

High-performance transition metalâ€“doped Pt ₃ reduction reaction

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Citation Report

#	ARTICLE	IF	CITATIONS
18	Engineered nanomaterials in aerospace. MRS Bulletin, 2015, 40, 804-811.	1.7	24
20	Probing Redox Reactions at the Nanoscale with Electrochemical Tip-Enhanced Raman Spectroscopy. Nano Letters, 2015, 15, 7956-7962.	4.5	193
21	Atomic Structure of Pt ₃ Ni Nanoframe Electrocatalysts by <i>in Situ</i> X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2015, 137, 15817-15824.	6.6	197
22	Highly Durable and Active PtFe Nanocatalyst for Electrochemical Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 15478-15485.	6.6	517
23	UCLA researchers develop lower-cost, more efficient nanostructures for PEMFCs. Fuel Cells Bulletin, 2015, 2015, 13.	0.7	0
24	Rational Design of Pt ₃ Ni Surface Structures for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2015, 119, 17735-17747.	1.5	44
25	Catalysts by Platonic design. Science, 2015, 349, 379-380.	6.0	98
26	The alloying effect and AgCl-directing growth for synthesizing a trimetallic nanoring with improved SERS. Nanoscale, 2015, 7, 20414-20425.	2.8	10
27	Cubic structure of the mixed halide perovskite CH ₃ NH ₃ Pb ₃ xCl _x via thermal annealing. RSC Advances, 2015, 5, 85480-85485.	1.7	21
28	Epitaxial Growth of Twinned Au@Pt Core-Shell Star-Shaped Decahedra as Highly Durable Electrocatalysts. Nano Letters, 2015, 15, 7808-7815.	4.5	195
29	Ratio-Controlled Synthesis of CuNi Octahedra and Nanocubes with Enhanced Catalytic Activity. Journal of the American Chemical Society, 2015, 137, 14027-14030.	6.6	75
30	Electrochemical-reduction-assisted assembly of ternary Ag nanoparticles/polyoxometalate/graphene nanohybrids and their activity in the electrocatalysis of oxygen reduction. RSC Advances, 2015, 5, 74447-74456.	1.7	38
31	Synergistic effect of S,N-co-doped mesoporous carbon materials with high performance for oxygen-reduction reaction and Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 20244-20253.	5.2	53
32	Nanostructured Electrocatalysts for PEM Fuel Cells and Redox Flow Batteries: A Selected Review. ACS Catalysis, 2015, 5, 7288-7298.	5.5	78
33	Structural Characterization of Bimetallic Nanocrystal Electrocatalysts. Microscopy and Microanalysis, 2016, 22, 1286-1287.	0.2	0
34	Ultralong PtNi alloy nanowires enabled by the coordination effect with superior ORR durability. RSC Advances, 2016, 6, 71501-71506.	1.7	37
35	Stabilization of Organic-Inorganic Perovskite Layers by Partial Substitution of Iodide by Bromide in Methylammonium Lead Iodide. ChemPhysChem, 2016, 17, 1505-1511.	1.0	49
36	Superior Catalysts for Oxygen Reduction Reaction Based on Porous Nanostars of a Pt, Pd, or Pt@Pd Alloy Shell Supported on a Gold Core. ChemElectroChem, 2016, 3, 749-756.	1.7	26

#	ARTICLE	IF	CITATIONS
37	Increasing Stability and Activity of Core-Shell Catalysts by Preferential Segregation of Oxide on Edges and Vertices: Oxygen Reduction on Ti-Au@Pt/C. <i>Journal of the American Chemical Society</i> , 2016, 138, 9294-9300.	6.6	83
38	Intermetallic Ni _x M _y (<i>M</i> = Ga and Sn) Nanocrystals: A Non-Precious Metal Catalyst for Semi-Hydrogenation of Alkynes. <i>Advanced Materials</i> , 2016, 28, 4747-4754.	11.1	145
39	Spatially Resolved Quantification of the Surface Reactivity of Solid Catalysts. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6239-6243.	7.2	87
40	Facile Synthesis of Porous Dendritic Bimetallic Platinum-Nickel Nanocrystals as Efficient Catalysts for the Oxygen Reduction Reaction. <i>Chemistry - an Asian Journal</i> , 2016, 11, 1388-1393.	1.7	50
41	Bimetallic Nanocrystals: Syntheses, Properties, and Applications. <i>Chemical Reviews</i> , 2016, 116, 10414-10472.	23.0	1,339
42	Nitrogen-doped cobalt phosphate@nanocarbon hybrids for efficient electrocatalytic oxygen reduction. <i>Energy and Environmental Science</i> , 2016, 9, 2563-2570.	15.6	216
43	Superaerophilic Carbon-Nanotube-Array Electrode for High-Performance Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2016, 28, 7155-7161.	11.1	231
44	Unexpected hydrogen oxidation selectivity of Pt/NbTiO ₂ catalysts. <i>Nano Energy</i> , 2016, 27, 157-166.	8.2	7
45	Carbon-coated nanoparticle superlattices for energy applications. <i>Nanoscale</i> , 2016, 8, 14359-14368.	2.8	11
46	Synthesis of core/shell structured Pd ₃ Au@Pt/C with enhanced electrocatalytic activity by regioselective atomic layer deposition combined with a wet chemical method. <i>RSC Advances</i> , 2016, 6, 66712-66720.	1.7	12
47	In situ ETEM study of composition redistribution in Pt-Ni octahedral catalysts for electrochemical reduction of oxygen. <i>AIChE Journal</i> , 2016, 62, 399-407.	1.8	24
48	Platinfreie Nanomaterialien für die Sauerstoffreduktion. <i>Angewandte Chemie</i> , 2016, 128, 2698-2726.	1.6	87
49	Earth-Abundant Nanomaterials for Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2650-2676.	7.2	926
50	Electrochemically Identifying Degradation Pathways of Carbon-Supported Pt Catalysts Assists in Designing Highly Durable Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 33749-33754.	4.0	7
51	Biaxially strained PtPb/Pt core/shell nanoplate boosts oxygen reduction catalysis. <i>Science</i> , 2016, 354, 1410-1414.	6.0	1,262
52	In situ preparation of multi-wall carbon nanotubes/Au composites for oxygen electroreduction. <i>RSC Advances</i> , 2016, 6, 91209-91215.	1.7	7
53	Pt-M (<i>M</i> = Cu, Fe, Zn, etc.) bimetallic nanomaterials with abundant surface defects and robust catalytic properties. <i>Chemical Communications</i> , 2016, 52, 5985-5988.	2.2	60
54	Preparation of hollow PtCu nanoparticles as high-performance electrocatalysts for oxygen reduction reaction in the absence of a surfactant. <i>RSC Advances</i> , 2016, 6, 39993-40001.	1.7	23

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55	Dual-valence nickel nanosheets covered with thin carbon as bifunctional electrocatalysts for full water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7297-7304.	5.2	73
56	Tuning the activity of Pt alloy electrocatalysts by means of the lanthanide contraction. <i>Science</i> , 2016, 352, 73-76.	6.0	783
57	Novel Pd ₁₃ Cu ₃ S ₇ nanotubes with high electrocatalytic activity towards both oxygen reduction and ethanol oxidation reactions. <i>CrystEngComm</i> , 2016, 18, 6055-6061.	1.3	14
58	Synthesis of bare Pt ₃ Ni nanorods from PtNi@Ni core-shell nanorods by acid etching: one-step surfactant removal and phase conversion for optimal electrochemical performance toward oxygen reduction reaction. <i>CrystEngComm</i> , 2016, 18, 6002-6007.	1.3	19
59	Electrochemical Quantifying, Counting, and Sizing Supported Pt Nanoparticles in Real Time. <i>Analytical Chemistry</i> , 2016, 88, 6403-6409.	3.2	7
60	Well-dispersed FeN ₄ decorated mesoporous carbons for efficient oxygen reduction in acid media. <i>Carbon</i> , 2016, 105, 282-290.	5.4	22
61	Mesoporous platinum nickel thin films with double gyroid morphology for the oxygen reduction reaction. <i>Nano Energy</i> , 2016, 29, 243-248.	8.2	26
62	Mechanisms for High Selectivity in the Hydrodeoxygenation of 5-Hydroxymethylfurfural over PtCo Nanocrystals. <i>ACS Catalysis</i> , 2016, 6, 4095-4104.	5.5	124
63	Activities and Stabilities of Au-Modified Stepped-Pt Single-Crystal Electrodes as Model Cathode Catalysts in Polymer Electrolyte Fuel Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 4194-4200.	6.6	68
64	Progress in the Development of Oxygen Reduction Reaction Catalysts for Low-Temperature Fuel Cells. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2016, 7, 509-532.	3.3	46
65	Recent advances in the design of tailored nanomaterials for efficient oxygen reduction reaction. <i>Nano Energy</i> , 2016, 29, 149-165.	8.2	177
66	Creation of Ge-Nx-Cy Configures in Carbon Nanotubes: Origin of Enhanced Electrocatalytic Performance for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10383-10391.	4.0	23
67	SAD-GLAD Pt-Ni@Ni Nanorods as Highly Active Oxygen Reduction Reaction Electrocatalysts. <i>ACS Catalysis</i> , 2016, 6, 3478-3485.	5.5	20
68	Ultra-durable two-electrode Zn-air secondary batteries based on bifunctional titania nanocatalysts: a Co ²⁺ dopant boosts the electrochemical activity. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7841-7847.	5.2	30
69	Dealloyed Pt-based core-shell oxygen reduction electrocatalysts. <i>Nano Energy</i> , 2016, 29, 166-177.	8.2	143
70	Synthesis of Pt-Ni Octahedra in Continuous-Flow Droplet Reactors for the Scalable Production of Highly Active Catalysts toward Oxygen Reduction. <i>Nano Letters</i> , 2016, 16, 3850-3857.	4.5	86
71	Palladium-Platinum Core-Shell Electrocatalysts for Oxygen Reduction Reaction Prepared with the Assistance of Citric Acid. <i>ACS Catalysis</i> , 2016, 6, 3428-3432.	5.5	52
72	Oxidation Induced Doping of Nanoparticles Revealed by <i>in Situ</i> X-ray Absorption Studies. <i>Nano Letters</i> , 2016, 16, 3738-3747.	4.5	25

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73	Large faceted Pd nanocrystals supported small Pt nanoparticles as highly durable electrocatalysts for oxygen reduction. <i>Journal of Power Sources</i> , 2016, 326, 23-34.	4.0	16
74	Synthesis of highly active and dual-functional electrocatalysts for methanol oxidation and oxygen reduction reactions. <i>Applied Surface Science</i> , 2016, 389, 181-189.	3.1	27
75	Activating earth-abundant electrocatalysts for efficient, low-cost hydrogen evolution/oxidation: sub-monolayer platinum coatings on titanium tungsten carbide nanoparticles. <i>Energy and Environmental Science</i> , 2016, 9, 3290-3301.	15.6	138
76	Nanostructured Bifunctional Redox Electrocatalysts. <i>Small</i> , 2016, 12, 5656-5675.	5.2	174
77	Shaping electrocatalysis through tailored nanomaterials. <i>Nano Today</i> , 2016, 11, 587-600.	6.2	133
78	Self-supporting nanoporous gold-palladium overlayer bifunctional catalysts toward oxygen reduction and evolution reactions. <i>Nano Research</i> , 2016, 9, 3781-3794.	5.8	39
79	Synergistic effect of Yttrium and pyridine-functionalized carbon nanotube on platinum nanoparticles toward the oxygen reduction reaction in acid medium. <i>Journal of Catalysis</i> , 2016, 344, 712-721.	3.1	14
80	Potentiodynamic dissolution study of PtRu/C electrocatalyst in the presence of methanol. <i>Electrochimica Acta</i> , 2016, 211, 851-859.	2.6	39
81	The segregation resistance of the Pt ₂ ML ₂ /Os/Pd ₃ Al sandwich catalyst for oxygen reduction reaction: a density functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30174-30182.	1.3	17
82	Functional link between surface low-coordination sites and the electrochemical durability of Pt nanoparticles. <i>Journal of Power Sources</i> , 2016, 334, 52-57.	4.0	12
83	Intrinsically Conductive Perovskite Oxides with Enhanced Stability and Electrocatalytic Activity for Oxygen Reduction Reactions. <i>ACS Catalysis</i> , 2016, 6, 7865-7871.	5.5	51
84	Structural Evolution of Solid Pt Nanoparticles to a Hollow PtFe Alloy with a Pt-Skin Surface via Space-Confining Pyrolysis and the Nanoscale Kirkendall Effect. <i>Advanced Materials</i> , 2016, 28, 10673-10678.	11.1	150
85	Controllable localization of carbon nanotubes on the holey edge of graphene: an efficient oxygen reduction electrocatalyst for Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18240-18247.	5.2	31
86	Dealloyed PtAuCu electrocatalyst to improve the activity and stability towards both oxygen reduction and methanol oxidation reactions. <i>Electrochimica Acta</i> , 2016, 212, 277-285.	2.6	27
87	Low-cost Cr doped Pt ₃ Ni alloy supported on carbon nanofibers composites counter electrode for efficient dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2016, 328, 543-550.	4.0	19
88	Ternary dendritic nanowires as highly active and stable multifunctional electrocatalysts. <i>Nanoscale</i> , 2016, 8, 15167-15172.	2.8	23
89	Metalloporphyrins as Non-Precious Metal Electrocatalysts for Highly Efficient Oxygen Reduction in Alkaline Media. <i>ChemCatChem</i> , 2016, 8, 2832-2837.	1.8	52
90	Oxygen Electrocatalysis on Dealloyed Pt Nanocatalysts. <i>Topics in Catalysis</i> , 2016, 59, 1628-1637.	1.3	27

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91	Nano ceria supported nitrogen doped graphene as a highly stable and methanol tolerant electrocatalyst for oxygen reduction. <i>RSC Advances</i> , 2016, 6, 77100-77104.	1.7	27
92	One-Pot Synthesis of Highly Anisotropic Five-Fold-Twinned PtCu Nanoframes Used as a Bifunctional Electrocatalyst for Oxygen Reduction and Methanol Oxidation. <i>Advanced Materials</i> , 2016, 28, 8712-8717.	11.1	336
93	Recent developments in copper-based, non-noble metal electrocatalysts for the oxygen reduction reaction. <i>Chinese Journal of Catalysis</i> , 2016, 37, 1049-1061.	6.9	59
94	Hairy Hybrid Nanorattles of Platinum Nanoclusters with Dual-Responsive Polymer Shells for Confined Nanocatalysis. <i>Macromolecules</i> , 2016, 49, 5649-5659.	2.2	23
95	Yolk-Shell Nanocomposites of a Gold Nanocore Encapsulated in an Electroactive Polyaniline Shell for Catalytic Aerobic Oxidation. <i>ACS Omega</i> , 2016, 1, 160-167.	1.6	12
96	Coordination effect assisted synthesis of ultrathin Pt layers on second metal nanocrystals as efficient oxygen reduction electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13033-13039.	5.2	31
97	Structural evolution of concave trimetallic nanocubes with tunable ultra-thin shells for oxygen reduction reaction. <i>Nanoscale</i> , 2016, 8, 16640-16649.	2.8	32
98	High Durable Ternary Nanodendrites as Effective Catalysts for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 23646-23654.	4.0	28
99	2D Nanoporous Fe ^N /C Nanosheets as Highly Efficient Non-Platinum Electrocatalysts for Oxygen Reduction Reaction in Zn-Air Battery. <i>Small</i> , 2016, 12, 5710-5719.	5.2	95
100	Controlled Dealloying of Alloy Nanoparticles toward Optimization of Electrocatalysis on Spongy Metallic Nanoframes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 23920-23931.	4.0	39
101	Self-assembly of Pt-based truncated octahedral crystals into metal-frameworks towards enhanced electrocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15169-15180.	5.2	11
102	Designed multimetallic Pd nanosponges with enhanced electrocatalytic activity for ethylene glycol and glycerol oxidation. <i>Energy and Environmental Science</i> , 2016, 9, 3097-3102.	15.6	111
103	Enhancing the stability and activity by anchoring Pt nanoparticles between the layers of etched montmorillonite for oxygen reduction reaction. <i>Science Bulletin</i> , 2016, 61, 1435-1439.	4.3	17
104	Elucidating Proton Involvement in the Rate-Determining Step for Pt/Pd-Based and Non-Precious-Metal Oxygen Reduction Reaction Catalysts Using the Kinetic Isotope Effect. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3542-3547.	2.1	50
105	Noncovalent Immobilization of a Pyrene-Modified Cobalt Corrole on Carbon Supports for Enhanced Electrocatalytic Oxygen Reduction and Oxygen Evolution in Aqueous Solutions. <i>ACS Catalysis</i> , 2016, 6, 6429-6437.	5.5	170
106	Carbon supported nano Pt-Mo alloy catalysts for oxygen reduction in magnesium-air batteries. <i>RSC Advances</i> , 2016, 6, 83025-83030.	1.7	16
107	3D multi-structural porous NiAg films with nanoarchitecture walls: high catalytic activity and stability for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2016, 211, 900-910.	2.6	44
108	Anisotropic phase segregation and migration of Pt in nanocrystals en route to nanoframe catalysts. <i>Nature Materials</i> , 2016, 15, 1188-1194.	13.3	244

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109	Rational design of Pt–Ni–Co ternary alloy nanoframe crystals as highly efficient catalysts toward the alkaline hydrogen evolution reaction. <i>Nanoscale</i> , 2016, 8, 16379-16386.	2.8	128
110	Self-Supported Mesoporous Pt-Based Bimetallic Nanospheres Containing an Intermetallic Phase as Ultrastable Oxygen Reduction Electrocatalysts. <i>Small</i> , 2016, 12, 5347-5353.	5.2	72
111	Coordination compound-derived ordered mesoporous N-free Fe–P–C material for efficient oxygen electroreduction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14291-14297.	5.2	20
112	Importance and Challenges of Electrochemical <i>in Situ</i> Liquid Cell Electron Microscopy for Energy Conversion Research. <i>Accounts of Chemical Research</i> , 2016, 49, 2015-2022.	7.6	185
113	Composition tunable ternary Pt–Ni–Co octahedra for optimized oxygen reduction activity. <i>Chemical Communications</i> , 2016, 52, 11215-11218.	2.2	44
114	Scalable Nanoporous (Pt _{1-x} Ni _x) ₃ Al Intermetallic Compounds as Highly Active and Stable Catalysts for Oxygen Electroreduction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32910-32917.	4.0	29
115	Iron nanoparticles with a square pyramidal structure in mesoporous carbons as an effective catalyst toward oxygen reduction. <i>RSC Advances</i> , 2016, 6, 111366-111373.	1.7	3
116	Direct and continuous strain control of catalysts with tunable battery electrode materials. <i>Science</i> , 2016, 354, 1031-1036.	6.0	512
117	A highly active and durable CuPdPt/C electrocatalyst for an efficient hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15309-15315.	5.2	29
118	Facile Synthesis of PdAgCo Trimetallic Nanoparticles for Formic Acid Electrochemical Oxidation. <i>Chemistry Letters</i> , 2016, 45, 732-734.	0.7	6
119	Effect of the pyrolysis atmosphere and nature of iron precursor on the structure and activity of Fe/N based electrocatalysts for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22560-22569.	3.8	13
120	Bioinspired Iron- and Copper-incorporated Carbon Electrocatalysts for Oxygen Reduction Reaction. <i>Chemistry Letters</i> , 2016, 45, 1213-1215.	0.7	12
121	Galvanic replacement mediated synthesis of rGO–Mn ₃ O ₄ –Pt nanocomposites for the oxygen reduction reaction. <i>RSC Advances</i> , 2016, 6, 89124-89129.	1.7	12
122	Alloying Behavior of Self-Assembled Noble Metal Nanoparticles. <i>Chemistry - A European Journal</i> , 2016, 22, 13446-13450.	1.7	25
123	Stimulation of electrocatalytic oxygen reduction activity on nitrogen doped graphene through noncovalent molecular functionalisation. <i>Chemical Communications</i> , 2016, 52, 10385-10388.	2.2	17
124	Coating Pt–Ni Octahedra with Ultrathin Pt Shells to Enhance the Durability without Compromising the Activity toward Oxygen Reduction. <i>ChemSusChem</i> , 2016, 9, 2209-2215.	3.6	35
125	Metalloporphyrins as Electrocatalysts for the Oxygen Reduction Reaction (ORR). <i>Israel Journal of Chemistry</i> , 2016, 56, 756-762.	1.0	38
126	A review of applications of poly(diallyldimethyl ammonium chloride) in polymer membrane fuel cells: From nanoparticles to support materials. <i>Chinese Journal of Catalysis</i> , 2016, 37, 1025-1036.	6.9	14

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127	Ternary Hollow Mesoporous TiN/N-Graphene/Pt Hybrid Results in Enhanced Electrocatalytic Performance for Methanol Oxidation and Oxygen Reduction Reaction. <i>Electrochimica Acta</i> , 2016, 213, 771-782.	2.6	21
128	Hierarchical carbon and nitrogen adsorbed PtNiCo nanocomposites with multiple active sites for oxygen reduction and methanol oxidation reactions. <i>Journal of Materials Chemistry A</i> , 2016, 4, 12296-12307.	5.2	44
129	Pt skin on Pd-Co-Zn/C ternary nanoparticles with enhanced Pt efficiency toward ORR. <i>Nanoscale</i> , 2016, 8, 14793-14802.	2.8	22
130	Mesoporous materials for energy conversion and storage devices. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	1,031
131	Platanus hispanica-inspired design of Co-carbon nanotube frameworks through chemical vapor deposition: a highly integrated hierarchical electrocatalyst for oxygen reduction reactions. <i>Chemical Communications</i> , 2016, 52, 12992-12995.	2.2	13
132	Morphology Control and Electro catalytic Activity towards Oxygen Reduction of Peptide-templated Metal Nanomaterials: A Comparison between Au and Pt. <i>ChemistrySelect</i> , 2016, 1, 6044-6052.	0.7	19
133	Ultrafine jagged platinum nanowires enable ultrahigh mass activity for the oxygen reduction reaction. <i>Science</i> , 2016, 354, 1414-1419.	6.0	1,292
134	Highly active and stable AuNi dendrites as an electrocatalyst for the oxygen reduction reaction in alkaline media. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17828-17837.	5.2	43
135	CO ₂ dissociation over Pt _x Ni _{4-x} bimetallic clusters with and without hydrogen sources: A density functional theory study. <i>Journal of CO₂ Utilization</i> , 2016, 16, 431-441.	3.3	28
136	Theoretical Insights into the Effects of Oxidation and Mo-Doping on the Structure and Stability of Pt-Ni Nanoparticles. <i>Nano Letters</i> , 2016, 16, 7748-7754.	4.5	64
137	Photoassisted Oxygen Reduction Reaction in H ₂ -O ₂ Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14748-14751.	7.2	81
138	Nanostructured electrocatalysts with tunable activity and selectivity. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	675
139	Polyaniline-Coated Platinum Nanocube Assemblies as Enhanced Methanol Oxidation Electrocatalysts. <i>ChemCatChem</i> , 2016, 8, 3436-3440.	1.8	18
140	Shape effects of nickel phosphide nanocrystals on hydrogen evolution reaction. <i>CrystEngComm</i> , 2016, 18, 6083-6089.	1.3	96
141	Engineering Multimetallic Nanocrystals for Highly Efficient Oxygen Reduction Catalysts. <i>Advanced Energy Materials</i> , 2016, 6, 1600236.	10.2	108
142	Contact Potentials, Fermi Level Equilibration, and Surface Charging. <i>Langmuir</i> , 2016, 32, 5765-5775.	1.6	63
143	Probing the nanoscale structure of the catalytically active overlayer on Pt alloys with rare earths. <i>Nano Energy</i> , 2016, 29, 249-260.	8.2	49
144	Tin nanoparticles decorated copper oxide nanowires for selective electrochemical reduction of aqueous CO ₂ to CO. <i>Journal of Materials Chemistry A</i> , 2016, 4, 10710-10718.	5.2	129

