surface-enhanced Raman spectroscopy. *SusMat*, **2021**, 1, 345-358		7
138	Understanding Lithium-Mediated Oxygen Reactions at the Au|DMSO interface: Are We There?. *Journal of Physical Chemistry C*, **2021**, 125, 20762-20771	3.8	1
137	Strongly coupled Te-SnS2/MXene superstructure with self-autoadjustable function for fast and stable potassium ion storage. *Journal of Energy Chemistry*, **2021**, 61, 416-424	12	7
136	Direct Spectroscopic Evidence for Solution-Mediated Oxygen Reduction Reaction Intermediates in Aprotic Lithium-Oxygen Batteries.. *Nano Letters*, **2021**,	11.5	2
135	In Situ Imaging Polysulfides Electrochemistry of Li-S Batteries in a Hollow Carbon Nanotubule Wet Electrochemical Cell. *ACS Applied Materials & Interfaces*, **2020**, 12, 55971-55981	9.5	7
134	A CO-Assisted Sodium-Phenanthrenequinone Battery. *Journal of Physical Chemistry Letters*, **2020**, 11, 5350-5353	6.4	2
133	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
132	Bismuthene for highly efficient carbon dioxide electroreduction reaction. *Nature Communications*, **2020**, 11, 1088	17.4	125
131	Enabling an intrinsically safe and high-energy-density 4.5 V-class Li-ion battery with nonflammable electrolyte. *InformaⅠMateriⅠ*, **2020**, 2, 984-992	23.1	54
130	Identifying the anionic redox activity in cation-disordered Li1.25Nb0.25Fe0.50O2/C oxide cathodes for Li-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 5115-5127	13	21
129	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
128	Heterostructures of 2D Molybdenum Dichalcogenide on 2D Nitrogen-Doped Carbon: Superior Potassium-Ion Storage and Insight into Potassium Storage Mechanism. *Advanced Materials*, **2020**, 32, e2000958	24	113
127	Surface Electronegativity as an Activity Descriptor to Screen Oxygen Evolution Reaction Catalysts of Li-O Battery. *ACS Applied Materials & Interfaces*, **2020**, 12, 27166-27175	9.5	7

126	Unraveling the Nature of Excellent Potassium Storage in Small-Molecule Se@Peapod-Like N-Doped Carbon Nanofibers. *Advanced Materials*, **2020**, 32, e2003879	24	47
125	In situ imaging electrocatalytic CO reduction and evolution reactions in all-solid-state Li-CO nanobatteries. *Nanoscale*, **2020**, 12, 23967-23974	7.7	6
124	Rechargeable Aluminium-Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. *Angewandte Chemie - International Edition*, **2020**, 59, 22963-22967	16.4	15
123	Rechargeable Aluminium–Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. *Angewandte Chemie*, **2020**, 132, 23163-23167	3.6	5
122	Operando X-ray diffraction analysis of the degradation mechanisms of a spinel LiMn2O4 cathode in different voltage windows. *Journal of Energy Chemistry*, **2020**, 44, 138-146	12	22
121	Identification of a better charge redox mediator for lithium–oxygen batteries. *Energy Storage Materials*, **2020**, 25, 795-800	19.4	13
120	A High-Performance Carbonate-Free Lithium|Garnet Interface Enabled by a Trace Amount of Sodium. *Advanced Materials*, **2020**, 32, e2000575	24	28
119	A self-supported, three-dimensional porous copper film as a current collector for advanced lithium metal batteries. *Journal of Materials Chemistry A*, **2019**, 7, 1092-1098	13	50
118	Boosting Potassium-Ion Battery Performance by Encapsulating Red Phosphorus in Free-Standing Nitrogen-Doped Porous Hollow Carbon Nanofibers. *Nano Letters*, **2019**, 19, 1351-1358	11.5	186
117	Self-supporting, eutectic-like, nanoporous biphase bismuth-tin film for high-performance magnesium storage. *Nano Research*, **2019**, 12, 801-808	10	14
