Junyuan Xu

List of Publications by Year
in descending order

56 papers	3,960 citations	126858 33 h-index	149623 56 g-index
57 all docs	57 docs citations	57 times ranked	5397 citing authors

#	Article	IF	Citations
1	Polar Layered Intermetallic LaCo₂P₂ as a Water Oxidation Electrocatalyst. ACS Applied Materials & Interfaces, 2022, 14, 14120-14128.	4.0	4
2	Boosting acidic water oxidation performance by constructing arrays-like nanoporous IrxRu1âˆ’xO2 with abundant atomic steps. Nano Research, 2022, 15, 5933-5939.	5.8	25
3	Iridiumâ€“Iron Diatomic Active Sites for Efficient Bifunctional Oxygen Electrocatalysis. ACS Catalysis, 2022, 12, 9397-9409.	5.5	47
4	Amorphous phosphatized ruthenium-iron bimetallic nanoclusters with Pt-like activity for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2021, 283, 119583.	10.8	78
5	Easy preparation of multifunctional ternary PdNiP/C catalysts toward enhanced small organic molecule electro-oxidation and hydrogen evolution reactions. Journal of Energy Chemistry, 2021, 58, 256-263.	7.1	31
6	Rhodium single-atom catalysts with enhanced electrocatalytic hydrogen evolution performance. New Journal of Chemistry, 2021, 45, 5770-5774.	1.4	13
7	Multifunctional Noble Metal Phosphide Electrocatalysts for Organic Molecule Electro-Oxidation. ACS Applied Energy Materials, 2021, 4, 1593-1600.	2.5	12
8	Atomic-Step Enriched Rutheniumâ€“Iridium Nanocrystals Anchored Homogeneously on MOF-Derived Support for Efficient and Stable Oxygen Evolution in Acidic and Neutral Media. ACS Catalysis, 2021, 11, 3402-3413.	5.5	87
9	Plasma tailoring in WTe2 nanosheets for efficiently boosting hydrogen evolution reaction. Journal of Materials Science and Technology, 2021, 78, 170-175.	5.6	23
10	Oxygen electrochemistry in Liâ€O₂ batteries probed by in situ surfaceâ€enhanced Raman spectroscopy. SusMat, 2021, 1, 345-358.	7.8	31
11	Efficient hydrogen production by saline water electrolysis at high current densities without the interfering chlorine evolution. Journal of Materials Chemistry A, 2021, 9, 22248-22253.	5.2	35
12	Bi-metallic cobalt-nickel phosphide nanowires for electrocatalysis of the oxygen and hydrogen evolution reactions. Catalysis Today, 2020, 358, 196-202.	2.2	46
13	Ultrafine oxygen-defective iridium oxide nanoclusters for efficient and durable water oxidation at high current densities in acidic media. Journal of Materials Chemistry A, 2020, 8, 24743-24751.	5.2	45
14	Bifunctional Porous Cobalt Phosphide Foam for High-Current-Density Alkaline Water Electrolysis with 4000-h Long Stability. ACS Sustainable Chemistry and Engineering, 2020, 8, 10193-10200.	3.2	57
15	Stable overall water splitting in an asymmetric acid/alkaline electrolyzer comprising a bipolar membrane sandwiched by bifunctional cobaltâ€nickel phosphide nanowire electrodes. , 2020, 2, 646-655.		79
16	Strong Electronic Coupling between Ultrafine Iridiumâ€“Ruthenium Nanoclusters and Conductive, Acid-Stable Tellurium Nanoparticle Support for Efficient and Durable Oxygen Evolution in Acidic and Neutral Media. ACS Catalysis, 2020, 10, 3571-3579.	5.5	122
17	Ultrafine-Grained Porous Ir-Based Catalysts for High-Performance Overall Water Splitting in Acidic Media. ACS Applied Energy Materials, 2020, 3, 3736-3744.	2.5	26
18	Mille-CrÃªpe-like Metal Phosphide Nanocrystals/Carbon Nanotube Film Composites as High-Capacitance Negative Electrodes in Asymmetric Supercapacitors. ACS Applied Energy Materials, 2020, 3, 4580-4588.	2.5	19

