Xin Wang

List of Publications by Year in descending order

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236 papers	39,565 citations	2675 95 h-index	2571 195 g-index
237 all docs	237 docs citations	237 times ranked	35301 citing authors

#	Article	IF	Citations
1	Review on Recent Progress in Nitrogen-Doped Graphene: Synthesis, Characterization, and Its Potential Applications. ACS Catalysis, 2012, 2, 781-794.	11.2	3,171
2	A metalâ€“organic framework-derived bifunctional oxygenÂelectrocatalyst. Nature Energy, 2016, 1, .	39.5	1,974
3	Imparting functionality to a metalâ€“organic framework material by controlled nanoparticle encapsulation. Nature Chemistry, 2012, 4, 310-316.	13.6	1,857
4	A review on fundamentals for designing oxygen evolution electrocatalysts. Chemical Society Reviews, 2020, 49, 2196-2214.	38.1	1,466
5	Molybdenum phosphide as an efficient electrocatalyst for the hydrogen evolution reaction. Energy and Environmental Science, 2014, 7, 2624-2629.	30.8	1,164
6	A review on noble-metal-free bifunctional heterogeneous catalysts for overall electrochemical water splitting. Journal of Materials Chemistry A, 2016, 4, 17587-17603.	10.3	1,037
7	Chemical and structural origin of lattice oxygen oxidation in Coâ€“Zn oxyhydroxide oxygen evolution electrocatalysts. Nature Energy, 2019, 4, 329-338.	39.5	977
8	Recent Development of Molybdenum Sulfides as Advanced Electrocatalysts for Hydrogen Evolution Reaction. ACS Catalysis, 2014, 4, 1693-1705.	11.2	769
9	Proton Exchange Membrane Fuel Cells with Carbon Nanotube Based Electrodes. Nano Letters, 2004, 4, 345-348.	9.1	728
10	A Review of Phosphideâ€Based Materials for Electrocatalytic Hydrogen Evolution. Advanced Energy Materials, 2015, 5, 1500985.	19.5	707
11	Design of Efficient Bifunctional Oxygen Reduction/Evolution Electrocatalyst: Recent Advances and Perspectives. Advanced Energy Materials, 2017, 7, 1700544.	19.5	593
12	One-Pot Synthesis of Cubic PtCu₃ Nanocages with Enhanced Electrocatalytic Activity for the Methanol Oxidation Reaction. Journal of the American Chemical Society, 2012, 134, 13934-13937.	13.7	581
13	Durability investigation of carbon nanotube as catalyst support for proton exchange membrane fuel cell. Journal of Power Sources, 2006, 158, 154-159.	7.8	570
14	Selective Electrochemical H₂O₂ Production through Twoâ€Electron Oxygen Electrochemistry. Advanced Energy Materials, 2018, 8, 1801909.	19.5	498
15	Hierarchical MoS₂microboxes constructed by nanosheets with enhanced electrochemical properties for lithium storage and water splitting. Energy and Environmental Science, 2014, 7, 3302-3306.	30.8	471
16	Clayâ€Inspired MXeneâ€Based Electrochemical Devices and Photoâ€Electrocatalyst: Stateâ€ofâ€theâ€Art Progresses and Challenges. Advanced Materials, 2018, 30, e1704561.	21.0	431
17	Formation of Niâ€“Fe Mixed Diselenide Nanocages as a Superior Oxygen Evolution Electrocatalyst. Advanced Materials, 2017, 29, 1703870.	21.0	428
18	Facile synthesis of low crystalline MoS2 nanosheet-coated CNTs for enhanced hydrogen evolution reaction. Nanoscale, 2013, 5, 7768.	5.6	426

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19	Ultrathin and Ultralong Single-Crystal Platinum Nanowire Assemblies with Highly Stable Electrocatalytic Activity. Journal of the American Chemical Society, 2013, 135, 9480-9485.	13.7	425
20	Recent developments in electrode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 9353-9378.	10.3	413
21	Oneâ€Pot Synthesis of Ptâ€“Co Alloy Nanowire Assemblies with Tunable Composition and Enhanced Electrocatalytic Properties. Angewandte Chemie - International Edition, 2015, 54, 3797-3801.	13.8	407
22	Ultrathin MoS₂ Nanoplates with Rich Active Sites as Highly Efficient Catalyst for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2013, 5, 12794-12798.	8.0	392
23	A review on the electrochemical reduction of CO2 in fuel cells, metal electrodes and molecular catalysts. Catalysis Today, 2014, 233, 169-180.	4.4	392
24	In Situ Grown Epitaxial Heterojunction Exhibits Highâ€Performance Electrocatalytic Water Splitting. Advanced Materials, 2018, 30, e1705516.	21.0	375
25	General Formation of Mâ€“MoS₃ (M = Co, Ni) Hollow Structures with Enhanced Electrocatalytic Activity for Hydrogen Evolution. Advanced Materials, 2016, 28, 92-97.	21.0	364
26	Switching charge transfer of C3N4/W18O49 from type-II to Z-scheme by interfacial band bending for highly efficient photocatalytic hydrogen evolution. Nano Energy, 2017, 40, 308-316.	16.0	346
27	Enlarged Coï¿¿O Covalency in Octahedral Sites Leading to Highly Efficient Spinel Oxides for Oxygen Evolution Reaction. Advanced Materials, 2018, 30, e1802912.	21.0	338
28	Novel Molybdenum Carbideâ€“Tungsten Carbide Composite Nanowires and Their Electrochemical Activation for Efficient and Stable Hydrogen Evolution. Advanced Functional Materials, 2015, 25, 1520-1526.	14.9	325
29	Dual-Phase Spinel MnCo₂O₄and Spinel MnCo₂O₄/Nanocarbon Hybrids for Electrocatalytic Oxygen Reduction and Evolution. ACS Applied Materials & Interfaces, 2014, 6, 12684-12691.	8.0	322
30	Efficient Electrochemical Reduction of CO₂ to HCOOH over Subâ€2â€…nm SnO₂ Quantum Wires with Exposed Grain Boundaries. Angewandte Chemie - International Edition, 2019, 58, 8499-8503.	13.8	322
31	Enhancement effect of Ag for Pd/C towards the ethanol electro-oxidation in alkaline media. Applied Catalysis B: Environmental, 2009, 91, 507-515.	20.2	319
32	Catalysis mechanisms of CO₂ and CO methanation. Catalysis Science and Technology, 2016, 6, 4048-4058.	4.1	316
33	Strategies to Break the Scaling Relation toward Enhanced Oxygen Electrocatalysis. Matter, 2019, 1, 1494-1518.	10.0	316
34	Recent progress on graphene-based hybrid electrocatalysts. Materials Horizons, 2014, 1, 379-399.	12.2	303
35	Electrocatalytic reduction of carbon dioxide: opportunities with heterogeneous molecular catalysts. Energy and Environmental Science, 2020, 13, 374-403.	30.8	303
36	Hexagonal-Phase Cobalt Monophosphosulfide for Highly Efficient Overall Water Splitting. ACS Nano, 2017, 11, 11031-11040.	14.6	297