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145	Reduced graphene oxide (rGO) grafted zinc stannate (Zn ₂ SnO ₄) nanofiber scaffolds for highly efficient mixed-halide perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 12158-12169.	5.2	65
146	Polyelemental nanoparticle libraries. <i>Science</i> , 2016, 352, 1565-1569.	6.0	332
147	Mechanistic Insight into Sulfide-Enhanced Oxygen Reduction Reaction Activity and Stability of Commercial Pt Black: An in Situ Raman Spectroscopic Study. <i>ACS Catalysis</i> , 2016, 6, 5000-5004.	5.5	24
148	In situ development of highly concave and composition-confined PtNi octahedra with high oxygen reduction reaction activity and durability. <i>Nano Research</i> , 2016, 9, 149-157.	5.8	64
149	Ultra-small Fe ₂ N nanocrystals embedded into mesoporous nitrogen-doped graphitic carbon spheres as a highly active, stable, and methanol-tolerant electrocatalyst for the oxygen reduction reaction. <i>Nano Energy</i> , 2016, 24, 121-129.	8.2	131
150	Humidity and Temperature Dependences of Oxygen Transport Resistance of Nafion Thin Film on Platinum Electrode. <i>Electrochimica Acta</i> , 2016, 209, 682-690.	2.6	147
151	Antimony selenide thin-film solar cells. <i>Semiconductor Science and Technology</i> , 2016, 31, 063001.	1.0	178
152	How Does the Surface Structure of Pt-Ni Alloys Control Water and Hydrogen Peroxide Formation?. <i>ACS Catalysis</i> , 2016, 6, 5641-5650.	5.5	9
153	Recent advances in Pt-based octahedral nanocrystals as high performance fuel cell catalysts. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11559-11581.	5.2	54
154	Highly-branched mesoporous Au-Pd-Pt trimetallic nanoflowers blooming on reduced graphene oxide as an oxygen reduction electrocatalyst. <i>Chemical Communications</i> , 2016, 52, 8659-8662.	2.2	52
155	Amphiphilic linear-hyperbranched polymer poly(ethylene glycol)-branched polyethylenimine-poly(μ -caprolactone): synthesis, self-assembly and application as stabilizer of platinum nanoparticles. <i>Polymer International</i> , 2016, 65, 691-697.	1.6	14
156	Trimetallic TriStar Nanostructures: Tuning Electronic and Surface Structures for Enhanced Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2016, 28, 2077-2084.	11.1	181
157	Spatially Resolved Quantification of the Surface Reactivity of Solid Catalysts. <i>Angewandte Chemie</i> , 2016, 128, 6347-6351.	1.6	21
158	Unveiling the Oxidation Processes of Pt ₃ Ni(1±1) by Real-time Surface Core-level Spectroscopy. <i>ChemCatChem</i> , 2016, 8, 713-718.	1.8	4
159	Ultrathin Icosahedral Pt-Enriched Nanocage with Excellent Oxygen Reduction Reaction Activity. <i>Journal of the American Chemical Society</i> , 2016, 138, 1494-1497.	6.6	316
160	High impact of the reducing agent on palladium nanomaterials: new insights from X-ray photoelectron spectroscopy and oxygen reduction reaction. <i>RSC Advances</i> , 2016, 6, 12627-12637.	1.7	42
161	Molecular Dynamics Simulations on O ₂ Permeation through Nafion Ionomer on Platinum Surface. <i>Electrochimica Acta</i> , 2016, 188, 767-776.	2.6	198
162	Oxygen Reduction Reaction Catalyzed by Self-Assembled Monolayers of Copper-Based Electrocatalysts on a Polycrystalline Gold Surface. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15814-15822.	1.5	24

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163	In-situ Preparation of Pd Incorporated Ordered Mesoporous Carbon as Efficient Electrocatalyst for Oxygen Reduction Reaction. <i>Electrochimica Acta</i> , 2016, 191, 355-363.	2.6	24
164	Pt-Based Icosahedral Nanocages: Using a Combination of {111} Facets, Twin Defects, and Ultrathin Walls to Greatly Enhance Their Activity toward Oxygen Reduction. <i>Nano Letters</i> , 2016, 16, 1467-1471.	4.5	228
165	Shape-controlled synthesis of porous AuPt nanoparticles and their superior electrocatalytic activity for oxygen reduction reaction. <i>Science and Technology of Advanced Materials</i> , 2016, 17, 58-62.	2.8	21
166	Recent Advances in Electrocatalysts for Oxygen Reduction Reaction. <i>Chemical Reviews</i> , 2016, 116, 3594-3657.	23.0	3,233
167	Recent advances in the organic solution phase synthesis of metal nanoparticles and their electrocatalysis for energy conversion reactions. <i>Nano Energy</i> , 2016, 29, 178-197.	8.2	63
168	Rh-Doped Pt-Ni Octahedral Nanoparticles: Understanding the Correlation between Elemental Distribution, Oxygen Reduction Reaction, and Shape Stability. <i>Nano Letters</i> , 2016, 16, 1719-1725.	4.5	238
169	Enhancing stability of octahedral PtNi nanoparticles for oxygen reduction reaction by halide treatment. <i>Journal of Power Sources</i> , 2016, 307, 883-890.	4.0	39
170	Smart design of hollow AuPt nanospheres with a porous shell as superior electrocatalysts for ethylene glycol oxidation. <i>RSC Advances</i> , 2016, 6, 19632-19637.	1.7	20
171	Oxidation of Platinum Nickel Nanowires to Improve Durability of Oxygen-Reducing Electrocatalysts. <i>Journal of the Electrochemical Society</i> , 2016, 163, F296-F301.	1.3	22
172	Electrolyte Engineering toward Efficient Hydrogen Production Electrocatalysis with Oxygen-Crossover Regulation under Densely Buffered Near-Neutral pH Conditions. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1785-1794.	1.5	31
173	Positive Effect of Surface Doping with Au on the Stability of Pt-Based Electrocatalysts. <i>ACS Catalysis</i> , 2016, 6, 1630-1634.	5.5	90
174	Chemoelectronic circuits based on metal nanoparticles. <i>Nature Nanotechnology</i> , 2016, 11, 603-608.	15.6	103
175	Understanding the Bifunctional Effect for Removal of CO Poisoning: Blend of a Platinum Nanocatalyst and Hydrous Ruthenium Oxide as a Model System. <i>ACS Catalysis</i> , 2016, 6, 2398-2407.	5.5	86
176	Tin dioxide facilitated truncated octahedral Pt ₃ Ni alloy catalyst: synthesis and ultra highly active and durable electrocatalysts for oxygen reduction reaction. <i>RSC Advances</i> , 2016, 6, 26323-26328.	1.7	8
177	Pt-free silver nanoalloy electrocatalysts for oxygen reduction reaction in alkaline media. <i>Catalysis Science and Technology</i> , 2016, 6, 3317-3340.	2.1	95
178	A novel method of methanol concentration control through feedback of the amplitudes of output voltage fluctuations for direct methanol fuel cells. <i>Energy</i> , 2016, 100, 217-226.	4.5	13
179	Morphology and Phase Controlled Construction of Pt-Ni Nanostructures for Efficient Electrocatalysis. <i>Nano Letters</i> , 2016, 16, 2762-2767.	4.5	176
180	The Priority and Challenge of High-Power Performance of Low-Platinum Proton-Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1127-1137.	2.1	908

#	ARTICLE	IF	CITATIONS
181	Correlation between diffusion barriers and alloying energy in binary alloys. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 3302-3307.	1.3	33
182	Synthesis of 4H/fcc Noble Multimetallic Nanoribbons for Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2016, 138, 1414-1419.	6.6	196
183	Pt ₃ Re alloy nanoparticles as electrocatalysts for the oxygen reduction reaction. <i>Nano Energy</i> , 2016, 20, 202-211.	8.2	38
184	Thermal Facet Healing of Concave Octahedral Pt-Ni Nanoparticles Imaged in Situ at the Atomic Scale: Implications for the Rational Synthesis of Durable High-Performance ORR Electrocatalysts. <i>ACS Catalysis</i> , 2016, 6, 692-695.	5.5	78
185	Charge distribution and Fermi level in bimetallic nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2924-2931.	1.3	47
186	Structural and Electronic Transformations of Pt/C, Pd@Pt(1 ML)/C and Pd@Pt(2 ML)/C Cathode Catalysts in Polymer Electrolyte Fuel Cells during Potential-step Operating Processes Characterized by In-situ Time-resolved XAFS. <i>Surface Science</i> , 2016, 648, 100-113.	0.8	21
187	Tunable mesoporous manganese oxide for high performance oxygen reduction and evolution reactions. <i>Journal of Materials Chemistry A</i> , 2016, 4, 620-631.	5.2	113
188	Editors' Choice Electrochemically Active Surface Area Measurement of Aged Pt Alloy Catalysts in PEM Fuel Cells by CO Stripping. <i>Journal of the Electrochemical Society</i> , 2017, 164, F55-F59.	1.3	92
189	Porous Iron-Tungsten Carbide Electrocatalyst with High Activity and Stability toward Oxygen Reduction Reaction: From the Self-Assisted Synthetic Mechanism to Its Active-Species Probing. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 3713-3722.	4.0	39
190	An Efficient Bifunctional Electrocatalyst for a Zinc-Air Battery Derived from Fe/N/C and Bimetallic Metal-Organic Framework Composites. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5213-5221.	4.0	113
191	Improved ethanol electrooxidation performance by shortening Pd-Ni active site distance in Pd-Ni-P nanocatalysts. <i>Nature Communications</i> , 2017, 8, 14136.	5.8	351
192	Surface and interface engineering of FePt/C nanocatalysts for electro-catalytic methanol oxidation: enhanced activity and durability. <i>Nanoscale</i> , 2017, 9, 4066-4075.	2.8	31
193	Fe-Ni Nanoparticles: A Multiscale First-Principles Study to Predict Geometry, Structure, and Catalytic Activity. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1667-1674.	1.5	21
194	Combining theory and experiment in electrocatalysis: Insights into materials design. <i>Science</i> , 2017, 355, .	6.0	7,837
195	Rational design and synthesis of sandwich-like iron nitride-graphene composites as efficient catalysts for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 202-211.	3.8	10
196	Asymmetric Volcano Trend in Oxygen Reduction Activity of Pt and Non-Pt Catalysts: In Situ Identification of the Site-Blocking Effect. <i>Journal of the American Chemical Society</i> , 2017, 139, 1384-1387.	6.6	114
197	Thermally Converted CoO Nanoparticles Embedded into N-Doped Carbon Layers as Highly Efficient Bifunctional Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions. <i>ChemCatChem</i> , 2017, 9, 1503-1510.	1.8	31
198	Colloidal nanocrystals for photoelectrochemical and photocatalytic water splitting. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 074006.	1.3	25

#	ARTICLE	IF	CITATIONS
199	Three-Dimensional Array of TiN@Pt ₃ Cu Nanowires as an Efficient Porous Electrode for the Lithium-Oxygen Battery. ACS Nano, 2017, 11, 1747-1754.	7.3	46
200	Edgeless Ag-Pt Bimetallic Nanocages: In Situ Monitor Plasmon-Induced Suppression of Hydrogen Peroxide Formation. Journal of the American Chemical Society, 2017, 139, 2224-2233.	6.6	111
201	1D Colloidal Hetero-Nanomaterials with Programmed Semiconductor Morphology and Metal Location for Enhancing Solar Energy Conversion. Small, 2017, 13, 1602629.	5.2	16
202	Synthesis of NiO Nano Octahedron Aggregates as High-Performance Anode Materials for Lithium Ion Batteries. Electrochimica Acta, 2017, 231, 272-278.	2.6	81
203	Controlled Synthesis of Octahedral Platinum-Based Mesocrystals by Oriented Aggregation. Chemistry - A European Journal, 2017, 23, 6803-6810.	1.7	10
204	Advanced electron microscopy characterization of nanomaterials for catalysis. Green Energy and Environment, 2017, 2, 70-83.	4.7	97
205	Intermetallic Nanocrystals: Syntheses and Catalytic Applications. Advanced Materials, 2017, 29, 1605997.	11.1	375
206	Dendritic unzipped carbon nanofibers enable uniform loading of surfactant-free Pd nanoparticles for the electroanalysis of small biomolecules. Journal of Materials Chemistry B, 2017, 5, 2254-2262.	2.9	2
207	Facile Synthesis of Nanoporous Pt-Y alloy with Enhanced Electrocatalytic Activity and Durability. Scientific Reports, 2017, 7, 41826.	1.6	46
208	Mo ⁶⁺ activated multimetal oxygen-evolving catalysts. Chemical Science, 2017, 8, 3484-3488.	3.7	129
209	Pudding-typed cobalt sulfides/nitrogen and sulfur dual-doped hollow carbon spheres as a highly efficient and stable oxygen reduction electrocatalyst. Journal of Power Sources, 2017, 348, 183-192.	4.0	62
210	Three-Dimensional Assembly of PtNi Alloy Nanosticks with Enhanced Electrocatalytic Activity and Ultrahigh Stability for the Oxygen Reduction Reaction. ChemElectroChem, 2017, 4, 1436-1442.	1.7	8
211	The activity origin of core-shell and alloy AgCu bimetallic nanoparticles for the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 7043-7054.	5.2	60
212	The growth and degradation of binary and ternary octahedral Pt-Ni-based fuel cell catalyst nanoparticles studied using advanced transmission electron microscopy. Advances in Physics: X, 2017, 2, 281-301.	1.5	7
213	Ultrasmall Palladium Nanoclusters Encapsulated in Porous Carbon Nanosheets for Oxygen Electroreduction in Alkaline Media. ChemElectroChem, 2017, 4, 1349-1355.	1.7	29
214	Phthalocyanine tethered iron phthalocyanine on graphitized carbon black as superior electrocatalyst for oxygen reduction reaction. Nano Energy, 2017, 34, 338-343.	8.2	113
215	Construction of Au-Pd alloy shells for enhanced catalytic performance toward alkyne semihydrogenation reactions. Materials Horizons, 2017, 4, 584-590.	6.4	40
216	Rapidly convergent cluster expansion and application to lithium ion battery materials. Physical Review B, 2017, 95, .	1.1	6

#	ARTICLE	IF	CITATIONS
217	Nanostructured Materials for Heterogeneous Electrocatalytic CO ₂ Reduction and their Related Reaction Mechanisms. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11326-11353.	7.2	811
218	Nanostrukturierte Materialien für die elektrokatalytische CO ₂ -Reduktion und ihre Reaktionsmechanismen. <i>Angewandte Chemie</i> , 2017, 129, 11482-11511.	1.6	102
219	Current Status and Future Development of Catalyst Materials and Catalyst Layers for Proton Exchange Membrane Fuel Cells: An Industrial Perspective. <i>ACS Energy Letters</i> , 2017, 2, 629-638.	8.8	443
220	Effects of Mechanical Strain on Ionic Conductivity in the Interface between LiPON and Ni-Mn Spinel. <i>Journal of the Electrochemical Society</i> , 2017, 164, A594-A599.	1.3	2
221	Co@Pt Core@Shell nanoparticles encapsulated in porous carbon derived from zeolitic imidazolate framework 67 for oxygen electroreduction in alkaline media. <i>Journal of Power Sources</i> , 2017, 343, 458-466.	4.0	99
222	In situ growth of Pt ₃ Ni nanoparticles on an A-site deficient perovskite with enhanced activity for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6399-6404.	5.2	70
223	Highly uniform distribution of Pt nanoparticles on N-doped hollow carbon spheres with enhanced durability for oxygen reduction reaction. <i>RSC Advances</i> , 2017, 7, 6303-6308.	1.7	44
224	Simulated Volcano Plot of Oxygen Reduction Reaction on Stepped Pt Surfaces. <i>Electrochimica Acta</i> , 2017, 230, 470-478.	2.6	30
225	High-Performance Energy Storage and Conversion Materials Derived from a Single Metal-Organic Framework/Graphene Aerogel Composite. <i>Nano Letters</i> , 2017, 17, 2788-2795.	4.5	348
226	Effect of Pt addition on resistance to carbon formation of Ni catalysts in methane dehydrogenation over Ni-Pt bimetallic surfaces: A density functional theory study. <i>Molecular Catalysis</i> , 2017, 434, 206-218.	1.0	48
227	One-pot synthesis of PtIr tripods with a dendritic surface as an efficient catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9107-9112.	5.2	58
228	Doubling up the activity of fuel cell catalysts. <i>National Science Review</i> , 2017, 4, 513-514.	4.6	3
229	Tuning the branches and composition of PtCu nanodendrites through underpotential deposition of Cu towards advanced electrocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9014-9021.	5.2	55
230	Optimizing the ORR activity of Pd based nanocatalysts by tuning their strain and particle size. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9867-9872.	5.2	98
231	Biomass Derived N-Doped Porous Carbon Supported Single Fe Atoms as Superior Electrocatalysts for Oxygen Reduction. <i>Small</i> , 2017, 13, 1604290.	5.2	132
232	Randomly oriented Ni-P/nanofiber/nanotube composite prepared by electrolessly plated nickel-phosphorus alloys for fuel cell applications. <i>Journal of Materials Science</i> , 2017, 52, 8432-8443.	1.7	12
233	A silicon photoanode for efficient ethanol oxidation under alkaline conditions. <i>RSC Advances</i> , 2017, 7, 21809-21814.	1.7	13
234	A review of Pt-based electrocatalysts for oxygen reduction reaction. <i>Frontiers in Energy</i> , 2017, 11, 268-285.	1.2	155

#	ARTICLE	IF	CITATIONS
235	Structural Evolution of Sub-10 nm Octahedral Platinum–Nickel Bimetallic Nanocrystals. <i>Nano Letters</i> , 2017, 17, 3926-3931.	4.5	57
236	Metallic Two-Dimensional Nanoframes: Unsupported Hierarchical Nickel–Platinum Alloy Nanoarchitectures with Enhanced Electrochemical Oxygen Reduction Activity and Stability. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18660-18674.	4.0	31
237	The role of iron nitrides in the Fe–Ni–C catalysis system towards the oxygen reduction reaction. <i>Nanoscale</i> , 2017, 9, 7641-7649.	2.8	96
238	Surface tuning of carbon supported chemically ordered nanoparticles for promoting their catalysis toward the oxygen reduction reaction. <i>Electrochimica Acta</i> , 2017, 246, 671-679.	2.6	17
239	Hierarchically porous nitrogen-doped carbon nanotubes derived from core–shell ZnO@zeolitic imidazolate framework nanorods for highly efficient oxygen reduction reactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12322-12329.	5.2	93
240	Additive engineering for highly efficient organic–inorganic halide perovskite solar cells: recent advances and perspectives. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12602-12652.	5.2	303
241	Trimetallic PtCoFe Alloy Monolayer Superlattices as Bifunctional Oxygen-Reduction and Ethanol-Oxidation Electrocatalysts. <i>Small</i> , 2017, 13, 1700250.	5.2	42
242	Stimuli-Responsive Polymeric Nanoparticles. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700030.	2.0	79
243	Binary Fe, Cu-doped bamboo-like carbon nanotubes as efficient catalyst for the oxygen reduction reaction. <i>Nano Energy</i> , 2017, 37, 187-194.	8.2	125
244	Cu, Co-Embedded N-Enriched Mesoporous Carbon for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. <i>Advanced Energy Materials</i> , 2017, 7, 1700193.	10.2	487
245	High-Performance Core–Shell Catalyst with Nitride Nanoparticles as a Core: Well-Defined Titanium Copper Nitride Coated with an Atomic Pt Layer for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2017, 7, 3810-3817.	5.5	84
246	Raisin bread-like iron sulfides/nitrogen and sulfur dual-doped mesoporous graphitic carbon spheres: a promising electrocatalyst for the oxygen reduction reaction in alkaline and acidic media. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11114-11123.	5.2	55
247	Three-Dimensional Super-Branched PdCu Nanoarchitectures Exposed on Controlled Crystal Facets. <i>Chemistry - A European Journal</i> , 2017, 23, 51-56.	1.7	24
248	Spiny Rhombic Dodecahedral CuPt Nanoframes with Enhanced Catalytic Performance Synthesized from Cu Nanocube Templates. <i>Chemistry of Materials</i> , 2017, 29, 5681-5692.	3.2	77
249	A bottom-up, template-free route to mesoporous N-doped carbons for efficient oxygen electroreduction. <i>Journal of Materials Science</i> , 2017, 52, 9794-9805.	1.7	7
250	Pt–Co deposited on polyaniline-modified carbon for the electro-reduction of oxygen: the interaction between Pt–Co nanoparticles and polyaniline. <i>New Journal of Chemistry</i> , 2017, 41, 6585-6592.	1.4	16
251	Atomic scale deposition of Pt around Au nanoparticles to achieve much enhanced electrocatalysis of Pt. <i>Nanoscale</i> , 2017, 9, 7745-7749.	2.8	24
252	Chemically controlled surface compositions of Ag–Pt octahedral catalysts. <i>MRS Communications</i> , 2017, 7, 179-182.	0.8	1

#	ARTICLE	IF	CITATIONS
253	High Specific and Mass Activity for the Oxygen Reduction Reaction for Thin Film Catalysts of Sputtered Pt ₃ Y. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700311.	1.9	39
254	Einzelatom-Elektrokatalysatoren. <i>Angewandte Chemie</i> , 2017, 129, 14132-14148.	1.6	99
255	Single-Atom Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13944-13960.	7.2	1,040
256	Reliable computational design of biological-inorganic materials to the large nanometer scale using Interface-FF. <i>Molecular Simulation</i> , 2017, 43, 1394-1405.	0.9	34
257	Constructing an Atomic Layer Pt Electrocatalyst with a Concave Curved Surface for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2017, 4, 2469-2473.	1.7	7
258	Microwave-assisted synthesis of multimetal oxygen-evolving catalysts. <i>Electrochemistry Communications</i> , 2017, 81, 116-119.	2.3	15
259	Facile fabrication of PtPd alloyed worm-like nanoparticles for electrocatalytic reduction of oxygen. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 17112-17121.	3.8	25
260	N-doped carbon-stabilized PtCo nanoparticles derived from Pt@ZIF-67: Highly active and durable catalysts for oxygen reduction reaction. <i>Nano Research</i> , 2017, 10, 3228-3237.	5.8	90
261	Lithium manganese phosphate-carbon composite as a highly active and durable electrocatalyst for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2017, 245, 219-226.	2.6	10
262	Nitrogen and Iron-Codoped Carbon Hollow Nanotubes as High-Performance Catalysts toward Oxygen Reduction Reaction: A Combined Experimental and Theoretical Study. <i>Chemistry of Materials</i> , 2017, 29, 5617-5628.	3.2	92
263	Unprecedented Activity of Bifunctional Electrocatalyst for High Power Density Aqueous Zinc-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 21216-21224.	4.0	64
264	Simultaneous Improvements in Performance and Durability of an Octahedral PtNi ₃ /C Electrocatalyst for Next-Generation Fuel Cells by Continuous, Compressive, and Concave Pt Skin Layers. <i>ACS Catalysis</i> , 2017, 7, 4642-4654.	5.5	64
265	Facile Aqueous Phase Synthesis of Carbon Supported B-doped Pt ₃ Ni Nanocatalyst for Efficient Oxygen Reduction Reaction. <i>Electrochimica Acta</i> , 2017, 246, 242-250.	2.6	26
266	Three-Dimensional Dendritic Structures of NiCoMo as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22420-22431.	4.0	100
267	Metal and Metal Oxide Interactions and Their Catalytic Consequences for Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 7893-7903.	6.6	135
268	Achieving Remarkable Activity and Durability toward Oxygen Reduction Reaction Based on Ultrathin Rh-Doped Pt Nanowires. <i>Journal of the American Chemical Society</i> , 2017, 139, 8152-8159.	6.6	265
269	Directly anchoring Fe ₃ C nanoclusters and FeN _x sites in ordered mesoporous nitrogen-doped graphitic carbons to boost electrocatalytic oxygen reduction. <i>Carbon</i> , 2017, 121, 143-153.	5.4	71
270	A Composite of Pyrrole-Doped Carbon Black Modified with Co ₃ O ₄ for Efficient Electrochemical Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2017, 4, 2260-2268.	1.7	11

#	ARTICLE	IF	CITATIONS
271	Octahedral PtNi nanoparticles with controlled surface structure and composition for oxygen reduction reaction. <i>Science China Materials</i> , 2017, 60, 1109-1120.	3.5	23
272	Graphene on Pt ₃ Ni(1%): a suitable platform for tunable charge doping, electron-phonon coupling and plasmonic excitations. <i>2D Materials</i> , 2017, 4, 035003.	2.0	11
273	Ni/nitrogen-doped graphene nanotubes acted as a valuable tailor for remarkably enhanced hydrogen evolution performance of platinum-based catalysts. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16249-16254.	5.2	25
274	Active sites engineering leads to exceptional ORR and OER bifunctionality in P,N Co-doped graphene frameworks. <i>Energy and Environmental Science</i> , 2017, 10, 1186-1195.	15.6	431
275	Controlled Growth of Monodisperse Ferrite Octahedral Nanocrystals for Biomass-Derived Catalytic Applications. <i>ACS Catalysis</i> , 2017, 7, 2948-2955.	5.5	40
276	Implementing Structural Disorder as a Promising Direction for Improving the Stability of PtNi/C Nanoparticles. <i>ACS Catalysis</i> , 2017, 7, 3072-3081.	5.5	61
277	Bridged-multi-octahedral cobalt oxide nanocrystals with a Co-terminated surface as an oxygen evolution and reduction electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7416-7422.	5.2	23
278	Co-vacancy-rich Co _{1-x} S nanosheets anchored on rGO for high-efficiency oxygen evolution. <i>Nano Research</i> , 2017, 10, 1819-1831.	5.8	78
279	Halide ion-induced formation of single crystalline mesoporous PtPd bimetallic nanoparticles with hollow interiors for electrochemical methanol and ethanol oxidation reaction. <i>Nano Research</i> , 2017, 10, 1064-1077.	5.8	51
280	Atomically and Electronically Coupled Pt and CoO Hybrid Nanocatalysts for Enhanced Electrocatalytic Performance. <i>Advanced Materials</i> , 2017, 29, 1604607.	11.1	224
281	Hierarchical hybrid of Ni ₃ N/N-doped reduced graphene oxide nanocomposite as a noble metal free catalyst for oxygen reduction reaction. <i>Applied Surface Science</i> , 2017, 400, 245-253.	3.1	26
282	Active and Stable Ir@Pt Core-Shell Catalysts for Electrochemical Oxygen Reduction. <i>ACS Energy Letters</i> , 2017, 2, 244-249.	8.8	72
283	Porous Tetrametallic PtCuBiMn Nanosheets with a High Catalytic Activity and Methanol Tolerance Limit for Oxygen Reduction Reactions. <i>Advanced Materials</i> , 2017, 29, 1604994.	11.1	84
284	Promoting the oxygen reduction reaction with gold at step/edge sites of Ni@AuPt core-shell nanoparticles. <i>Catalysis Science and Technology</i> , 2017, 7, 596-606.	2.1	27
285	Molybdenum-Doped PdPt@Pt Core-Shell Octahedra Supported by Ionic Block Copolymer-Functionalized Graphene as a Highly Active and Durable Oxygen Reduction Electrocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 1524-1535.	4.0	49
286	Microwave-Assisted Synthesis of Pd Oxide-Rich Pd Particles on Nitrogen/Sulfur Co-Doped Graphene with Remarkably Enhanced Ethanol Electrooxidation. <i>Fuel Cells</i> , 2017, 17, 115-122.	1.5	16
287	Energy and fuels from electrochemical interfaces. <i>Nature Materials</i> , 2017, 16, 57-69.	13.3	1,484
288	Mechanism and kinetics of the electrocatalytic reaction responsible for the high cost of hydrogen fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2666-2673.	1.3	43