116	A versatile functionalized ionic liquid to boost the solution-mediated performances of lithium-oxygen batteries. *Nature Communications*, **2019**, 10, 602	17.4	90
115	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
114	Understanding the Reaction Interface in Lithium-Oxygen Batteries. *Batteries and Supercaps*, **2019**, 2, 37-48	5.6	21
113	Polysulfide-driven low charge overpotential for aprotic lithium–oxygen batteries. *Journal of Materials Chemistry A*, **2019**, 7, 8777-8784	13	3
112	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
111	Promoting defective-Li2O2 formation via Na doping for Li–O2 batteries with low charge overpotentials. *Journal of Materials Chemistry A*, **2019**, 7, 10389-10396	13	15
110	Ternary mesoporous cobalt-iron-nickel oxide efficiently catalyzing oxygen/hydrogen evolution reactions and overall water splitting. *Nano Research*, **2019**, 12, 2281-2287	10	38
109	A highly selective tin-copper bimetallic electrocatalyst for the electrochemical reduction of aqueous CO2 to formate. *Applied Catalysis B: Environmental*, **2019**, 259, 118040	21.8	38

108	Compactly Coupled Nitrogen-Doped Carbon Nanosheets/Molybdenum Phosphide Nanocrystal Hollow Nanospheres as Polysulfide Reservoirs for High-Performance Lithium-Sulfur Chemistry. *Small*, **2019**, 15, e1902491	11	53
107	Advanced Lithium Metal-Carbon Nanotube Composite Anode for High-Performance Lithium-Oxygen Batteries. *Nano Letters*, **2019**, 19, 6377-6384	11.5	42
106	Three-Dimensional Ordered Macroporous Metal-Organic Framework Single Crystal-Derived Nitrogen-Doped Hierarchical Porous Carbon for High-Performance Potassium-Ion Batteries. *Nano Letters*, **2019**, 19, 4965-4973	11.5	152
105	Composition- and size-modulated porous bismuth-tin biphase alloys as anodes for advanced magnesium ion batteries. *Nanoscale*, **2019**, 11, 15279-15288	7.7	26
104	Taming Interfacial Instability in Lithium□Oxygen Batteries: A Polymeric Ionic Liquid Electrolyte Solution. *Advanced Energy Materials*, **2019**, 9, 1901967	21.8	13
103	Nanoporous Iridium-Based Alloy Nanowires as Highly Efficient Electrocatalysts Toward Acidic Oxygen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2019**, 11, 39728-39736	9.5	34
102	Lithium□Sulfur Batteries: Compactly Coupled Nitrogen-Doped Carbon Nanosheets/Molybdenum Phosphide Nanocrystal Hollow Nanospheres as Polysulfide Reservoirs for High-Performance Lithium□Sulfur Chemistry (Small 40/2019). *Small*, **2019**, 15, 1970216	11	
101	Interstitial Hydrogen Atom Modulation to Boost Hydrogen Evolution in Pd-Based Alloy Nanoparticles. *ACS Nano*, **2019**, 13, 12987-12995	16.7	36
100	Understanding the Reaction Interface in Lithium-Oxygen Batteries. *Batteries and Supercaps*, **2019**, 2, 5-5	5.6	0
99	Probing Lithium Carbonate Formation in Trace-O-Assisted Aprotic Li-CO Batteries Using in Situ Surface-Enhanced Raman Spectroscopy. *Journal of Physical Chemistry Letters*, **2019**, 10, 322-328	6.4	36
98	A New Defect-Rich CoGa Layered Double Hydroxide as Efficient and Stable Oxygen Evolution Electrocatalyst. *Small Methods*, **2019**, 3, 1800286	12.8	23
97	'Painting' nanostructured metals-playing with liquid metal. *Nanoscale Horizons*, **2018**, 3, 408-416	10.8	21
96	Co9S8@carbon porous nanocages derived from a metal□organic framework: a highly efficient bifunctional catalyst for aprotic Li□O2 batteries. *Journal of Materials Chemistry A*, **2018**, 6, 8595-8603	13	49
95	A mesoporous antimony-based nanocomposite for advanced sodium ion batteries. *Energy Storage Materials*, **2018**, 13, 247-256	19.4	53