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19	One-step fabrication of a self-supported Co@CoTe₂ electrocatalyst for efficient and durable oxygen evolution reactions. Inorganic Chemistry Frontiers, 2020, 7, 2523-2532.	3.0	37
20	High-Performance Flexible Solid-State Asymmetric Supercapacitors Based on Bimetallic Transition Metal Phosphide Nanocrystals. ACS Nano, 2019, 13, 10612-10621.	7.3	214
21	Electrocatalytic water oxidation over AlFe₂B₂. Chemical Science, 2019, 10, 2796-2804.	3.7	52
22	Large-Scale Fabrication of Hollow Pt₃Al Nanoboxes and Their Electrocatalytic Performance for Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 9842-9847.	3.2	14
23	NiP₂: A Story of Two Divergent Polymorphic Multifunctional Materials. Chemistry of Materials, 2019, 31, 3407-3418.	3.2	52
24	Polyvinylpyrrolidone-Assisted Hydrothermal Synthesis of CuCoO₂ Nanoplates with Enhanced Oxygen Evolution Reaction Performance. ACS Sustainable Chemistry and Engineering, 2019, 7, 1493-1501.	3.2	48
25	Trends in activity for the oxygen evolution reaction on transition metal (M = Fe, Co, Ni) phosphide pre-catalysts. Chemical Science, 2018, 9, 3470-3476.	3.7	443
26	Boosting the hydrogen evolution performance of ruthenium clusters through synergistic coupling with cobalt phosphide. Energy and Environmental Science, 2018, 11, 1819-1827.	15.6	350
27	Al-Induced In Situ Formation of Highly Active Nanostructured Water-Oxidation Electrocatalyst Based on Ni-Phosphide. ACS Catalysis, 2018, 8, 2595-2600.	5.5	67
28	Template-Free Synthesis of Hollow Iron Phosphideâ€“Phosphate Composite Nanotubes for Use as Active and Stable Oxygen Evolution Electrocatalysts. ACS Applied Nano Materials, 2018, 1, 617-624.	2.4	66
29	Conformal and continuous deposition of bifunctional cobalt phosphide layers on p-silicon nanowire arrays for improved solar hydrogen evolution. Nano Research, 2018, 11, 4823-4835.	5.8	28
30	Highly-ordered silicon nanowire arrays for photoelectrochemical hydrogen evolution: an investigation on the effect of wire diameter, length and inter-wire spacing. Sustainable Energy and Fuels, 2018, 2, 978-982.	2.5	31
31	Hollow cobalt phosphide octahedral pre-catalysts with exceptionally high intrinsic catalytic activity for electro-oxidation of water and methanol. Journal of Materials Chemistry A, 2018, 6, 20646-20652.	5.2	95
32	Cluster Beam Deposition of Ultrafine Cobalt and Ruthenium Clusters for Efficient and Stable Oxygen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 3013-3018.	2.5	29
33	Vaporâ€“solid synthesis of monolithic single-crystalline CoP nanowire electrodes for efficient and robust water electrolysis. Chemical Science, 2017, 8, 2952-2958.	3.7	162
34	Decisive Intermediates Responsible for the Carbonaceous Products of CO₂ Electroâ€reduction on Nitrogenâ€Doped sp² Nanocarbon Catalysts in NaHCO₃ Aqueous Electrolyte. ChemElectroChem, 2017, 4, 1274-1278.	1.7	9
35	Oneâ€Step Fabrication of Monolithic Electrodes Comprising Co₉S₈ Particles Supported on Cobalt Foam for Efficient and Durable Oxygen Evolution Reaction. Chemistry - A European Journal, 2017, 23, 8749-8755.	1.7	64
36	Hydrothermal Synthesis of Monolithic Co₃Se₄ Nanowire Electrodes for Oxygen Evolution and Overall Water Splitting with High Efficiency and Extraordinary Catalytic Stability. Advanced Energy Materials, 2017, 7, 1602579.	10.2	267