#	ARTICLE	IF	CITATIONS
289	Tip-Enhanced Raman Voltammetry: Coverage Dependence and Quantitative Modeling. <i>Nano Letters</i> , 2017, 17, 590-596.	4.5	74
290	Superior Bifunctional Liquid Fuel Oxidation and Oxygen Reduction Electrocatalysis Enabled by PtNiPd Core-Shell Nanowires. <i>Advanced Materials</i> , 2017, 29, 1603774.	11.1	106
291	Towards Versatile and Sustainable Hydrogen Production through Electrocatalytic Water Splitting: Electrolyte Engineering. <i>ChemSusChem</i> , 2017, 10, 1318-1336.	3.6	154
292	A review of electrocatalyst characterization by transmission electron microscopy. <i>Journal of Energy Chemistry</i> , 2017, 26, 1117-1135.	7.1	32
293	Building upon the Koutecky-Levich Equation for Evaluation of Next-Generation Oxygen Reduction Reaction Catalysts. <i>Electrochimica Acta</i> , 2017, 255, 99-108.	2.6	63
294	Platinum electrocatalysts with plasmonic nano-cores for photo-enhanced oxygen-reduction. <i>Nano Energy</i> , 2017, 41, 233-242.	8.2	41
295	Rupturing Cotton Microfibers into Mesoporous Nitrogen-Doped Carbon Nanosheets as Metal-Free Catalysts for Efficient Oxygen Electroreduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 9709-9717.	3.2	27
296	Biomass derived 2D carbons via a hydrothermal carbonization method as efficient bifunctional ORR/HER electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23481-23488.	5.2	166
297	Synthesis of hollow Pt-Ag nanoparticles by oxygen-assisted acid etching as electrocatalysts for the oxygen reduction reaction. <i>RSC Advances</i> , 2017, 7, 46916-46924.	1.7	13
298	From covalent triazine-based frameworks to N-doped porous carbon/reduced graphene oxide nanosheets: efficient electrocatalysts for oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23170-23178.	5.2	60
299	Mass Production of Mesoporous MnCo ₂ O ₄ Spinels with Manganese(IV) and Cobalt(II)-Rich Surfaces for Superior Bifunctional Oxygen Electrocatalysis. <i>Angewandte Chemie</i> , 2017, 129, 15173-15177.	1.6	61
300	Mass Production of Mesoporous MnCo ₂ O ₄ Spinels with Manganese(IV) and Cobalt(II)-Rich Surfaces for Superior Bifunctional Oxygen Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14977-14981.	7.2	184
301	Tuning the Electrocatalytic Oxygen Reduction Reaction Activity and Stability of Shape-Controlled Pt-Ni Nanoparticles by Thermal Annealing – Elucidating the Surface Atomic Structural and Compositional Changes. <i>Journal of the American Chemical Society</i> , 2017, 139, 16536-16547.	6.6	144
302	Hollow Co ₃ O ₄ Nanosphere Embedded in Carbon Arrays for Stable and Flexible Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , 2017, 29, 1704117.	11.1	407
303	Branched Ag nanoplates: synthesis dictated by suppressing surface diffusion and catalytic activity for nitrophenol reduction. <i>CrystEngComm</i> , 2017, 19, 6339-6346.	1.3	8
304	Strain-controlled electrocatalysis on multimetallic nanomaterials. <i>Nature Reviews Materials</i> , 2017, 2, .	23.3	727
305	Radially Phase Segregated PtCu@PtCuNi Dendrite@Frame Nanocatalyst for the Oxygen Reduction Reaction. <i>ACS Nano</i> , 2017, 11, 10844-10851.	7.3	110
306	Ammonia Mediated One-Step Synthesis of Three-Dimensional Porous Pt _x Cu _{100-x} Nanochain Networks with Enhanced Electrocatalytic Activity toward Polyhydric Alcohol Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11086-11095.	3.2	28

#	ARTICLE	IF	CITATIONS
307	Highly active and durable Pd-Cu catalysts for oxygen reduction in alkaline exchange membrane fuel cells. <i>Frontiers in Energy</i> , 2017, 11, 299-309.	1.2	37
308	Platinum-Based Nanowires as Active Catalysts toward Oxygen Reduction Reaction: In Situ Observation of Surface-Diffusion-Assisted, Solid-State Oriented Attachment. <i>Advanced Materials</i> , 2017, 29, 1703460.	11.1	102
309	Surface structure effects of platinum-based catalysts for oxygen reduction reaction. <i>Current Opinion in Electrochemistry</i> , 2017, 4, 76-82.	2.5	19
310	Research advances in unsupported Pt-based catalysts for electrochemical methanol oxidation. <i>Journal of Energy Chemistry</i> , 2017, 26, 1067-1076.	7.1	163
311	Predicting Catalytic Activity of Nanoparticles by a DFT-Aided Machine-Learning Algorithm. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4279-4283.	2.1	190
312	Pt-Ni nanourchins as electrocatalysts for oxygen reduction reaction. <i>Frontiers in Energy</i> , 2017, 11, 254-259.	1.2	11
313	Pt skin coated hollow Ag-Pt bimetallic nanoparticles with high catalytic activity for oxygen reduction reaction. <i>Journal of Power Sources</i> , 2017, 365, 17-25.	4.0	25
314	One-pot synthesis of Pd@PtNi core-shell nanoflowers supported on the multi-walled carbon nanotubes with boosting activity toward oxygen reduction in alkaline electrolyte. <i>Journal of Power Sources</i> , 2017, 365, 26-33.	4.0	31
315	Enhanced electrocatalytic performance of ultrathin PtNi alloy nanowires for oxygen reduction reaction. <i>Frontiers in Energy</i> , 2017, 11, 260-267.	1.2	17
316	Design of ultrathin Pt-Mo-Ni nanowire catalysts for ethanol electrooxidation. <i>Science Advances</i> , 2017, 3, e1603068.	4.7	224
317	Form Follows Function: Nanoparticle Shape and Its Implications for Nanomedicine. <i>Chemical Reviews</i> , 2017, 117, 11476-11521.	23.0	464
318	Corrosion-Protected Hybrid Nanoparticles. <i>Advanced Science</i> , 2017, 4, 1700234.	5.6	20
319	In Situ Integration of Ultrathin PtCu Nanowires with Reduced Graphene Oxide Nanosheets for Efficient Electrocatalytic Oxygen Reduction. <i>Chemistry - A European Journal</i> , 2017, 23, 16871-16876.	1.7	36
320	Crumpled rGO-supported Pt-Ir bifunctional catalyst prepared by spray pyrolysis for unitized regenerative fuel cells. <i>Journal of Power Sources</i> , 2017, 364, 215-225.	4.0	40
321	Electrocatalysis of the Oxygen Reduction Reaction and the Formic Acid Oxidation Reaction on BN/Pd Composites Prepared Sonochemically. <i>Journal of the Electrochemical Society</i> , 2017, 164, H805-H811.	1.3	7
322	Active sites and factors influencing them for efficient oxygen reduction reaction in metal-N coordinated pyrolyzed and non-pyrolyzed catalysts: a review. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20095-20119.	5.2	108
323	Construction of a porous nitrogen-doped carbon nanotube with open-ended channels to effectively utilize the active sites for excellent oxygen reduction reaction activity. <i>Chemical Communications</i> , 2017, 53, 11426-11429.	2.2	32
324	Metallfreie Bor-haltige Heterogenkatalysatoren. <i>Angewandte Chemie</i> , 2017, 129, 15712-15724.	1.6	19

#	ARTICLE	IF	CITATIONS
325	Metal-Free Boron-Containing Heterogeneous Catalysts. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15506-15518.	7.2	114
326	Nickel-Based Electrocatalysts for Energy-Related Applications: Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution Reactions. <i>ACS Catalysis</i> , 2017, 7, 7196-7225.	5.5	857
327	Design Synthesis of Nitrogen-Doped TiO ₂ @Carbon Nanosheets toward Selective Nitroaromatics Reduction under Mild Conditions. <i>ACS Catalysis</i> , 2017, 7, 6991-6998.	5.5	31
328	Support Interaction Effect of Platinum Nanoparticles on Non- γ , γ , Ce-Doped Anatase and Its Implication on the ORR in Acid and Alkaline Media. <i>ChemElectroChem</i> , 2017, 4, 3264-3275.	1.7	24
329	NiFe Layered Double Hydroxide Nanoparticles on Co, N-Codoped Carbon Nanoframes as Efficient Bifunctional Catalysts for Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700467.	10.2	422
330	High-Yield Synthesis of Crystal-Phase-Heterostructured 4H/fcc Au@Pd Core-Shell Nanorods for Electrocatalytic Ethanol Oxidation. <i>Advanced Materials</i> , 2017, 29, 1701331.	11.1	144
331	Platinum stabilized by defective activated carbon with excellent oxygen reduction performance in alkaline media. <i>Chinese Journal of Catalysis</i> , 2017, 38, 1011-1020.	6.9	13
332	Recent development of efficient electrocatalysts derived from porous organic polymers for oxygen reduction reaction. <i>Science China Chemistry</i> , 2017, 60, 999-1006.	4.2	37
333	Synergy of facet control and surface metalloid modification on hierarchical Pt-Ni nanoroses toward high electrocatalytic activity. <i>CrystEngComm</i> , 2017, 19, 4964-4971.	1.3	4
334	A bifunctional electrocatalyst of PtNi nanoparticles immobilized on three-dimensional carbon nanofiber mats for efficient and stable water splitting in both acid and basic media. <i>Journal of Materials Science</i> , 2017, 52, 13064-13077.	1.7	40
335	Facile and scalable preparation of nitrogen, phosphorus codoped nanoporous carbon as oxygen reduction reaction electrocatalyst. <i>Electrochimica Acta</i> , 2017, 248, 11-19.	2.6	23
336	One-pot synthesis of dendritic Pt ₃ Ni nanoalloys as nonenzymatic electrochemical biosensors with high sensitivity and selectivity for dopamine detection. <i>Nanoscale</i> , 2017, 9, 10998-11003.	2.8	30
337	Pt ₄ PdCu _{0.4} alloy nanoframes as highly efficient and robust bifunctional electrocatalysts for oxygen reduction reaction and formic acid oxidation. <i>Nano Energy</i> , 2017, 39, 532-538.	8.2	97
338	Design of Efficient Bifunctional Oxygen Reduction/Evolution Electrocatalyst: Recent Advances and Perspectives. <i>Advanced Energy Materials</i> , 2017, 7, 1700544.	10.2	593
339	Rhodium-Tin Binary Nanoparticle-A Strategy to Develop an Alternative Electrocatalyst for Oxygen Reduction. <i>ACS Catalysis</i> , 2017, 7, 5796-5801.	5.5	25
340	Preparation of PEMFC Electrodes from Milligram-Amounts of Catalyst Powder. <i>Journal of the Electrochemical Society</i> , 2017, 164, F845-F849.	1.3	44
341	CO-Terminated Pt/Au Codeposition on Titania Nanotube Arrays (TNAs). <i>Electrocatalysis</i> , 2017, 8, 480-491.	1.5	6
342	pH-Induced versus Oxygen-Induced Surface Enrichment and Segregation Effects in Pt-Ni Alloy Nanoparticle Fuel Cell Catalysts. <i>ACS Catalysis</i> , 2017, 7, 6376-6384.	5.5	40

#	ARTICLE	IF	CITATIONS
343	Potentialâ€Cycling Synthesis of Single Platinum Atoms for Efficient Hydrogen Evolution in Neutral Media. <i>Angewandte Chemie</i> , 2017, 129, 13882-13886.	1.6	49
344	3D Analysis of Fuel Cell Electrocatalyst Degradation on Alternate Carbon Supports. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 29839-29848.	4.0	76
345	Biomass willow catkin-derived Co ₃ O ₄ /N-doped hollow hierarchical porous carbon microtubes as an effective tri-functional electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20170-20179.	5.2	102
346	One-Pot Seedless Aqueous Synthesis of Reduced Graphene Oxide (rGO)-Supported Coreâ€Shell Pt@Pd Nanoflowers as Advanced Catalysts for Oxygen Reduction and Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8675-8683.	3.2	50
347	Potentialâ€Cycling Synthesis of Single Platinum Atoms for Efficient Hydrogen Evolution in Neutral Media. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13694-13698.	7.2	438
348	Unsupported Platinum-Based Electrocatalysts for Oxygen Reduction Reaction. <i>ACS Energy Letters</i> , 2017, 2, 2035-2043.	8.8	174
349	Noble metal-free catalysts for oxygen reduction reaction. <i>Science China Chemistry</i> , 2017, 60, 1494-1507.	4.2	60
350	Local Chemical Ordering and Negative Thermal Expansion in PtNi Alloy Nanoparticles. <i>Nano Letters</i> , 2017, 17, 7892-7896.	4.5	34
351	Reconstructing the Surface of Gold Nanoclusters by Cadmium Doping. <i>Journal of the American Chemical Society</i> , 2017, 139, 17779-17782.	6.6	84
352	Activating cobalt(II) oxide nanorods for efficient electrocatalysis by strain engineering. <i>Nature Communications</i> , 2017, 8, 1509.	5.8	361
353	3D Imaging of Nanoalloy Catalysts at Atomic Resolution. <i>Microscopy and Microanalysis</i> , 2017, 23, 2032-2033.	0.2	0
354	Unexpected catalytic performance of Feâ€Mâ€C (M = N, P, and S) electrocatalysts towards oxygen reduction reaction: surface heteroatoms boost the activity of Fe ₂ M/graphene nanocomposites. <i>Dalton Transactions</i> , 2017, 46, 16885-16894.	1.6	12
355	Grand Projection State: A Single Microscopic State to Determine Free Energy. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 114802.	0.7	7
356	Influence of the injection temperature on the size of Ni-Pt polyhedral nanoparticles synthesized by the hot-injection method. <i>MRS Communications</i> , 2017, 7, 947-952.	0.8	4
357	Electron Tomography of PEM Fuel Cell Catalyst Coarsening on Alternate Carbon Supports. <i>Microscopy and Microanalysis</i> , 2017, 23, 2090-2091.	0.2	1
358	Surface-coating synthesis of nitrogen-doped inverse opal carbon materials with ultrathin micro/mesoporous graphene-like walls for oxygen reduction and supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25237-25248.	5.2	32
359	Design of Ultrathin Ptâ€Based Multimetallic Nanostructures for Efficient Oxygen Reduction Electrocatalysis. <i>Small</i> , 2017, 13, 1702156.	5.2	77
360	Extrapolating Energetics on Clusters and Single-Crystal Surfaces to Nanoparticles by Machine-Learning Scheme. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26397-26405.	1.5	41

#	ARTICLE	IF	CITATIONS
361	Symmetry-adapted order parameters and free energies for solids undergoing order-disorder phase transitions. <i>Physical Review B</i> , 2017, 96, .	1.1	33
362	Confining the Nucleation of Pt to In Situ Form (Pt-Enriched Cage)@CeO ₂ Core@Shell Nanostructure as Excellent Catalysts for Hydrogenation Reactions. <i>Advanced Materials</i> , 2017, 29, 1700495.	11.1	72
363	Surface evolution of a Pt-Pd-Au electrocatalyst for stable oxygen reduction. <i>Nature Energy</i> , 2017, 2, .	19.8	302
364	Benchmarking Pt and Pt-lanthanide sputtered thin films for oxygen electroreduction: fabrication and rotating disk electrode measurements. <i>Electrochimica Acta</i> , 2017, 247, 708-721.	2.6	39
365	Giant enhancement and anomalous temperature dependence of magnetism in monodispersed NiPt ₂ nanoparticles. <i>Nano Research</i> , 2017, 10, 3238-3247.	5.8	10
366	Interface Engineering in Nanostructured Nickel Phosphide Catalyst for Efficient and Stable Water Oxidation. <i>ACS Catalysis</i> , 2017, 7, 5450-5455.	5.5	74
367	Metal-organic framework derived hollow CoS ₂ nanotube arrays: an efficient bifunctional electrocatalyst for overall water splitting. <i>Nanoscale Horizons</i> , 2017, 2, 342-348.	4.1	247
368	Revealing Surface Elemental Composition and Dynamic Processes Involved in Facet-Dependent Oxidation of Pt ₃ Co Nanoparticles via <i>in Situ</i> Transmission Electron Microscopy. <i>Nano Letters</i> , 2017, 17, 4683-4688.	4.5	71
369	Pt-Pd and Pt-Pd-(Cu or Fe or Co)/graphene nanoribbon nanocomposites as efficient catalysts toward the oxygen reduction reaction. <i>Electrochimica Acta</i> , 2017, 247, 19-29.	2.6	42
370	PtPb/PtNi Intermetallic Core/Atomic Layer Shell Octahedra for Efficient Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 9576-9582.	6.6	185
371	Proton conductive Pt-Co nanoparticles anchoring on citric acid functionalized graphene for efficient oxygen reduction reaction. <i>Journal of Power Sources</i> , 2017, 360, 528-537.	4.0	12
372	Tuning Surface Structure and Strain in Pd-Pt Core-Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction. <i>Small</i> , 2017, 13, 1603423.	5.2	104
373	A Prussian blue route to nitrogen-doped graphene aerogels as efficient electrocatalysts for oxygen reduction with enhanced active site accessibility. <i>Nano Research</i> , 2017, 10, 1213-1222.	5.8	73
374	Innovative carbon-free low content Pt catalyst supported on Mo-doped titanium suboxide (Ti ₃ O ₅ -Mo) for stable and durable oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2017, 201, 419-429.	10.8	66
375	Colloidal nanocrystals for electrochemical reduction reactions. <i>Journal of Colloid and Interface Science</i> , 2017, 485, 308-327.	5.0	17
376	Atomic-Scale Preparation of Octopod Nanoframes with High-Index Facets as Highly Active and Stable Catalysts. <i>Advanced Materials</i> , 2017, 29, .	11.1	89
377	Superior Electrochemical Oxygen Evolution Enabled by Three-Dimensional Layered Double Hydroxide Nanosheet Superstructures. <i>ChemCatChem</i> , 2017, 9, 84-88.	1.8	40
378	In situ confined synthesis of molybdenum oxide decorated nickel-iron alloy nanosheets from MoO ₄ ²⁻ intercalated layered double hydroxides for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 87-91.	5.2	157

#	ARTICLE	IF	CITATIONS
379	Epitaxial growth of unusual 4H hexagonal Ir, Rh, Os, Ru and Cu nanostructures on 4H Au nanoribbons. <i>Chemical Science</i> , 2017, 8, 795-799.	3.7	81
380	Highly efficient electrocatalysts with CoO/CoFe ₂ O ₄ composites embedded within N-doped porous carbon materials prepared by hard-template method for oxygen reduction reaction. <i>RSC Advances</i> , 2017, 7, 56375-56381.	1.7	8
381	Precisely Controlled Synthesis of Pt-Pd Octahedral Nanoframes as a Superior Catalyst towards Oxygen Reduction Reaction. <i>Chinese Journal of Chemical Physics</i> , 2017, 30, 581-587.	0.6	3
382	Low Temperature Green Synthesis of Sulfur-Nitrogen Co-Doped Graphene as Efficient Metal-Free Catalysts for Oxygen Reduction Reaction. <i>International Journal of Electrochemical Science</i> , 2017, 12, 3537-3548.	0.5	16
383	Well-Defined Metal Nanoparticles for Electrocatalysis. <i>Studies in Surface Science and Catalysis</i> , 2017, , 123-148.	1.5	4
384	A DFT Study on the O ₂ Adsorption Properties of Supported PtNi Clusters. <i>Inorganics</i> , 2017, 5, 43.	1.2	15
385	A full understanding of oxygen reduction reaction mechanism on Au(111) surface. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 365201.	0.7	7
386	Fabrication of Nitrogen-Doped Carbon Nanofiber Networks for Oxygen Reduction Reaction. <i>International Journal of Electrochemical Science</i> , 2017, 12, 5404-5410.	0.5	5
387	Fine-tuning the Cross-Sectional Architecture of Antimony-doped Tin Oxide Nanofibers as Pt Catalyst Support for Enhanced Oxygen Reduction Activity. <i>International Journal of Electrochemical Science</i> , 2017, 12, 6221-6231.	0.5	6
388	Surface Oxidation of AuNi Heterodimers to Achieve High Activities toward Hydrogen/Oxygen Evolution and Oxygen Reduction Reactions. <i>Small</i> , 2018, 14, e1703749.	5.2	60
389	Understanding the Effects of Au Morphology on CO ₂ Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4274-4280.	1.5	36
390	Facile synthesis of porous dendritic Pt ₆₈ Ag ₃₂ nanodandelions for greatly boosting electrocatalytic activity towards oxygen reduction and hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 6096-6106.	3.8	9
391	Designing Nanoparticles and Nanoalloys with Controlled Surface and Reactivity. <i>Chemical Record</i> , 2018, 18, 1114-1124.	2.9	12
392	Conversion of confined metal@ZIF-8 structures to intermetallic nanoparticles supported on nitrogen-doped carbon for electrocatalysis. <i>Nano Research</i> , 2018, 11, 3469-3479.	5.8	46
393	A highly active worm-like PtMo nanowire for the selective synthesis of dibenzylamines. <i>RSC Advances</i> , 2018, 8, 8755-8760.	1.7	11
394	Construction of Pd-M (M = Ni, Ag, Cu) alloy surfaces for catalytic applications. <i>Nano Research</i> , 2018, 11, 780-790.	5.8	61
395	Nanoalloy catalysts inside fuel cells: An atomic-level perspective on the functionality by combined in operando x-ray spectroscopy and total scattering. <i>Nano Energy</i> , 2018, 49, 209-220.	8.2	18
396	Evaluation of performance and durability of platinum-iron-copper with L10 ordered face-centered tetragonal structure as cathode catalysts in polymer electrolyte fuel cells. <i>Journal of Applied Electrochemistry</i> , 2018, 48, 773-782.	1.5	13

#	ARTICLE	IF	CITATIONS
397	Highly Durable and Active Ternary PtAuNi Electro-catalyst for Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2018, 10, 3049-3056.	1.8	22
398	On-Chip in Situ Monitoring of Competitive Interfacial Anionic Chemisorption as a Descriptor for Oxygen Reduction Kinetics. <i>ACS Central Science</i> , 2018, 4, 590-599.	5.3	29
399	Organic-inorganic hybrid perovskite quantum dots with high PLQY and enhanced carrier mobility through crystallinity control by solvent engineering and solid-state ligand exchange. <i>Nanoscale</i> , 2018, 10, 13356-13367.	2.8	71
400	Enhancing oxygen reduction electrocatalysis through tuning crystal structure: Influence of intermetallic MPt nanocrystals. <i>Chinese Journal of Catalysis</i> , 2018, 39, 583-589.	6.9	12
401	One-step solid state synthesis of PtCo nanocubes/graphene nanocomposites as advanced oxygen reduction reaction electrocatalysts. <i>Journal of Catalysis</i> , 2018, 362, 85-93.	3.1	29
402	Application of rhenium-doped Pt ₃ Ni on carbon nanofibers as counter electrode for dye-sensitized solar cells. <i>Applied Surface Science</i> , 2018, 448, 522-528.	3.1	9
403	General Synthetic Strategy for Libraries of Supported Multicomponent Metal Nanoparticles. <i>ACS Nano</i> , 2018, 12, 4594-4604.	7.3	66
404	Electronic Structure Control of Tungsten Oxide Activated by Ni for Ultrahigh Performance Supercapacitors. <i>Small</i> , 2018, 14, e1800381.	5.2	55
405	Transition-metal-oxide-based catalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8194-8209.	5.2	259
406	A Review on Recent Developments and Prospects for the Oxygen Reduction Reaction on Hollow Pt-Alloy Nanoparticles. <i>ChemPhysChem</i> , 2018, 19, 1552-1567.	1.0	64
407	"Painting" nanostructured metals" playing with liquid metal. <i>Nanoscale Horizons</i> , 2018, 3, 408-416.	4.1	32
408	Multiple Metal (Cu, Mn, Fe) Centered Species Simultaneously Combined Nitrogen-doped Graphene as an Electrocatalyst for Oxygen Reduction in Alkaline and Neutral Solutions. <i>ChemCatChem</i> , 2018, 10, 2471-2480.	1.8	11
409	Alloy-composition-dependent oxygen reduction reaction activity and electrochemical stability of Pt-based bimetallic systems: a model electrocatalyst study of Pt/Pt _x Ni _{100-x} (111). <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 11994-12004.	1.3	9
410	Control of the Interfacial Wettability to Synthesize Highly Dispersed PtPd Nanocrystals for Efficient Oxygen Reduction Reaction. <i>Chemistry - an Asian Journal</i> , 2018, 13, 1119-1123.	1.7	14
411	Dendrite-Embedded Platinum-Nickel Multiframes as Highly Active and Durable Electrocatalyst toward the Oxygen Reduction Reaction. <i>Nano Letters</i> , 2018, 18, 2930-2936.	4.5	121
413	Electrochemical Observation of High Oxophilicity and its Effect on Oxygen Reduction Reaction Activity of Au Clusters Mass-Selectively Deposited on Glassy Carbon. <i>Electrocatalysis</i> , 2018, 9, 471-479.	1.5	5
414	Insight into induced charges at metal surfaces and biointerfaces using a polarizable Lennard-Jones potential. <i>Nature Communications</i> , 2018, 9, 716.	5.8	121
415	Embedding platinum-based nanoparticles within ordered mesoporous carbon using supercritical carbon dioxide technique as a highly efficient oxygen reduction electrocatalyst. <i>Journal of Alloys and Compounds</i> , 2018, 741, 580-589.	2.8	9