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37	An Efficient and Earthâ€Abundant Oxygenâ€Evolving Electrocatalyst Based on Amorphous Metal Borides. Advanced Energy Materials, 2018, 8, 1701475.	19.5	292
38	Amino acid modified copper electrodes for the enhanced selective electroreduction of carbon dioxide towards hydrocarbons. Energy and Environmental Science, 2016, 9, 1687-1695.	30.8	290
39	Strongly Coupled NiCo₂O₄â€rGO Hybrid Nanosheets as a Methanolâ€Tolerant Electrocatalyst for the Oxygen Reduction Reaction. Advanced Materials, 2014, 26, 2408-2412.	21.0	283
40	Nafion/Zeolite Nanocomposite Membrane by in Situ Crystallization for a Direct Methanol Fuel Cell. Chemistry of Materials, 2006, 18, 5669-5675.	6.7	276
41	Molybdenum Carbideâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Chemistry - A European Journal, 2017, 23, 10947-10961.	3.3	267
42	Lithiumâ€Doped Conjugated Microporous Polymers for Reversible Hydrogen Storage. Angewandte Chemie - International Edition, 2010, 49, 3330-3333.	13.8	258
43	Vertically oriented MoS₂ and WS₂ nanosheets directly grown on carbon cloth as efficient and stable 3-dimensional hydrogen-evolving cathodes. Journal of Materials Chemistry A, 2015, 3, 131-135.	10.3	254
44	Bi₂O₃ Nanosheets Grown on Multiâ€Channel Carbon Matrix to Catalyze Efficient CO₂ Electroreduction to HCOOH. Angewandte Chemie - International Edition, 2019, 58, 13828-13833.	13.8	254
45	Rational Design of Transition Metalâ€Based Materials for Highly Efficient Electrocatalysis. Small Methods, 2019, 3, 1800211.	8.6	250
46	Electrocatalytic Activity and Interconnectivity of Pt Nanoparticles on Multiwalled Carbon Nanotubes for Fuel Cells. Journal of Physical Chemistry C, 2009, 113, 18935-18945.	3.1	239
47	Highly efficient submonolayer Pt-decorated Au nano-catalysts for formic acid oxidation. Chemical Communications, 2008, , 353-355.	4.1	230
48	Core-shell carbon materials derived from metal-organic frameworks as an efficient oxygen bifunctional electrocatalyst. Nano Energy, 2016, 30, 368-378.	16.0	229
49	A Flexible Electrode Based on Iron Phosphide Nanotubes for Overall Water Splitting. Chemistry - A European Journal, 2015, 21, 18062-18067.	3.3	228
50	Electrochemical investigation of formic acid electro-oxidation and its crossover through a NafionÂ® membrane. Journal of Electroanalytical Chemistry, 2004, 562, 73-80.	3.8	226
51	Nitrogen-doped cobalt phosphate@nanocarbon hybrids for efficient electrocatalytic oxygen reduction. Energy and Environmental Science, 2016, 9, 2563-2570.	30.8	216
52	Selfâ€Supported Interconnected Pt Nanoassemblies as Highly Stable Electrocatalysts for Lowâ€Temperature Fuel Cells. Angewandte Chemie - International Edition, 2012, 51, 7213-7216.	13.8	211
53	Electrodeposited Pt on three-dimensional interconnected graphene as a free-standing electrode for fuel cell application. Journal of Materials Chemistry, 2012, 22, 5286.	6.7	210
54	PtRu Nanoparticles Supported on 1-Aminopyrene-Functionalized Multiwalled Carbon Nanotubes and Their Electrocatalytic Activity for Methanol Oxidation. Langmuir, 2008, 24, 10505-10512.	3.5	205