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37	In Situ Electrostatic Modulation of Path Selectivity for the Oxygen Reduction Reaction on Feâ€“N Doped Carbon Catalyst. Chemistry of Materials, 2017, 29, 4649-4653.	3.2	23
38	The Coulombic Nature of Active Nitrogen Sites in N-Doped Nanodiamond Revealed In Situ by Ionic Surfactants. ACS Catalysis, 2017, 7, 3295-3300.	5.5	20
39	Enhanced Stability of Immobilized Platinum Nanoparticles through Nitrogen Heteroatoms on Doped Carbon Supports. Chemistry of Materials, 2017, 29, 8670-8678.	3.2	44
40	Interface Engineering in Nanostructured Nickel Phosphide Catalyst for Efficient and Stable Water Oxidation. ACS Catalysis, 2017, 7, 5450-5455.	5.5	74
41	Revealing the Origin of Activity in Nitrogenâ€Doped Nanocarbons towards Electrocatalytic Reduction of Carbon Dioxide. ChemSusChem, 2016, 9, 1085-1089.	3.6	143
42	Tuning the surface structure of supported PtNi_xbimetallic electrocatalysts for the methanol electro-oxidation reaction. Chemical Communications, 2016, 52, 3927-3930.	2.2	17
43	Oxygen breaks into carbon nanotubes and abstracts hydrogen from propane. Carbon, 2016, 96, 631-640.	5.4	38
44	The Effect of Different Phosphorus Chemical States on an Onionâ€like Carbon Surface for the Oxygen Reduction Reaction. ChemSusChem, 2015, 8, 2872-2876.	3.6	29
45	An oxygen evolution catalyst on an antimony doped tin oxide nanowire structured support for proton exchange membrane liquid water electrolysis. Journal of Materials Chemistry A, 2015, 3, 20791-20800.	5.2	79
46	Nanosphere-structured composites consisting of Cs-substituted phosphotungstates and antimony doped tin oxides as catalyst supports for proton exchange membrane liquid water electrolysis. International Journal of Hydrogen Energy, 2014, 39, 1914-1923.	3.8	13
47	Highly active and stable Pt electrocatalysts promoted by antimony-doped SnO2 supports for oxygen reduction reactions. Applied Catalysis B: Environmental, 2014, 144, 112-120.	10.8	85
48	A novel catalyst coated membrane embedded with Cs-substituted phosphotungstates for proton exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2014, 39, 14531-14539.	3.8	14
49	Oxygen evolution catalysts on supports with a 3-D ordered array structure and intrinsic proton conductivity for proton exchange membrane steam electrolysis. Energy and Environmental Science, 2014, 7, 820.	15.6	79
50	Antimony doped tin oxide modified carbon nanotubes as catalyst supports for methanol oxidation and oxygen reduction reactions. Journal of Materials Chemistry A, 2013, 1, 9737.	5.2	38
51	Antimony doped tin oxides and their composites with tin pyrophosphates as catalyst supports for oxygen evolution reaction in proton exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2012, 37, 18629-18640.	3.8	59
52	The electrocatalytic properties of an IrO2/SnO2 catalyst using SnO2 as a support and an assisting reagent for the oxygen evolution reaction. Electrochimica Acta, 2012, 59, 105-112.	2.6	165
53	Microwaveâ€“hydrothermal synthesis of birnessite-type MnO2 nanospheres as supercapacitor electrode materials. Journal of Power Sources, 2012, 198, 428-431.	4.0	141
54	The physicalâ€“chemical properties and electrocatalytic performance of iridium oxide in oxygen evolution. Electrochimica Acta, 2011, 56, 10223-10230.	2.6	34

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55	A novel catalyst layer with hydrophilicâ€“hydrophobic meshwork and pore structure for solid polymer electrolyte water electrolysis. Electrochemistry Communications, 2011, 13, 437-439.	2.3	30
56	The performance and mechanism of multi-step activation of MEA for DMFC. International Journal of Hydrogen Energy, 2010, 35, 12341-12345.	3.8	25