#	ARTICLE	IF	CITATIONS
416	Composition-driven shape evolution to Cu-rich PtCu octahedral alloy nanocrystals as superior bifunctional catalysts for methanol oxidation and oxygen reduction reaction. <i>Nanoscale</i> , 2018, 10, 4670-4674.	2.8	82
417	Understanding Catalytic Activity Trends in the Oxygen Reduction Reaction. <i>Chemical Reviews</i> , 2018, 118, 2302-2312.	23.0	1,666
418	Metal organic framework for the fabrication of mutually interacted Pt CeO ₂ C ternary nanostructure: advanced electrocatalyst for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2018, 266, 348-356.	2.6	36
419	Nanoalloy Materials for Chemical Catalysis. <i>Advanced Materials</i> , 2018, 30, e1705698.	11.1	139
420	Coral-like Co ₃ O ₄ Decorated N-doped Carbon Particles as active Materials for Oxygen Reduction Reaction and Supercapacitor. <i>Scientific Reports</i> , 2018, 8, 1802.	1.6	41
421	Insight on Thermally Activated Hydrocarbon Dehydrogenation on the Pt ₃ Ni(111) Surface: From Adsorbed Hydrocarbons up to Graphene Formation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3885-3892.	1.5	4
423	Dilute Au-Containing Ag Nanosponges as a Highly Active and Durable Electrocatalyst for Oxygen Reduction and Alcohol Oxidation Reactions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 6276-6287.	4.0	33
424	Synthesis and Characterization of Branched <i>fcc</i> / <i>hcp</i> Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. <i>Crystal Growth and Design</i> , 2018, 18, 1509-1516.	1.4	19
425	Synthesis of PtAu Alloy Nanocrystals in Micelle Nanoreactors Enabled by Flash Heating and Cooling. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1700413.	1.2	9
426	Scalable Synthesis of Carbon-Supported Platinum-Lanthanide and Rare-Earth Alloys for Oxygen Reduction. <i>ACS Catalysis</i> , 2018, 8, 2071-2080.	5.5	59
427	Fe Stabilization by Intermetallic L ₁ -FePt and Pt Catalysis Enhancement in L ₁ -FePt/Pt Nanoparticles for Efficient Oxygen Reduction Reaction in Fuel Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 2926-2932.	6.6	312
428	Strain Engineering to Enhance the Electrooxidation Performance of Atomic-Layer Pt on Intermetallic Pt ₃ Ga. <i>Journal of the American Chemical Society</i> , 2018, 140, 2773-2776.	6.6	193
429	Gold-Copper Aerogels with Intriguing Surface Electronic Modulation as Highly Active and Stable Electrocatalysts for Oxygen Reduction and Borohydride Oxidation. <i>ChemSusChem</i> , 2018, 11, 1354-1364.	3.6	31
430	Electrochemical processes on solid shaped nanoparticles with defined facets. <i>Chemical Society Reviews</i> , 2018, 47, 715-735.	18.7	129
431	Highly Durable and Active Pt-Based Nanoscale Design for Fuel Cell Oxygen Reduction Electrocatalysts. <i>Advanced Materials</i> , 2018, 30, e1704123.	11.1	208
432	Kern-Schale-Strukturierung rein metallischer Aerogele für eine hocheffiziente Nutzung von Platin für die Sauerstoffreduktion. <i>Angewandte Chemie</i> , 2018, 130, 3014-3018.	1.6	7
433	Effective size-controlled synthesis and electrochemical characterization of ordered Pt nanopattern arrays from self-assembling block copolymer template. <i>Journal of Materials Science</i> , 2018, 53, 4089-4102.	1.7	5
434	Roles of Mo Surface Dopants in Enhancing the ORR Performance of Octahedral PtNi Nanoparticles. <i>Nano Letters</i> , 2018, 18, 798-804.	4.5	162

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435	Ultrathin Ir nanowires as high-performance electrocatalysts for efficient water splitting in acidic media. <i>Nanoscale</i> , 2018, 10, 1892-1897.	2.8	122
436	Study of CO ₂ reduction at Pt-Ru electrocatalyst in polymer electrolyte cell by differential electrochemical mass spectrometry and liquid chromatography. <i>Electrochimica Acta</i> , 2018, 261, 340-345.	2.6	12
437	Highly active platinum supported on Mo-doped titanium nanotubes suboxide (Pt/TNTS-Mo) electrocatalyst for oxygen reduction reaction in PEMFC. <i>Renewable Energy</i> , 2018, 120, 209-219.	4.3	48
438	Unlocking the door to highly active ORR catalysts for PEMFC applications: polyhedron-engineered Pt-based nanocrystals. <i>Energy and Environmental Science</i> , 2018, 11, 258-275.	15.6	367
439	Core-Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2963-2966.	7.2	154
440	High Edge Selectivity of In Situ Electrochemical Pt Deposition on Edge-Rich Layered WS ₂ Nanosheets. <i>Advanced Materials</i> , 2018, 30, 1704779.	11.1	84
441	Stable High-Index Faceted Pt Skin on Zigzag-Like PtFe Nanowires Enhances Oxygen Reduction Catalysis. <i>Advanced Materials</i> , 2018, 30, 1705515.	11.1	305
443	Improvement of O ₂ adsorption for γ -MnO ₂ as an oxygen reduction catalyst by Zr ⁴⁺ doping. <i>RSC Advances</i> , 2018, 8, 2963-2970.	1.7	32
444	Fabrication of a Single-Atom Platinum Catalyst for the Hydrogen Evolution Reaction: A New Protocol by Utilization of H ₂ MoO ₃ with Plasmon Resonance. <i>ChemCatChem</i> , 2018, 10, 946-950.	1.8	43
445	Carbon-supported metal nanodendrites as efficient, stable catalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1714-1726.	5.2	30
446	Bifunctional Co _{Nx} embedded graphene electrocatalysts for OER and ORR: A theoretical evaluation. <i>Carbon</i> , 2018, 130, 112-119.	5.4	209
447	Bimetallic Alloyed PtCu Nanocubic Frames with Three-Dimensional Molecular Accessible Surfaces for Boosting Oxygen Reduction and Glycerol Oxidation Reactions. <i>ChemCatChem</i> , 2018, 10, 3319-3326.	1.8	24
448	Computational predictive design for metal-decorated-graphene size-specific subnanometer to nanometer ORR catalysts. <i>Catalysis Today</i> , 2018, 312, 105-117.	2.2	13
449	Minute quantities of hexagonal nanoplates PtFe alloy with facile operating conditions enhanced electrocatalytic activity and durability for oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2018, 752, 23-31.	2.8	17
450	Rapid thermal annealing of CH ₃ NH ₃ PbI ₃ perovskite thin films by intense pulsed light with aid of diodomethane additive. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9378-9383.	5.2	42
451	Metal-organic framework-derived Zn _{0.975} Co _{0.025} S/CoS ₂ embedded in N,S-codoped carbon nanotube/nanopolyhedra as an efficient electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10441-10446.	5.2	69
452	Carbothermal shock synthesis of high-entropy-alloy nanoparticles. <i>Science</i> , 2018, 359, 1489-1494.	6.0	1,065
453	Ga-Doped Pt-Ni Octahedral Nanoparticles as a Highly Active and Durable Electrocatalyst for Oxygen Reduction Reaction. <i>Nano Letters</i> , 2018, 18, 2450-2458.	4.5	125

#	ARTICLE	IF	CITATIONS
454	Theoretical insights into the effective hydrogen evolution on Cu ₃ P and its evident improvement by surface-doped Ni atoms. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 10407-10417.	1.3	29
455	Bimetallic Mn-Co Oxide Nanoparticles Anchored on Carbon Nanofibers Wrapped in Nitrogen-Doped Carbon for Application in Zn-Air Batteries and Supercapacitors. <i>ACS Applied Energy Materials</i> , 2018, 1, 1612-1625.	2.5	49
456	Barrier-free Interface Electron Transfer on PtFe-Fe ₂ C Janus-like Nanoparticles Boosts Oxygen Catalysis. <i>Chem</i> , 2018, 4, 1153-1166.	5.8	82
457	Platinum supported on multifunctional titanium cobalt oxide nanosheets assembles for efficient oxygen reduction reaction. <i>Electrochimica Acta</i> , 2018, 265, 364-371.	2.6	16
458	Rational Design and Synthesis of Low-Temperature Fuel Cell Electrocatalysts. <i>Electrochemical Energy Reviews</i> , 2018, 1, 54-83.	13.1	87
459	Stability of High-Performance Pt-Based Catalysts for Oxygen Reduction Reactions. <i>Advanced Materials</i> , 2018, 30, e1705332.	11.1	179
460	Adatom decorated shape-controlled metal nanoparticles: Advanced electrocatalysts for energy conversion. <i>Current Opinion in Electrochemistry</i> , 2018, 9, 121-128.	2.5	10
461	A Universal Method to Engineer Metal Oxide-Metal-Carbon Interface for Highly Efficient Oxygen Reduction. <i>ACS Nano</i> , 2018, 12, 3042-3051.	7.3	125
462	Non-noble metal catalyst on carbon ribbon for fuel cell cathode. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 761-771.	1.2	5
463	A hybrid catalyst of Pt/CoNiO ₂ on carbon nanotubes and its synergetic effect towards remarkable ethanol electro-oxidation in alkaline media. <i>Sustainable Energy and Fuels</i> , 2018, 2, 229-236.	2.5	15
464	Copper-Palladium Tetrapods with Sharp Tips as a Superior Catalyst for the Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2018, 10, 925-930.	1.8	14
465	Continuous Flow Synthesis of Platinum Nanoparticles in Porous Carbon as Durable and Methanol-Tolerant Electrocatalysts for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2018, 5, 62-70.	1.7	18
466	Metal-organic frameworks for solar energy conversion by photoredox catalysis. <i>Coordination Chemistry Reviews</i> , 2018, 373, 83-115.	9.5	146
467	Designing of stable and highly efficient ordered Pt ₂ CoNi ternary alloy electrocatalyst: The origin of dioxygen reduction activity. <i>Nano Energy</i> , 2018, 43, 219-227.	8.2	49
468	Platinum-Copper Rhombic Dodecahedral Nanoframes with Tunable Channels as Efficient Bifunctional Electrocatalysts for Fuel-Cell Reactions. <i>ChemCatChem</i> , 2018, 10, 931-935.	1.8	15
469	Pt-Nanoparticle-Supported Carbon Electrocatalysts Functionalized with a Protic Ionic Liquid and Organic Salt. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701123.	1.9	18
470	Peptide templated AuPt alloyed nanoparticles as highly efficient bi-functional electrocatalysts for both oxygen reduction reaction and hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2018, 260, 168-176.	2.6	41
471	DUT-58 (Co) Derived Synthesis of Co Clusters as Efficient Oxygen Reduction Electrocatalyst for Zinc-Air Battery. <i>Global Challenges</i> , 2018, 2, 1700086.	1.8	13

#	ARTICLE	IF	CITATIONS
472	Gram-scale synthesis of highly active and durable octahedral PtNi nanoparticle catalysts for proton exchange membrane fuel cell. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 530-537.	10.8	63
473	High-performance bimetallic alloy catalyst using Ni and N co-doped composite carbon for the oxygen electro-reduction. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 30-39.	5.0	13
474	Enhanced performance of perovskite solar cells by ultraviolet-ozone treatment of mesoporous TiO ₂ . <i>Applied Surface Science</i> , 2018, 436, 596-602.	3.1	55
475	Metal-organic frameworks derived platinum-cobalt bimetallic nanoparticles in nitrogen-doped hollow porous carbon capsules as a highly active and durable catalyst for oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 496-503.	10.8	131
476	Enhancement of oxygen reduction reaction performance: The characteristic role of Fe N coordinations. <i>Electrochimica Acta</i> , 2018, 260, 264-273.	2.6	27
477	Molybdenum Doping Augments Platinum-Copper Oxygen Reduction Electrocatalyst. <i>ChemSusChem</i> , 2018, 11, 193-201.	3.6	33
478	Preparation of carbon nanofibers supported MoO ₂ composites electrode materials for application in dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2018, 259, 188-195.	2.6	31
479	Oxygen reduction reaction of (C-PCTNB@CNTs): A nitrogen and phosphorus dual-doped carbon electro-catalyst derived from polyphosphazenes. <i>Journal of Power Sources</i> , 2018, 373, 61-69.	4.0	40
480	Rod-shaped thiocyanate-induced abnormal band gap broadening in SCN ⁻ doped CsPbBr ₃ perovskite nanocrystals. <i>Nano Research</i> , 2018, 11, 2715-2723.	5.8	44
481	Enhanced O ₂ reduction on atomically thin Pt-based nanoshells by integrating surface facet, interfacial electronic, and substrate stabilization effects. <i>Nano Research</i> , 2018, 11, 3313-3326.	5.8	21
482	Atomic Vacancies Control of Pd-Based Catalysts for Enhanced Electrochemical Performance. <i>Advanced Materials</i> , 2018, 30, 1704171.	11.1	102
483	Au@Ag Core-shell Nanoparticles Supported on Carbon Nanotubes as Promising Catalysts for Oxygen Electroreduction. <i>International Journal of Electrochemical Science</i> , 2018, , 6756-6770.	0.5	6
484	A Comprehensive Review on Controlling Surface Composition of Pt-Based Bimetallic Electrocatalysts. <i>Advanced Energy Materials</i> , 2018, 8, 1703597.	10.2	123
485	Oxygen Reduction Catalysts on Nanoparticle Electrodes. , 2018, , 796-811.		5
486	RuO _x -decorated multimetallic hetero-nanocages as highly efficient electrocatalysts toward the methanol oxidation reaction. <i>Nanoscale</i> , 2018, 10, 21178-21185.	2.8	21
487	Transformation of carbon-supported Pt-Ni octahedral electrocatalysts into cubes: toward stable electrocatalysis. <i>Nanoscale</i> , 2018, 10, 21353-21362.	2.8	7
488	Molybdenum carbide promotion on Fe-N-doped carbon nanolayers facily prepared for enhanced oxygen reduction. <i>Nanoscale</i> , 2018, 10, 21944-21950.	2.8	12
489	Nanoporous PdCe bimetallic nanocubes with high catalytic activity towards ethanol electro-oxidation and the oxygen reduction reaction in alkaline media. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23560-23568.	5.2	38

#	ARTICLE	IF	CITATIONS
490	Ultralow-loading platinum-cobalt fuel cell catalysts derived from imidazolate frameworks. <i>Science</i> , 2018, 362, 1276-1281.	6.0	735
491	Ultrasmall PtNi Bimetallic Nanoclusters for Oxygen Reduction Reaction in Alkaline Media. <i>International Journal of Electrochemical Science</i> , 2018, 13, 4438-4454.	0.5	5
492	Atomic Platinum Skin under Synergy of Cobalt for Enhanced Methanol Oxidation Electrocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 43716-43722.	4.0	17
493	Nanostructure Optimization of Platinum-Based Nanomaterials for Catalytic Applications. <i>Nanomaterials</i> , 2018, 8, 949.	1.9	40
494	Favorable Core/Shell Interface within Co ₂ P/Pt Nanorods for Oxygen Reduction Electrocatalysis. <i>Nano Letters</i> , 2018, 18, 7870-7875.	4.5	68
495	Updating Pt-Based Electrocatalysts for Practical Fuel Cells. <i>Joule</i> , 2018, 2, 2514-2516.	11.7	31
496	Recent advances in electrocatalysts toward the oxygen reduction reaction: the case of PtNi octahedra. <i>Nanoscale</i> , 2018, 10, 20073-20088.	2.8	60
497	Highly Dispersed Carbon Supported PdNiMo Core with Pt Monolayer Shell Electrocatalysts for Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2018, 165, J3295-J3300.	1.3	8
498	Two-dimensional transition metal carbides as supports for tuning the chemistry of catalytic nanoparticles. <i>Nature Communications</i> , 2018, 9, 5258.	5.8	188
499	Single platinum atoms immobilized on an MXene as an efficient catalyst for the hydrogen evolution reaction. <i>Nature Catalysis</i> , 2018, 1, 985-992.	16.1	1,236
500	Optimized Pt-Based Catalysts for Oxygen Reduction Reaction in Alkaline Solution: A First Principle Study. <i>Journal of the Electrochemical Society</i> , 2018, 165, J3090-J3094.	1.3	13
501	Pt nanowire growth induced by Pt nanoparticles in application of the cathodes for Polymer Electrolyte Membrane Fuel Cells (PEMFCs). <i>International Journal of Hydrogen Energy</i> , 2018, 43, 20041-20049.	3.8	23
502	Nitrogen-, Oxygen- and Sulfur-Doped Carbon-Encapsulated Ni ₃ S ₂ and NiS Core@Shell Architectures: Bifunctional Electrocatalysts for Hydrogen Evolution and Oxygen Reduction Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15582-15590.	3.2	52
503	Graphdiyne Electrocatalyst. <i>Joule</i> , 2018, 2, 1396-1398.	11.7	23
504	Controlled Synthesis of PtNi Hexapods for Enhanced Oxygen Reduction Reaction. <i>Frontiers in Chemistry</i> , 2018, 6, 468.	1.8	17
505	Selective Electrochemical H ₂ O ₂ Production through Two-Electron Oxygen Electrochemistry. <i>Advanced Energy Materials</i> , 2018, 8, 1801909.	10.2	498
506	PtTe Monolayer: Two-Dimensional Electrocatalyst with High Basal Plane Activity toward Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 12732-12735.	6.6	95
507	N-doped carbon nanofibers aerogels derived from aramid as efficient electrocatalysts for oxygen reduction reaction in alkaline and acidic media. <i>Journal of Electroanalytical Chemistry</i> , 2018, 829, 177-183.	1.9	31

#	ARTICLE	IF	CITATIONS
508	Graphdiyne-Supported Single-Atom-Sized Fe Catalysts for the Oxygen Reduction Reaction: DFT Predictions and Experimental Validations. <i>ACS Catalysis</i> , 2018, 8, 10364-10374.	5.5	202
509	Energetic Span as a Rate-Determining Term for Electrocatalytic Volcanos. <i>ACS Catalysis</i> , 2018, 8, 10590-10598.	5.5	63
510	Correlating the electrocatalytic stability of platinum monolayer catalysts with their structural evolution in the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20725-20736.	5.2	22
511	Atom-hybridization for synthesis of polymetallic clusters. <i>Nature Communications</i> , 2018, 9, 3873.	5.8	60
512	Recent Advances on Electrocatalysts for PEM and AEM Fuel Cells. , 2018, , 51-89.		1
513	Deconvolution of octahedral Pt ₃ Ni nanoparticle growth pathway from in situ characterizations. <i>Nature Communications</i> , 2018, 9, 4485.	5.8	37
514	Switchable counterion gradients around charged metallic nanoparticles enable reception of radio waves. <i>Science Advances</i> , 2018, 4, eaau3546.	4.7	16
515	Two-step etching fabrication of tunable ternary rhombic dodecahedral nanoframes for enhanced oxygen reduction electrocatalysis. <i>Journal of Power Sources</i> , 2018, 406, 42-49.	4.0	27
516	Platinum Nanoparticles Dispersed on High-Surface-Area Roelike Nitrogen-Doped Mesoporous Carbon for Oxygen Reduction Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 6198-6207.	2.5	12
517	One-Nanometer-Thick PtNiRh Trimetallic Nanowires with Enhanced Oxygen Reduction Electrocatalysis in Acid Media: Integrating Multiple Advantages into One Catalyst. <i>Journal of the American Chemical Society</i> , 2018, 140, 16159-16167.	6.6	160
518	A general synthesis approach for supported bimetallic nanoparticles via surface inorganometallic chemistry. <i>Science</i> , 2018, 362, 560-564.	6.0	176
519	Shape-Controlled Nanoparticles in Pore-Confined Space. <i>Journal of the American Chemical Society</i> , 2018, 140, 15684-15689.	6.6	48
520	Improvement in the activity of Pt ₁ Ni ₃ /C by decorating with Au adatoms for ethylene glycol oxidation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 20680-20686.	3.8	4
521	Core/shell Cu/FePtCu nanoparticles with face-centered tetragonal texture: An active and stable low-Pt catalyst for enhanced oxygen reduction. <i>Nano Energy</i> , 2018, 54, 280-287.	8.2	22
522	Sepia-Derived N, P Co-doped Porous Carbon Spheres as Oxygen Reduction Reaction Electrocatalyst and Supercapacitor. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 16032-16038.	3.2	72
523	A Ternary Ni ₄₆ Co ₄₀ Fe ₁₄ Nanoalloy-Based Oxygen Electrocatalyst for Highly Efficient Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , 2018, 30, e1803372.	11.1	73
524	Engineering porosity into trimetallic PtPdNi nanospheres for enhanced electrocatalytic oxygen reduction activity. <i>Green Energy and Environment</i> , 2018, 3, 352-359.	4.7	14
526	Facile Fabrication of Radial PtCo Nanodendrites for Enhanced Methanol Oxidation Electrocatalysis. <i>ACS Applied Nano Materials</i> , 2018, 1, 5019-5026.	2.4	26

#	ARTICLE	IF	CITATIONS
527	Tolerance factors of hybrid organic–inorganic perovskites: recent improvements and current state of research. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21785-21793.	5.2	63
528	The Use of Cluster Expansions To Predict the Structures and Properties of Surfaces and Nanostructured Materials. <i>Journal of Chemical Information and Modeling</i> , 2018, 58, 2401-2413.	2.5	41
529	Emerging Materials in Heterogeneous Electrocatalysis Involving Oxygen for Energy Harvesting. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33737-33767.	4.0	52
530	Dendritic defect-rich palladium–copper–cobalt nanoalloys as robust multifunctional non-platinum electrocatalysts for fuel cells. <i>Nature Communications</i> , 2018, 9, 3702.	5.8	204
531	Smoothing the single-crystal to single-crystal conversions of a two-dimensional metal–organic framework via the hetero-metal doping of the linear trimetallic secondary building unit. <i>Dalton Transactions</i> , 2018, 47, 13722-13729.	1.6	16
532	A Self-Charging Hybrid Electric Power Device with High Specific Energy and Power. <i>ACS Energy Letters</i> , 2018, 3, 2425-2432.	8.8	30
533	Seed-mediated atomic-scale reconstruction of silver manganate nanoplates for oxygen reduction towards high-energy aluminum-air flow batteries. <i>Nature Communications</i> , 2018, 9, 3715.	5.8	77
534	Engineering Ru@Pt Core-Shell Catalysts for Enhanced Electrochemical Oxygen Reduction Mass Activity and Stability. <i>Nanomaterials</i> , 2018, 8, 38.	1.9	30
535	Lithium Electrochemical Tuning for Electrocatalysis. <i>Advanced Materials</i> , 2018, 30, e1800978.	11.1	51
536	The Marriage of the FeN ₄ Moiety and MXene Boosts Oxygen Reduction Catalysis: Fe 3d Electron Delocalization Matters. <i>Advanced Materials</i> , 2018, 30, e1803220.	11.1	289
537	Noble Metal-Based Nanocomposites for Fuel Cells. , 2018, , .		4
538	Tuning the Catalytic Oxygen Reduction Reaction Performance of Pt-Ni Octahedral Nanoparticles by Acid Treatments and Thermal Annealing. <i>Journal of the Electrochemical Society</i> , 2018, 165, J3026-J3030.	1.3	17
539	Growth mechanism of core–shell PtNi–Ni nanoparticles using in situ transmission electron microscopy. <i>Nanoscale</i> , 2018, 10, 11281-11286.	2.8	15
540	Confined bimetallic phosphide within P, N co-doped carbon layers towards boosted bifunctional oxygen catalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11281-11287.	5.2	40
541	Preparation and application in assembling high-performance fuel cell catalysts of colloidal PtCu alloy nanoclusters. <i>Journal of Power Sources</i> , 2018, 395, 66-76.	4.0	33
542	Shape Stability of Octahedral PtNi Nanocatalysts for Electrochemical Oxygen Reduction Reaction Studied by <i>in situ</i> Transmission Electron Microscopy. <i>ACS Nano</i> , 2018, 12, 5306-5311.	7.3	62
543	Actualizing In Situ X-ray Absorption Spectroscopy Characterization of PEMFC-Cycled Pt-Electrodes. <i>Journal of the Electrochemical Society</i> , 2018, 165, F597-F603.	1.3	12
544	Understanding Chemical Bonding in Alloys and the Representation in Atomistic Simulations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14996-15009.	1.5	30

