

# Xiaoping Dai

## List of Publications by Year in descending order

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76  
papers

3,647  
citations

117625

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138484

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77  
docs citations

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times ranked

4857  
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-Doped MoS <sub>2</sub> Nanosheets with the Dominant CoMoS Phase Coated on Carbon as an Excellent Electrocatalyst for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2015, 7, 27242-27253.	8.0	422
2	Structure Effects of 2D Materials on Ni-Nickel Hydroxide for Oxygen Evolution Reaction. ACS Nano, 2018, 12, 3875-3885.	14.6	174
3	One-Pot Synthesis of Ternary Pt-Ni-Cu Nanocrystals with High Catalytic Performance. Chemistry of Materials, 2015, 27, 6402-6410.	6.7	133
4	Strongly Coupled FeNi Alloys/NiFe <sub>2</sub> O <sub>4</sub> @Carbonitride Layers-Assembled Microboxes for Enhanced Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2016, 8, 34396-34404.	8.0	130
5	Synthesis of Pt-Ni Alloy Nanocrystals with High-Index Facets and Enhanced Electrocatalytic Properties. Angewandte Chemie - International Edition, 2014, 53, 12522-12527.	13.8	123
6	An Interfacial Electron Transfer on Tetrahedral NiS <sub>2</sub> /NiSe <sub>2</sub> Heterocages with Dual-Phase Synergy for Efficiently Triggering the Oxygen Evolution Reaction. Small, 2020, 16, e1905083.	10.0	122
7	Enhanced hydrogen evolution reaction on few-layer MoS <sub>2</sub> nanosheets-coated functionalized carbon nanotubes. International Journal of Hydrogen Energy, 2015, 40, 8877-8888.	7.1	118
8	Bimetallic thin film NiCo-NiCoO <sub>2</sub> @NC as a superior bifunctional electrocatalyst for overall water splitting in alkaline media. Journal of Materials Chemistry A, 2017, 5, 15901-15912.	10.3	109
9	Cobalt/Molybdenum Phosphide and Oxide Heterostructures Encapsulated in N-Doped Carbon Nanocomposite for Overall Water Splitting in Alkaline Media. ACS Applied Materials & Interfaces, 2019, 11, 6890-6899.	8.0	91
10	Interfacial electronic modulation on heterostructured NiSe@CoFe LDH nanoarrays for enhancing oxygen evolution reaction and water splitting by facilitating the deprotonation of OH to O. Chemical Engineering Journal, 2022, 431, 134080.	12.7	85
11	Graphene Oxide-Assisted Synthesis of Pt-Co Alloy Nanocrystals with High-Index Facets and Enhanced Electrocatalytic Properties. Small, 2016, 12, 524-533.	10.0	82
12	Interface engineering: few-layer MoS <sub>2</sub> coupled to a NiCo-sulfide nanosheet heterostructure as a bifunctional electrocatalyst for overall water splitting. Journal of Materials Chemistry A, 2019, 7, 27594-27602.	10.3	80
13	Implanting Mo Atoms into Surface Lattice of Pt <sub>3</sub> Mn Alloys Enclosed by High-Indexed Facets: Promoting Highly Active Sites for Ethylene Glycol Oxidation. ACS Catalysis, 2019, 9, 442-455.	11.2	79
14	Synergistic effect between undercoordinated platinum atoms and defective nickel hydroxide on enhanced hydrogen evolution reaction in alkaline solution. Nano Energy, 2018, 48, 590-599.	16.0	76
15	Interfacial synergy between dispersed Ru sub-nanoclusters and porous NiFe layered double hydroxide on accelerated overall water splitting by intermediate modulation. Nanoscale, 2020, 12, 9669-9679.	5.6	62
16	Catalytic Ru containing Pt <sub>3</sub> Mn nanocrystals enclosed with high-indexed facets: Surface alloyed Ru makes Pt more active than Ru particles for ethylene glycol oxidation. Applied Catalysis B: Environmental, 2019, 253, 11-20.	20.2	60
17	Heterostructured CoP/MoO <sub>2</sub> on Mo foil as high-efficiency electrocatalysts for the hydrogen evolution reaction in both acidic and alkaline media. Journal of Materials Chemistry A, 2020, 8, 6732-6739.	10.3	58
18	Amorphous (Fe)Ni-MOF-derived hollow (bi)metal/oxide@N-graphene polyhedron as effectively bifunctional catalysts in overall alkaline water splitting. Electrochimica Acta, 2019, 318, 430-439.	5.2	55

