Peng Zhang

List of Publications by Year
in descending order

29	2,084	361413	477307
papers	citations	20 h-index	29 g-index

29	29	29	2847
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Functional and stability orientation synthesis of materials and structures in aprotic Liâ€“O₂batteries. Chemical Society Reviews, 2018, 47, 2921-3004.	38.1	282
2	Atomically dispersed cobalt catalyst anchored on nitrogen-doped carbon nanosheets for lithium-oxygen batteries. Nature Communications, 2020, 11, 1576.	12.8	237
3	3D Hierarchical Co/CoOâ€Grapheneâ€Carbonized Melamine Foam as a Superior Cathode toward Longâ€Life Lithium Oxygen Batteries. Advanced Functional Materials, 2016, 26, 1354-1364.	14.9	206
4	Nitrogenâ€Doped Cobalt Pyrite Yolkâ€“Shell Hollow Spheres for Longâ€Life Rechargeable Znâ€“Air Batteries. Advanced Science, 2020, 7, 2001178.	11.2	206
5	The role of oxygen vacancies in improving the performance of CoO as a bifunctional cathode catalyst for rechargeable Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2015, 3, 17598-17605.	10.3	155
6	Hierarchical NiCo₂S₄@NiO Coreâ€“Shell Heterostructures as Catalytic Cathode for Longâ€Life Liâ€O₂ Batteries. Advanced Energy Materials, 2019, 9, 1900788.	19.5	124
7	Free-Standing Three-Dimensional Graphene/Manganese Oxide Hybrids As Binder-Free Electrode Materials for Energy Storage Applications. ACS Applied Materials & Interfaces, 2014, 6, 11665-11674.	8.0	110
8	Morphology Engineering of Co₃O₄ Nanoarrays as Free-Standing Catalysts for Lithiumâ€“Oxygen Batteries. ACS Applied Materials & Interfaces, 2016, 8, 23713-23720.	8.0	82
9	Promoting Surface-Mediated Oxygen Reduction Reaction of Solid Catalysts in Metalâ€“O₂ Batteries by Capturing Superoxide Species. Journal of the American Chemical Society, 2019, 141, 6263-6270.	13.7	69
10	Challenges and Strategy on Parasitic Reaction for Highâ€Performance Nonaqueous Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2020, 10, 2001789.	19.5	62
11	Realizing the Embedded Growth of Large Li₂O₂ Aggregations by Matching Different Metal Oxides for Highâ€Capacity and Highâ€Rate Lithium Oxygen Batteries. Advanced Science, 2017, 4, 1700172.	11.2	59
12	The controlled growth of porous Î´-MnO2nanosheets on carbon fibers as a bi-functional catalyst for rechargeable lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 10811-10818.	10.3	55
13	Bifunctional Catalytic Activity Guided by Rich Crystal Defects in Ti₃C₂ MXene Quantum Dot Clusters for Liâ€“O₂ Batteries. Advanced Energy Materials, 2021, 11, 2003069.	19.5	52
14	A Liquid/Liquid Electrolyte Interface that Inhibits Corrosion and Dendrite Growth of Lithium in Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 6397-6405.	13.8	50
15	Highly Conductive Mo₂C Nanofibers Encapsulated in Ultrathin MnO₂ Nanosheets as a Self-Supported Electrode for High-Performance Capacitive Energy Storage. ACS Applied Materials & Interfaces, 2016, 8, 32460-32467.	8.0	49
16	Oneâ€Step Route Synthesized Co₂P/Ru/Nâ€Doped Carbon Nanotube Hybrids as Bifunctional Electrocatalysts for Highâ€Performance Liâ€“O₂ Batteries. Small, 2019, 15, e1900001.	10.0	48
17	Hierarchical porous nitrogen doped three-dimensional graphene as a free-standing cathode for rechargeable lithium-oxygen batteries. Electrochimica Acta, 2016, 191, 90-97.	5.2	43
18	Synthesis of Porous Î´â€MnO₂ Submicron Tubes as Highly Efficient Electrocatalyst for Rechargeable Liâ€“O₂ Batteries. ChemSusChem, 2015, 8, 1972-1979.	6.8	42

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19	Revealing the Intrinsic Atomic Structure and Chemistry of Amorphous LiO₂-Containing Products in Liâ€“O₂ Batteries Using Cryogenic Electron Microscopy. Journal of the American Chemical Society, 2022, 144, 2129-2136.	13.7	28
20	Inhibition of Discharge Side Reactions by Promoting Solution-Mediated Oxygen Reduction Reaction with Stable Quinone in Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2020, 12, 10607-10615.	8.0	23
21	Decomposition pathway and stabilization of ether-based electrolytes in the discharge process of Li-O2 battery. Journal of Energy Chemistry, 2022, 69, 516-523.	12.9	20
22	A Liquid/Liquid Electrolyte Interface that Inhibits Corrosion and Dendrite Growth of Lithium in Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 6459-6467.	2.0	14
23	Vacancy Defect-Rich Perovskite SrTiO₃/Ti₃C₂ Heterostructures In Situ Derived from Ti₃C₂ MXenes with Exceptional Oxygen Catalytic Activity for Advanced Znâ€“Air Batteries. ACS Applied Energy Materials, 2022, 5, 6100-6109.	5.1	14
24	Porous hollow ZnCo2S4 nanosheet arrays derived from metal-organic framework as efficient cathode for lithium oxygen batteries. Journal of Alloys and Compounds, 2021, 860, 157656.	5.5	13
25	Greatly promoted oxygen reduction reaction activity of solid catalysts by regulating the stability of superoxide in metal-O2 batteries. Science China Materials, 2021, 64, 870-879.	6.3	12
26	Electrochemical Oxidation of Li₂O₂ Surface-Doped with Li₂CO₃. ACS Applied Materials & Interfaces, 2020, 12, 6627-6632.	8.0	11
27	Heteroatom Doping-Induced Defected Co₃O₄ Electrode for High-Performance Lithium Oxygen Battery. ACS Applied Energy Materials, 2022, 5, 3359-3368.	5.1	9
28	LiOH: A â€œdouble-edgedâ€•effect toward electrochemical oxidation of Li2O2. Journal of Energy Chemistry, 2021, 57, 401-405.	12.9	6
29	Unraveling the decomposition mechanism of Li2CO3 in the aprotic medium by isotope-labeled differential electrochemical mass spectrometry. Journal of Energy Chemistry, 2022, 73, 1-4.	12.9	3