#	ARTICLE	IF	CITATIONS
545	Plasmon-Mediated Electrocatalysis for Sustainable Energy: From Electrochemical Conversion of Different Feedstocks to Fuel Cell Reactions. <i>ACS Energy Letters</i> , 2018, 3, 1415-1433.	8.8	62
546	Surface and Interface Engineering in Copper-Based Bimetallic Materials for Selective CO ₂ Electroreduction. <i>CheM</i> , 2018, 4, 1809-1831.	5.8	587
547	Doped Nanocarbons Derived from Conducting Polymers toward ORR Electrocatalysts. <i>Advanced Sustainable Systems</i> , 2018, 2, 1800033.	2.7	5
548	Preparation of an octahedral PtNi/CNT catalyst and its application in high durability PEMFC cathodes. <i>RSC Advances</i> , 2018, 8, 18381-18387.	1.7	37
549	A fuel cell catalyst support based on doped titanium suboxides with enhanced conductivity, durability and fuel cell performance. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14805-14815.	5.2	38
550	High performance layer-by-layer Pt ₃ Ni(Pt-skin)-modified Pd/C for the oxygen reduction reaction. <i>Chemical Science</i> , 2018, 9, 6134-6142.	3.7	25
551	Shape-Controlled Synthesis of Colloidal Metal Nanocrystals by Replicating the Surface Atomic Structure on the Seed. <i>Advanced Materials</i> , 2018, 30, e1706312.	11.1	114
552	Recent advancements in the development of bifunctional electrocatalysts for oxygen electrodes in unitized regenerative fuel cells (URFCs). <i>Progress in Materials Science</i> , 2018, 98, 108-167.	16.0	37
553	Laser-irradiation induced synthesis of spongy AuAgPt alloy nanospheres with high-index facets, rich grain boundaries and subtle lattice distortion for enhanced electrocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13735-13742.	5.2	32
554	Metal Surface and Interface Energy Electrocatalysis: Fundamentals, Performance Engineering, and Opportunities. <i>CheM</i> , 2018, 4, 2054-2083.	5.8	225
555	The Size Effect of PdCu Bimetallic Nanoparticles on Oxygen Reduction Reaction Activity. <i>ChemElectroChem</i> , 2018, 5, 2571-2576.	1.7	10
556	Derivatives of coordination compounds for rechargeable batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13999-14024.	5.2	58
557	The oxygen reduction on Pt-Ni and Pt-Ni-M catalysts for low-temperature acidic fuel cells: A review. <i>International Journal of Energy Research</i> , 2018, 42, 3747-3769.	2.2	38
558	Two-Dimensional Metal Nanomaterials: Synthesis, Properties, and Applications. <i>Chemical Reviews</i> , 2018, 118, 6409-6455.	23.0	711
559	A hydrothermal approach to access active and durable sulfonated silica-ceramic carbon electrodes for PEM fuel cell applications. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 125-132.	10.8	20
560	Copper-Induced Formation of Structurally Ordered Pt-Fe-Cu Ternary Intermetallic Electrocatalysts with Tunable Phase Structure and Improved Stability. <i>Chemistry of Materials</i> , 2018, 30, 5987-5995.	3.2	96
561	Coordination of Atomic Co-Pt Coupling Species at Carbon Defects as Active Sites for Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 10757-10763.	6.6	464
562	The Sub-Nanometer Scale as a New Focus in Nanoscience. <i>Advanced Materials</i> , 2018, 30, e1802031.	11.1	99

#	ARTICLE	IF	CITATIONS
563	Au-Doped Stable L1₀ Structured Platinum Cobalt Ordered Intermetallic Nanoparticle Catalysts for Enhanced Electrocatalysis. ACS Applied Energy Materials, 2018, 1, 3771-3777.	2.5	16
564	Insight of holey-graphene in the enhancing of electrocatalytic activity as supporting material. Nanotechnology, 2018, 29, 425708.	1.3	6
565	First-principles database driven computational neural network approach to the discovery of active ternary nanocatalysts for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2018, 20, 24539-24544.	1.3	37
566	Oxygen Reduction Reaction Catalyzed by Noble Metal Clusters. Catalysts, 2018, 8, 65.	1.6	64
567	Random Alloyed versus Intermetallic Nanoparticles: A Comparison of Electrocatalytic Performance. Advanced Materials, 2018, 30, e1801563.	11.1	175
568	Hollow nanoparticles as emerging electrocatalysts for renewable energy conversion reactions. Chemical Society Reviews, 2018, 47, 8173-8202.	18.7	222
569	Highly crumpled nanocarbons as efficient metal-free electrocatalysts for zinc-air batteries. Nanoscale, 2018, 10, 15706-15713.	2.8	21
570	Copper Nanoflower Assembled by Sub-2 nm Rough Nanowires for Efficient Oxygen Reduction Reaction: High Stability and Poison Resistance and Density Functional Calculations. ACS Applied Materials & Interfaces, 2018, 10, 26233-26240.	4.0	9
571	Synthesis of Highly Efficient Bifunctional Ag/Co₃O₄ Catalyst for Oxygen Reduction and Oxygen Evolution Reactions in Alkaline Medium. ACS Omega, 2018, 3, 7745-7756.	1.6	53
572	Improved Prediction of Nanoalloy Structures by the Explicit Inclusion of Adsorbates in Cluster Expansions. Journal of Physical Chemistry C, 2018, 122, 18040-18047.	1.5	19
573	Design of Stable Ultrasmall Pt~Ni(O) Nanoparticles with Enhanced Catalytic Performance: Insights into the Effects of Pt~Ni~NiO Dual Interfaces. ChemCatChem, 2018, 10, 4134-4142.	1.8	12
574	Cycling potential engineering surface configuration of sandwich Au@Ni@PtNiAu for superior catalytic durability. Nano Energy, 2018, 52, 22-28.	8.2	18
575	Emerging Pt-based electrocatalysts with highly open nanoarchitectures for boosting oxygen reduction reaction. Nano Today, 2018, 21, 91-105.	6.2	285
576	Effects of Catalyst Processing on the Activity and Stability of Pt~Ni Nanoframe Electrocatalysts. ACS Nano, 2018, 12, 8697-8705.	7.3	80
577	A eutectic salt-assisted semi-closed pyrolysis route to fabricate high-density active-site hierarchically porous Fe/N/C catalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 15504-15509.	5.2	98
578	Recent developments of nano-structured materials as the catalysts for oxygen reduction reaction. Nano Convergence, 2018, 5, 13.	6.3	26
579	Copper Silver Thin Films with Metastable Miscibility for Oxygen Reduction Electrocatalysis in Alkaline Electrolytes. ACS Applied Energy Materials, 2018, 1, 1990-1999.	2.5	40
580	Adding refractory 5d transition metal W into PtCo system: an advanced ternary alloy for efficient oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 10700-10709.	5.2	43

#	ARTICLE	IF	CITATIONS
581	A modular strategy for decorating isolated cobalt atoms into multichannel carbon matrix for electrocatalytic oxygen reduction. <i>Energy and Environmental Science</i> , 2018, 11, 1980-1984.	15.6	225
584	Nanocomposites CoPt-x/Diatomite-C as oxygen reversible electrocatalysts for zinc-air batteries: Diatomite boosted the catalytic activity and durability. <i>Electrochimica Acta</i> , 2018, 284, 119-127.	2.6	25
585	One-pot Synthesis of Icosahedral PdPtNi/C Twin Crystal Catalyst with High Activity toward Oxygen Reduction Reaction. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800783.	1.9	2
586	Carbon-Supported Single Atom Catalysts for Electrochemical Energy Conversion and Storage. <i>Advanced Materials</i> , 2018, 30, e1801995.	11.1	479
587	Boosting electrocatalysis of oxygen reduction reaction through photovoltaic-driven potential manipulation strategy. <i>Materials Today Energy</i> , 2018, 10, 34-39.	2.5	1
588	Prospects of Platinum-Based Nanostructures for the Electrocatalytic Reduction of Oxygen. <i>ACS Catalysis</i> , 2018, 8, 9388-9398.	5.5	52
589	Metal-Air Batteries: From Static to Flow System. <i>Advanced Energy Materials</i> , 2018, 8, 1801396.	10.2	156
590	Nanodendrites of platinum-group metals for electrocatalytic applications. <i>Nano Research</i> , 2018, 11, 6111-6140.	5.8	54
591	Facile Synthesis of PtCu Alloy/Graphene Oxide Hybrids as Improved Electrocatalysts for Alkaline Fuel Cells. <i>ACS Omega</i> , 2018, 3, 8724-8732.	1.6	21
592	Solvothermal Synthesis of Monodisperse PtCu Dodecahedral Nanoframes with Enhanced Catalytic Activity and Durability for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 5054-5061.	2.5	43
593	Freestanding Pt nanosheets with high porosity and improved electrocatalytic performance toward the oxygen reduction reaction. <i>Green Energy and Environment</i> , 2018, 3, 310-317.	4.7	15
594	Superaerophobic P-doped Ni(OH) ₂ /NiMoO ₄ hierarchical nanosheet arrays grown on Ni foam for electrocatalytic overall water splitting. <i>Dalton Transactions</i> , 2018, 47, 8787-8793.	1.6	64
595	Fabrication of Smart Hybrid Nanoreactors from Platinum Nanodendrites Encapsulating in Hyperbranched Polyglycerol Hollow Shells. <i>ACS Applied Nano Materials</i> , 2018, 1, 2559-2566.	2.4	11
596	Electrocatalytic valorisation of biomass derived chemicals. <i>Catalysis Science and Technology</i> , 2018, 8, 3216-3232.	2.1	105
597	Scalable Preparation of the Chemically Ordered Pt-Fe-Au Nanocatalysts with High Catalytic Reactivity and Stability for Oxygen Reduction Reactions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22156-22166.	4.0	54
598	Recent developments in electrocatalyst design thriving noble metals in fuel cells. <i>Current Opinion in Electrochemistry</i> , 2018, 9, 271-277.	2.5	29
599	Pt _{0.61} Ni/C for High-Efficiency Cathode of Fuel Cells with Superhigh Platinum Utilization. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14691-14697.	1.5	11
600	Recent advances in bimetallic electrocatalysts for oxygen reduction: design principles, structure-function relations and active phase elucidation. <i>Current Opinion in Electrochemistry</i> , 2018, 8, 135-146.	2.5	60

#	ARTICLE	IF	CITATIONS
601	Efficient Oxygen Reduction Reaction (ORR) Catalysts Based on Single Iron Atoms Dispersed on a Hierarchically Structured Porous Carbon Framework. <i>Angewandte Chemie</i> , 2018, 130, 9176-9181.	1.6	105
602	Efficient Oxygen Reduction Reaction (ORR) Catalysts Based on Single Iron Atoms Dispersed on a Hierarchically Structured Porous Carbon Framework. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9038-9043.	7.2	467
603	Designing hybrid materials with multifunctional interfaces for wound dressing, electrocatalysis, and chemical separation. <i>Journal of Colloid and Interface Science</i> , 2019, 533, 106-125.	5.0	16
604	Chicken feather rachis: An improvement over feather fiber derived electrocatalyst for oxygen electroreduction. <i>Applied Surface Science</i> , 2019, 495, 143603.	3.1	27
605	Synthesis of low- and high-index faceted metal (Pt, Pd, Ru, Ir, Rh) nanoparticles for improved activity and stability in electrocatalysis. <i>Nanoscale</i> , 2019, 11, 18995-19011.	2.8	110
606	One-Pot Synthesis of Highly Efficient Carbon-Supported Polyhedral Pt ₃ Ni Alloy Nanoparticles for Oxygen Reduction Reaction. <i>Electrocatalysis</i> , 2019, 10, 613-620.	1.5	12
607	3D Structure Determination of Pt-based Nanocatalysts at Atomic Resolution. <i>Microscopy and Microanalysis</i> , 2019, 25, 398-399.	0.2	0
608	Advanced engineering of core/shell nanostructures for electrochemical carbon dioxide reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20478-20493.	5.2	30
609	Locally-ordered PtNiPb ternary nano-pompons as efficient bifunctional oxygen reduction and methanol oxidation catalysts. <i>Nanoscale</i> , 2019, 11, 16945-16953.	2.8	18
610	Antiferromagnetic element Mn modified PtCo truncated octahedral nanoparticles with enhanced activity and durability for direct methanol fuel cells. <i>Nano Research</i> , 2019, 12, 2520-2527.	5.8	21
611	Tailor-Made Pt Catalysts with Improved Oxygen Reduction Reaction Stability/Durability. <i>ACS Catalysis</i> , 2019, 9, 8622-8645.	5.5	82
612	Effect of Ionic Liquid Modification on the ORR Performance and Degradation Mechanism of Trimetallic PtNiMo/C Catalysts. <i>ACS Catalysis</i> , 2019, 9, 8682-8692.	5.5	60
613	Single iron atoms stabilized by microporous defects of biomass-derived carbon aerogels as high-performance cathode electrocatalysts for aluminum-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20840-20846.	5.2	68
614	Pt@Mesoporous PtRu Yolk-Shell Nanostructured Electrocatalyst for Methanol Oxidation Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14867-14873.	3.2	29
615	Local Structural Disorder Enhances the Oxygen Reduction Reaction Activity of Carbon-Supported Low Pt Loading CoPt Nanocatalysts. <i>Journal of Physical Chemistry C</i> , 2019, 123, 19013-19021.	1.5	18
616	Exploiting dynamic water structure and structural sensitivity for nanoscale electrocatalyst design. <i>Nano Energy</i> , 2019, 64, 103963.	8.2	30
617	Carbon Xerogels Hydrothermally Doped with Bimetal Oxides for Oxygen Reduction Reaction. <i>Materials</i> , 2019, 12, 2446.	1.3	12
618	Recent advances of nanoporous metal-based catalyst: synthesis, application and perspectives. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 779-795.	1.4	9

#	ARTICLE	IF	CITATIONS
619	Monodisperse nanoparticles for catalysis and nanomedicine. <i>Nanoscale</i> , 2019, 11, 18946-18967.	2.8	61
620	Conformational Effects of Pt-Shells on Nanostructures and Corresponding Oxygen Reduction Reaction Activity of Au-Cluster-Decorated NiO _x @Pt Nanocatalysts. <i>Nanomaterials</i> , 2019, 9, 1003.	1.9	14
621	Molybdenum-modified and vertex-reinforced quaternary hexapod nano-skeletons as efficient electrocatalysts for methanol oxidation and oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 117974.	10.8	40
622	Intermediate Modulation on Noble Metal Hybridized to 2D Metal-Organic Framework for Accelerated Water Electrocatalysis. <i>CheM</i> , 2019, 5, 2429-2441.	5.8	150
623	Achievements, challenges and perspectives on cathode catalysts in proton exchange membrane fuel cells for transportation. <i>Nature Catalysis</i> , 2019, 2, 578-589.	16.1	760
624	Monodispersed Pt ₃ Ni Nanoparticles as a Highly Efficient Electrocatalyst for PEMFCs. <i>Catalysts</i> , 2019, 9, 588.	1.6	13
625	Insights into thermal annealing of highly-active PtCu ₃ /C Oxygen Reduction Reaction electrocatalyst: An in-situ heating transmission Electron microscopy study. <i>Nano Energy</i> , 2019, 63, 103892.	8.2	41
626	Thermally driven interfacial diffusion synthesis of nitrogen-doped carbon confined trimetallic Pt ₃ CoRu composites for the methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18143-18149.	5.2	29
627	Nickel and copper doped palladium clusters from a first-principles perspective. <i>International Journal of Quantum Chemistry</i> , 2019, 119, e26013.	1.0	10
628	NaCl protected synthesis of 3D hierarchical metal-free porous nitrogen-doped carbon catalysts for the oxygen reduction reaction in acidic electrolyte. <i>Chemical Communications</i> , 2019, 55, 9023-9026.	2.2	48
629	Tuning the Electrocatalytic Oxygen Reduction Reaction Activity of Pt-Co Nanocrystals by Cobalt Concentration with Atomic-Scale Understanding. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26789-26797.	4.0	40
630	Ternary core-shell PdM@Pt (M = Mn and Fe) nanoparticle electrocatalysts with enhanced ORR catalytic properties. <i>Ultrasonics Sonochemistry</i> , 2019, 58, 104673.	3.8	19
631	PtCuNi Tetrahedra Catalysts with Tailored Surfaces for Efficient Alcohol Oxidation. <i>Nano Letters</i> , 2019, 19, 5431-5436.	4.5	93
632	Gram-Scale Synthesis of Well-Dispersed Shape-Controlled Pt-Ni/C as High-Performance Catalysts for the Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29689-29697.	4.0	47
633	Shaping well-defined noble-metal-based nanostructures for fabricating high-performance electrocatalysts: advances and perspectives. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2582-2618.	3.0	51
634	Revealing the nature of active sites in electrocatalysis. <i>Chemical Science</i> , 2019, 10, 8060-8075.	3.7	96
635	Overwhelming the Performance of Single Atoms with Atomic Clusters for Platinum-Catalyzed Hydrogen Evolution. <i>ACS Catalysis</i> , 2019, 9, 8213-8223.	5.5	68
636	Recent advancements in Pt-nanostructure-based electrocatalysts for the oxygen reduction reaction. <i>Catalysis Science and Technology</i> , 2019, 9, 4835-4863.	2.1	73

#	ARTICLE	IF	CITATIONS
637	Low loaded platinum (Pt) based binary catalyst electrode for PEMFC by plasma co-sputtered deposition method. <i>Materials Chemistry and Physics</i> , 2019, 236, 121796.	2.0	14
638	Insight on Single Cell Proton Exchange Membrane Fuel Cell Performance of Pt-Cu/C Cathode. <i>Catalysts</i> , 2019, 9, 544.	1.6	14
639	Recent progress of Pt-based catalysts for oxygen reduction reaction in preparation strategies and catalytic mechanism. <i>Journal of Electroanalytical Chemistry</i> , 2019, 848, 113279.	1.9	56
640	Dopant-Free Hole Transport Materials with a Long Alkyl Chain for Stable Perovskite Solar Cells. <i>Nanomaterials</i> , 2019, 9, 935.	1.9	9
641	In Situ Formed Pt ₃ Ti Nanoparticles on a Two-Dimensional Transition Metal Carbide (MXene) Used as Efficient Catalysts for Hydrogen Evolution Reactions. <i>Nano Letters</i> , 2019, 19, 5102-5108.	4.5	133
642	Revealing Atomic Structure and Oxidation States of Dopants in Charge-Ordered Nanoparticles for Migration-Promoted Oxygen-Exchange Capacity. <i>Chemistry of Materials</i> , 2019, 31, 5769-5777.	3.2	10
643	Computationally generated maps of surface structures and catalytic activities for alloy phase diagrams. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22044-22051.	3.3	14
644	Platinum Porous Nanosheets with High Surface Distortion and Pt Utilization for Enhanced Oxygen Reduction Catalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1904429.	7.8	96
645	Differential Surface Elemental Distribution Leads to Significantly Enhanced Stability of PtNi-Based ORR Catalysts. <i>Matter</i> , 2019, 1, 1567-1580.	5.0	82
646	Materials research and development focus areas for low cost automotive proton-exchange membrane fuel cells. <i>Current Opinion in Electrochemistry</i> , 2019, 18, 81-89.	2.5	88
647	An Improved Version of DMOEA- μ C for Many-objective optimization Problems: IDMOEA- μ C. , 2019, , .		1
648	Synthesis of Biodiesel from Soybean Oil with Methanol Catalyzed by Ni-doped CaO-MgO Catalysts. <i>ChemistrySelect</i> , 2019, 4, 11181-11188.	0.7	1
649	Elucidating the Dynamic Nature of Fuel Cell Electrodes as a Function of Conditioning: An ex Situ Material Characterization and in Situ Electrochemical Diagnostic Study. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45016-45030.	4.0	96
650	Mechanisms for hydrogen evolution on transition metal phosphide catalysts and a comparison to Pt(111). <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 24489-24498.	1.3	31
651	Simultaneously enhancing interfacial adhesion and pervaporation separation performance of PDMS/ceramic composite membrane via a facile substrate surface grafting approach. <i>AIChE Journal</i> , 2019, 65, e16773.	1.8	21
652	Activity Origin and Multifunctionality of Pt-Based Intermetallic Nanostructures for Efficient Electrocatalysis. <i>ACS Catalysis</i> , 2019, 9, 11242-11254.	5.5	96
653	Recent Progress in Precious Metal-Free Carbon-Based Materials towards the Oxygen Reduction Reaction: Activity, Stability, and Anti-Poisoning. <i>Chemistry - A European Journal</i> , 2020, 26, 3973-3990.	1.7	36
654	Current challenges related to the deployment of shape-controlled Pt alloy oxygen reduction reaction nanocatalysts into low Pt-loaded cathode layers of proton exchange membrane fuel cells. <i>Current Opinion in Electrochemistry</i> , 2019, 18, 61-71.	2.5	111

#	ARTICLE	IF	CITATIONS
655	Numerical Simulations of Seasonal Variations of Rainfall over the Island of Hawaii. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 1219-1232.	0.6	3
656	General Solvothermal Synthesis Method for Complete Solubility Range Bimetallic and High-Entropy Alloy Nanocatalysts. <i>Advanced Functional Materials</i> , 2019, 29, 1905933.	7.8	130
657	Orientation Engineering in Low-Dimensional Crystal-Structural Materials via Seed Screening. <i>Advanced Materials</i> , 2019, 31, e1903914.	11.1	104
658	Unconventional d Hybridization Interaction in PtGa Ultrathin Nanowires Boosts Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 18083-18090.	6.6	216
659	Markedly Enhanced Oxygen Reduction Activity of Single-Atom Fe Catalysts via Integration with Fe Nanoclusters. <i>ACS Nano</i> , 2019, 13, 11853-11862.	7.3	340
660	Systematic Investigation of Iridium-Based Bimetallic Thin Film Catalysts for the Oxygen Evolution Reaction in Acidic Media. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 34059-34066.	4.0	56
661	Magic Mathematical Relationships for Nanoclusters. <i>Nanoscale Research Letters</i> , 2019, 14, 150.	3.1	24
662	Carbon-loaded ultrafine fully crystalline phase palladium-based nanoalloy PdCoNi/C: facile synthesis and high activity for formic acid oxidation. <i>Nanoscale</i> , 2019, 11, 17334-17339.	2.8	7
663	F or V-induced activation of (Co, Ni) ₂ P during electrocatalysis for efficient hydrogen evolution reaction. <i>CrystEngComm</i> , 2019, 21, 6080-6092.	1.3	9
664	Wavy PtCu alloy nanowire networks with abundant surface defects enhanced oxygen reduction reaction. <i>Nano Research</i> , 2019, 12, 2766-2773.	5.8	48
665	Phosphorization Treatment Improves the Catalytic Activity and Durability of Platinum Catalysts toward Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2019, 31, 8205-8211.	3.2	24
666	Controlling Near-Surface Ni Composition in Octahedral PtNi(Mo) Nanoparticles by Mo Doping for a Highly Active Oxygen Reduction Reaction Catalyst. <i>Nano Letters</i> , 2019, 19, 6876-6885.	4.5	95
667	Ternary Palladium-Boron-Phosphorus Alloy Mesoporous Nanospheres for Highly Efficient Electrocatalysis. <i>ACS Nano</i> , 2019, 13, 12052-12061.	7.3	108
668	PdAg Bimetallic Nanoparticles Encapsulated in Porous Carbon Derived from UIO-66 as Electrocatalyst for Oxygen Reduction and Hydrogen Evolution Reactions. <i>International Journal of Electrochemical Science</i> , 2019, 14, 8781-8792.	0.5	11
669	Eco-Friendly, Direct Deposition of Metal Nanoparticles on Graphite for Electrochemical Energy Conversion and Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 36525-36534.	4.0	23
670	Photo-improved hydrogen evolution reaction activity of the Pt/CdS electrocatalyst. <i>Progress in Natural Science: Materials International</i> , 2019, 29, 379-383.	1.8	6
671	Hofmann-like metal-organic-framework-derived Pt _x Fe/C/N-GC composites as efficient electrocatalysts for methanol oxidation. <i>RSC Advances</i> , 2019, 9, 26450-26455.	1.7	6
672	PdMo bimetallic for oxygen reduction catalysis. <i>Nature</i> , 2019, 574, 81-85.	13.7	935

#	ARTICLE	IF	CITATIONS
673	Electrochemical "deactivation effect" to oxygen reduction reaction caused by long-time potential cycling process. <i>Applied Catalysis A: General</i> , 2019, 588, 117273.	2.2	5
674	Designing the 3D Architecture of PGM-Free Cathodes for H ₂ /Air Proton Exchange Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 7211-7222.	2.5	41
675	Development of g-C ₃ N ₄ activated hollow carbon spheres with good performance for oxygen reduction and selective capture of acid gases. <i>Electrochimica Acta</i> , 2019, 324, 134869.	2.6	22
676	Atomically ordered non-precious Co ₃ Ta intermetallic nanoparticles as high-performance catalysts for hydrazine electrooxidation. <i>Nature Communications</i> , 2019, 10, 4514.	5.8	80
677	Tracking mobile active sites and intermediates in NH ₃ -SCR over zeolite catalysts by impedance-based <i>in situ</i> spectroscopy. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 986-994.	1.9	16
678	Decoupling the roles of carbon and metal oxides on the electrocatalytic reduction of oxygen on La _{1-x} Sr _x CoO _{3-δ} perovskite composite electrodes. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3327-3338.	1.3	26
679	3D PtAu nanoframe superstructure as a high-performance carbon-free electrocatalyst. <i>Nanoscale</i> , 2019, 11, 2840-2847.	2.8	27
680	Platinum-trimer decorated cobalt-palladium core-shell nanocatalyst with promising performance for oxygen reduction reaction. <i>Nature Communications</i> , 2019, 10, 440.	5.8	115
681	Prussian blue analogues-derived bimetallic phosphide hollow nanocubes grown on Ni foam as water splitting electrocatalyst. <i>Journal of Materials Science</i> , 2019, 54, 7087-7095.	1.7	31
682	Trifunctional Self-Supporting Cobalt-Embedded Carbon Nanotube Films for ORR, OER, and HER Triggered by Solid Diffusion from Bulk Metal. <i>Advanced Materials</i> , 2019, 31, e1808043.	11.1	290
683	Engineering Surface Structure of Pt Nanoshells on Pd Nanocubes to Preferentially Expose Active Surfaces for ORR by Manipulating the Growth Kinetics. <i>Nano Letters</i> , 2019, 19, 1743-1748.	4.5	67
684	Direct synthesis of superlong Pt Te mesoporous nanotubes for electrocatalytic oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1711-1717.	5.2	46
685	Optimizing solution-processed C ₆₀ electron transport layer in planar perovskite solar cells by interfacial modification with solid-state ionic-liquids. <i>Journal of Solid State Chemistry</i> , 2019, 276, 302-308.	1.4	26
686	Does the oxophilic effect serve the same role for hydrogen evolution/oxidation reaction in alkaline media?. <i>Nano Energy</i> , 2019, 62, 601-609.	8.2	68
687	Tuning the Bifunctional Oxygen Electrocatalytic Properties of Core-Shell Co ₃ O ₄ @NiFe LDH Catalysts for Zn-Air Batteries: Effects of Interfacial Cation Valences. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21506-21514.	4.0	114
688	Pressure intensified HO evolution from OER and electrolysis desulfurization. <i>Electrochimica Acta</i> , 2019, 318, 202-210.	2.6	7
689	g-C ₃ N ₄ templated synthesis of the Fe ₃ C@NSC electrocatalyst enriched with Fe-N active sites for efficient oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16920-16936.	5.2	91
690	Amperometric sarcosine biosensor with strong anti-interference capabilities based on mesoporous organic-inorganic hybrid materials. <i>Biosensors and Bioelectronics</i> , 2019, 141, 111431.	5.3	29