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19	Reduction kinetics of lanthanum ferrite perovskite for the production of synthesis gas by chemical-looping methane reforming. <i>Chemical Engineering Science</i> , 2016, 153, 236-245.	3.8	53
20	The <i>in situ</i> etching assisted synthesis of Pt-Fe-Mn ternary alloys with high-index facets as efficient catalysts for electro-oxidation reactions. <i>Nanoscale</i> , 2019, 11, 9061-9075.	5.6	50
21	Reduced Graphene Oxide/O-MWCNT Hybrids Functionalized with p-Phenylenediamine as High-Performance MoS <sub>2</sub> Electrolyst Support for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1478-1487.	3.1	49
22	NiCo-DH nanodots anchored on amorphous NiCo-Sulfide sheets as efficient electrocatalysts for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 295, 1085-1092.	5.2	46
23	A General Strategy Assisted with Dual Reductants and Dual Protecting Agents for Preparing Pt-Based Alloys with High-Index Facets and Excellent Electrocatalytic Performance. <i>Small</i> , 2017, 13, 1702617.	10.0	45
24	Fe/IRMOF-3 derived porous carbons as non-precious metal electrocatalysts with high activity and stability towards oxygen reduction reaction. <i>Electrochimica Acta</i> , 2016, 205, 53-61.	5.2	42
25	In Situ Synthesis of Core-Shell Pt-Cu Frame@Metal-Organic Frameworks as Multifunctional Catalysts for Hydrogenation Reaction. <i>Chemistry of Materials</i> , 2017, 29, 6336-6345.	6.7	42
26	Interface-Synergistically Enhanced Acidic, Neutral, and Alkaline Hydrogen Evolution Reaction over Mo <sub>2</sub> C/MoO <sub>2</sub> Heteronanorods. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14356-14364.	6.7	42
27	Morphology Design of IRMOF-3 Crystal by Coordination Modulation. <i>Crystal Growth and Design</i> , 2014, 14, 5856-5864.	3.0	41
28	Large-pore mesoporous RuNi-doped TiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> nanocomposites for highly efficient selective CO methanation in hydrogen-rich reformat gases. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 752-762.	20.2	40
29	Restructured Fe-Mn Alloys Encapsulated by N-doped Carbon Nanotube Catalysts Derived from Bimetallic MOF for Enhanced Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2018, 10, 5475-5486.	3.7	39
30	Engineering FeNi alloy nanoparticles <i>via</i> synergistic ultralow Pt doping and nanocarbon capsulation for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24347-24355.	10.3	39
31	Phosphorus-Doped FeNi Alloys/NiFe <sub>2</sub> O <sub>4</sub> Imbedded in Carbon Network Hollow Bipramid as Efficient Electrocatalysts for Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2285-2295.	6.7	39
32	Selective Conversion of Syngas into Higher Alcohols via a Reaction-Coupling Strategy on Multifunctional Relay Catalysts. <i>ACS Catalysis</i> , 2020, 10, 2419-2430.	11.2	38
33	Partially sulfurated ultrathin nickel-iron carbonate hydroxides nanosheet boosting the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2019, 309, 57-64.	5.2	37
34	Amorphous NiMS (M: Co, Fe or Mn) holey nanosheets derived from crystal phase transition for enhanced oxygen evolution in water splitting. <i>Electrochimica Acta</i> , 2019, 323, 134756.	5.2	35
35	Interfacial synergy of ultralong jagged Pt <sub>85</sub> Mo <sub>15</sub> -S nanowires with abundant active sites on enhanced hydrogen evolution in an alkaline solution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24328-24336.	10.3	35
36	Hollow FeNi-based hybrid polyhedron derived from unique sulfur-modulating coordinated transition bimetal complexes for efficient oxygen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21320-21327.	10.3	34