94	An Aluminum□Sulfur Battery with a Fast Kinetic Response. *Angewandte Chemie*, **2018**, 130, 1916-1920	3.6	29
93	An Aluminum-Sulfur Battery with a Fast Kinetic Response. *Angewandte Chemie - International Edition*, **2018**, 57, 1898-1902	16.4	111
92	Pd□PdO Interface as Active Site for HCOOH Selective Dehydrogenation at Ambient Condition. *Journal of Physical Chemistry C*, **2018**, 122, 2081-2088	3.8	45
91	Sodium storage mechanisms of bismuth in sodium ion batteries: An operando X-ray diffraction study. *Journal of Power Sources*, **2018**, 379, 1-9	8.9	41

90	N-Doping and Defective Nanographitic Domain Coupled Hard Carbon Nanoshells for High Performance Lithium/Sodium Storage. *Advanced Functional Materials*, **2018**, 28, 1706294	15.6	268
89	A Dealloying Synthetic Strategy for Nanoporous Bismuth-Antimony Anodes for Sodium Ion Batteries. *ACS Nano*, **2018**, 12, 3568-3577	16.7	115
88	Identifying compatibility of lithium salts with LiFePO4 cathode using a symmetric cell. *Journal of Power Sources*, **2018**, 384, 80-85	8.9	13
87	Direct monitoring of trace water in Li-ion batteries using fluorescence spectroscopy. *Chemical Science*, **2018**, 9, 231-237	9.4	16
86	Eutectic-Derived Mesoporous Ni-Fe-O Nanowire Network Catalyzing Oxygen Evolution and Overall Water Splitting. *Advanced Energy Materials*, **2018**, 8, 1701347	21.8	217
85	Tackling Grand Challenges of the 21st Century with Electroanalytical Chemistry. *Journal of the American Chemical Society*, **2018**, 140, 10629-10638	16.4	27
84	Unlocking the Energy Capabilities of Lithium Metal Electrode with Solid-State Electrolytes. *Joule*, **2018**, 2, 1674-1689	27.8	133
83	(CH3)3Si-N[(FSO2)(n-C4F9SO2)]: An additive for dendrite-free lithium metal anode. *Journal of Power Sources*, **2018**, 400, 225-231	8.9	23
82	Engineering Solid Electrolyte Interphase in Lithium Metal Batteries by Employing an Ionic Liquid Ether Double-Solvent Electrolyte with Li[(CF3SO2)(n-C4F9SO2)N] as the Salt. *ACS Applied Energy Materials*, **2018**, 1, 4426-4431	6.1	18
81	Probing the Reaction Interface in Li-Oxygen Batteries Using Dynamic Electrochemical Impedance Spectroscopy: Discharge-Charge Asymmetry in Reaction Sites and Electronic Conductivity. *Journal of Physical Chemistry Letters*, **2018**, 9, 3403-3408	6.4	21
80	Disproportionation of Sodium Superoxide in Metal–Air Batteries. *Angewandte Chemie*, **2018**, 130, 10054-10058	3.6	11
79	Disproportionation of Sodium Superoxide in Metal-Air Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 9906-9910	16.4	30
78	High-Capacity and High-Rate Discharging of a Coenzyme Q -Catalyzed Li-O Battery. *Advanced Materials*, **2018**, 30, 1705571	24	71
77	Li2CO3: Die Achillesferse von Lithium-Luft-Batterien. *Angewandte Chemie*, **2018**, 130, 3936-3949	3.6	16
76	Achilles' Heel of Lithium-Air Batteries: Lithium Carbonate. *Angewandte Chemie - International Edition*, **2018**, 57, 3874-3886	16.4	127
75	Verifying the Rechargeability of Li-CO Batteries on Working Cathodes of Ni Nanoparticles Highly Dispersed on N-Doped Graphene. *Advanced Science*, **2018**, 5, 1700567	13.6	117
74	The Salt Matters: Enhanced Reversibility of Li-O Batteries with a Li[(CF SO)(n-C F SO)N]-Based Electrolyte. *Advanced Materials*, **2018**, 30, 1704841	24	58
73	Making Li2O2 Different in Solution. *CheM*, **2018**, 4, 2730-2731	16.2	2

72	Promoting Solution Discharge of Li-O Batteries with Immobilized Redox Mediators. *Journal of Physical Chemistry Letters*, **2018**, 9, 5915-5920	6.4	27
71	Scalable Fabrication of Core-Shell Sb@Co(OH) Nanosheet Anodes for Advanced Sodium-Ion Batteries via Magnetron Sputtering. *ACS Nano*, **2018**, 12, 11678-11688	16.7	28