#	ARTICLE	IF	CITATIONS
691	Restructured PtNi on ultrathin nickel hydroxide for enhanced performance in hydrogen evolution and methanol oxidation. <i>Journal of Catalysis</i> , 2019, 375, 267-278.	3.1	31
692	PtFe alloy catalyst supported on porous carbon nanofiber with high activity and durability for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 18083-18092.	3.8	36
693	Calixarene-Based {Co ₂₆ } Burr Puzzle: An Efficient Oxygen Reduction Catalyst. <i>ACS Applied Nano Materials</i> , 2019, 2, 4232-4237.	2.4	14
694	Efficient oxygen reduction on sandwich-like metal@N-C composites with ultrafine Fe nanoparticles embedded in N-doped carbon nanotubes grafted on graphene sheets. <i>Nanoscale</i> , 2019, 11, 12610-12618.	2.8	26
695	Pt-Based Nanocrystal for Electrocatalytic Oxygen Reduction. <i>Advanced Materials</i> , 2019, 31, e1808115.	11.1	260
696	Fe ₃ O ₄ Nanoparticles Supported on Arc-Synthesized Carbon Nanotubes as Advanced Electrocatalyst for Oxygen Reduction Reaction. <i>ChemistrySelect</i> , 2019, 4, 6227-6232.	0.7	3
697	Dual-Site Cascade Oxygen Reduction Mechanism on SnO ₂ /Pt-Cu-Ni for Promoting Reaction Kinetics. <i>Journal of the American Chemical Society</i> , 2019, 141, 9463-9467.	6.6	70
698	Gold nanoparticles deposited on MnO ₂ nanorods modified graphene oxide composite: A potential ternary nanocatalyst for efficient synthesis of betti bases and bisamides. <i>Molecular Catalysis</i> , 2019, 474, 110415.	1.0	13
699	Structure-Related Electrocatalytic Performance of N/C-Supported Fe ₃ Ni Nanoparticles toward Oxygen Reduction. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16250-16256.	1.5	5
700	Platinum and PtNi Nanoparticle-Supported Multiwalled Carbon Nanotube Electrocatalysts Prepared by One-Pot Pyrolytic Synthesis with an Ionic Liquid. <i>ACS Applied Energy Materials</i> , 2019, 2, 4865-4872.	2.5	12
701	Tweaking the Interplay among Galvanic Exchange, Oxidative Etching, and Seed-Mediated Deposition toward Architectural Control of Multimetallic Nanoelectrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23482-23494.	4.0	13
702	Nano-single crystal coalesced PtCu nanospheres as robust bifunctional catalyst for hydrogen evolution and oxygen reduction reactions. <i>Journal of Catalysis</i> , 2019, 375, 164-170.	3.1	133
703	Synthesis of Metallic Nanocrystals: From Noble Metals to Base Metals. <i>Materials</i> , 2019, 12, 1497.	1.3	14
704	Ab-initio calculations of chemical and optoelectronic properties of 7-atom Pt-Y [Y = Li, Na, K]. <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	0
705	Electrode Materials for Rechargeable Zinc-Ion and Zinc-Air Batteries: Current Status and Future Perspectives. <i>Electrochemical Energy Reviews</i> , 2019, 2, 395-427.	13.1	122
706	Constructing a desirable electrocatalyst for ORR employing site isolation strategy. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 16557-16565.	3.8	8
707	High-Loading Composition-Tolerant Co-Mn Spinel Oxides with Performance beyond 1 W/cm ² in Alkaline Polymer Electrolyte Fuel Cells. <i>ACS Energy Letters</i> , 2019, 4, 1251-1257.	8.8	77
708	Influence of Metal-Ligand Coordination on the Elemental Growth and Alloying Composition of Pt-Ni Octahedral Nanoparticles for Oxygen Reduction Electrocatalysis. <i>ACS Omega</i> , 2019, 4, 8305-8311.	1.6	16

#	ARTICLE	IF	CITATIONS
709	Optimal coordination-site exposure engineering in porous platinum for outstanding oxygen reduction performance. <i>Chemical Science</i> , 2019, 10, 5589-5595.	3.7	20
710	One-nanometer-thick platinum-based nanowires with controllable surface structures. <i>Nano Research</i> , 2019, 12, 1721-1726.	5.8	18
711	Boron as a superior activator for Pt anode catalyst in direct alcohol fuel cell. <i>Journal of Power Sources</i> , 2019, 431, 125-134.	4.0	35
712	Single-atom tailoring of platinum nanocatalysts for high-performance multifunctional electrocatalysis. <i>Nature Catalysis</i> , 2019, 2, 495-503.	16.1	464
713	Composition- and shape-controlled synthesis of the PtNi alloy nanotubes with enhanced activity and durability toward oxygen reduction reaction. <i>Journal of Power Sources</i> , 2019, 429, 1-8.	4.0	19
714	Au~Pd Selectivity~Switchable Alcohol~Oxidation Catalyst: Controlling the Duality of the Mechanism using a Multivariate Approach. <i>ChemCatChem</i> , 2019, 11, 3022-3034.	1.8	9
715	Densely Populated Isolated Single Co ₁ N Site for Efficient Oxygen Electrocatalysis. <i>Advanced Energy Materials</i> , 2019, 9, 1900149.	10.2	262
716	High-performance single atom bifunctional oxygen catalysts derived from ZIF-67 superstructures. <i>Nano Energy</i> , 2019, 61, 245-250.	8.2	205
717	Surface-engineered mesoporous Pt nanodendrites with Ni dopant for highly enhanced catalytic performance in hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12800-12807.	5.2	45
718	Self-Supported ZIF-Derived Co ₃ O ₄ Nanoparticles-Decorated Porous N-Doped Carbon Fibers as Oxygen Reduction Catalyst. <i>Chemistry - A European Journal</i> , 2019, 25, 6807-6813.	1.7	23
719	Comparison of Pt~Cu/C with Benchmark Pt~Co/C: Metal Dissolution and Their Surface Interactions. <i>ACS Applied Energy Materials</i> , 2019, 2, 3131-3141.	2.5	54
720	Improved Accelerated Stress Tests for ORR Catalysts Using a Rotating Disk Electrode. <i>Journal of the Electrochemical Society</i> , 2019, 166, F3111-F3115.	1.3	18
721	Microwave-assisted hydrothermal synthesis of MOFs-derived bimetallic CuCo-N/C electrocatalyst for efficient oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2019, 795, 462-470.	2.8	31
722	Increasing the stability of membrane-electrode assemblies based on Aquivion® membranes under automotive fuel cell conditions by using proper catalysts and ionomers. <i>Journal of Electroanalytical Chemistry</i> , 2019, 842, 59-65.	1.9	21
723	Atomic Arrangement Engineering of Metallic Nanocrystals for Energy-Conversion Electrocatalysis. <i>Joule</i> , 2019, 3, 956-991.	11.7	197
724	Pt-rare earth metal alloy/metal oxide catalysts for oxygen reduction and alcohol oxidation reactions: an overview. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1866-1891.	2.5	82
725	MoS ₂ -Coated Ni ₃ S ₂ Nanorods with Exposed {110} High-Index Facets As Excellent CO-Tolerant Cocatalysts for Pt: Ultradurable Catalytic Activity for Methanol Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11101-11109.	3.2	35
726	Catalytic Ru containing PtMn nanocrystals enclosed with high-indexed facets: Surface alloyed Ru makes Pt more active than Ru particles for ethylene glycol oxidation. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 11-20.	10.8	60

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727	Chemical transformation of solution-processed Ag nanocrystal thin films into electrically conductive and catalytically active Pt-based nanostructures. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 76, 388-395.	2.9	3
728	Effective surface termination with Au on PtCo@Pt core-shell nanoparticle: Microstructural investigations and oxygen reduction reaction properties. <i>Journal of Electroanalytical Chemistry</i> , 2019, 842, 1-7.	1.9	14
729	Transition metal-embedded two-dimensional C ₃ N as a highly active electrocatalyst for oxygen evolution and reduction reactions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12050-12059.	5.2	123
730	PtM (M = Co, Ni) Mesoporous Nanotubes as Bifunctional Electrocatalysts for Oxygen Reduction and Methanol Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7960-7968.	3.2	58
731	In-situ synthesis of carbon-encapsulated Ni nanoparticles decorated graphene nanosheets with high reactivity toward glucose oxidation and sensing. <i>Carbon</i> , 2019, 148, 44-51.	5.4	35
732	Room-temperature electrochemical deposition of ultrathin CuOx film as hole transport layer for perovskite solar cells. <i>Scripta Materialia</i> , 2019, 165, 134-139.	2.6	20
733	Sub-6 nm Fully Ordered Pt-Co Nanoparticles Enhance Oxygen Reduction via Co Doping Induced Ferromagnetism Enhancement and Optimized Surface Strain. <i>Advanced Energy Materials</i> , 2019, 9, 1803771.	10.2	127
734	NiFe Alloy Nanoparticles with hcp Crystal Structure Stimulate Superior Oxygen Evolution Reaction Electrocatalytic Activity. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6099-6103.	7.2	267
735	NiFe Alloy Nanoparticles with hcp Crystal Structure Stimulate Superior Oxygen Evolution Reaction Electrocatalytic Activity. <i>Angewandte Chemie</i> , 2019, 131, 6160-6164.	1.6	14
736	Reducing energy barriers of chemical reactions with a nanomicrocell catalyst consisting of integrated active sites in conductive matrices. <i>Science Bulletin</i> , 2019, 64, 385-390.	4.3	10
737	Deviations from Vegard's law and evolution of the electrocatalytic activity and stability of Pt-based nanoalloys inside fuel cells by in operando X-ray spectroscopy and total scattering. <i>Nanoscale</i> , 2019, 11, 5512-5525.	2.8	33
738	Structure regulation of noble-metal-based nanomaterials at an atomic level. <i>Nano Today</i> , 2019, 26, 164-175.	6.2	33
739	PtNi Nanoparticles Encapsulated in Few Carbon Layers as High-Performance Catalysts for Oxygen Reduction Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 2769-2778.	2.5	21
740	Uniform Nitrogen and Sulfur Co-doped Carbon Bowls for the Electrocatalyzation of Oxygen Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7148-7154.	3.2	13
741	Electrocatalytic Activities towards the Electrochemical Oxidation of Formic Acid and Oxygen Reduction Reactions over Bimetallic, Trimetallic and Core-Shell-Structured Pd-Based Materials. <i>Inorganics</i> , 2019, 7, 36.	1.2	23
742	Atomic Scale Stability of Tungsten-Cobalt Intermetallic Nanocrystals in Reactive Environment at High Temperature. <i>Journal of the American Chemical Society</i> , 2019, 141, 5871-5879.	6.6	39
743	RuN ₄ Doped Graphene Oxide, a Highly Efficient Bifunctional Catalyst for Oxygen Reduction and CO ₂ Reduction from Computational Study. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 8136-8144.	3.2	29
744	CO-assisted ex-situ chemical activation of Pt-Cu/C oxygen reduction reaction electrocatalyst. <i>Electrochimica Acta</i> , 2019, 306, 377-386.	2.6	37

#	ARTICLE	IF	CITATIONS
745	Two-Way Alloying and Dealloying of Cadmium in Metalloid Gold Clusters. <i>Inorganic Chemistry</i> , 2019, 58, 5388-5392.	1.9	29
746	Carbon-supported ultrafine Pt nanoparticles modified with trace amounts of cobalt as enhanced oxygen reduction reaction catalysts for proton exchange membrane fuel cells. <i>Chinese Journal of Catalysis</i> , 2019, 40, 504-514.	6.9	32
747	Vanadium activity measurement in fcc phase Pt-V alloy. <i>Journal of Alloys and Compounds</i> , 2019, 788, 967-971.	2.8	1
748	Review of Metal Catalysts for Oxygen Reduction Reaction: From Nanoscale Engineering to Atomic Design. <i>CheM</i> , 2019, 5, 1486-1511.	5.8	544
749	Highly active zigzag-like Pt-Zn alloy nanowires with high-index facets for alcohol electrooxidation. <i>Nano Research</i> , 2019, 12, 1173-1179.	5.8	65
750	Effects of Pt metal loading on the atomic restructure and oxygen reduction reaction performance of Pt-cluster decorated Cu@Pd electrocatalysts. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1668-1681.	2.5	19
751	Advanced Catalysts Derived from Compositionally Segregated Platinum-Nickel Nanostructures: New Opportunities and Challenges. <i>Advanced Functional Materials</i> , 2019, 29, 1808161.	7.8	38
752	Recommended Practices and Benchmark Activity for Hydrogen and Oxygen Electrocatalysis in Water Splitting and Fuel Cells. <i>Advanced Materials</i> , 2019, 31, e1806296.	11.1	841
753	Key Factors for Simultaneous Improvements of Performance and Durability of Core-Shell Pt ₃ Ni/Carbon Electrocatalysts Toward Superior Polymer Electrolyte Fuel Cell. <i>Chemical Record</i> , 2019, 19, 1337-1353.	2.9	5
754	From Atoms to Lives: The Evolution of Nanoparticle Assemblies. <i>Advanced Functional Materials</i> , 2019, 29, 1807658.	7.8	44
755	Moving Frontiers in Transition Metal Catalysis: Synthesis, Characterization and Modeling. <i>Advanced Materials</i> , 2019, 31, e1807381.	11.1	36
756	Biomass Derived Graphene-Like Carbons for Electrocatalytic Oxygen Reduction Reaction. <i>ChemNanoMat</i> , 2019, 5, 682-689.	1.5	39
757	The Challenge of Achieving a High Density of Fe-Based Active Sites in a Highly Graphitic Carbon Matrix. <i>Catalysts</i> , 2019, 9, 144.	1.6	22
758	Polyacrylonitrile-derived nanostructured carbon materials. <i>Progress in Polymer Science</i> , 2019, 92, 89-134.	11.8	92
759	Redox Trimetallic Nanozyme with Neutral Environment Preference for Brain Injury. <i>ACS Nano</i> , 2019, 13, 1870-1884.	7.3	90
760	Pd Nanocrystals with Continuously Tunable High-Index Facets as a Model Nanocatalyst. <i>ACS Catalysis</i> , 2019, 9, 3144-3152.	5.5	68
761	Fabrication of Superior Single-Atom Catalysts toward Diverse Electrochemical Reactions. <i>Small Methods</i> , 2019, 3, 1800497.	4.6	99
762	Continuous and Scalable Synthesis of Pt Multipods with Enhanced Electrocatalytic Activity toward the Oxygen Reduction Reaction. <i>ChemNanoMat</i> , 2019, 5, 599-605.	1.5	8

#	ARTICLE	IF	CITATIONS
763	Remarkable Improvement of the Catalytic Performance of PtFe Nanoparticles by Structural Ordering and Doping. ACS Applied Materials & Interfaces, 2019, 11, 11527-11536.	4.0	30
764	Defect chemistry in 2D materials for electrocatalysis. Materials Today Energy, 2019, 12, 215-238.	2.5	110
765	2020 Roadmap on gas-involved photo- and electro- catalysis. Chinese Chemical Letters, 2019, 30, 2089-2109.	4.8	71
766	Pt ₃ MeAu (Me = Ni, Cu) Fuel Cell Nanocatalyst Growth, Shapes, and Efficiency: A Molecular Dynamics Simulation Approach. Journal of Physical Chemistry C, 2019, 123, 29656-29664.	1.5	5
767	Synergistic engineering of architecture and composition in Ni _x Co _{1-x} MoO ₄ @CoMoO ₄ nanobrush arrays towards efficient overall water splitting electrocatalysis. Nanoscale, 2019, 11, 22820-22831.	2.8	37
768	First-principles investigation of electrochemical dissolution of Pt nanoparticles and kinetic simulation. Journal of Chemical Physics, 2019, 151, 234711.	1.2	10
769	Regulating locations of active sites: a novel strategy to greatly improve the stability of PtAu electrocatalysts. Chemical Communications, 2019, 55, 13602-13605.	2.2	8
770	The dual-defective SnS ₂ monolayers: promising 2D photocatalysts for overall water splitting. Physical Chemistry Chemical Physics, 2019, 21, 26292-26300.	1.3	18
771	Optimizing PtFe intermetallics for oxygen reduction reaction: from DFT screening to <i>in situ</i> XAFS characterization. Nanoscale, 2019, 11, 20301-20306.	2.8	33
772	Leaching- and sintering-resistant hollow or structurally ordered intermetallic PtFe alloy catalysts for oxygen reduction reactions. Nanoscale, 2019, 11, 20115-20122.	2.8	48
773	Hydroxyl group modification improves the electrocatalytic ORR and OER activity of graphene supported single and bi-metal atomic catalysts (Ni, Co, and Fe). Journal of Materials Chemistry A, 2019, 7, 24583-24593.	5.2	126
774	Interfacial synergy of ultralong jagged Pt ₈₅ Mo ₁₅ S nanowires with abundant active sites on enhanced hydrogen evolution in an alkaline solution. Journal of Materials Chemistry A, 2019, 7, 24328-24336.	5.2	35
775	Stabilizer-Free CuIr Alloy Nanoparticle Catalysts. Chemistry of Materials, 2019, 31, 10225-10235.	3.2	16
776	Carbon-Based Nanomaterials as Sustainable Noble-Metal-Free Electrocatalysts. Frontiers in Chemistry, 2019, 7, 759.	1.8	29
777	Polymorphic cobalt diselenide as extremely stable electrocatalyst in acidic media via a phase-mixing strategy. Nature Communications, 2019, 10, 5338.	5.8	65
778	Corrosion Resistance and Acidic ORR Activity of Pt-based Catalysts Supported on Nanocrystalline Alloys of Molybdenum and Tantalum Carbide. Journal of the Electrochemical Society, 2019, 166, F1292-F1300.	1.3	13
779	Preparation of Ni@Pt core@shell conformal nanofibre oxygen reduction electrocatalysts via microwave-assisted galvanic displacement. Catalysis Science and Technology, 2019, 9, 6920-6928.	2.1	8
780	Therapeutic applications of multifunctional nanozymes. Nanoscale, 2019, 11, 21046-21060.	2.8	89

#	ARTICLE	IF	CITATIONS
781	Efficient Bifunctional Polyalcohol Oxidation and Oxygen Reduction Electrocatalysts Enabled by Ultrathin PtPdM (M = Ni, Fe, Co) Nanosheets. <i>Advanced Energy Materials</i> , 2019, 9, 1800684.	10.2	112
782	Nanoscale Structure Design for High-Performance Pt-Based ORR Catalysts. <i>Advanced Materials</i> , 2019, 31, e1802234.	11.1	478
783	Single-Atom Electroplating on Two Dimensional Materials. <i>Chemistry of Materials</i> , 2019, 31, 429-435.	3.2	55
784	Platinum Nanocrystals Decorated on Defect-Rich MoS ₂ Nanosheets for pH-Universal Hydrogen Evolution Reaction. <i>Crystal Growth and Design</i> , 2019, 19, 60-65.	1.4	39
785	Composition optimized trimetallic PtNiRu dendritic nanostructures as versatile and active electrocatalysts for alcohol oxidation. <i>Nano Research</i> , 2019, 12, 651-657.	5.8	49
786	Alloy Nanocatalysts for the Electrochemical Oxygen Reduction (ORR) and the Direct Electrochemical Carbon Dioxide Reduction Reaction (CO ₂ RR). <i>Advanced Materials</i> , 2019, 31, e1805617.	11.1	255
787	Opportunities and Challenges of Interface Engineering in Bimetallic Nanostructure for Enhanced Electrocatalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1806419.	7.8	223
788	Mn ₃ O ₄ @C Nanoparticles Supported on Porous Carbon as Bifunctional Oxygen Electrodes and their Electrocatalytic Mechanism. <i>ChemElectroChem</i> , 2019, 6, 359-368.	1.7	32
789	Two-dimensional circular platinum nanodendrites toward efficient oxygen reduction reaction and methanol oxidation reaction. <i>Electrochemistry Communications</i> , 2019, 98, 53-57.	2.3	17
790	Metal alloy hybrid nanoparticles with enhanced catalytic activities in fuel cell applications. <i>Journal of Solid State Chemistry</i> , 2019, 270, 295-303.	1.4	26
791	Porous nitrogen/halogen dual-doped nanocarbons derived from imidazolium functionalized cationic metal-organic frameworks for highly efficient oxygen reduction reaction. <i>Science China Materials</i> , 2019, 62, 671-680.	3.5	30
792	Multimetallic Electrocatalyst Stabilized by Atomic Ordering. <i>Joule</i> , 2019, 3, 9-10.	11.7	10
793	Effect of surface-bound sulfide on oxygen reduction reaction on Pt: Breaking the scaling relationship and mechanistic insights. <i>Journal of Chemical Physics</i> , 2019, 150, 041728.	1.2	17
794	Tungsten-Doping-Induced Surface Reconstruction of Porous Ternary Pt-Based Alloy Electrocatalyst for Oxygen Reduction. <i>Advanced Functional Materials</i> , 2019, 29, 1807070.	7.8	65
795	B-Doped Fe/N/C Porous Catalyst for High-Performance Oxygen Reduction in Anion-Exchange Membrane Fuel Cells. <i>ChemElectroChem</i> , 2019, 6, 1754-1760.	1.7	18
796	Hierarchically Structured Co(OH) ₂ /CoPt/N-CN Air Cathodes for Rechargeable Zinc-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4983-4994.	4.0	35
797	Morphological, Structural, and Compositional Evolution of Pt-Ni Octahedral Electrocatalysts with Pt-Rich Edges and Ni-Rich Core: Toward the Rational Design of Electrocatalysts for the Oxygen Reduction Reaction. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1800442.	1.2	10
798	Anti-poisoned oxygen reduction by the interface modulated Pd@NiO core@shell. <i>Nano Energy</i> , 2019, 58, 234-243.	8.2	38

#	ARTICLE	IF	CITATIONS
799	Colloidal Nanocrystals as Building Blocks for Well-Defined Heterogeneous Catalysts. <i>Chemistry of Materials</i> , 2019, 31, 576-596.	3.2	80
800	Dynamics of Subnanometer Pt Clusters Can Break the Scaling Relationships in Catalysis. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 460-467.	2.1	72
801	A facile surfactant-assisted synthesis of carbon-supported dendritic Pt nanoparticles with high electrocatalytic performance for the oxygen reduction reaction. <i>Microporous and Mesoporous Materials</i> , 2019, 280, 1-6.	2.2	20
802	Hard-Magnet L10-CoPt Nanoparticles Advance Fuel Cell Catalysis. <i>Joule</i> , 2019, 3, 124-135.	11.7	326
803	Real-time Simulation of Nonequilibrium Nanocrystal Transformations. <i>Advanced Theory and Simulations</i> , 2019, 2, 1800127.	1.3	14
804	Zn ₃ [Fe(CN) ₆] ₂ derived Fe/Fe ₅ C ₂ @N-doped carbon as a highly effective oxygen reduction reaction catalyst for zinc-air battery. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 197-205.	10.8	98
805	Unique hierarchical flower-like PtNi alloy nanocrystals with enhanced oxygen reduction properties. <i>Electrochimica Acta</i> , 2019, 294, 406-412.	2.6	14
806	Optimizing the structural configuration of FePt-FeOx nanoparticles at the atomic scale by tuning the post-synthetic conditions. <i>Nano Energy</i> , 2019, 55, 441-446.	8.2	10
807	Janus electrode with simultaneous management on gas and liquid transport for boosting oxygen reduction reaction. <i>Nano Research</i> , 2019, 12, 177-182.	5.8	43
808	High performance octahedral PtNi/C catalysts investigated from rotating disk electrode to membrane electrode assembly. <i>Nano Research</i> , 2019, 12, 281-287.	5.8	44
809	Rh-doped PdAg nanoparticles as efficient methanol tolerance electrocatalytic materials for oxygen reduction. <i>Science Bulletin</i> , 2019, 64, 54-62.	4.3	33
810	A CO Adsorption Site Change Induced by Copper Substitution in a Ruthenium Catalyst for Enhanced CO Oxidation Activity. <i>Angewandte Chemie</i> , 2019, 131, 2252-2257.	1.6	11
811	Advanced Electrocatalytic Performance of Ni-Based Materials for Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 341-349.	3.2	43
812	A CO Adsorption Site Change Induced by Copper Substitution in a Ruthenium Catalyst for Enhanced CO Oxidation Activity. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2230-2235.	7.2	48
813	Solid-Diffusion Synthesis of Single-Atom Catalysts Directly from Bulk Metal for Efficient CO ₂ Reduction. <i>Joule</i> , 2019, 3, 584-594.	11.7	277
814	Aluminum and Nitrogen Codoped Graphene: Highly Active and Durable Electrocatalyst for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2019, 9, 610-619.	5.5	56
815	Implanting Mo Atoms into Surface Lattice of Pt ₃ Mn Alloys Enclosed by High-Indexed Facets: Promoting Highly Active Sites for Ethylene Glycol Oxidation. <i>ACS Catalysis</i> , 2019, 9, 442-455.	5.5	79
816	Face-centered tetragonal (FCT) Fe and Co alloys of Pt as catalysts for the oxygen reduction reaction (ORR): A DFT study. <i>Journal of Chemical Physics</i> , 2019, 150, 041704.	1.2	29