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37	Highly stable and active PtNiFe dandelion-like alloys for methanol electrooxidation. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13252.	10.3	32
38	2D Fe-doped NiO nanosheets with grain boundary defects for the advanced oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 6355-6362.	3.3	32
39	Restructured PtNi on ultrathin nickel hydroxide for enhanced performance in hydrogen evolution and methanol oxidation. <i>Journal of Catalysis</i> , 2019, 375, 267-278.	6.2	31
40	One-Pot-Synthesized CoFe-Glycerate Hollow Spheres with Rich Oxyhydroxides for Efficient Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5464-5477.	6.7	31
41	Mn-doping induced electronic modulation and rich oxygen vacancies on vertically grown NiFe <sub>2</sub> O <sub>4</sub> nanosheet array for synergistically triggering oxygen evolution reaction. <i>Nano Research</i> , 2022, 15, 3940-3945.	10.4	31
42	Metal-organic frameworks-derived core-shell Fe <sub>3</sub> O <sub>4</sub> /Fe <sub>3</sub> N@graphite carbon nanocomposites as excellent non-precious metal electrocatalyst for oxygen reduction. <i>Dalton Transactions</i> , 2018, 47, 16567-16577.	3.3	29
43	Promotion of the Electrocatalytic Oxygen Evolution Reaction by Chemical Coupling of CoOOH Particles to 3D Branched $\gamma$ -MnOOH Rods. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13015-13022.	6.7	29
44	Morphology controllable synthesis of PtNi concave nanocubes enclosed by high-index facets supported on porous graphene for enhanced hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17790-17796.	10.3	28
45	Oxygen vacancies and surface reconstruction on NiFe LDH@Ni(OH) <sub>2</sub> heterojunction synergistically triggering oxygen evolution and urea oxidation reaction. <i>Journal of Alloys and Compounds</i> , 2022, 921, 166145.	5.5	27
46	Hybrid of Fe <sub>3</sub> C@N, S co-doped carbon nanotubes coated porous carbon derived from metal organic frameworks as an efficient catalyst towards oxygen reduction. <i>Journal of Colloid and Interface Science</i> , 2019, 533, 311-318.	9.4	26
47	Silver nanoparticles encapsulated by metal-organic-framework give the highest turnover frequencies of 10 5 h <sup>-1</sup> for three component reaction by microwave-assisted heating. <i>Journal of Catalysis</i> , 2017, 348, 276-281.	6.2	25
48	Microwave-Assisted, Ni-Induced Fabrication of Hollow ZIF-8 Nanoframes for the Knoevenagel Reaction. <i>Crystal Growth and Design</i> , 2018, 18, 3841-3850.	3.0	25
49	Promoting effect of nickel hydroxide on the electrocatalytic performance of Pt in alkaline solution. <i>Dalton Transactions</i> , 2018, 47, 7975-7982.	3.3	24
50	Electronic modulation and surface reconstruction of cactus-like CoB <sub>2</sub> O <sub>4</sub> @FeOOH heterojunctions for synergistically triggering oxygen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11386-11393.	10.3	24
51	Platinum-cobalt nanocrystals synthesized under different atmospheres for high catalytic performance in methanol electro-oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10671-10676.	10.3	23
52	Electronic modulation and proton transfer by iron and borate co-doping for synergistically triggering the oxygen evolution reaction on a hollow NiO bipyramidal prism. <i>Nanoscale</i> , 2021, 13, 14156-14165.	5.6	23
53	Amorphous MoS <sub>2</sub> nanosheets on MoO <sub>2</sub> films/Mo foil as free-standing electrode for synergetic electrocatalytic hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17422-17433.	7.1	23
54	Phosphorus-doping-tuned PtNi concave nanocubes with high-index facets for enhanced methanol oxidation reaction. <i>Nano Research</i> , 2022, 15, 6961-6968.	10.4	21

