Dehua Xiong

List of Publications by Year
in descending order

87 papers	5,816 citations	108046 37 h-index	84171 75 g-index
90 all docs	90 docs citations	90 times ranked	8596 citing authors

#	Article	IF	Citations
1	CoTe₂â€“NiTe₂ heterojunction directly grown on CoNi alloy foam for efficient oxygen evolution reaction. Inorganic Chemistry Frontiers, 2022, 9, 332-342.	3.0	14
2	Metalâ€“organic framework derived bimetal oxide CuCoO₂ as efficient electrocatalyst for the oxygen evolution reaction. Dalton Transactions, 2022, 51, 5997-6006.	1.6	22
3	Hydrothermal synthesized delafossite CuGaO2 as an electrocatalyst for water oxidation. Frontiers of Optoelectronics, 2022, 15, 1.	1.9	6
4	Effect of nickel doping on the structure, morphology and oxygen evolution reaction performance of Cu-BTC derived CuCoO₂. Dalton Transactions, 2022, 51, 8757-8765.	1.6	9
5	Nanocrystals of CuCoO₂ derived from MOFs and their catalytic performance for the oxygen evolution reaction. Dalton Transactions, 2022, 51, 11536-11546.	1.6	8
6	Improved efficiency and carrier dynamic transportation behavior in perovskite solar cells with CuInS₂ quantum dots as hole-transport materials. Dalton Transactions, 2021, 50, 8837-8844.	1.6	6
7	Self-supported cobaltâ€“nickel bimetallic telluride as an advanced catalyst for the oxygen evolution reaction. Inorganic Chemistry Frontiers, 2021, 8, 4247-4256.	3.0	19
8	Glass forming region and bonding mechanism of lowâ€melting V₂O₅â€“TeO₂â€“Bi₂O₃ glass applied in vacuum glazing sealing. Journal of the American Ceramic Society, 2021, 104, 5050-5066.	1.9	7
9	Controllable synthesis of CdSe/ZnS coreâ€“shell quantum dots by one-step thermal injection and application in light-emitting diodes. Journal of Materials Science: Materials in Electronics, 2021, 32, 22024-22034.	1.1	6
10	Exceptional lithium storage performance achieved by iron-based nanostructures upon extended high-rate cycling. Journal of Alloys and Compounds, 2021, 888, 161626.	2.8	4
11	P-type transparent conducting characteristics of delafossite Ca doped CuScO₂ prepared by hydrothermal synthesis. Dalton Transactions, 2021, 50, 5262-5268.	1.6	10
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	Enhanced vacuum glazing bonding strength by anodic bondingâ€assisted sealing method. International Journal of Applied Glass Science, 2020, 11, 147-154.	1.0	3
14	High-efficient separation of photoinduced carriers on double Z-scheme heterojunction for superior photocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2020, 564, 303-312.	5.0	46
15	Discovery of Realâ€Space Topological Ferroelectricity in Metallic Transition Metal Phosphides. Advanced Materials, 2020, 32, e2003479.	11.1	13
16	Mapping the glass forming region and making their phosphorâ€inâ€glass for application in Wâ€LEDs packaging. Journal of the American Ceramic Society, 2020, 103, 5056-5066.	1.9	11
17	Surfactant-Modified Hydrothermal Synthesis of Ca-Doped CuCoO₂ Nanosheets with Abundant Active Sites for Enhanced Electrocatalytic Oxygen Evolution. Inorganic Chemistry, 2020, 59, 9889-9899.	1.9	23
18	Impact of Mg doping on the optical and electrical properties of p-type CuMnO2 ultrathin nanosheets. Journal of Materials Science: Materials in Electronics, 2020, 31, 5452-5461.	1.1	7