#	ARTICLE	IF	CITATIONS
817	Ternary CoAuPd and binary AuPd electrocatalysts for methanol oxidation and oxygen reduction reaction: Enhanced catalytic performance by surface reconstruction. <i>Journal of Power Sources</i> , 2019, 412, 142-152.	4.0	34
818	Carbon-Supported Divacancy-Anchored Platinum Single-Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2019, 131, 1175-1179.	1.6	73
819	Carbon-Supported Divacancy-Anchored Platinum Single-Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1163-1167.	7.2	252
820	Laser-Induced Graphene: From Discovery to Translation. <i>Advanced Materials</i> , 2019, 31, e1803621.	11.1	512
821	Ceria supported ruthenium(0) nanoparticles: Highly efficient catalysts in oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 704-710.	5.0	37
822	One-step synthesis of porous PtNiCu trimetallic nanoalloy with enhanced electrocatalytic performance toward methanol oxidation. <i>Journal of Saudi Chemical Society</i> , 2019, 23, 43-51.	2.4	24
823	XAFS study on single-atomic-site Cu ₁ /N-graphene catalyst for oxygen reduction reaction. <i>Radiation Physics and Chemistry</i> , 2020, 175, 108230.	1.4	11
824	Surface and Interface Control in Nanoparticle Catalysis. <i>Chemical Reviews</i> , 2020, 120, 1184-1249.	23.0	492
825	In situ grown 3D hierarchical MnCo ₂ O _{4.5} @Ni(OH) ₂ nanosheet arrays on Ni foam for efficient electrocatalytic urea oxidation. <i>Chemical Engineering Journal</i> , 2020, 381, 122603.	6.6	117
826	Interface modulation of twinned PtFe nanoplates branched 3D architecture for oxygen reduction catalysis. <i>Science Bulletin</i> , 2020, 65, 97-104.	4.3	42
827	Intermetallic PtBi Nanoplates Boost Oxygen Reduction Catalysis with Superior Tolerance over Chemical Fuels. <i>Advanced Science</i> , 2020, 7, 1800178.	5.6	55
828	In situ synthesis of sustainable highly efficient single iron atoms anchored on nitrogen doped carbon derived from renewable biomass. <i>Carbon</i> , 2020, 157, 614-621.	5.4	64
829	String of pyrolyzed ZIF-67 particles on carbon fibers for high-performance electrocatalysis. <i>Energy Storage Materials</i> , 2020, 25, 137-144.	9.5	102
830	A highly durable N-enriched titanium nanotube suboxide fuel cell catalyst support. <i>Applied Catalysis B: Environmental</i> , 2020, 263, 118272.	10.8	18
831	Platinum Alloy Catalysts for Oxygen Reduction Reaction: Advances, Challenges and Perspectives. <i>ChemNanoMat</i> , 2020, 6, 32-41.	1.5	71
832	Rapid synthesis of metallic and alloy micro/nanoparticles by laser ablation towards water. <i>Applied Surface Science</i> , 2020, 504, 144461.	3.1	28
833	Platinum-group-metal catalysts for proton exchange membrane fuel cells: From catalyst design to electrode structure optimization. <i>EnergyChem</i> , 2020, 2, 100023.	10.1	138
834	Reduced segregation and integration of structural brain network associated with sympathetic and dorsal penile nerve activity in anejaculation patients: a graph-based connectome study. <i>Andrology</i> , 2020, 8, 392-399.	1.9	9

#	ARTICLE	IF	CITATIONS
835	Promoting the ORR catalysis of Pt-Fe intermetallic catalysts by increasing atomic utilization and electronic regulation. <i>Electrochimica Acta</i> , 2020, 330, 135119.	2.6	53
836	Graphene-cobalt based oxygen electrocatalysts. <i>Catalysis Today</i> , 2020, 358, 184-195.	2.2	6
837	Well-Defined Nanoparticle Electrocatalysts for the Refinement of Theory. <i>Chemical Reviews</i> , 2020, 120, 814-850.	23.0	75
838	Probing the active sites of site-specific nitrogen doping in metal-free graphdiyne for electrochemical oxygen reduction reactions. <i>Science Bulletin</i> , 2020, 65, 45-54.	4.3	52
839	N-Doped ordered porous carbon decorated with WN and Ni nanoparticles for enhanced electrocatalytic properties. <i>Journal of Porous Materials</i> , 2020, 27, 719-726.	1.3	2
840	N-doping induced tensile-strained Pt nanoparticles ensuring an excellent durability of the oxygen reduction reaction. <i>Journal of Catalysis</i> , 2020, 382, 247-255.	3.1	61
841	Efficient hydrogen evolution reaction with platinum stannide PtSn ₄ via surface oxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2349-2355.	5.2	14
842	Computational screening of transition metal-doped phthalocyanine monolayers for oxygen evolution and reduction. <i>Nanoscale Advances</i> , 2020, 2, 710-716.	2.2	30
843	Tuning the surface segregation composition of a PdCo alloy by the atmosphere for increasing electrocatalytic activity. <i>Sustainable Energy and Fuels</i> , 2020, 4, 380-386.	2.5	13
844	A mesoporous carbon derived from 4,4'-dipyridyl iron as an efficient catalyst for oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2439-2444.	5.2	12
845	Precious metal nanocrystals for renewable energy electrocatalysis: structural design and controlled synthesis. <i>Dalton Transactions</i> , 2020, 49, 267-273.	1.6	9
846	High-purity pyrrole-type FeN ₄ sites as a superior oxygen reduction electrocatalyst. <i>Energy and Environmental Science</i> , 2020, 13, 111-118.	15.6	327
847	Current progress of Pt and Pt-based electrocatalysts used for fuel cells. <i>Sustainable Energy and Fuels</i> , 2020, 4, 15-30.	2.5	375
848	Sub-nanometer Pt cluster decoration enhances the oxygen reduction reaction performances of NiO _x supported Pd nano-islands. <i>Sustainable Energy and Fuels</i> , 2020, 4, 809-823.	2.5	19
849	Enhanced oxygen reduction activity of PtCu nanoparticles by morphology tuning and transition-metal doping. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 4427-4434.	3.8	14
850	Atomically Dispersed Mn within Carbon Frameworks as High-Performance Oxygen Reduction Electrocatalysts for Zinc-Air Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 427-434.	3.2	43
851	Recent Progress of Metal Carbides Encapsulated in Carbon-Based Materials for Electrocatalysis of Oxygen Reduction Reaction. <i>Small Methods</i> , 2020, 4, 1900575.	4.6	59
852	Inactive step-edge Pt atoms boost oxygen reduction reaction by activating adsorbed hydrogen atoms. <i>Applied Surface Science</i> , 2020, 504, 144434.	3.1	6

#	ARTICLE	IF	CITATIONS
853	Intermetallic compound catalysts: synthetic scheme, structure characterization and catalytic application. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2207-2221.	5.2	63
854	Surface oxygen-mediated ultrathin PtRuM (Ni, Fe, and Co) nanowires boosting methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2323-2330.	5.2	67
855	Evidence for interfacial geometric interactions at metal–support interfaces and their influence on the electroactivity and stability of Pt nanoparticles. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1368-1377.	5.2	25
856	Bimetallic PdZn nanoparticles for oxygen reduction reaction in alkaline medium: The effects of surface structure. <i>Journal of Catalysis</i> , 2020, 382, 181-191.	3.1	30
857	Zirconium nitride catalysts surpass platinum for oxygen reduction. <i>Nature Materials</i> , 2020, 19, 282-286.	13.3	293
858	Hollow PtCu octahedral nanoalloys: Efficient bifunctional electrocatalysts towards oxygen reduction reaction and methanol oxidation reaction by regulating near-surface composition. <i>Journal of Colloid and Interface Science</i> , 2020, 562, 244-251.	5.0	49
859	Guanine–Stabilized Formamidineum Lead Iodide Perovskites. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4691-4697.	7.2	61
860	CeO ₂ Encapsulated by Iron, Sulfur, and Nitrogen–Doped Carbons for Enhanced Oxygen Reduction Reaction Catalytic Activity. <i>ChemElectroChem</i> , 2020, 7, 642-648.	1.7	14
861	Facet-controlled Pt–Ir nanocrystals with substantially enhanced activity and durability towards oxygen reduction. <i>Materials Today</i> , 2020, 35, 69-77.	8.3	45
862	Visualization Analysis of Pt and Co Species in Degraded Pt ₃ Co/C Electrocatalyst Layers of a Polymer Electrolyte Fuel Cell Using a Same-View Nano-XAFS/STEM-EDS Combination Technique. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2299-2312.	4.0	8
863	Synthesis of a small-size metal oxide mixture based on MoO and NiO with oxygen vacancies as bifunctional electrocatalyst for oxygen reactions. <i>Applied Surface Science</i> , 2020, 509, 144898.	3.1	28
864	Metal-free, active nitrogen-enriched, efficient bifunctional oxygen electrocatalyst for ultrastable zinc-air batteries. <i>Energy Storage Materials</i> , 2020, 27, 514-521.	9.5	84
865	Tungsten as “Adhesive” in Pt ₂ CuW _{0.25} Ternary Alloy for Highly Durable Oxygen Reduction Electrocatalysis. <i>Advanced Functional Materials</i> , 2020, 30, 1908230.	7.8	59
866	Freestanding Single-Atom-Layer Pd-Based Catalysts: Oriented Splitting of Energy Bands for Unique Stability and Activity. <i>CheM</i> , 2020, 6, 431-447.	5.8	70
867	Fishbone-like platinum-nickel nanowires as an efficient electrocatalyst for methanol oxidation. <i>Nano Research</i> , 2020, 13, 67-71.	5.8	17
868	Polymer-Assisted Co–Assembly towards Synthesis of Mesoporous Titania Encapsulated Monodisperse PdAu for Highly Selective Hydrogenation of Phenylacetylene. <i>ChemCatChem</i> , 2020, 12, 1476-1482.	1.8	8
869	Hollow PtFe Alloy Nanoparticles Derived from Pt ₃ O ₄ Dimers through a Silica–Protection Reduction Strategy as Efficient Oxygen Reduction Electrocatalysts. <i>Chemistry - A European Journal</i> , 2020, 26, 4090-4096.	1.7	49
870	Cobalt-gluconate-derived high-density cobalt sulfides nanocrystals encapsulated within nitrogen and sulfur dual-doped micro/mesoporous carbon spheres for efficient electrocatalysis of oxygen reduction. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 829-837.	5.0	31

#	ARTICLE	IF	CITATIONS
871	Guanine-stabilized Formamidinium Lead Iodide Perovskites. <i>Angewandte Chemie</i> , 2020, 132, 4721-4727.	1.6	0
872	Shape Control of Monodispersed Sub-5 nm Pd Tetrahedrons and Lacinate Pd Nanourchins by Maneuvering the Dispersed State of Additives for Boosting ORR Performance. <i>Small</i> , 2020, 16, e1906026.	5.2	36
873	Electrochemical Synthesis of a Multipurpose Pt-Ni Catalyst for Renewable Energy-Related Electrocatalytic Reactions. <i>ChemElectroChem</i> , 2020, 7, 4369-4377.	1.7	9
874	Local structure engineering for active sites in fuel cell electrocatalysts. <i>Science China Chemistry</i> , 2020, 63, 1543-1556.	4.2	11
875	Light-switchable catalytic activity of Cu for oxygen reduction reaction. <i>Frontiers of Materials Science</i> , 2020, 14, 481-487.	1.1	1
876	Highly Stable Pt-Based Ternary Systems for Oxygen Reduction Reaction in Acidic Electrolytes. <i>Advanced Energy Materials</i> , 2020, 10, 2002049.	10.2	62
877	Beyond Extended Surfaces: Understanding the Oxygen Reduction Reaction on Nanocatalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 17812-17827.	6.6	134
878	Synthesis of S-doped AuPbPt alloy nanowire-networks as superior catalysts towards the ORR and HER. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23906-23918.	5.2	32
879	Current progress and performance improvement of Pt/C catalysts for fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24284-24306.	5.2	137
880	Phase-Selective Epitaxial Growth of Heterophase Nanostructures on Unconventional 2H-Pd Nanoparticles. <i>Journal of the American Chemical Society</i> , 2020, 142, 18971-18980.	6.6	111
881	Dynamic Surface Reconstruction of Single-Atom Bimetallic Alloy under <i>Operando</i> Electrochemical Conditions. <i>Nano Letters</i> , 2020, 20, 8319-8325.	4.5	28
882	Preparation of dandelion-like Co-Mo-P/CNTs-Ni foam catalyst and its performance in hydrogen production by alcoholysis of sodium borohydride. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 30443-30454.	3.8	30
883	Integrating nanostructured Pt-based electrocatalysts in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2020, 478, 228516.	4.0	44
884	Atomic-Scale Interface Engineering: Boosting Oxygen Electroreduction over Supported Ternary Alloys Fabricated by Carbon-Assisted Galvanic Replacement. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001267.	1.9	1
885	Recent Progress in Engineering the Atomic and Electronic Structure of Electrocatalysts via Cation Exchange Reactions. <i>Advanced Materials</i> , 2020, 32, e2001866.	11.1	101
886	One-Pot Synthesis of PtNi Alloy Nanoparticle-Supported Multiwalled Carbon Nanotubes in an Ionic Liquid Using a Staircase Heating Process. <i>ACS Omega</i> , 2020, 5, 25687-25694.	1.6	7
887	Size dependent oxygen reduction and methanol oxidation reactions: catalytic activities of PtCu octahedral nanocrystals. <i>Catalysis Science and Technology</i> , 2020, 10, 5501-5512.	2.1	18
888	Highly durable fuel cell catalysts using crosslinkable block copolymer-based carbon supports with ultralow Pt loadings. <i>Energy and Environmental Science</i> , 2020, 13, 4921-4929.	15.6	61

#	ARTICLE	IF	CITATIONS
889	Promoted oxygen reduction kinetics on nitrogen-doped hierarchically porous carbon by engineering proton-feeding centers. <i>Energy and Environmental Science</i> , 2020, 13, 2849-2855.	15.6	101
890	Lattice-mismatch-induced growth of ultrathin Pt shells with high-index facets for boosting oxygen reduction catalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16477-16486.	5.2	21
891	Nanoalloys for Energy Applications. , 2020, , 347-380.		3
892	Carbon Monoxide Activation on Small Iron Magnetic Cluster Surfaces, Fe _n CO, $n = 1-20$. A Theoretical Approach. <i>Journal of Physical Chemistry A</i> , 2020, 124, 9951-9962.	1.1	8
893	Metal-Support Interactions in a Molybdenum Oxide Anchored PtNi Alloy for Improving Oxygen Reduction Activity. <i>ACS Applied Energy Materials</i> , 2020, 3, 12246-12253.	2.5	15
894	Research Progress on Catalysts for the Electrocatalytic Oxidation of Methanol. <i>ChemistrySelect</i> , 2020, 5, 13318-13340.	0.7	12
895	Creation of a Highly Active Pt/Pd/C Core-Shell-Structured Catalyst by Synergistic Combination of Intrinsically High Activity and Surface Decoration with Melamine or Tetra-(<i>tert</i> -butyl)-tetraazaporphyrin. <i>ACS Catalysis</i> , 2020, 10, 14567-14580.	5.5	22
896	Enhanced Oxygen Reduction Catalysis of Carbon Nanohybrids from Nitrogen-Rich Edges. <i>Langmuir</i> , 2020, 36, 13752-13758.	1.6	5
897	Interface-tuned Mo-based nanospheres for efficient oxygen reduction and hydrogen evolution catalysis. <i>Catalysis Science and Technology</i> , 2020, 10, 6713-6722.	2.1	1
898	Activity-Stability Relationship in Au@Pt Nanoparticles for Electrocatalysis. <i>ACS Energy Letters</i> , 2020, 5, 2827-2834.	8.8	49
899	Addressing the sensitivity of signals from solid/liquid ambient pressure XPS (APXPS) measurement. <i>Journal of Chemical Physics</i> , 2020, 153, 044709.	1.2	16
900	Atomically deviated Pd-Te nanoplates boost methanol-tolerant fuel cells. <i>Science Advances</i> , 2020, 6, eaba9731.	4.7	78
901	On-Chip Electrical Transport Investigation of Metal Nanoparticles: Characteristic Acidic and Alkaline Adsorptions Revealed on Pt and Au Surface. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5798-5806.	2.1	9
902	Topographical and compositional engineering of core-shell Ni@Pt ORR electro-catalysts. <i>RSC Advances</i> , 2020, 10, 29268-29277.	1.7	11
903	Enhancement of oxygen reduction reaction activity by grain boundaries in platinum nanostructures. <i>Nano Research</i> , 2020, 13, 3310-3314.	5.8	17
904	Advanced Electrocatalysts with Single-Metal-Atom Active Sites. <i>Chemical Reviews</i> , 2020, 120, 12217-12314.	23.0	563
905	Reconsidering the Benchmarking Evaluation of Catalytic Activity in Oxygen Reduction Reaction. <i>IScience</i> , 2020, 23, 101532.	1.9	42
906	Bimetallic Palladium-Nickel Nanoparticles Anchored on Carbon as High-Performance Electrocatalysts for Oxygen Reduction and Formic Acid Oxidation Reactions. <i>ACS Applied Energy Materials</i> , 2020, 3, 9285-9295.	2.5	36

#	ARTICLE	IF	CITATIONS
907	Ultrafast and surfactant-free synthesis of Sub-3 nm nanoalloys by shear-assisted liquid-metal reduction. <i>Nanoscale Advances</i> , 2020, 2, 4873-4880.	2.2	7
908	PtCo-excavated rhombic dodecahedral nanocrystals for efficient electrocatalysis. <i>Nanoscale Advances</i> , 2020, 2, 4881-4886.	2.2	9
909	Critical Practices in Rigorously Assessing the Inherent Activity of Nanoparticle Electrocatalysts. <i>ACS Catalysis</i> , 2020, 10, 10735-10741.	5.5	24
910	Nitrogen-doped vertical graphene nanosheets by high-flux plasma enhanced chemical vapor deposition as efficient oxygen reduction catalysts for Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23248-23256.	5.2	30
911	Pt ₂ nanoparticles on N,P doped carbon through a self-conversion process to core-shell Pt/Pt ₂ as an efficient and robust ORR catalyst. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20463-20473.	5.2	36
912	Single-Atom In-Doped Subnanometer Pt Nanowires for Simultaneous Hydrogen Generation and Biomass Upgrading. <i>Advanced Functional Materials</i> , 2020, 30, 2004310.	7.8	77
913	Carbon-Free Platinum-Iron Nanonetworks with Chemically Ordered Structures as Durable Oxygen Reduction Electrocatalysts for Polymer Electrolyte Fuel Cells. <i>ACS Applied Nano Materials</i> , 2020, 3, 9912-9923.	2.4	11
914	Emerging Metal Single Atoms in Electrocatalysts and Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2003870.	7.8	38
915	Carbon-Supported PtNi Nanocrystals for Alkaline Oxygen Reduction and Evolution Reactions: Electrochemical Activity and Durability upon Accelerated Stress Tests. <i>ACS Applied Energy Materials</i> , 2020, 3, 8858-8870.	2.5	16
916	Atomic-scaled surface engineering Ni-Pt nanoalloys towards enhanced catalytic efficiency for methanol oxidation reaction. <i>Nano Research</i> , 2020, 13, 3088-3097.	5.8	50
917	Surface modifications of Pt-based atomically ordered nanoparticles to improve catalytic performances for oxygen reduction reaction. <i>Progress in Natural Science: Materials International</i> , 2020, 30, 890-895.	1.8	14
918	Anion-Modulated Platinum for High-Performance Multifunctional Electrocatalysis toward HER, HOR, and ORR. <i>IScience</i> , 2020, 23, 101793.	1.9	45
919	Selective Reduction Sites on Commercial Graphite Foil for Building Multimetallic Nano-Assemblies for Energy Conversion. <i>ChemistrySelect</i> , 2020, 5, 13269-13277.	0.7	0
920	Improving the Catalytic Activity of Carbon-Supported Single Atom Catalysts by Polynary Metal or Heteroatom Doping. <i>Small</i> , 2020, 16, e1906782.	5.2	124
921	Engineering the surface active sites of actiniae-like hierarchical Fe ₃ O ₄ /Co ₃ O ₄ nanoheterojunction for efficient oxygen reduction reaction. <i>Dyes and Pigments</i> , 2020, 180, 108439.	2.0	7
922	One-Step Synthesis of Supported High-Index Faceted Platinum-Cobalt Nanocatalysts for an Enhanced Oxygen Reduction Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 5077-5082.	2.5	11
923	Realizing a CO-free pathway and enhanced durability in highly dispersed Cu-doped PtBi nanoalloys towards methanol full electrooxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 11564-11572.	5.2	47
924	An Overview and Future Perspectives of Rechargeable Zinc Batteries. <i>Small</i> , 2020, 16, e2000730.	5.2	216

#	ARTICLE	IF	CITATIONS
925	Visualization and understanding of the degradation behaviors of a PEFC Pt/C cathode electrocatalyst using a multi-analysis system combining time-resolved quick XAFS, three-dimensional XAFS-CT, and same-view nano-XAFS/STEM-EDS techniques. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 18919-18931.	1.3	16
926	3DOM CeO ₂ -supported Ru _y M (M = Au, Pd, Pt) alloy nanoparticles with improved catalytic activity and chlorine-tolerance in trichloroethylene oxidation. <i>Catalysis Science and Technology</i> , 2020, 10, 3755-3770.	2.1	25
927	Boosting the catalysis of AuCuMo for oxygen reduction: Important roles of an optimized electronic structure and surface electrochemical stability. <i>Journal of Alloys and Compounds</i> , 2020, 837, 155552.	2.8	3
928	Enhancement of oxygen reduction activity and stability via introducing acid-resistant refractory Mo and regulating the near-surface Pt content. <i>Journal of Energy Chemistry</i> , 2020, 51, 246-252.	7.1	26
929	Proton exchange membrane with plasmon-active surface for enhancement of fuel cell effectivity. <i>Nanoscale</i> , 2020, 12, 12068-12075.	2.8	4
930	Solvothermal Doping of Lanthanum on Nanoscale Platinum Surfaces to Improve Oxygen Electroreduction Performance. <i>ChemElectroChem</i> , 2020, 7, 2643-2650.	1.7	9
931	Syntheses of Pt@Ni Hollow Nanoalloy for Hydrogen Generation from Catalytic Hydrolysis of Ammonia Borane. <i>ChemCatChem</i> , 2020, 12, 4257-4261.	1.8	16
932	PtRhCu ternary alloy nanodendrites with enhanced catalytic activity and durability toward methanol electro-oxidation. <i>Materials Chemistry and Physics</i> , 2020, 252, 123234.	2.0	11
933	Tuning Single-Atom Catalysts of Nitrogen-Coordinated Transition Metals for Optimizing Oxygen Evolution and Reduction Reactions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13168-13176.	1.5	43
934	Ionic Liquid Additives for the Mitigation of Nafion Specific Adsorption on Platinum. <i>ACS Catalysis</i> , 2020, 10, 7691-7698.	5.5	48
935	Study on optical absorption and conductivity of hybrid ZnO nanorod/graphene. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	4
936	Low-temperature synthesis of ultrasmall spinel Mn Co ₃ O ₄ nanoparticles for efficient oxygen reduction. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1818-1825.	6.9	14
937	Bimetallic PtCu-decorated reduced graphene oxide (RGO)-TiO ₂ nanocomposite for efficient oxygen reduction reaction. <i>Synthetic Metals</i> , 2020, 266, 116433.	2.1	18
938	Synergies between electronic and geometric effects of Mo-doped Au nanoparticles for effective CO ₂ electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12291-12295.	5.2	21
939	Synergistic heat treatment derived hollow-mesoporous-microporous Fe@N@C-SHT electrocatalyst for oxygen reduction reaction. <i>Microporous and Mesoporous Materials</i> , 2020, 305, 110382.	2.2	17
940	Single-Atom Catalysts for Electrocatalytic Applications. <i>Advanced Functional Materials</i> , 2020, 30, 2000768.	7.8	390
941	Cation Exchange Strategy to Single-Atom Noble-Metal Doped CuO Nanowire Arrays with Ultralow Overpotential for H ₂ O Splitting. <i>Nano Letters</i> , 2020, 20, 5482-5489.	4.5	93
942	Using DMH as a complexing agent for pulse electrodeposition of platinum nanoparticles towards oxygen reduction reaction. <i>Ionics</i> , 2020, 26, 3473-3482.	1.2	8