70	Alloying boosting superior sodium storage performance in nanoporous tin-antimony alloy anode for sodium ion batteries. *Nano Energy*, **2018**, 54, 349-359	17.1	57
69	Heteroatom-doped carbon materials and their composites as electrocatalysts for CO2 reduction. *Journal of Materials Chemistry A*, **2018**, 6, 18782-18793	13	89
68	Liquid-like Poly(ionic liquid) as Electrolyte for Thermally Stable Lithium-Ion Battery. *ACS Omega*, **2018**, 3, 10564-10571	3.9	11
67	Casting nanoporous nanowires: revitalizing the ancient process for designing advanced catalysts. *Journal of Materials Chemistry A*, **2018**, 6, 10525-10534	13	7
66	Unveiling the Complex Effects of HO on Discharge-Recharge Behaviors of Aprotic Lithium-O Batteries. *Journal of Physical Chemistry Letters*, **2018**, 9, 3333-3339	6.4	38
65	Dual phase enhanced superior electrochemical performance of nanoporous bismuth-tin alloy anodes for magnesium-ion batteries. *Energy Storage Materials*, **2018**, 14, 351-360	19.4	48
64	Core-Shell Structured NiCo2O4@FeOOH Nanowire Arrays as Bifunctional Electrocatalysts for Efficient Overall Water Splitting. *ChemCatChem*, **2018**, 10, 4119-4125	5.2	22
63	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
62	Mechanistic origin of low polarization in aprotic Na-O batteries. *Physical Chemistry Chemical Physics*, **2017**, 19, 12375-12383	3.6	17
61	LiO: Cryosynthesis and Chemical/Electrochemical Reactivities. *Journal of Physical Chemistry Letters*, **2017**, 8, 2334-2338	6.4	55
60	Decomposing lithium carbonate with a mobile catalyst. *Nano Energy*, **2017**, 36, 390-397	17.1	46
59	Understanding oxygen electrochemistry in aprotic Li O2 batteries. *Green Energy and Environment*, **2017**, 2, 186-203	5.7	49
58	Hierarchical Porous Carbon Spheres for High-Performance Na-O Batteries. *Advanced Materials*, **2017**, 29, 1606816	24	70
57	Tungsten diselenide nanoplates as advanced lithium/sodium ion electrode materials with different storage mechanisms. *Nano Research*, **2017**, 10, 2584-2598	10	51
56	Recent Advances in Li Anode for Aprotic Li-O2 Batteries. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2017**, 33, 486-499	3.8	8
55	A High-Performance Li-O Battery with a Strongly Solvating Hexamethylphosphoramide Electrolyte and a LiPON-Protected Lithium Anode. *Advanced Materials*, **2017**, 29, 1701568	24	123

54	The origin of potential rise during charging of Li-O2 batteries. *Science China Chemistry*, **2017**, 60, 1527-1532	7.3	12
53	Monodispersed Ru Nanoparticles Functionalized Graphene Nanosheets as Efficient Cathode Catalysts for O-Assisted Li-CO Battery. *ACS Omega*, **2017**, 2, 9280-9286	3.9	47
52	Amorphous Li2O2: Chemical Synthesis and Electrochemical Properties. *Angewandte Chemie*, **2016**, 128, 10875-10879	3.6	28
51	Spectroscopic Identification of the Au-C Bond Formation upon Electroreduction of an Aryl Diazonium Salt on Gold. *Langmuir*, **2016**, 32, 11514-11519	4	11
50	Understanding oxygen reactions in aprotic Li-O 2 batteries. *Chinese Physics B*, **2016**, 25, 018204	1.2	9
49	Dealloyed silver nanoparticles as efficient catalyst towards oxygen reduction in alkaline solution. *Chemical Research in Chinese Universities*, **2016**, 32, 106-111	2.2	3
48	Potential-Dependent Generation of O2 and LiO2 and Their Critical Roles in O2 Reduction to Li2O2 in Aprotic Li-O2 Batteries. *Journal of Physical Chemistry C*, **2016**, 120, 3690-3698	3.8	121
47	Hierarchically nanoporous nickel-based actuators with giant reversible strain and ultrahigh work density. *Journal of Materials Chemistry C*, **2016**, 4, 45-52	7.1	29