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19	Hydrothermal synthesis of delafossite CuScO₂ hexagonal plates as an electrocatalyst for the alkaline oxygen evolution reaction. Dalton Transactions, 2020, 49, 3519-3524.	1.6	18
20	Self-Epitaxial Hetero-Nanolayers and Surface Atom Reconstruction in Electrocatalytic Nickel Phosphides. ACS Applied Materials & Interfaces, 2020, 12, 21616-21622.	4.0	9
21	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
22	Gradient refractive index structure of phosphorâ€inâ€glass coating for packaging of white <scp>LED</scp>s. Journal of the American Ceramic Society, 2019, 102, 1677-1685.	1.9	17
23	Investigation of the structural, optical and electrical properties of Ca²⁺ doped CuCoO₂ nanosheets. Dalton Transactions, 2019, 48, 13753-13759.	1.6	28
24	Solvothermal synthesis of CuCoO₂ nanoplates using zeolitic imidazolate framework-67 (ZIF-67) as a co-derived precursor. New Journal of Chemistry, 2019, 43, 15233-15239.	1.4	18
25	One-step synthesis of novel Ag/AgCl-glass with remarkably stable photocatalytic activity. Journal of Non-Crystalline Solids, 2019, 506, 21-27.	1.5	5
26	The oxygen evolution reaction enabled by transition metal phosphide and chalcogenide pre-catalysts with dynamic changes. Chemical Communications, 2019, 55, 8744-8763.	2.2	246
27	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
28	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
29	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
30	Synthesis of the 0D/3D CuO/ZnO Heterojunction with Enhanced Photocatalytic Activity. Journal of Physical Chemistry C, 2018, 122, 9531-9539.	1.5	246
31	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
32	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
33	High refractive index coating of phosphor-in-glass for enhanced light extraction efficiency of white LEDs. Journal of Materials Science, 2018, 53, 1335-1345.	1.7	22
34	A low temperature hydrothermal synthesis of delafossite CuCoO₂ as an efficient electrocatalyst for the oxygen evolution reaction in alkaline solutions. Inorganic Chemistry Frontiers, 2018, 5, 183-188.	3.0	58
35	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
36	Hierarchical ZnO Decorated with CeO₂ Nanoparticles as the Direct Z-Scheme Heterojunction for Enhanced Photocatalytic Activity. ACS Applied Materials & Interfaces, 2018, 10, 39679-39687.	4.0	226

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37	Preparation and Luminescent Properties of Tb3+-doped SrOâ€“Al2O3â€“SiO2 Glassâ€“Ceramics for white Light-Emitting Diode. Glass Physics and Chemistry, 2018, 44, 300-306.	0.2	1
38	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
39	Atomic-layer-deposited ultrafine MoS₂nanocrystals on cobalt foam for efficient and stable electrochemical oxygen evolution. Nanoscale, 2017, 9, 2711-2717.	2.8	88
40	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
41	Heat-up and gram-scale synthesis of Cu-poor CZTS nanocrystals with controllable compositions and shapes. CrystEngComm, 2017, 19, 2013-2020.	1.3	9
42	SrCl₂ Derived Perovskite Facilitating a High Efficiency of 16% in Holeâ€Conductorâ€Free Fully Printable Mesoscopic Perovskite Solar Cells. Advanced Materials, 2017, 29, 1606608.	11.1	135
43	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
44	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
45	Enhanced luminous efficiency of multilayer gradient refractive index phosphor in P2O5-ZnO-B2O3-BaO glass for white light-emitting diode packages. Journal of Non-Crystalline Solids, 2017, 471, 215-221.	1.5	22
46	Vertically Aligned Porous Nickel(II) Hydroxide Nanosheets Supported on Carbon Paper with Longâ€Term Oxygen Evolution Performance. Chemistry - an Asian Journal, 2017, 12, 543-551.	1.7	118
47	Tunable chromaticity and enhanced luminous efficacy of white LEDs with phosphor-in-glass coating via multilayer screen-printing. Ceramics International, 2017, 43, 13569-13575.	2.3	18
48	Enhanced high reflectance SiO2-Ag-SiO2 thin film adhesion for Concentrating Solar Power reflector. Surfaces and Interfaces, 2017, 8, 225-229.	1.5	7
49	Self-supported Co-Ni-P ternary nanowire electrodes for highly efficient and stable electrocatalytic hydrogen evolution in acidic solution. Catalysis Today, 2017, 287, 122-129.	2.2	105
50	Bifunctional Nickel Phosphide Nanocatalysts Supported on Carbon Fiber Paper for Highly Efficient and Stable Overall Water Splitting. Advanced Functional Materials, 2016, 26, 4067-4077.	7.8	591
51	Bifunctional Catalysts: Bifunctional Nickel Phosphide Nanocatalysts Supported on Carbon Fiber Paper for Highly Efficient and Stable Overall Water Splitting (Adv. Funct. Mater. 23/2016). Advanced Functional Materials, 2016, 26, 4066-4066.	7.8	12
52	Low-temperature solution synthesis of a ZnO nanorod array with a mesoporous surface mediated by cadmium ions. CrystEngComm, 2016, 18, 8277-8283.	1.3	7
53	Passivation of hematite nanorod photoanodes with a phosphorus overlayer for enhanced photoelectrochemical water oxidation. Nanotechnology, 2016, 27, 375401.	1.3	28
54	From water reduction to oxidation: Janus Co-Ni-P nanowires as high-efficiency and ultrastable electrocatalysts for over 3000Âh water splitting. Journal of Power Sources, 2016, 330, 156-166.	4.0	190

