## **Sheng Zhang**

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

63
papers
7,971
citations

8,840
ext. papers

8,840
ext. citations

10.5
avg, IF

69
L-index

#	Paper	IF	Citations
63	Nitrogen-doped graphene and its electrochemical applications. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 7491		934
62	Nanostructured tin catalysts for selective electrochemical reduction of carbon dioxide to formate. Journal of the American Chemical Society, <b>2014</b> , 136, 1734-7	16.4	821
61	Polyethylenimine-enhanced electrocatalytic reduction of COIto formate at nitrogen-doped carbon nanomaterials. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 7845-8	16.4	500
60	Nitrogen-doped colloidal graphene quantum dots and their size-dependent electrocatalytic activity for the oxygen reduction reaction. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 18932-5	16.4	478
59	Edge-selectively sulfurized graphene nanoplatelets as efficient metal-free electrocatalysts for oxygen reduction reaction: the electron spin effect. <i>Advanced Materials</i> , <b>2013</b> , 25, 6138-45	24	465
58	Ionic liquids for energy, materials, and medicine. <i>Chemical Communications</i> , <b>2014</b> , 50, 9228-50	5.8	396
57	Highly durable graphene nanoplatelets supported Pt nanocatalysts for oxygen reduction. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 4600-4605	8.9	345
56	Effect of carbon black support corrosion on the durability of Pt/C catalyst. <i>Journal of Power Sources</i> , <b>2007</b> , 171, 331-339	8.9	343
55	Graphene Decorated with PtAu Alloy Nanoparticles: Facile Synthesis and Promising Application for Formic Acid Oxidation. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 1079-1081	9.6	342
54	Facile, scalable synthesis of edge-halogenated graphene nanoplatelets as efficient metal-free eletrocatalysts for oxygen reduction reaction. <i>Scientific Reports</i> , <b>2013</b> , 3, 1810	4.9	278
53	Polyelectrolyte-induced reduction of exfoliated graphite oxide: a facile route to synthesis of soluble graphene nanosheets. <i>ACS Nano</i> , <b>2011</b> , 5, 1785-91	16.7	274
52	Electrostatic self-assembly of a Pt-around-Au nanocomposite with high activity towards formic acid oxidation. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 2211-4	16.4	270
51	Self assembly of acetylcholinesterase on a gold nanoparticles@raphene nanosheet hybrid for organophosphate pesticide detection using polyelectrolyte as a linker. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 5319		196
50	Rapid selective electrocatalytic reduction of carbon dioxide to formate by an iridium pincer catalyst immobilized on carbon nanotube electrodes. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 8709	-15.4	192
49	CO Reduction: From Homogeneous to Heterogeneous Electrocatalysis. <i>Accounts of Chemical Research</i> , <b>2020</b> , 53, 255-264	24.3	168
48	Recent progress in nanostructured electrocatalysts for PEM fuel cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4631	13	157
47	Carbon nanotubes decorated with Pt nanoparticles via electrostatic self-assembly: a highly active oxygen reduction electrocatalyst. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 2826		144

## (2014-2010)

46	Facile synthesis of PtAu alloy nanoparticles with high activity for formic acid oxidation. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 1103-1106	8.9	119
45	Polymer-supported CuPd nanoalloy as a synergistic catalyst for electrocatalytic reduction of carbon dioxide to methane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 15809-14	11.5	108
44	Single catalyst electrocatalytic reduction of CO2 in water to H2+CO syngas mixtures with water oxidation to O2. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 4007-4012	35.4	104
43	Graphene-polypyrrole nanocomposite as a highly efficient and low cost electrically switched ion exchanger for removing ClOII from wastewater. <i>ACS Applied Materials &amp; Discrete Amp; Interfaces</i> , <b>2011</b> , 3, 3633-7	9.5	89
42	Self-assembly of Pt nanoparticles on highly graphitized carbon nanotubes as an excellent oxygen-reduction catalyst. <i>Applied Catalysis B: Environmental</i> , <b>2011</b> , 102, 372-377	21.8	84
41	Stabilization of platinum nanoparticle electrocatalysts for oxygen reduction using poly(diallyldimethylammonium chloride). <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 7995		82
40	Electrochemical studies of Pt/IrIrO2 electrocatalyst as a bifunctional oxygen electrode. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 59-67	6.7	80
39	Pt/porous-IrO2 nanocomposite as promising electrocatalyst for unitized regenerative fuel cell. <i>Electrochemistry Communications</i> , <b>2012</b> , 14, 63-66	5.1	77
38	Scalable and efficient separation of hydrogen isotopes using graphene-based electrochemical pumping. <i>Nature Communications</i> , <b>2017</b> , 8, 15215	17.4	76
37	Noncovalently functionalized graphitic mesoporous carbon as a stable support of Pt nanoparticles for oxygen reduction. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 1805-1811	8.9	74
36	Rapid Selective Electrocatalytic Reduction of Carbon Dioxide to Formate by an Iridium Pincer Catalyst Immobilized on Carbon Nanotube Electrodes. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 8853-8857	3.6	59
35	Preparation of Pt/Irx(IrO2)10½ bifunctional oxygen catalyst for unitized regenerative fuel cell. <i>Journal of Power Sources</i> , <b>2012</b> , 210, 321-326	8.9	48
34	Low-cost and durable catalyst support for fuel cells: Graphite submicronparticles. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 457-460	8.9	44
33	Polyelectrolyte assisted synthesis and enhanced oxygen reduction activity of Pt nanocrystals with controllable shape and size. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2014</b> , 6, 14043-9	9.5	43
32	Giant photoeffect in proton transport through graphene membranes. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 300-303	28.7	41
31	Role of Pt-pyridinic nitrogen sites in methanol oxidation on Pt/polypyrrole-carbon black Catalyst. <i>Journal of Power Sources</i> , <b>2012</b> , 197, 44-49	8.9	41
30	Perylene Monolayer Protected Gold Nanorods: Unique Optical, Electronic Properties and Self-Assemblies. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 10396-10404	3.8	40
29	Pt/Tin Oxide/Carbon Nanocomposites as Promising Oxygen Reduction Electrocatalyst with Improved Stability and Activity. <i>Electrochimica Acta</i> , <b>2014</b> , 117, 413-419	6.7	35