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55	Boosting Electrochemical CO₂ Reduction on Metalâ€“Organic Frameworks via Ligand Doping. Angewandte Chemie - International Edition, 2019, 58, 4041-4045.	13.8	199
56	Carbon Nanotube Film by Filtration as Cathode Catalyst Support for Proton-Exchange Membrane Fuel Cell. Langmuir, 2005, 21, 9386-9389.	3.5	196
57	General Formation of Complex Tubular Nanostructures of Metal Oxides for the Oxygen Reduction Reaction and Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2013, 52, 8643-8647.	13.8	194
58	Highly Concave Platinum Nanoframes with Highâ€Index Facets and Enhanced Electrocatalytic Properties. Angewandte Chemie - International Edition, 2013, 52, 12337-12340.	13.8	193
59	Highly Efficient Oxygen Reduction Reaction Activity of Nâ€Doped Carbonâ€“Cobalt Boride Heterointerfaces. Advanced Energy Materials, 2021, 11, 2100157.	19.5	190
60	Investigation of molybdenum carbide nano-rod as an efficient and durable electrocatalyst for hydrogen evolution in acidic and alkaline media. Applied Catalysis B: Environmental, 2014, 154-155, 232-237.	20.2	183
61	Ethylene Selectivity in Electrocatalytic CO₂ Reduction on Cu Nanomaterials: A Crystal Phase-Dependent Study. Journal of the American Chemical Society, 2020, 142, 12760-12766.	13.7	183
62	In situ formation of molecular Ni-Fe active sites on heteroatom-doped graphene as a heterogeneous electrocatalyst toward oxygen evolution. Science Advances, 2018, 4, eaap7970.	10.3	176
63	Nano-tungsten carbide decorated graphene as co-catalysts for enhanced hydrogen evolution on molybdenum disulfide. Chemical Communications, 2013, 49, 4884.	4.1	175
64	Unsupported Platinum-Based Electrocatalysts for Oxygen Reduction Reaction. ACS Energy Letters, 2017, 2, 2035-2043.	17.4	174
65	Microwave-assisted one-pot synthesis of metal/metal oxide nanoparticles on graphene and their electrochemical applications. Electrochimica Acta, 2011, 56, 3338-3344.	5.2	170
66	Dual-template synthesis of Co(OH)2 with mesoporous nanowire structure and its application in supercapacitor. Journal of Power Sources, 2012, 201, 382-386.	7.8	169
67	Electrochemical Impedance Studies of Methanol Electro-oxidation on Pt/C Thin Film Electrode. Journal of the Electrochemical Society, 2002, 149, A615.	2.9	164
68	Composite Nafion/polyvinyl alcohol membranes for the direct methanol fuel cell. Journal of Membrane Science, 2002, 210, 147-153.	8.2	164
69	Ptâ^'Ru Supported on Double-Walled Carbon Nanotubes as High-Performance Anode Catalysts for Direct Methanol Fuel Cells. Journal of Physical Chemistry B, 2006, 110, 15353-15358.	2.6	163
70	Construction of Efficient 3D Gas Evolution Electrocatalyst for Hydrogen Evolution: Porous FeP Nanowire Arrays on Graphene Sheets. Advanced Science, 2015, 2, 1500120.	11.2	163
71	Synthesis and Characterization of Surfactant-Stabilized Pt/C Nanocatalysts for Fuel Cell Applications. Journal of Physical Chemistry B, 2003, 107, 11057-11064.	2.6	161
72	Tuning of lattice oxygen reactivity and scaling relation to construct better oxygen evolution electrocatalyst. Nature Communications, 2021, 12, 3992.	12.8	151

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73	Ptshellâ€“Aucore/C electrocatalyst with a controlled shell thickness and improved Pt utilization for fuel cell reactions. Electrochemistry Communications, 2008, 10, 12-15.	4.7	149
74	Self-assembly of mixed Pt and Au nanoparticles on PDDA-functionalized graphene as effective electrocatalysts for formic acid oxidation of fuel cells. Physical Chemistry Chemical Physics, 2011, 13, 6883.	2.8	144
75	Linkage Effect in the Heterogenization of Cobalt Complexes by Doped Graphene for Electrocatalytic CO₂ Reduction. Angewandte Chemie - International Edition, 2019, 58, 13532-13539.	13.8	143
76	Polyelectrolyte functionalized carbon nanotubes as a support for noble metal electrocatalysts and their activity for methanol oxidation. Nanotechnology, 2008, 19, 265601.	2.6	138
77	Anodic Oxidation Enabled Cation Leaching for Promoting Surface Reconstruction in Water Oxidation. Angewandte Chemie - International Edition, 2021, 60, 7418-7425.	13.8	130
78	Heterogeneous Electrocatalyst with Molecular Cobalt Ions Serving as the Center of Active Sites. Journal of the American Chemical Society, 2017, 139, 1878-1884.	13.7	129
79	Novel palladiumâ€“lead (Pdâ€“Pb/C) bimetallic catalysts for electrooxidation of ethanol in alkaline media. Journal of Power Sources, 2010, 195, 2619-2622.	7.8	128
80	CNT-Based Electrodes with High Efficiency for PEMFCs. Electrochemical and Solid-State Letters, 2005, 8, A42.	2.2	124
81	Surfactant stabilized Pt and Pt alloy electrocatalyst for polymer electrolyte fuel cells. Electrochimica Acta, 2002, 47, 2981-2987.	5.2	122
82	Controlled synthesis of dendritic Au@Pt coreâ€“shell nanomaterials for use as an effective fuel cell electrocatalyst. Nanotechnology, 2009, 20, 025605.	2.6	117
83	Nanoâ€RuO₂â€Decorated Holey Graphene Composite Fibers for Microâ€Supercapacitors with Ultrahigh Energy Density. Small, 2018, 14, e1800582.	10.0	113
84	Sandwich-structured TiO2â€“Ptâ€“graphene ternary hybrid electrocatalysts with high efficiency and stability. Journal of Materials Chemistry, 2012, 22, 16499.	6.7	112
85	Bi2O3 deposited on highly ordered mesoporous carbon for supercapacitors. Electrochemistry Communications, 2009, 11, 313-317.	4.7	111
86	Deposition of platinum nanoparticles on organic functionalized carbon nanotubes grownin situon carbon paper for fuel cells. Nanotechnology, 2005, 16, S395-S400.	2.6	109
87	Controlled synthesis of Pt-decorated Au nanostructure and its promoted activity toward formic acid electro-oxidation. Electrochimica Acta, 2009, 54, 4916-4924.	5.2	108
88	Enhanced electrochemical activity of Pt nanowire network electrocatalysts for methanol oxidation reaction of fuel cells. Electrochimica Acta, 2011, 56, 1563-1569.	5.2	108
89	Hybrid catalysts for photoelectrochemical reduction of carbon dioxide: a prospective review on semiconductor/metal complex co-catalyst systems. Journal of Materials Chemistry A, 2014, 2, 15228.	10.3	108
90	Graphene/NiO Nanowires: Controllable One-Pot Synthesis and Enhanced Pseudocapacitive Behavior. ACS Applied Materials & Interfaces, 2014, 6, 8246-8256.	8.0	106