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55	Fabrication and band engineering of Cu-doped CdSe0.6Te0.4-alloyed quantum dots for solar cells. Solar Energy Materials and Solar Cells, 2016, 157, 161-170.	3.0	18
56	Facile synthesis of iron phosphide nanorods for efficient and durable electrochemical oxygen evolution. Chemical Communications, 2016, 52, 8711-8714.	2.2	168
57	Low temperature hydrothermal synthesis mechanism and thermal stability of p-type CuMnO₂ nanocrystals. New Journal of Chemistry, 2016, 40, 6498-6504.	1.4	34
58	Efficient and durable electrochemical hydrogen evolution using cocoon-like MoS2 with preferentially exposed edges. International Journal of Hydrogen Energy, 2016, 41, 9344-9354.	3.8	74
59	Crystal structural, optical properties and mott-schottky plots of p-type Ca doped CuFeO 2 nanoplates. Materials Research Bulletin, 2016, 83, 141-147.	2.7	50
60	Fast fabrication of self-supported porous nickel phosphide foam for efficient, durable oxygen evolution and overall water splitting. Journal of Materials Chemistry A, 2016, 4, 5639-5646.	5.2	224
61	Use of delafossite oxides CuCr1-xGaxO2 nanocrystals in p-type dye-sensitized solar cell. Journal of Alloys and Compounds, 2016, 662, 374-380.	2.8	32
62	Porous W-doped VO2 films with simultaneously enhanced visible transparency and thermochromic properties. Journal of Sol-Gel Science and Technology, 2016, 77, 85-93.	1.1	85
63	Hydrothermal synthesis of delafossite CuFeO₂ crystals at 100 Â°C. RSC Advances, 2015, 5, 49280-49286.	1.7	56
64	Preparation of p-type AgCrO2 nanocrystals through low-temperature hydrothermal method and the potential application in p-type dye-sensitized solar cell. Journal of Alloys and Compounds, 2015, 642, 104-110.	2.8	37
65	Preparation and characterization of CuCrO2/TiO2 heterostructure photocatalyst with enhanced photocatalytic activity. Applied Surface Science, 2015, 347, 747-754.	3.1	34
66	A facile hydrothermal route to synthesize delafossite CuMnO2 nanocrystals. Journal of Materials Science: Materials in Electronics, 2015, 26, 10159-10163.	1.1	26
67	TiO₂ Nanorods: A Facile Size- and Shape-Tunable Synthesis and Effective Improvement of Charge Collection Kinetics for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 9698-9704.	4.0	37
68	Oleic acid assisted formation mechanism of CuInS₂ nanocrystals with tunable structures. RSC Advances, 2014, 4, 36875-36881.	1.7	22
69	Selective laser sintering of TiO₂ nanoparticle film on plastic conductive substrate for highly efficient flexible dye-sensitized solar cell application. Journal of Materials Chemistry A, 2014, 2, 4566-4573.	5.2	40
70	Remarkable photocurrent of p-type dye-sensitized solar cell achieved by size controlled CuGaO₂ nanoplates. Journal of Materials Chemistry A, 2014, 2, 2968-2976.	5.2	93
71	Synthesis and Characterization of CuAlO₂ and AgAlO₂ Delafossite Oxides through Low-Temperature Hydrothermal Methods. Inorganic Chemistry, 2014, 53, 4106-4116.	1.9	70
72	Modulated Charge Injection in p-Type Dye-Sensitized Solar Cells Using Fluorene-Based Light Absorbers. ACS Applied Materials & Interfaces, 2014, 6, 3448-3454.	4.0	48

