

# Liuxuan Luo

## List of Publications by Year in descending order

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36  
papers

789  
citations

471509

17  
h-index

526287

27  
g-index

36  
all docs

36  
docs citations

36  
times ranked

763  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lithium-ion modified cellulose as a water-soluble binder for Li-O <sub>2</sub> battery. <i>Frontiers in Energy</i> , 2022, 16, 502-508.	2.3	4
2	Hydrogen-assisted scalable preparation of ultrathin Pt shells onto surfactant-free and uniform Pd nanoparticles for highly efficient oxygen reduction reaction in practical fuel cells. <i>Nano Research</i> , 2022, 15, 1892-1900.	10.4	27
3	Evaluation of Electrocatalytic Activity of Noble Metal Catalysts Toward Nitrogen Reduction Reaction in Aqueous Solutions under Ambient Conditions. <i>ChemSusChem</i> , 2022, 15, .	6.8	12
4	Insight into the potential strategies for mitigating Pt degradation in proton exchange membrane fuel cells (PEMFCs): From the perspective of Pt ion transport. <i>Journal of Power Sources</i> , 2022, 522, 230999.	7.8	9
5	Electronic and Potential Synergistic Effects of Surface-Doped P=O Species on Uniform Pd Nanospheres: Breaking the Linear Scaling Relationship toward Electrochemical Oxygen Reduction. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 14146-14156.	8.0	8
6	Rapid flame synthesis of carbon doped defective ZnO for electrocatalytic CO <sub>2</sub> reduction to syngas. <i>Electrochimica Acta</i> , 2022, 411, 140098.	5.2	11
7	Perspectives on Challenges and Achievements in Local Oxygen Transport of Low Pt Proton Exchange Membrane Fuel Cells. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	25
8	Electrochemical CO <sub>2</sub> separation by a shorted membrane. <i>Joule</i> , 2022, 6, 720-722.	24.0	4
9	Platinum-Based Nanocomposite Pt@BSA as an Efficient Electrochemical Biosensing Interface for Rapid and Ultrasensitive Determination of Folate Receptor-Positive Tumor Cells. <i>ACS Applied Bio Materials</i> , 2022, 5, 3038-3048.	4.6	4
10	Breaking the scaling relationship of ORR on carbon-based single-atom catalysts through building a local collaborative structure. <i>Catalysis Science and Technology</i> , 2021, 11, 7764-7772.	4.1	14
11	Potential-Dependent Mechanistic Study of Ethanol Electro-oxidation on Palladium. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 16602-16610.	8.0	20
12	An In-Depth Theoretical Exploration of Influences of Non-Metal Elements Doping on the ORR Performance of Co <sub>4</sub> N. <i>ChemCatChem</i> , 2021, 13, 2303-2310.	3.7	12
13	Interaction of Ammonia with Nafion and Electrolyte in Electrocatalytic Nitrogen Reduction Study. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6861-6866.	4.6	15
14	Theoretical Exploration of the Thermodynamic Process Competition between NRR and HER on Transition-Metal-Doped CoP (101) Facets. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17051-17057.	3.1	15
15	Lithium-mediated electrochemical nitrogen reduction: Mechanistic insights to enhance performance. <i>IScience</i> , 2021, 24, 103105.	4.1	50
16	Electrodeposited PtNi nanoparticles towards oxygen reduction reaction: A study on nucleation and growth mechanism. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2068-2077.	14.0	11
17	Microstructures and Proton Networks of Ionomer Film on the Surface of Platinum Single Atom Catalyst in Polymer Electrolyte Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2021, 125, 24240-24248.	3.1	8
18	Composition-Graded Cu-Pd Nanospheres with Ir-Doped Surfaces on N-Doped Porous Graphene for Highly Efficient Ethanol Electro-Oxidation in Alkaline Media. <i>ACS Catalysis</i> , 2020, 10, 1171-1184.	11.2	98

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19	Comparative Investigation on the Activity Degradation Mechanism of Pt/C and PtCo/C Electrocatalysts in PEMFCs during the Accelerate Degradation Process Characterized by an in Situ X-ray Absorption Fine Structure. <i>ACS Catalysis</i> , 2020, 10, 604-612.	11.2	40
20	Probing structure-designed Cu@Pd nanospheres and their Pt-monolayer-shell derivatives as high-performance electrocatalysts for alkaline and acidic oxygen reduction reactions. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22389-22400.	10.3	22
21	First-principles study of catalytic activity of W-doped cobalt phosphide toward the hydrogen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1698-1705.	14.0	18
22	Improving the High-Current-Density Performance of PEMFC through Much Enhanced Utilization of Platinum Electrocatalysts on Carbon. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 26076-26083.	8.0	38
23	Promoting Effects of Au Submonolayer Shells on Structure-Designed Cu@Pd/Ir Nanospheres: Greatly Enhanced Activity and Durability for Alkaline Ethanol Electro-Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 25961-25971.	8.0	26
24	A derivative of mesoporous oxygen reduction reaction electrocatalysts from citric acid and dicyandiamide. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 6563-6572.	7.1	5
25	The Asymmetric Effects of Cu <sup>2+</sup> Contamination in a Proton Exchange Membrane Fuel Cell (PEMFC). <i>Fuel Cells</i> , 2020, 20, 196-202.	2.4	18
26	MoS <sub>2</sub> -rGO hybrid architecture as durable support for cathode catalyst in proton exchange membrane fuel cells. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1160-1167.	14.0	15
27	Degradation of core-shell Pt <sub>3</sub> Co catalysts in proton exchange membrane fuel cells (PEMFCs) studied by mathematical modeling. <i>Electrochimica Acta</i> , 2019, 323, 134751.	5.2	22
28	Recent advances in hybrid support material for Pt-based electrocatalysts of proton exchange membrane fuel cells. <i>International Journal of Energy Research</i> , 2019, 43, 2694-2721.	4.5	25
29	Icosahedral Pt@Ni Nanocrystalline Electrocatalyst: Growth Mechanism and Oxygen Reduction Activity. <i>ChemSusChem</i> , 2018, 11, 1015-1019.	6.8	27
30	Comprehensive Analysis on the Highly Active and Stable PdAu/C Electrocatalyst for Ethanol Oxidation Reaction in Alkaline Media. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1604-1611.	3.1	33
31	DMF-Coordination Assisted Electrodeposition of Highly Active PtCo Alloy Catalysts for the Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2018, 165, D43-D49.	2.9	9
32	A perspective on the promoting effect of Ir and Au on Pd toward the ethanol oxidation reaction in alkaline media. <i>Frontiers in Energy</i> , 2018, 12, 501-508.	2.3	5
33	An exploration of the use of Au submonolayer decorated Pd <sub>7</sub> Ir nanoparticles as a highly active electrocatalyst for the ethanol oxidation reaction in alkaline media. <i>Catalysis Science and Technology</i> , 2018, 8, 3465-3468.	4.1	7
34	Enhanced durability of Pt electrocatalyst with tantalum doped titania as catalyst support. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30750-30759.	7.1	46
35	Composition-Graded Pd <sub>x</sub> Ni <sub>1-x</sub> Nanospheres with Pt Monolayer Shells as High-Performance Electrocatalysts for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2017, 7, 5420-5430.	11.2	82
36	Formic Acid Oxidation by Pd Monolayers on Pt <sub>3</sub> Ni Nanocubes. <i>Wuli Huaxue Xuebao/ Acta Physico-Chimica Sinica</i> , 2016, 32, 337-342.	4.9	4