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91	A Hierarchical MoP Nanoflake Array Supported on Ni Foam: A Bifunctional Electrocatalyst for Overall Water Splitting. Small Methods, 2018, 2, 1700369.	8.6	106
92	The study of Pt@Au electrocatalyst based on Cu underpotential deposition and Pt redox replacement. Electrochimica Acta, 2009, 54, 3092-3097.	5.2	105
93	Electrocatalysis of Pdâ€“Co supported on carbon black or ball-milled carbon nanotubes towards methanol oxidation in alkaline media. Applied Catalysis B: Environmental, 2010, 99, 229-234.	20.2	104
94	Controlled deposition of Pt on Au nanorods and their catalytic activity towards formic acid oxidation. Electrochemistry Communications, 2008, 10, 961-964.	4.7	103
95	Hydrogen storage in a Niâ€“B nanoalloy-doped three-dimensional graphene material. Energy and Environmental Science, 2011, 4, 195-200.	30.8	99
96	Recent Methods for the Synthesis of Noble-Metal-Free Hydrogen-Evolution Electrocatalysts: From Nanoscale to Sub-nanoscale. Small Methods, 2017, 1, 1700118.	8.6	96
97	Molecular Sieving in a Nanoporousb-Oriented Pure-Silica-Zeolite MFI Monocrystal Film. Journal of the American Chemical Society, 2004, 126, 4122-4123.	13.7	95
98	Tuning the electrocatalytic activity of Pt nanoparticles on carbon nanotubes via surface functionalization. Electrochemistry Communications, 2010, 12, 1646-1649.	4.7	88
99	Carbohydrate functionalized carbon nanotubes and their applications. Chemical Society Reviews, 2010, 39, 2925.	38.1	87
100	Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co_{0.55}Mn_{0.45})_{0.99}O_{3â^Î´} nanorod/graphene hybrid in alkaline media. Nanoscale, 2015, 7, 9046-9054.	5.6	86
101	A Waterâ€Soluble Cu Complex as Molecular Catalyst for Electrocatalytic CO₂ Reduction on Grapheneâ€Based Electrodes. Advanced Energy Materials, 2019, 9, 1803151.	19.5	85
102	Highly Efficient and Durable Pd Hydride Nanocubes Embedded in 2D Amorphous NiB Nanosheets for Oxygen Reduction Reaction. Advanced Energy Materials, 2017, 7, 1700919.	19.5	84
103	Free-standing vertically-aligned nitrogen-doped carbon nanotube arrays/graphene as air-breathing electrodes for rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2017, 5, 2488-2495.	10.3	83
104	Assembling pore-rich FeP nanorods on the CNT backbone as an advanced electrocatalyst for oxygen evolution. Journal of Materials Chemistry A, 2016, 4, 13005-13010.	10.3	82
105	Ultrathin Amorphous Ironâ€“Nickel Boride Nanosheets for Highly Efficient Electrocatalytic Oxygen Production. Chemistry - A European Journal, 2018, 24, 18502-18511.	3.3	82
106	Isolated FeN₄ Sites for Efficient Electrocatalytic CO₂ Reduction. Advanced Science, 2020, 7, 2001545.	11.2	81
107	Pd Nanoparticles on Carbon Nitrideâ€“Graphene for the Selective Electro-Oxidation of Glycerol in Alkaline Solution. ACS Catalysis, 2015, 5, 3174-3180.	11.2	80
108	A Planar, Conjugated N₄â€Macrocyclic Cobalt Complex for Heterogeneous Electrocatalytic CO₂ Reduction with High Activity. Angewandte Chemie - International Edition, 2020, 59, 17104-17109.	13.8	80

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109	Tailoring of Metal Boride Morphology via Anion for Efficient Water Oxidation. Advanced Energy Materials, 2019, 9, 1901503.	19.5	79
110	Strategies on the Design of Nitrogen-Doped Graphene. Journal of Physical Chemistry Letters, 2014, 5, 119-125.	4.6	78
111	Selective Electrochemical Reduction of CO₂ to Ethylene on Nanopores-Modified Copper Electrodes in Aqueous Solution. ACS Applied Materials & Interfaces, 2017, 9, 32782-32789.	8.0	75
112	Electrochemical hydrogen storage properties of ball-milled multi-wall carbon nanotubes. International Journal of Hydrogen Energy, 2009, 34, 1437-1443.	7.1	73
113	Ethanol electro-oxidation activity of Nb-doped-TiO2 supported PdAg catalysts in alkaline media. Applied Catalysis B: Environmental, 2012, 113-114, 261-270.	20.2	72
114	Enhanced deep-ultraviolet upconversion emission of Gd3+ sensitized by Yb3+ and Ho3+ in Î²-NaLuF4 microcrystals under 980 nm excitation. Journal of Materials Chemistry C, 2013, 1, 2485.	5.5	72
115	Polyelectrolyte mediated formation of hydroxyapatite microspheres of controlled size and hierarchical structure. Journal of Colloid and Interface Science, 2009, 339, 69-77.	9.4	70
116	Formation of Ptâ€“TiO₂â€“rGO 3-phase junctions with significantly enhanced electro-activity for methanol oxidation. Physical Chemistry Chemical Physics, 2012, 14, 473-476.	2.8	67
117	Facile Synthesis of Amorphous Ternary Metal Boridesâ€“Reduced Graphene Oxide Hybrid with Superior Oxygen Evolution Activity. ACS Applied Materials & Interfaces, 2019, 11, 846-855.	8.0	67
118	Methane reforming with carbon dioxide over a Ni/ZiO2â€“SiO2 catalyst: Influence of pretreatment gas atmospheres. International Journal of Hydrogen Energy, 2012, 37, 10135-10144.	7.1	66
119	Boosting Electrochemical CO₂ Reduction on Metalâ€“Organic Frameworks via Ligand Doping. Angewandte Chemie, 2019, 131, 4081-4085.	2.0	66
120	Rational Design of Metalâ€“Organic Frameworks towards Efficient Electrocatalysis. , 2020, 2, 1251-1267.		65
121	Promoted aerobic oxidation of benzyl alcohol on CNT supported platinum by iron oxide. Chemical Communications, 2011, 47, 7473.	4.1	64
122	Axial Modification of Cobalt Complexes on Heterogeneous Surface with Enhanced Electron Transfer for Carbon Dioxide Reduction. Angewandte Chemie - International Edition, 2020, 59, 19162-19167.	13.8	64
123	Synthesis of Nâ€Doped Highly Graphitic Carbon Urchinâ€Like Hollow Structures Loaded with Singleâ€Ni Atoms towards Efficient CO₂Electroreduction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	64
124	Electrochemical characterization of binary carbon supported electrode in polymer electrolyte fuel cells. Journal of Power Sources, 2001, 96, 282-287.	7.8	63
125	Increasing intracellular releasable electrons dramatically enhances bioelectricity output in microbial fuel cells. Electrochemistry Communications, 2012, 19, 13-16.	4.7	60
126	Synthesis of coin-like hollow carbon and performance as Pd catalyst support for methanol electrooxidation. Electrochemistry Communications, 2007, 9, 2473-2478.	4.7	58