28	PtfGOTiO2 nanocomposite by UV-photoreduction method as promising electrocatalyst for methanol oxidation. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 12310-12317	6.7	32
27	Perfect proton selectivity in ion transport through two-dimensional crystals. <i>Nature Communications</i> , <b>2019</b> , 10, 4243	17.4	31
26	IrO2-graphene hybrid as an active oxygen evolution catalyst for water electrolysis. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 9217-9222	6.7	29
25	Surface-functionalized palladium catalysts for electrochemical CO2 reduction. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 15884-15890	13	28
24	Effects and Mechanism Research of the Desilication Pretreatment for High-Aluminum Fly Ash. <i>Energy &amp; Desilication Pretreatment for High-Aluminum Fly Ash.</i>	4.1	28
23	First-row transition metal oxide oxygen evolution electrocatalysts: regulation strategies and mechanistic understandings. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 5417-5432	5.8	28
22	Atomically thin micas as proton-conducting membranes. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 962-966	28.7	26
21	Effect of Se in Co-based selenides towards oxygen reduction electrocatalytic activity. <i>Journal of Power Sources</i> , <b>2012</b> , 206, 103-107	8.9	25
20	Electrostatic Self-Assembly of a Pt-around-Au Nanocomposite with High Activity towards Formic Acid Oxidation. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 2257-2260	3.6	24
19	Tungsten doped CoBe nanocomposites as an efficient non precious metal catalyst for oxygen reduction. <i>Electrochimica Acta</i> , <b>2013</b> , 91, 179-184	6.7	23
18	A Facile Route to Fabricate Effective Pt/IrO2 Bifunctional Catalyst for Unitized Regenerative Fuel Cell. <i>Catalysis Letters</i> , <b>2014</b> , 144, 242-247	2.8	20
17	Self-healing polyelectrolyte complex coating for flame retardant flexible polyurethane foam with enhanced mechanical property. <i>Composites Part B: Engineering</i> , <b>2021</b> , 219, 108886	10	19
16	Stable Surface-Anchored Cu Nanocubes for CO2 Electroreduction to Ethylene. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 8328-8334	5.6	15
15	Highly efficient CO2 electrolysis within a wide operation window using octahedral tin oxide single crystals. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 7848-7856	13	15
14	In situ ion exchange preparation of Pt/carbon nanotubes electrode: Effect of two-step oxidation of carbon nanotubes. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 9955-9960	8.9	11
13	Graphene Quantum Dots: Syntheses, Properties, and Biological Applications <b>2016</b> , 171-192		9
12	Tuning the electronic structure of platinum nanocrystals towards high efficient ethanol oxidation. <i>Chinese Journal of Catalysis</i> , <b>2019</b> , 40, 1904-1911	11.3	7
11	Investigation on the durability of direct dimethyl ether fuel cell. Part I: Anode degradation. <i>Journal of Power Sources</i> , <b>2012</b> , 198, 170-175	8.9	7

## LIST OF PUBLICATIONS

10	Recent Advances in Electrochemical CO2 Reduction Using CopperBased Catalysts. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , <b>2020</b> , 2006034-0	3.8	7	
9	Revisiting Chlor-Alkali Electrolyzers: from Materials to Devices. <i>Transactions of Tianjin University</i> , <b>2021</b> , 27, 202-216	2.9	7	
8	3D-niobium oxide supported platinum as an effective and durable oxygen reduction catalyst. <i>Catalysis Communications</i> , <b>2015</b> , 68, 67-72	3.2	6	
7	Nanoporous tin oxides for efficient electrochemical CO2 reduction to formate. <i>Green Chemical Engineering</i> , <b>2021</b> ,	3	6	
6	2D surface induced self-assembly of Pd nanocrystals into nanostrings for enhanced formic acid electrooxidation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 17128-17135	13	5	
5	Heteroatom-Doped Carbon Nanotubes as Advanced Electrocatalysts for Oxygen Reduction Reaction <b>2015</b> , 1-16		3	
4	Metal-Free Electrocatalysts for Oxygen Reduction. Lecture Notes in Energy, 2013, 375-389	0.4	3	
3	Boosting oxygen evolution over inverse spinel Fe-Co-Mn oxide nanocubes through electronic structure engineering. <i>Chemical Engineering Journal</i> , <b>2022</b> , 433, 134446	14.7	3	
2	Niobium Dioxide Facilitating Methanol Electrooxidation on Pt/C Catalyst by Synergistic Effect. <i>Fuel Cells</i> , <b>2013</b> , 13, n/a-n/a	2.9	2	
1	Efficient electrochemical reduction of CO promoted by the electrospun CuS/Cu tandem catalyst. <i>Nanoscale</i> , <b>2021</b> , 13, 16986-16994	7.7	0	