46	Identifying Reactive Sites and Transport Limitations of Oxygen Reactions in Aprotic Lithium-O2 Batteries at the Stage of Sudden Death. *Angewandte Chemie*, **2016**, 128, 5287-5291	3.6	19
45	Identifying Reactive Sites and Transport Limitations of Oxygen Reactions in Aprotic Lithium-O2 Batteries at the Stage of Sudden Death. *Angewandte Chemie - International Edition*, **2016**, 55, 5201-5	16.4	128
44	Identifying a Stable Counter/Reference Electrode for the Study of Aprotic Na-O2Batteries. *Journal of the Electrochemical Society*, **2016**, 163, A1270-A1274	3.9	13
43	Unraveling the catalytic activities of ruthenium nanocrystals in high performance aprotic Li-O2 batteries. *Nano Energy*, **2016**, 28, 486-494	17.1	46
42	Ruthenium nanocrystal decorated vertical graphene nanosheets@Ni foam as highly efficient cathode catalysts for lithium-oxygen batteries. *NPG Asia Materials*, **2016**, 8, e286-e286	10.3	39
41	Amorphous Li2 O2 : Chemical Synthesis and Electrochemical Properties. *Angewandte Chemie - International Edition*, **2016**, 55, 10717-21	16.4	106
40	Metal-Organic Framework-Induced Synthesis of Ultrasmall Encased NiFe Nanoparticles Coupling with Graphene as an Efficient Oxygen Electrode for a Rechargeable Zn-Air Battery. *ACS Catalysis*, **2016**, 6, 6335-6342	13.1	167
39	Polyphenylene Wrapped Sulfur/Multi-Walled Carbon Nano-Tubes via Spontaneous Grafting of Diazonium Salt for Improved Electrochemical Performance of Lithium-Sulfur Battery. *Electrochimica Acta*, **2015**, 165, 136-141	6.7	27
38	[001] preferentially-oriented 2D tungsten disulfide nanosheets as anode materials for superior lithium storage. *Journal of Materials Chemistry A*, **2015**, 3, 17811-17819	13	50
37	Li 2 O 2 oxidation: the charging reaction in the aprotic Li-O 2 batteries. *Science Bulletin*, **2015**, 60, 1227-1234	2.6	14

36	Reversibility of Noble Metal-Catalyzed Aprotic Li-O Batteries. *Nano Letters*, **2015**, 15, 8084-90	11.5	139
35	Unlocking the energy capabilities of micron-sized LiFePO4. *Nature Communications*, **2015**, 6, 7898	17.4	51
34	A Carbon- and Binder-Free Nanostructured Cathode for High-Performance Nonaqueous Li-O Battery. *Advanced Science*, **2015**, 2, 1500092	13.6	65
33	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. *Angewandte Chemie*, **2015**, 127, 8283-8286	3.6	19
32	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. *Angewandte Chemie - International Edition*, **2015**, 54, 8165-8	16.4	64
31	Enhanced methanol electro-oxidation and oxygen reduction reaction performance of ultrafine nanoporous platinum opper alloy: Experiment and density functional theory calculation. *Journal of Power Sources*, **2015**, 279, 334-344	8.9	48
30	NiO nanorod array anchored Ni foam as a binder-free anode for high-rate lithium ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 20022-20029	13	77
29	A stable cathode for the aprotic Li-O2 battery. *Nature Materials*, **2013**, 12, 1050-6	27	617
28	The carbon electrode in nonaqueous Li-O2 cells. *Journal of the American Chemical Society*, **2013**, 135, 494-500	16.4	1014
27	Charging a Li-O battery using a redox mediator. *Nature Chemistry*, **2013**, 5, 489-94	17.6	675
26	Li-O2 battery with a dimethylformamide electrolyte. *Journal of the American Chemical Society*, **2012**, 134, 7952-7	16.4	319
25	A reversible and higher-rate Li-O2 battery. *Science*, **2012**, 337, 563-6	33.3	1559
24	Reactions in the rechargeable lithium-O2 battery with alkyl carbonate electrolytes. *Journal of the American Chemical Society*, **2011**, 133, 8040-7	16.4	1049