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127	3D ordered porous Mo_xC (x = 1 or 2) for advanced hydrogen evolution and Li storage. Nanoscale, 2017, 9, 7260-7267.	5.6	58
128	Highly active Pd and Pdâ€“Au nanoparticles supported on functionalized graphene nanoplatelets for enhanced formic acid oxidation. RSC Advances, 2014, 4, 4028-4033.	3.6	57
129	An Earth-Abundant Tungstenâ€“Nickel Alloy Electrocatalyst for Superior Hydrogen Evolution. ACS Applied Nano Materials, 2018, 1, 1228-1235.	5.0	57
130	Templateâ€Free Pseudomorphic Synthesis of Tungsten Carbide Nanorods. Small, 2012, 8, 3350-3356.	10.0	56
131	Nanocomposite fuel cell membranes based on Nafion and acid functionalized zeolite beta nanocrystals. Journal of Membrane Science, 2008, 320, 86-92.	8.2	55
132	Anchoring metal nanoparticles on hydrofluoric acid treated multiwalled carbon nanotubes as stable electrocatalysts. Electrochemistry Communications, 2008, 10, 1101-1104.	4.7	55
133	Model interpretation of electrochemical impedance spectroscopy and polarization behavior of H2/CO mixture oxidation in polymer electrolyte fuel cells. Electrochimica Acta, 2001, 46, 4397-4405.	5.2	52
134	Multifunctional composite membrane based on a highly porous polyimide matrix for direct methanol fuel cells. Journal of Power Sources, 2010, 195, 1024-1030.	7.8	52
135	Lithiation/Delithiation Synthesis of Few Layer Silicene Nanosheets for Rechargeable Liâ€“O₂ Batteries. Advanced Materials, 2018, 30, e1705523.	21.0	51
136	Synthesis and characterization of Cocoreâ€“Ptshell electrocatalyst prepared by spontaneous replacement reaction for oxygen reduction reaction. Electrochimica Acta, 2010, 56, 1000-1007.	5.2	50
137	Optimizing interfacial electronic coupling with metal oxide to activate inert polyaniline for superior electrocatalytic hydrogen generation. , 2019, 1, 77-84.		50
138	Shape-controlled synthesis of octahedral Î±-NaYF4 and its rare earth doped submicrometer particles in acetic acid. Nano Research, 2009, 2, 565-574.	10.4	49
139	Selective synthesis of hexagonal Ag nanoplates in a solution-phase chemical reduction process. Nano Research, 2010, 3, 843-851.	10.4	48
140	Structural tuning of heterogeneous molecular catalysts for electrochemical energy conversion. Science Advances, 2021, 7, .	10.3	48
141	Pd catalyst supported on a chitosan-functionalized large-area 3D reduced graphene oxide for formic acid electrooxidation reaction. Journal of Materials Chemistry A, 2013, 1, 6839.	10.3	47
142	Oneâ€Pot Synthesis of Platinum Nanocubes on Reduced Graphene Oxide with Enhanced Electrocatalytic Activity. Small, 2014, 10, 2336-2339.	10.0	47
143	Bi₂O₃ Nanosheets Grown on Multiâ€Channel Carbon Matrix to Catalyze Efficient CO₂ Electroreduction to HCOOH. Angewandte Chemie, 2019, 131, 13966-13971.	2.0	45
144	Assessment of CO-tolerance for different Pt-alloy anode catalysts in a polymer electrolyte fuel cell using ac impedance spectroscopy. Journal of Electroanalytical Chemistry, 2002, 528, 145-152.	3.8	44