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73	Improved Photovoltages for p-Type Dye-Sensitized Solar Cells Using CuCrO₂ Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 16375-16379.	1.5	72
74	Near Field Enhanced Photocurrent Generation in P-type Dye-Sensitized Solar Cells. Scientific Reports, 2014, 4, 3961.	1.6	24
75	Efficient p-type dye-sensitized solar cells based on disulfide/thiolate electrolytes. Nanoscale, 2013, 5, 7963.	2.8	50
76	Low-cost porous Cu2ZnSnSe4 film remarkably superior to noble Pt as counter electrode in quantum dot-sensitized solar cell system. Journal of Power Sources, 2013, 226, 359-362.	4.0	57
77	Enhanced Performance of pâ€Type Dyeâ€Sensitized Solar Cells Based on Ultrasmall Mgâ€Doped CuCrO₂ Nanocrystals. ChemSusChem, 2013, 6, 1432-1437.	3.6	68
78	Spray deposition of water-soluble multiwall carbon nanotube and Cu2ZnSnSe4 nanoparticle composites as highly efficient counter electrodes in a quantum dot-sensitized solar cell system. Nanoscale, 2013, 5, 6992.	2.8	54
79	Dye-sensitized Solar Cells Based on P-type Delafossite Structure Nanocrystals of CuCrO2 and CuGaO2. , 2013, , .		0
80	Recent progress on tandem structured dye-sensitized solar cells. Frontiers of Optoelectronics, 2012, 5, 371-389.	1.9	39
81	Surface and interface characterization of oxygen plasma activated anodic bonding of glassâ€“ceramics to stainless steel. Microelectronics Reliability, 2012, 52, 1367-1372.	0.9	8
82	Hydrothermal synthesis of ultrasmall CuCrO2 nanocrystal alternatives to NiO nanoparticles in efficient p-type dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 24760.	6.7	162
83	Alâ€“Si Thin Films Assisted Anodic Bonding of R2Oâ€“Al2O3â€“SiO2 Glassâ€“Ceramics to Stainless Steel. Journal of Adhesion Science and Technology, 2011, 25, 1925-1935.	1.4	2
84	Electrical properties of R2Oâ€“Al2O3â€“SiO2 glassâ€“ceramics for anodic bonding. Journal of Materials Science: Materials in Electronics, 2010, 21, 882-888.	1.1	7
85	Anodic bonding of glassâ€“ceramics to stainless steel coated with intermediate SiO2 layer. Microelectronic Engineering, 2010, 87, 1741-1746.	1.1	24
86	Composition and crystallization kinetics of R2Oâ€“Al2O3â€“SiO2 glassâ€“ceramics. Journal of Alloys and Compounds, 2010, 498, 162-167.	2.8	13
87	Crystallization behaviors of R2Oâ€“Al2O3â€“SiO2 glassâ€“ceramics for use as anodic bonding materials. Journal of Alloys and Compounds, 2010, 507, 531-534.	2.8	10