23	Oxygen Reactions in a Non-Aqueous Li+ Electrolyte. *Angewandte Chemie*, **2011**, 123, 6475-6479	3.6	118
22	Oxygen reactions in a non-aqueous Li+ electrolyte. *Angewandte Chemie - International Edition*, **2011**, 50, 6351-5	16.4	472
21	One-pot synthesis of carbon nanotube-polyaniline-gold nanoparticle and carbon nanotube-gold nanoparticle composites by using aromatic amine chemistry. *Langmuir*, **2008**, 24, 8971-5	4	25
20	Covalent Sidewall Functionalization of Carbon Nanotubes by a ormation Degradation Approach. *Chemistry of Materials*, **2008**, 20, 6068-6075	9.6	33
19	Thermoresponsive polymer-stabilized silver nanoparticles. *Journal of Colloid and Interface Science*, **2008**, 319, 175-81	9.3	43

18	Micelle-assisted one-pot synthesis of water-soluble polyaniline-gold composite particles. *Langmuir*, **2006**, 22, 10915-8	4	68
17	Laser-assisted synthesis of Au-Ag alloy nanoparticles in solution. *Journal of Physical Chemistry B*, **2006**, 110, 2549-54	3.4	92
16	Size-dependent aggregates of gold nanoparticles induced by a bimolecular fork. *New Journal of Chemistry*, **2005**, 29, 1004	3.6	3
15	Photofragmentation of phase-transferred gold nanoparticles by intense pulsed laser light. *Journal of Physical Chemistry B*, **2005**, 109, 15735-40	3.4	35
14	Atomic Force Microscopic and Electrochemical Investigations of an Electrostatically Fabricated Single-Wall Carbon Nanotubes Modified Electrode. *Electroanalysis*, **2005**, 17, 59-64	3	7
13	Influence of intense pulsed laser irradiation on optical and morphological properties of gold nanoparticle aggregates produced by surface acid-base reactions. *Langmuir*, **2005**, 21, 4249-53	4	35
12	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
11	Preparation of a phosphopolyoxomolybdate $P_2Mo_{18}O_{62}$ doped polypyrrole modified electrode and its catalytic properties. *Journal of Electroanalytical Chemistry*, **2004**, 566, 63-71	4.1	23
10	Surface charge influence on the surface plasmon absorbance of electroactive thiol-protected gold nanoparticles. *Langmuir*, **2004**, 20, 2519-22	4	24
9	Loosely packed self-assembled monolayer of N-hexadecyl-3,6-di(p-mercaptophenylacetylene)carbazole on gold and its application in biomimetic membrane research. *Langmuir*, **2004**, 20, 10992-7	4	7
8	Immobilization of the nanoparticle monolayer onto self-assembled monolayers by combined sterically enhanced hydrophobic and electrophoretic forces. *Langmuir*, **2004**, 20, 5-10	4	21
7	Selective Penetration of Liquid-Phase Organic Probe Molecules into SAM of 2-Mercapto-3-n-octylthiophene. *Journal of the Electrochemical Society*, **2003**, 150, E197	3.9	5
6	Incorporation of surface-derivatized gold nanoparticles into electrochemically generated polymer films. *Electrochemistry Communications*, **2002**, 4, 210-213	5.1	33
5	Conformation change of horseradish peroxidase in lipid membrane. *Chemistry and Physics of Lipids*, **2002**, 120, 119-29	3.7	30
4	Formation of a Supported Hybrid Bilayer Membrane on Gold: A Sterically Enhanced Hydrophobic Effect. *Langmuir*, **2002**, 18, 4834-4839	4	31
3	Electrochemistry and spectroscopy study on the interaction of microperoxidase-11 with lipid membrane. *Biophysical Chemistry*, **2001**, 94, 165-73	3.5	19
2	Formation of a Self-Assembled Monolayer of 2-Mercapto-3-n-octylthiophene on Gold. *Langmuir*, **2001**, 17, 4904-4909	4	23
1	Oriented polyoxometalate/polycation multilayers on a carbon substrate. *Journal of Materials Chemistry*, **2000**, 10, 2727-2733		29