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145	Controllable self-assembly of Pd nanowire networks as highly active electrocatalysts for direct formic acid fuel cells. Nanotechnology, 2008, 19, 455602.	2.6	44
146	Water-Soluble Polymer Exfoliated Graphene: As Catalyst Support and Sensor. Journal of Physical Chemistry B, 2013, 117, 5606-5613.	2.6	43
147	Electrochemical hydrogen storage of ball-milled MmMg12 alloyâ€“Ni composites. International Journal of Hydrogen Energy, 2010, 35, 3550-3554.	7.1	42
148	Mesoporous ITO/NiO with a core/shell structure for supercapacitors. Nano Energy, 2013, 2, 1303-1313.	16.0	42
149	Molecule Confined Isolated Metal Sites Enable the Electrocatalytic Synthesis of Hydrogen Peroxide. Advanced Materials, 2022, 34, e2104891.	21.0	42
150	Methanol Resistant Cathodic Catalyst for Direct Methanol Fuel Cells. Journal of the Electrochemical Society, 2004, 151, A2183.	2.9	41
151	Pt supported on highly graphitized lace-like carbon for methanol electrooxidation. Carbon, 2008, 46, 531-536.	10.3	41
152	Tb promoted Pd/C catalysts for the electrooxidation of ethanol in alkaline media. International Journal of Hydrogen Energy, 2011, 36, 9645-9652.	7.1	41
153	Hierarchically structured Pt/CNT@TiO₂nanocatalysts with ultrahigh stability for low-temperature fuel cells. RSC Advances, 2012, 2, 792-796.	3.6	41
154	Aryl/hetero-arylethyne bridged dyes: the effect of planar Ï€-bridge on the performance of dye-sensitized solar cells. New Journal of Chemistry, 2011, 35, 127-136.	2.8	40
155	Novel tungsten carbide nanorods: An intrinsic peroxidase mimetic with high activity and stability in aqueous and organic solvents. Biosensors and Bioelectronics, 2014, 54, 521-527.	10.1	39
156	Uniform coreâ€“shell titanium phosphate nanospheres with orderly open nanopores: a highly active BrÃ¸nsted acid catalyst. Chemical Communications, 2010, 46, 1670.	4.1	38
157	Nickel-complexes with a mixed-donor ligand for photocatalytic hydrogen evolution from aqueous solutions under visible light. RSC Advances, 2012, 2, 8293.	3.6	38
158	Effect of Pd-impregnation on performance, sulfur poisoning and tolerance of Ni/GDC anode of solid oxide fuel cells. International Journal of Hydrogen Energy, 2012, 37, 10299-10310.	7.1	38
159	Efficient Electrochemical Reduction of CO₂ to HCOOH over Subâ€2â€…nm SnO₂ Quantum Wires with Exposed Grain Boundaries. Angewandte Chemie, 2019, 131, 8587-8591.	2.0	38
160	Reinforced and self-humidifying composite membrane for fuel cell applications. Journal of Membrane Science, 2009, 330, 357-362.	8.2	37
161	An investigation of the origin of the electrochemical hydrogen storage capacities of the ball-milled Coâ€“Si composites. International Journal of Hydrogen Energy, 2010, 35, 1669-1673.	7.1	37
162	Compressed hydrogen gas-induced synthesis of Auâ€“Pt coreâ€“shell nanoparticle chains towards high-performance catalysts for Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2014, 2, 10676-10681.	10.3	37

#	Article	IF	Citations
163	Nitrified coke wastewater sludge flocs: an attractive precursor for N,S dual-doped graphene-like carbon with ultrahigh capacitance and oxygen reduction performance. Journal of Materials Chemistry A, 2017, 5, 2012-2020.	10.3	36
164	CeO[sub 2] Promoted Electro-Oxidation of Formic Acid on Pdâ•C Nano-Electrocatalysts. Electrochemical and Solid-State Letters, 2009, 12, B73.	2.2	34
165	Hydrothermal assembly of micro-nano-integrated core-sheath carbon fibers for high-performance all-carbon micro-supercapacitors. Energy Storage Materials, 2017, 9, 221-228.	18.0	34
166	Electrochemical hydrogen storage properties of the ball-milled PrMg12â¯Ni + 150 wt% Ni (x= 1 and 2) composites. International Journal of Hydrogen Energy, 2008, 33, 5066-5072.	7.1	33
167	Synthesis of Pt and Pd nanosheaths on multi-walled carbon nanotubes as potential electrocatalysts of low temperature fuel cells. Electrochimica Acta, 2010, 55, 7652-7658.	5.2	33
168	Pore-filling membrane for direct methanol fuel cells based on sulfonated poly(styrene-ran-ethylene) and porous polyimide matrix. Journal of Membrane Science, 2009, 342, 208-214.	8.2	32
169	Excellent Durability of Substoichiometric Titanium Oxide As a Catalyst Support for Pd in Alkaline Direct Ethanol Fuel Cells. Industrial & Engineering Chemistry Research, 2012, 51, 9966-9972.	3.7	32
170	Enlarging the Ï€â€Conjugation of Cobalt Porphyrin for Highly Active and Selective CO₂Electroreduction. ChemSusChem, 2021, 14, 2126-2132.	6.8	31
171	Reversible hydrogen storage of multi-wall carbon nanotubes doped with atomically dispersed lithium. Journal of Materials Chemistry, 2010, 20, 6490.	6.7	30
172	Partially oxidized titanium carbonitride as a non-noble catalyst for oxygen reduction reactions. International Journal of Hydrogen Energy, 2012, 37, 15135-15139.	7.1	28
173	A 3D mesoporous polysulfoneâ€“carbon nanotube anode for enhanced bioelectricity output in microbial fuel cells. Chemical Communications, 2013, 49, 10754.	4.1	28
174	Improving mediated electron transport in anodic bioelectrocatalysis. Chemical Communications, 2015, 51, 12170-12173.	4.1	28
175	Copperâ€Modified Gold Nanoparticles as Highly Selective Catalysts for Glycerol Electroâ€Oxidation in Alkaline Solution. ChemCatChem, 2016, 8, 3272-3278.	3.7	28
176	Ultrafast hydrothermal assembly of nanocarbon microfibers in near-critical water for 3D microsupercapacitors. Carbon, 2018, 132, 698-708.	10.3	26
177	Recycling and regeneration of used perfluorosulfonic membranes for polymer electrolyte fuel cells. Journal of Applied Electrochemistry, 2002, 32, 1337-1340.	2.9	25
178	Electrochemical hydrogen storage properties of ball-milled NdMg12 alloy with Ni powders. International Journal of Hydrogen Energy, 2008, 33, 1023-1027.	7.1	25
179	A DFT Study on the Adsorption of Formic Acid and Its Oxidized Intermediates on (100) Facets of Pt, Au, Monolayer and Decorated Pt@Au Surfaces. Catalysis Letters, 2011, 141, 1872-1882.	2.6	25
180	High-yield synthesis of ultrathin silica-based nanosheets and their superior catalytic activity in H2O2 decomposition. Chemical Communications, 2011, 47, 6135.	4.1	24

