Tao Sun

List of Publications by Year
in descending order

34 papers	3,263 citations	279798 23 h-index	361022 35 g-index
36 all docs	36 docs citations	36 times ranked	4398 citing authors

#	Article	IF	Citations
1	Significant Contribution of Intrinsic Carbon Defects to Oxygen Reduction Activity. ACS Catalysis, 2015, 5, 6707-6712.	11.2	519
2	Scalable two-step annealing method for preparing ultra-high-density single-atom catalyst libraries. Nature Nanotechnology, 2022, 17, 174-181.	31.5	279
3	Compressing Carbon Nanocages by Capillarity for Optimizing Porous Structures toward Ultrahighâ€Volumetricâ€Performance Supercapacitors. Advanced Materials, 2017, 29, 1700470.	21.0	243
4	Oxygenâ€Functionalized Ultrathin Ti₃C₂T_{<i>x</i>} MXene for Enhanced Electrocatalytic Hydrogen Evolution. ChemSusChem, 2019, 12, 1368-1373.	6.8	204
5	B, N Codoped and Defectâ€Rich Nanocarbon Material as a Metalâ€Free Bifunctional Electrocatalyst for Oxygen Reduction and Evolution Reactions. Advanced Science, 2018, 5, 1800036.	11.2	202
6	Efficient Hydrogen Evolution of Oxidized Niâ€N₃ Defective Sites for Alkaline Freshwater and Seawater Electrolysis. Advanced Materials, 2021, 33, e2003846.	21.0	198
7	Design of Local Atomic Environments in Singleâ€Atom Electrocatalysts for Renewable Energy Conversions. Advanced Materials, 2021, 33, e2003075.	21.0	187
8	Engineering the Electronic Structure of MoS₂ Nanorods by N and Mn Dopants for Ultra-Efficient Hydrogen Production. ACS Catalysis, 2018, 8, 7585-7592.	11.2	180
9	Alloyed Coâ€“Mo Nitride as High-Performance Electrocatalyst for Oxygen Reduction in Acidic Medium. ACS Catalysis, 2015, 5, 1857-1862.	11.2	172
10	Recent advances in Fe (or Co)/N/C electrocatalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells. Journal of Materials Chemistry A, 2017, 5, 18933-18950.	10.3	146
11	Photocatalytic Reduction of CO2 into Methanol over Ag/TiO2 Nanocomposites Enhanced by Surface Plasmon Resonance. Plasmonics, 2014, 9, 61-70.	3.4	117
12	Defect chemistry in 2D materials for electrocatalysis. Materials Today Energy, 2019, 12, 215-238.	4.7	110
13	Engineering the Coordination Environment of Single Cobalt Atoms for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. ACS Catalysis, 2021, 11, 4498-4509.	11.2	94
14	Tuning the Spin Density of Cobalt Single-Atom Catalysts for Efficient Oxygen Evolution. ACS Nano, 2021, 15, 7105-7113.	14.6	90
15	Highâ€Yield Electrochemical Production of Largeâ€Sized and Thinly Layered NiPS₃ Flakes for Overall Water Splitting. Small, 2019, 15, e1902427.	10.0	62
16	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metalâ€Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. Chemistry - A European Journal, 2016, 22, 10326-10329.	3.3	59
17	Is iron nitride or carbide highly active for oxygen reduction reaction in acidic medium?. Catalysis Science and Technology, 2017, 7, 51-55.	4.1	50
18	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metal-Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. Chemistry - A European Journal, 2016, 22, 10261-10261.	3.3	40

#	Article	IF	Citations
19	S-doped mesoporous nanocomposite of HTiNbO₅ nanosheets and TiO₂ nanoparticles with enhanced visible light photocatalytic activity. Physical Chemistry Chemical Physics, 2016, 18, 801-810.	2.8	38
20	Tailoring the nano heterointerface of hematite/magnetite on hierarchical nitrogen-doped carbon nanocages for superb oxygen reduction. Journal of Materials Chemistry A, 2018, 6, 21313-21319.	10.3	34
21	Manganese oxide-induced strategy to high-performance iron/nitrogen/carbon electrocatalysts with highly exposed active sites. Nanoscale, 2016, 8, 8480-8485.	5.6	33
22	Alcohol-Tolerant Platinum Electrocatalyst for Oxygen Reduction by Encapsulating Platinum Nanoparticles inside Nitrogen-Doped Carbon Nanocages. ACS Applied Materials & Interfaces, 2016, 8, 16664-16669.	8.0	28
23	Superionic conductor-mediated growth of ternary ZnCdS nanorods over a wide composition range. Nano Research, 2015, 8, 584-591.	10.4	26
24	0D/2D Co_{0.85}Se/TiO₂ pâ€“n heterojunction for enhanced photocatalytic H₂ evolution. Catalysis Science and Technology, 2022, 12, 4893-4902.	4.1	20
25	A targeted drug delivery system based on folic acid-functionalized upconversion luminescent nanoparticles. Journal of Biomaterials Applications, 2017, 31, 1247-1256.	2.4	19
26	Chemical design and synthesis of superior single-atom electrocatalysts <i>via in situ</i> polymerization. Journal of Materials Chemistry A, 2020, 8, 17683-17690.	10.3	19
27	Advanced non-precious electrocatalyst of the mixed valence CoO x nanocrystals supported on N-doped carbon nanocages for oxygen reduction. Science China Chemistry, 2015, 58, 180-186.	8.2	17
28	Nitrogen-doped 3D nanocarbon with nanopore defects as high-capacity and stable anode materials for sodium/lithium-ion batteries. Materials Today Energy, 2020, 16, 100395.	4.7	17
29	Degradation Chemistry and Kinetic Stabilization of Magnetic CrI₃. Journal of the American Chemical Society, 2022, 144, 5295-5303.	13.7	13
30	Amorphous CoS_{<i>x</i>} decorated Cd_{0.5}Zn_{0.5}S with a bulk-twinned homojunction for efficient photocatalytic hydrogen evolution. Catalysis Science and Technology, 2022, 12, 3165-3174.	4.1	12
31	Hydrogen Bond Interaction in the Tradeâ€Off Between Electrolyte Voltage Window and Supercapacitor Lowâ€Temperature Performances. ChemSusChem, 2022, 15, .	6.8	10
32	Graphitic C3N4@MWCNTs supported Mn3O4 as a novel electrocatalyst for the oxygen reduction reaction in zincâ€“air batteries. Journal of Solid State Electrochemistry, 2016, 20, 2685-2692.	2.5	9
33	Assessing the Maximum Power and Consistency of Carbon Supercapacitors Through a Facile Practical Strategy. ACS Sustainable Chemistry and Engineering, 2020, 8, 12430-12436.	6.7	7
34	Morphology and composition evolution of one-dimensional InxAl1âˆ’xN nanostructures induced by the vapour pressure ratio. CrystEngComm, 2016, 18, 213-217.	2.6	3