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55	Pt <sub>3</sub> Mn alloy nanostructure with high-index facets by Sn doping modified for highly catalytic active electro-oxidation reactions. <i>Journal of Catalysis</i> , 2021, 395, 282-292.	6.2	20
56	<i>In situ</i> fabrication of dynamic self-optimizing Ni <sub>3</sub> S <sub>2</sub> nanosheets as an efficient catalyst for the oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 70-78.	3.3	19
57	Synergistic enhancement of the oxygen evolution reaction by MoS <sub>x</sub> and sulphate on amorphous polymetallic oxide nanosheets. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9858-9863.	10.3	19
58	Alkaline-Etched NiMgAl Trimetallic Oxide-Supported KMoS-Based Catalysts for Boosting Higher Alcohol Selectivity in CO Hydrogenation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 19066-19076.	8.0	18
59	Tuning the metal-support interaction in supported K-promoted NiMo catalysts for enhanced selectivity and productivity towards higher alcohols in CO hydrogenation. <i>Catalysis Science and Technology</i> , 2017, 7, 4206-4215.	4.1	17
60	Tungsten-Doped Molybdenum Sulfide with Dominant Double-Layer Structure on Mixed MgAl Oxide for Higher Alcohol Synthesis in CO Hydrogenation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 10170-10179.	3.7	17
61	Surface sites assembled-strategy on Pt-Ru nanowires for accelerated methanol oxidation. <i>Dalton Transactions</i> , 2020, 49, 13999-14008.	3.3	17
62	PtNiCu nanowires with advantageous lattice-plane boundary for enhanced ethanol electrooxidation. <i>Nano Research</i> , 2022, 15, 2877-2886.	10.4	15
63	Simultaneous Modulation of Composition and Oxygen Vacancies on Hierarchical ZnCo <sub>2</sub> O <sub>4</sub> /Co <sub>3</sub> O <sub>4</sub> /NC@CNT Mesoporous Dodecahedron for Enhanced Oxygen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2018, 24, 18689-18695.	3.3	14
64	Synergistic coupling of heterostructured porous CoP nanosheets with P doped NiO for highly efficient overall alkaline water splitting. <i>Journal of Colloid and Interface Science</i> , 2022, 621, 213-221.	9.4	13
65	A template-assisted strategy to synthesize a dilute CoNi alloy incorporated into ultramicroporous carbon for high performance supercapacitor application. <i>Dalton Transactions</i> , 2019, 48, 4702-4711.	3.3	12
66	Cobalt Nanoparticles Embedded in N, S Co-Doped Carbon towards Oxygen Reduction Reaction Derived by <i>In situ</i> Reducing Cobalt Sulfide. <i>ChemCatChem</i> , 2019, 11, 6039-6050.	3.7	11
67	Hierarchical sheet-on-sheet heterojunction array of a $\gamma$ -Ni(OH) <sub>2</sub> /Fe(OH) <sub>3</sub> self-supporting anode for effective overall alkaline water splitting. <i>Dalton Transactions</i> , 2021, 50, 12547-12554.	3.3	11
68	Phosphorus-doping induced electronic modulation of CoS <sub>2</sub> @MoS <sub>2</sub> hollow spheres on MoO <sub>2</sub> film-Mo foil for synergistically boosting alkaline hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33388-33396.	7.1	10
69	Highly stable Pt <sub>3</sub> Ni ultralong nanowires tailored with trace Mo for the ethanol oxidation. <i>Nano Research</i> , 2022, 15, 3230-3238.	10.4	10
70	Cobalt doped Fe-Mn@CNTs catalysts with highly stability for low-temperature selective catalytic reduction of NO <sub>x</sub> . <i>Nano Research</i> , 2022, 15, 3001-3009.	10.4	9
71	Interfacial synergistic effect in SnO <sub>2</sub> /PtNi nanocrystals enclosed by high-index facets for high-efficiency ethylene glycol electrooxidation. <i>Nano Research</i> , 2022, 15, 7877-7886.	10.4	8
72	Cobalt nanoparticles encapsulated in nitrogen-rich carbonitride nanotubes for efficient and stable hydrogen evolution reaction at all pH values. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 26347-26357.	7.1	7

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73	Enhanced Higher Alcohol Synthesis from CO Hydrogenation on Zn-Modified MgAl-Mixed Oxide Supported KNiMoS-Based Catalysts. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 1413-1421.	3.7	6
74	Multicomponent Pt-based catalyst for highly efficient chemoselective hydrogenation of 4-carboxybenzaldehyde. <i>Journal of Catalysis</i> , 2021, 401, 174-182.	6.2	5
75	Ordered mesoporous NiMg bimetal oxides confined KMoS catalyst for selective CO hydrogenation into higher alcohols. <i>Fuel</i> , 2021, 303, 121321.	6.4	5
76	Metal-Support interaction modulate the sulfidation and dispersion of MoS <sub>2</sub> slabs on hierarchical KNiMo ZnCrAl-Based multifunctional catalysts for selective conversion of syngas to higher alcohols. <i>Chemical Engineering Journal</i> , 2022, 440, 135831.	12.7	3