#	Article	IF	Citations
181	Fabrication of a mesoporous Co(OH)2/ITO nanowire composite electrode and its application in supercapacitors. RSC Advances, 2012, 2, 10512.	3.6	24
182	Enzymatic-reaction induced production of polydopamine nanoparticles for sensitive and visual sensing of urea. Analyst, The, 2015, 140, 449-455.	3.5	24
183	Linkage Effect in the Heterogenization of Cobalt Complexes by Doped Graphene for Electrocatalytic CO₂ Reduction. Angewandte Chemie, 2019, 131, 13666-13673.	2.0	24
184	A CO₂-responsive surface with an amidine-terminated self-assembled monolayer for stimuli-induced selective adsorption. Chemical Communications, 2014, 50, 4003-4006.	4.1	23
185	Octahedral PtNi nanoparticles with controlled surface structure and composition for oxygen reduction reaction. Science China Materials, 2017, 60, 1109-1120.	6.3	23
186	Kinetics investigation of H2/CO electro-oxidation on carbon supported Pt and its alloys using impedance based models. Journal of Electroanalytical Chemistry, 2003, 556, 117-126.	3.8	21
187	Carbon nanotube free-standing membrane as gas diffusion layer in hydrogen fuel cells. Micro and Nano Letters, 2006, 1, 62.	1.3	21
188	Selective electro-oxidation of glycerol over Au supported on extended poly(4-vinylpyridine) functionalized graphene. Applied Catalysis B: Environmental, 2015, 166-167, 25-31.	20.2	21
189	CO Adsorption Behavior on Decorated Pt@Au Nanoelectrocatalysts: A Combined Experimental and DFT Theoretical Calculation Study. Journal of Physical Chemistry C, 2012, 116, 3851-3856.	3.1	20
190	Hierarchical Nâ€Rich Carbon Sponge with Excellent Cycling Performance for Lithiumâ€Sulfur Battery at High Rates. Chemistry - A European Journal, 2018, 24, 5860-5867.	3.3	20
191	A microporous Mg²⁺ MOF with cation exchange properties in a single-crystal-to-single-crystal fashion. Inorganic Chemistry Frontiers, 2017, 4, 530-536.	6.0	19
192	Recyclable Sulfonated Amorphous Carbon Catalyzed Friedelâ€“Crafts Alkylation of Indoles with Î±,Î²â€Unsaturated Carbonyl Compounds in Water. Chemistry - an Asian Journal, 2010, 5, 778-782.	3.3	18
193	Hydrothermal preparation of carbon nanosheets and their supercapacitive behavior. Journal of Materials Chemistry, 2012, 22, 11458.	6.7	18
194	Ag containing porous Au structures as highly selective catalysts for glycolate and formate. Catalysis Science and Technology, 2017, 7, 874-881.	4.1	18
195	Ethanol electrooxidation on Pt/C catalysts promoted with praseodymium oxide nanorods. Dalton Transactions, 2009, , 7606.	3.3	17
196	H2 and CH4 oxidation on Gd0.2Ce0.8O1.9 infiltrated SrMoO3â€“yttria-stabilized zirconia anode for solid oxide fuel cells. International Journal of Hydrogen Energy, 2012, 37, 18349-18356.	7.1	16
197	Sr1â^'Ca MoO3â€“Gd0.2Ce0.8O1.9 as the anode in solid oxide fuel cells: Effects of Mo precipitation. Journal of Alloys and Compounds, 2014, 587, 326-331.	5.5	16
198	Fabrication of the porous polyimide film as a matrix of the composite membrane of the direct methanol fuel cell. Separation and Purification Technology, 2009, 67, 208-212.	7.9	15

#	Article	IF	Citations
199	Influence of preparation process on non-noble metal-based composite electrocatalysts for oxygen reduction reaction. Journal of Power Sources, 2008, 183, 604-608.	7.8	14
200	Interface-facilitated hydrothermal synthesis of sub-micrometre graphitic carbon plates. Journal of Materials Chemistry, 2011, 21, 15197.	6.7	14
201	Improving electron trans-inner membrane movements in microbial electrocatalysts. Chemical Communications, 2016, 52, 6292-6295.	4.1	14
202	A Planar, Conjugated N₄â€Macrocyclic Cobalt Complex for Heterogeneous Electrocatalytic CO₂ Reduction with High Activity. Angewandte Chemie, 2020, 132, 17252-17257.	2.0	14
203	Preparation and Catalytic Activity of Carbon Nanotube-Supported Metalloporphyrin Electrocatalyst. Chinese Journal of Catalysis, 2008, 29, 519-523.	14.0	13
204	Investigation of Structural Evolution of SnO 2 Nanosheets towards Electrocatalytic CO 2 Reduction. Chemistry - an Asian Journal, 2020, 15, 1558-1561.	3.3	13
205	Highly selective and efficient electroreduction of CO₂ in water by quaterpyridine derivativeâ€based molecular catalyst noncovalently tethered to carbon nanotubes. SmartMat, 2022, 3, 151-162.	10.7	12
206	Biomass-Derived Fe₂N@NCNTs from Bioaccumulation as an Efficient Electrocatalyst for Oxygen Reduction and Znâ€“Air Battery. ACS Sustainable Chemistry and Engineering, 2022, 10, 9105-9112.	6.7	12
207	Electrochemical properties of ball-milled LaMg12â€“Ni composites containing carbon nanotubes. International Journal of Hydrogen Energy, 2009, 34, 1444-1449.	7.1	11
208	Nanoporous platinum grown on nickel foam by facile plasma reduction with enhanced electro-catalytic performance. Electrochemistry Communications, 2012, 18, 33-36.	4.7	11
209	Axial Modification of Cobalt Complexes on Heterogeneous Surface with Enhanced Electron Transfer for Carbon Dioxide Reduction. Angewandte Chemie, 2020, 132, 19324-19329.	2.0	11
210	Synthesis of Nâ€Doped Highly Graphitic Carbon Urchinâ€Like Hollow Structures Loaded with Singleâ€Ni Atoms towards Efficient CO₂Electroreduction. Angewandte Chemie, 2022, 134, .	2.0	11
211	Co2MnO4 spinel-palladium co-infiltrated La0.7Ca0.3Cr0.5Mn0.5O3â^' cathodes for intermediate temperature solid oxide fuel cells. Journal of Alloys and Compounds, 2011, 509, 9708-9717.	5.5	9
212	CO2 reforming of dimethyl ether over Ni/Î³-Al2O3 catalyst. Catalysis Communications, 2012, 17, 49-53.	3.3	9
213	Fe-Based Metallopolymer Nanowall-Based Composites for Liâ€“O₂ Battery Cathode. ACS Applied Materials & Interfaces, 2014, 6, 7164-7170.	8.0	9
214	Effects of Axial Functional Groups on Heterogeneous Molecular Catalysts for Electrocatalytic CO₂ Reduction. Small Structures, 2021, 2, 2100093.	12.0	9
215	Electrochemical characteristics of the ball-milled LaMg10-xTixNi2LaMg10-xTixNi2 alloys with Ni powders (x=1x=1 and 2). International Journal of Hydrogen Energy, 2007, 32, 4180-4185.	7.1	8
216	Ce5Mg41â€“xNi nanocomposites for electrochemical hydrogen storage. Dalton Transactions, 2008, , 5495.	3.3	8

#	Article	IF	Citations
217	One-step dual template synthesis of platinum on mesoporous carbon nanowires for electrocatalysts. International Journal of Hydrogen Energy, 2013, 38, 2754-2759.	7.1	8
218	Facile Synthesis of 3â€‰D Platinum Dendrites with a Clean Surface as Highly Stable Electrocatalysts. ChemCatChem, 2014, 6, 1538-1542.	3.7	8
219	Augmentation of hydroxyl groups as electrocatalytic active sites in porous graphene. Carbon, 2019, 154, 384-390.	10.3	8
220	Electrodeposition of mesoporous bilayers of polyaniline supported Cu2O semiconductor films from Lyotropic Liquid Crystalline phase. Chemical Engineering Science, 2012, 80, 452-459.	3.8	7
221	Synthesis of Hollow-Cone-Like Carbon and Its Application as Support Material for Fuel Cells. Journal of the Electrochemical Society, 2009, 156, B377.	2.9	6
222	Boosting microbial electrocatalysis via localized high electron shuttles concentration by monolithic electrode based on nanostructured nitrogen-doped carbon microtubes. Journal of Power Sources, 2021, 514, 230557.	7.8	6
223	Recent advances in catalysisâ€"selected papers from APCAT 4 (Singapore, 6â€"8 December 2006). Catalysis Today, 2008, 131, 1.	4.4	5
224	Synthesis of Mesoporous Polyaniline (PANI)-Se_{0.5}Te_{0.5} Dual-Layer Film from Lyotropic Liquid Crystalline Template. Industrial & Engineering Chemistry Research, 2013, 52, 5072-5078.	3.7	5
225	â€˜Nanoreactorsâ€™ for photocatalytic H2 evolution in oilâ€"water biphase systems. Physical Chemistry Chemical Physics, 2010, 12, 14449.	2.8	4
226	Pd Nanoparticles Supported on PDDA-Functionalized Ti4O7 as an Effective Catalyst for Formic Acid Electrooxidation. ECS Solid State Letters, 2014, 3, M37-M40.	1.4	4
227	Electrochemical Performances of the Ballmilled Pr[sub 5]Mg[sub 41] Alloy with Ni Powders as Anode Materials of Niâ€"MH Batteries. Journal of the Electrochemical Society, 2008, 155, A982.	2.9	3
228	Density functional theory (DFT)-based modified embedded atom method potentials: Bridging the gap between nanoscale theoretical simulations and DFT calculations. Science China Chemistry, 2010, 53, 411-418.	8.2	3
229	Electrochemical properties of the ball-milled LaMg10NiMn alloy with Ni powders. Materials Chemistry and Physics, 2008, 110, 234-238.	4.0	2
230	Synthesis and characterization of Pd-on-Pt and Au-on-Pt bimetallic nanosheaths on multiwalled carbon nanotubes. Journal of Nanoparticle Research, 2011, 13, 2973-2979.	1.9	2
231	Effects of strain on PdZn(100) for methoxide decomposition: A DFT study. Journal of Molecular Catalysis A, 2014, 393, 296-301.	4.8	2
232	Pt-decorated Au Nanoparticles: Highly Active Catalyst for Formic Acid Oxidation. ECS Transactions, 2008, 16, 639-645.	0.5	1
233	Development of PtRu Electrocatalysts on 1-Aminopyrene Functionalized MWCNTs for Direct Methanol Fuel Cells. ECS Transactions, 2008, 16, 467-472.	0.5	1
234	Heterogeneous carbon dioxide reduction reaction by cobalt complexes of 4â€²,4â€²â€²-disubstituted derivatives of quinquepyridine immobilized on carbon black. Electrochimica Acta, 2021, 380, 138224.	5.2	1

#	Article	IF	Citations
235	Frontispiece: Molybdenum Carbideâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Chemistry - A European Journal, 2017, 23, .	3.3	0
236	InnenrÃ¼cktitelbild: Axial Modification of Cobalt Complexes on Heterogeneous Surface with Enhanced Electron Transfer for Carbon Dioxide Reduction (Angew. Chem. 43/2020). Angewandte Chemie, 2020, 132, 19527-19527.	2.0	0