#	ARTICLE	IF	CITATIONS
943	Three-Dimensional Nanoporous Metal Structures from Poly(2-vinylpyridine)- <i>block</i> -Poly(4-vinylpyridine) Copolymer Thin Film. ACS Applied Materials & Interfaces, 2020, 12, 15667-15674.	4.0	12
944	PGM-Free Fe/N/C and Ultralow Loading Pt/C Hybrid Cathode Catalysts with Enhanced Stability and Activity in PEM Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 13739-13749.	4.0	36
945	A hybrid Pt/NbO/CNTs catalyst with high activity and durability for oxygen reduction reaction in PEMFC. Renewable Energy, 2020, 154, 913-924.	4.3	40
946	Mesoporous carbon confined intermetallic nanoparticles as highly durable electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 15822-15828.	5.2	58
947	Design and Preparation of Fe ^{N₅} Catalytic Sites in Single-Atom Catalysts for Enhancing the Oxygen Reduction Reaction in Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 17334-17342.	4.0	76
948	Atomically Dispersed Cu ^{N₄} C as a Promising Support for Low-Pt Loading Cathode Catalysts of Fuel Cells. ACS Applied Energy Materials, 2020, 3, 3807-3814.	2.5	22
949	Critical differences in 3D atomic structure of individual ligand-protected nanocrystals in solution. Science, 2020, 368, 60-67.	6.0	103
950	Formation Mechanism and Gram-Scale Production of PtNi Hollow Nanoparticles for Oxygen Electrocatalysis through In Situ Galvanic Displacement Reaction. ACS Applied Materials & Interfaces, 2020, 12, 16286-16297.	4.0	15
951	Active and Stable Pt ^{Ni} Alloy Octahedra Catalyst for Oxygen Reduction via Near-Surface Atomical Engineering. ACS Catalysis, 2020, 10, 4205-4214.	5.5	98
952	Defect Engineering for Fuel-Cell Electrocatalysts. Advanced Materials, 2020, 32, e1907879.	11.1	338
953	Synthesis, Structure, Properties, and Applications of Bimetallic Nanoparticles of Noble Metals. Advanced Functional Materials, 2020, 30, 1909260.	7.8	274
954	Ternary PtIrNi Catalysts for Efficient Electrochemical Ammonia Oxidation. ACS Catalysis, 2020, 10, 3945-3957.	5.5	104
955	Gradient-Concentration Design of Stable Core-Shell Nanostructure for Acidic Oxygen Reduction Electrocatalysis. Advanced Materials, 2020, 32, e2003493.	11.1	79
956	Heterophase fcc-2H-fcc gold nanorods. Nature Communications, 2020, 11, 3293.	5.8	92
957	N ₂ -dopant of graphene with electrochemically switchable bifunctional ORR/OER catalysis for Zn-air battery. Energy Storage Materials, 2020, 32, 517-524.	9.5	80
958	2D AuPd alloy nanosheets: one-step synthesis as imaging-guided photonic nano-antibiotics. Nanoscale Advances, 2020, 2, 3550-3560.	2.2	13
959	Engineering Pt Nanoparticles with Fe and N Codoped Carbon to Boost Oxygen Reduction Catalytic Performance in Acidic Electrolyte. Energy Technology, 2020, 8, 2000393.	1.8	4
960	The Importance of Temperature and Potential Window in Stability Evaluation of Supported Pt-Based Oxygen Reduction Reaction Electrocatalysts in Thin Film Rotating Disc Electrode Setup. Journal of the Electrochemical Society, 2020, 167, 114506.	1.3	22

#	ARTICLE	IF	CITATIONS
961	A New Catalytic System with Balanced Activity and Durability toward Oxygen Reduction. ChemCatChem, 2020, 12, 4817-4824.	1.8	3
962	Catalytic Nanoframes and Beyond. Advanced Materials, 2020, 32, e2001345.	11.1	57
963	Strain engineering for Janus palladium-gold bimetallic nanoparticles: Enhanced electrocatalytic performance for oxygen reduction reaction and zinc-air battery. Chemical Engineering Journal, 2020, 389, 124240.	6.6	40
964	In-situ observation as activity descriptor enables rational design of oxygen reduction catalyst for zinc-air battery. Energy Storage Materials, 2020, 27, 226-231.	9.5	42
965	Molecular Design of Single-Atom Catalysts for Oxygen Reduction Reaction. Advanced Energy Materials, 2020, 10, 1903815.	10.2	295
966	Fabrication of Pt ₃ Ni catalysts on polypyrrole-modified electrochemically exfoliated graphene with exceptional electrocatalytic performance for methanol and ethanol oxidation. Electrochimica Acta, 2020, 340, 135969.	2.6	14
967	Simultaneously Realizing Rapid Electron Transfer and Mass Transport in Jellyfish-Like Mott-Schottky Nanoreactors for Oxygen Reduction Reaction. Advanced Functional Materials, 2020, 30, 1910482.	7.8	173
968	Zero-Dimensional/Two-Dimensional Au ₁₀₀ Pd ₁₀₀ Nanocomposites with Enhanced Nanozyme Catalysis for Sensitive Glucose Detection. ACS Applied Materials & Interfaces, 2020, 12, 11616-11624.	4.0	81
969	Use of Magnetic Fields for Surface Modification of PbI ₂ Layers to Increase the Performance of Hybrid Perovskite Solar Cells. Journal of Electronic Materials, 2020, 49, 3106-3113.	1.0	4
970	Electrochemical Measurement of Intrinsic Oxygen Reduction Reaction Activity at High Current Densities as a Function of Particle Size for Pt ₄ Co/C. J Electroanal Chem, 2020, 881, 146314.	1.5	1
971	Exceptionally durable Pt/TOMS catalysts for fuel cells. Applied Catalysis B: Environmental, 2020, 268, 118743.	10.8	28
972	High-Performance Pt-Co Nanoframes for Fuel-Cell Electrocatalysis. Nano Letters, 2020, 20, 1974-1979.	4.5	150
973	Vertically-aligned Pt-decorated MoS ₂ nanosheets coated on TiO ₂ nanotube arrays enable high-efficiency solar-light energy utilization for photocatalysis and self-cleaning SERS devices. Nano Energy, 2020, 71, 104579.	8.2	92
974	Facile synthesis of ZnS decorated N, S co-doped carbon polyhedron as high efficiency oxygen reduction reaction catalyst for Zn-air battery. Applied Surface Science, 2020, 509, 145367.	3.1	22
975	Advanced Electrocatalysts for the Oxygen Reduction Reaction in Energy Conversion Technologies. Joule, 2020, 4, 45-68.	11.7	596
976	Durability screening of Pt ternary alloy (111) surfaces for oxygen reduction reaction using Density Functional Theory. Surfaces and Interfaces, 2020, 18, 100440.	1.5	2
977	Preparation of a Graphitized-Carbon-Supported PtNi Octahedral Catalyst and Application in a Proton-Exchange Membrane Fuel Cell. ACS Applied Materials & Interfaces, 2020, 12, 7047-7056.	4.0	23
978	Atom-Ratio-Conducted Tailoring of PdAu Bimetallic Nanocrystals with Distinctive Shapes and Dimensions for Boosting the ORR Performance. Chemistry - A European Journal, 2020, 26, 4480-4488.	1.7	6

#	ARTICLE	IF	CITATIONS
979	Lavender-Like Ga-Doped Pt ₃ Co Nanowires for Highly Stable and Active Electrocatalysis. ACS Catalysis, 2020, 10, 3018-3026.	5.5	75
980	Pt alloy oxygen-reduction electrocatalysts: Synthesis, structure, and property. Chinese Journal of Catalysis, 2020, 41, 739-755.	6.9	84
981	Pt-O bond as an active site superior to PtO in hydrogen evolution reaction. Nature Communications, 2020, 11, 490.	5.8	184
982	3D Network Conductive Polymer/Pt Composites as Elctrocatalyst for Methanol Oxidation. International Journal of Electrochemical Science, 2020, 15, 929-946.	0.5	5
983	Facile synthesis of PtCo nanowires with enhanced electrocatalytic performance for ethanol oxidation reaction. Ionics, 2020, 26, 3091-3097.	1.2	6
984	N- and S-doped nanoporous carbon framework derived from conjugated microporous polymers incorporation with ionic liquids for efficient oxygen reduction reaction. Materials Today Energy, 2020, 16, 100382.	2.5	19
985	Compositionally tuned magnetron co-sputtered Pt _x Ni _{100-x} alloy as a cathode catalyst for proton exchange membrane fuel cells. Applied Surface Science, 2020, 511, 145486.	3.1	12
986	Applications of metal-organic framework-derived materials in fuel cells and metal-air batteries. Coordination Chemistry Reviews, 2020, 409, 213214.	9.5	182
987	Recent Advances on Metal Organic Framework-Derived Catalysts for Electrochemical Oxygen Reduction Reaction. ACS Symposium Series, 2020, , 231-278.	0.5	6
988	Morphing M _{core} @Pt _{shell} nanoparticles: Effects of core structure on the ORR performance of Pt shell. Applied Catalysis B: Environmental, 2020, 267, 118727.	10.8	58
989	Highly efficient, cell reversal resistant PEMFC based on PtNi/C octahedral and OER composite catalyst. International Journal of Hydrogen Energy, 2020, 45, 8930-8940.	3.8	29
990	Gold Nanoclusters as Electrocatalysts for Energy Conversion. Nanomaterials, 2020, 10, 238.	1.9	34
991	Mo-dopant-strengthened basal-plane activity in VS ₂ for accelerating hydrogen evolution reaction. Chemical Engineering Journal, 2020, 396, 125227.	6.6	31
992	Facile synthesis of synergistic Pt/(Co-N)@C composites as alternative oxygen-reduction electrode of PEMFCs with attractive activity and durability. Composites Part B: Engineering, 2020, 193, 108012.	5.9	24
993	Improving the bulk gas transport of Fe-N-C platinum group metal-free nanofiber electrodes via electrospinning for fuel cell applications. Nano Energy, 2020, 73, 104791.	8.2	47
994	Feed gas exchange (startup/shutdown) effects on Pt/C cathode electrocatalysis and surface Pt-oxide behavior in polymer electrolyte fuel cells as revealed using in situ real-time XAFS and high-resolution STEM measurements. Physical Chemistry Chemical Physics, 2020, 22, 9424-9437.	1.3	2
995	Recent advances in nanostructured intermetallic electrocatalysts for renewable energy conversion reactions. Journal of Materials Chemistry A, 2020, 8, 8195-8217.	5.2	64
996	Insights in the Oxygen Reduction Reaction: From Metallic Electrocatalysts to Diporphyrins. ACS Catalysis, 2020, 10, 5979-5989.	5.5	52

#	ARTICLE	IF	CITATIONS
997	Low-temperature direct ammonia fuel cells: Recent developments and remaining challenges. <i>Current Opinion in Electrochemistry</i> , 2020, 21, 335-344.	2.5	47
998	Atomistic Explanation of the Dramatically Improved Oxygen Reduction Reaction of Jagged Platinum Nanowires, 50 Times Better than Pt. <i>Journal of the American Chemical Society</i> , 2020, 142, 8625-8632.	6.6	55
999	Size and Stoichiometry Effect of FePt Bimetal Nanoparticle Catalyst for CO Oxidation: A DFT Study. <i>Journal of Physical Chemistry C</i> , 2020, 124, 8706-8715.	1.5	18
1000	New PtMg Alloy with Durable Electrocatalytic Performance for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell. <i>ACS Energy Letters</i> , 2020, 5, 1601-1609.	8.8	37
1001	Highly Adjustable Three-Dimensional Hollow Pt(Au)Cu Nanonetwork Structures as Enhancing Electrocatalysts for Alcohol Oxidation Reaction. <i>Journal of the Electrochemical Society</i> , 2020, 167, 066518.	1.3	7
1002	Atomic electron tomography in three and four dimensions. <i>MRS Bulletin</i> , 2020, 45, 290-297.	1.7	28
1003	Hydrazinium cation mixed FAPbI ₃ -based perovskite with 1D/3D hybrid dimension structure for efficient and stable solar cells. <i>Chemical Engineering Journal</i> , 2021, 403, 125724.	6.6	33
1004	Solid phase microwave-assisted fabrication of Fe-doped ZIF-8 for single-atom Fe-N-C electrocatalysts on oxygen reduction. <i>Journal of Energy Chemistry</i> , 2021, 54, 579-586.	7.1	52
1005	Pt _{1.4} Ni(100) Tetrapods with Enhanced Oxygen Reduction Reaction Activity. <i>Catalysis Letters</i> , 2021, 151, 212-220.	1.4	7
1006	3D N-doped ordered mesoporous carbon supported single-atom Fe-N-C catalysts with superior performance for oxygen reduction reaction and zinc-air battery. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119411.	10.8	324
1007	Design of Hybrid Zeolitic Imidazolate Framework-Derived Material with Ca-Mo-S Triatomic Coordination for Electrochemical Oxygen Reduction. <i>Small</i> , 2021, 17, e2003256.	5.2	14
1008	Advanced Electrocatalysis for Energy and Environmental Sustainability via Water and Nitrogen Reactions. <i>Advanced Materials</i> , 2021, 33, e2000381.	11.1	231
1009	Toward expanding the realm of high entropy materials to platinum group metals: A review. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156838.	2.8	52
1010	Support structure-catalyst electroactivity relation for oxygen reduction reaction on platinum supported by two-dimensional titanium carbide. <i>Nano Energy</i> , 2021, 79, 105363.	8.2	23
1011	Highly stable Pt-Co nanodendrite in nanoframe with Pt skin structured catalyst for oxygen reduction electrocatalysis. <i>Applied Catalysis B: Environmental</i> , 2021, 281, 119460.	10.8	105
1012	In situ surface-doped PtNiCoRh nanocrystals promote electrooxidation of C1 fuels. <i>Science China Materials</i> , 2021, 64, 1139-1149.	3.5	7
1013	High-quality and deeply excavated PtPdNi nanocubes as efficient catalysts toward oxygen reduction reaction. <i>Chinese Journal of Catalysis</i> , 2021, 42, 772-780.	6.9	6
1014	Noble-Metal Nanoframes and Their Catalytic Applications. <i>Chemical Reviews</i> , 2021, 121, 796-833.	23.0	115

#	ARTICLE	IF	CITATIONS
1015	Non-aqueous solution synthesis of Pt-based nanostructures for fuel cell catalysts. <i>Materials Today Energy</i> , 2021, 19, 100616.	2.5	10
1016	An Efficient Bio-Inspired Oxygen Reduction Reaction Catalyst: MnO _x Nanosheets Incorporated Iron Phthalocyanine Functionalized Graphene. <i>Energy and Environmental Materials</i> , 2021, 4, 474-480.	7.3	11
1017	Cage-bell structured Pt@N-doped hollow carbon sphere for oxygen reduction electrocatalysis. <i>Chemical Engineering Journal</i> , 2021, 409, 128101.	6.6	42
1018	Identification of durable and non-durable Fe _{N_x} sites in Fe-N-C materials for proton exchange membrane fuel cells. <i>Nature Catalysis</i> , 2021, 4, 10-19.	16.1	368
1019	Nanocatalyst Design for Long-Term Operation of Proton/Anion Exchange Membrane Water Electrolysis. <i>Advanced Energy Materials</i> , 2021, 11, 2003188.	10.2	89
1020	Computational strategies to address the catalytic activity of nanoclusters. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2021, 11, e1508.	6.2	5
1021	Which is Better for Nanomedicines: Nanocatalysts or Single-Atom Catalysts?. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001897.	3.9	13
1022	Structurally Disordered Phosphorus-Doped Pt as a Highly Active Electrocatalyst for an Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021, 11, 355-363.	5.5	79
1023	Gamma-radiation induced synthesis of freestanding nickel nanoparticles. <i>Dalton Transactions</i> , 2021, 50, 376-383.	1.6	14
1024	Coplanar Pt/C Nanomeshes with Ultrastable Oxygen Reduction Performance in Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6533-6538.	7.2	73
1025	Tunable strain drives the activity enhancement for oxygen reduction reaction on Pd@Pt core-shell electrocatalysts. <i>Journal of Power Sources</i> , 2021, 485, 229340.	4.0	21
1026	Reconstructing the Coordination Environment of Platinum Single-Atom Active Sites for Boosting Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021, 11, 466-475.	5.5	62
1027	Determination of the 3D Atomic Structures of Nanoparticles. <i>Small Science</i> , 2021, 1, 2000045.	5.8	12
1028	High-temperature-pulse synthesis of ultrathin-graphene-coated metal nanoparticles. <i>Nano Energy</i> , 2021, 80, 105536.	8.2	9
1029	Biomass-derived nitrogen self-doped porous activation carbon as an effective bifunctional electrocatalysts. <i>Chinese Chemical Letters</i> , 2021, 32, 92-98.	4.8	25
1030	Enhanced electrocatalytic activity and antifouling performance by iron phthalocyanine doped filtration membrane cathode. <i>Chemical Engineering Journal</i> , 2021, 413, 127536.	6.6	11
1031	Recent advances and perspective on heterogeneous catalysis using metals and oxide nanocrystals. <i>Materials Chemistry Frontiers</i> , 2021, 5, 151-222.	3.2	18
1032	Noble-Metal Based Random Alloy and Intermetallic Nanocrystals: Syntheses and Applications. <i>Chemical Reviews</i> , 2021, 121, 736-795.	23.0	269

#	ARTICLE	IF	CITATIONS
1033	Applications of Atomically Dispersed Oxygen Reduction Catalysts in Fuel Cells and Zinc-Air Batteries. <i>Energy and Environmental Materials</i> , 2021, 4, 307-335.	7.3	58
1034	Self-supported Pt-CoO networks combining high specific activity with high surface area for oxygen reduction. <i>Nature Materials</i> , 2021, 20, 208-213.	13.3	139
1035	Recent advances in Pt-based electrocatalysts for PEMFCs. <i>RSC Advances</i> , 2021, 11, 13316-13328.	1.7	36
1036	Colloidal Nanocrystals as Electrocatalysts with Tunable Activity and Selectivity. <i>ACS Catalysis</i> , 2021, 11, 1248-1295.	5.5	51
1037	Rationalizing the promotional effect of Mn oxides in benzene combustion using an O 2p-band center descriptor. <i>Chemical Communications</i> , 2021, 57, 4942-4945.	2.2	3
1038	Lanthanide electronic perturbation in Pt-Ln (La, Ce, Pr and Nd) alloys for enhanced methanol oxidation reaction activity. <i>Energy and Environmental Science</i> , 2021, 14, 5911-5918.	15.6	65
1039	Atomically dispersed single iron sites for promoting Pt and Pt ₃ Co fuel cell catalysts: performance and durability improvements. <i>Energy and Environmental Science</i> , 2021, 14, 4948-4960.	15.6	168
1040	Transition-metal single atoms embedded into defective BC ₃ as efficient electrocatalysts for oxygen evolution and reduction reactions. <i>Nanoscale</i> , 2021, 13, 1331-1339.	2.8	27
1041	Graphene-quantum-dot-composited platinum nanotube arrays as a dual efficient electrocatalyst for the oxygen reduction reaction and methanol electro-oxidation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9609-9615.	5.2	36
1042	Palladium-Copper Bimetallic Nanoparticles Loaded on Carbon Black for Oxygen Reduction and Zinc-Air Batteries. <i>ACS Applied Nano Materials</i> , 2021, 4, 1478-1484.	2.4	12
1043	Bimetallic Pt-Co Nanoparticle Deposited on Alumina for Simultaneous CO and Toluene Oxidation in the Presence of Moisture. <i>Processes</i> , 2021, 9, 230.	1.3	8
1044	Convolutional neural networks for high throughput screening of catalyst layer inks for polymer electrolyte fuel cells. <i>RSC Advances</i> , 2021, 11, 32126-32134.	1.7	7
1045	Carbon nano-onion encapsulated cobalt nanoparticles for oxygen reduction and lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7227-7237.	5.2	21
1046	Hydrothermal synthesis of palladium nitrides as robust multifunctional electrocatalysts for fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6196-6204.	5.2	33
1047	Phase control of ultrafine FeSe nanocrystals in a N-doped carbon matrix for highly efficient and stable oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3464-3471.	5.2	13
1048	Effect of an external electric field, aqueous solution and specific adsorption on segregation of Pt _M ML _M /Pt(111) (M = Cu, Pd, Au): a DFT study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 1584-1589.	1.3	5
1049	Ultrafine Pt-Ni nanoparticles in hollow porous carbon spheres for remarkable oxygen reduction reaction catalysis. <i>Dalton Transactions</i> , 2021, 50, 6811-6822.	1.6	10
1050	Correlating 3D Surface Atomic Structure and Catalytic Activities of Pt Nanocrystals. <i>Nano Letters</i> , 2021, 21, 1175-1183.	4.5	20

#	ARTICLE	IF	CITATIONS
1051	Engineering electrocatalyst nanosurfaces to enrich the activity by inducing lattice strain. <i>Energy and Environmental Science</i> , 2021, 14, 3717-3756.	15.6	98
1052	Design of ternary Pt-CoZn alloy catalysts coated with N-doped carbon towards acidic oxygen reduction. <i>Materials Advances</i> , 2021, 2, 5479-5486.	2.6	10
1053	Trace Pd modified intermetallic PtBi nanoplates towards efficient formic acid electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9602-9608.	5.2	36
1054	Molecular Insight of the Critical Role of Ni in Pt-Based Nanocatalysts for Improving the Oxygen Reduction Reaction Probed Using an <i>In Situ</i> SERS Borrowing Strategy. <i>Journal of the American Chemical Society</i> , 2021, 143, 1318-1322.	6.6	105
1055	Advanced Platinum-Based Oxygen Reduction Electrocatalysts for Fuel Cells. <i>Accounts of Chemical Research</i> , 2021, 54, 311-322.	7.6	237
1056	Challenges in applying highly active Pt-based nanostructured catalysts for oxygen reduction reactions to fuel cell vehicles. <i>Nature Nanotechnology</i> , 2021, 16, 140-147.	15.6	424
1057	Theoretical insight into single Rh atoms anchored on N-doped N_3 -graphyne as an excellent bifunctional electrocatalyst for the OER and ORR: electronic regulation of graphitic nitrogen. <i>Nanoscale</i> , 2021, 13, 5800-5808.	2.8	23
1058	Design of Lewis Pairs via Interface Engineering of Oxide-Metal Composite Catalyst for Water Activation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1443-1452.	2.1	18
1059	Oxygen Reduction Electrocatalysts toward Practical Fuel Cells: Progress and Perspectives. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17832-17852.	7.2	265
1060	Catalytic mechanism of oxygen reduction on two types of CoN_4 -graphene: A density functional study. <i>International Journal of Energy Research</i> , 2021, 45, 10858-10868.	2.2	6
1061	Oxygen Reduction Electrocatalysts toward Practical Fuel Cells: Progress and Perspectives. <i>Angewandte Chemie</i> , 2021, 133, 17976-17996.	1.6	60
1062	Coplanar Pt/C Nanomeshes with Ultrastable Oxygen Reduction Performance in Fuel Cells. <i>Angewandte Chemie</i> , 2021, 133, 6607-6612.	1.6	9
1063	A magnetic field strategy to porous Pt-Ni nanoparticles with predominant (111) facets for enhanced electrocatalytic oxygen reduction. <i>Journal of Energy Chemistry</i> , 2021, 53, 192-196.	7.1	19
1064	Subnanoscale Platinum by Repeated UV Irradiation: From One and Few Atoms to Clusters for the Automotive PEMFC. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8395-8404.	4.0	10
1065	Light-Driven Alcohol Splitting by Heterogeneous Photocatalysis: Recent Advances, Mechanism and Prospects. <i>Chemistry - an Asian Journal</i> , 2021, 16, 460-473.	1.7	16
1066	Effects of the Composition and the Particle Size of Octahedral Pt-Ni Nanoparticles on Their Durability. <i>Journal of the Electrochemical Society</i> , 2021, 168, 024514.	1.3	2
1067	Dip-Pen Nanolithography Enabled Functional Nanomaterials and Their Applications. <i>Advanced Materials Technologies</i> , 2021, 6, 2000897.	3.0	10
1068	A highly efficient atomically thin curved PdIr bimetallic electrocatalyst. <i>National Science Review</i> , 2021, 8, nwab019.	4.6	59

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1069	Rational Design and Biological Application of Antioxidant Nanozymes. <i>Frontiers in Chemistry</i> , 2020, 8, 831.	1.8	31
1070	Study on Catalytic Oxygen Reduction Performance of Mo-PtCu Octahedral Catalyst. <i>Energy & Fuels</i> , 2021, 35, 3368-3375.	2.5	10
1071	Alloying-enabled realloying enabled high durability for Pt-Pd-3d-transition metal nanoparticle fuel cell catalysts. <i>Nature Communications</i> , 2021, 12, 859.	5.8	137
1072	Bimetallic oxygen electrocatalyst derived from metallocenes doped MOFs. <i>Nanotechnology</i> , 2021, 32, 225603.	1.3	8
1073	A Durable and Efficient Electrocatalyst for Saline Water Splitting with Current Density Exceeding 2000 A cm ⁻² . <i>Advanced Functional Materials</i> , 2021, 31, 2010367.	7.8	102
1074	Ionic Liquid Mediated Decoration of Pt Nanoparticles on Graphene and Its Electrocatalytic Characteristics. <i>Journal of the Electrochemical Society</i> , 2021, 168, 036515.	1.3	3
1075	Manipulating Electrocatalysis using Mosaic Catalysts. <i>Small Science</i> , 2021, 1, 2000059.	5.8	15
1076	Large-scale Synthesis of Porous Pt Nanospheres / Three-dimensional Graphene Hybrid Materials as a Highly Active and Stable Electrocatalyst for Oxygen Reduction Reaction. <i>ChemistrySelect</i> , 2021, 6, 2080-2084.	0.7	1
1077	Carbon nanotube supported bifunctional electrocatalysts containing iron-nitrogen-carbon active sites for zinc-air batteries. <i>Nano Research</i> , 2021, 14, 4541-4547.	5.8	30
1078	Highly Stable PtPdCu Alloy Nanowire Networks as Oxygen Reduction Electrocatalysts. <i>Electrocatalysis</i> , 2021, 12, 372-380.	1.5	2
1079	A fundamental comprehension and recent progress in advanced Pt-based ORR nanocatalysts. <i>SmartMat</i> , 2021, 2, 56-75.	6.4	141
1080	A model for mesoporous carbon-supported platinum catalyst/electrolyte interfaces in polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2021, 487, 229414.	4.0	6
1081	Surface modification of metal materials for high-performance electrocatalytic carbon dioxide reduction. <i>Matter</i> , 2021, 4, 888-926.	5.0	74
1082	Rare-Earth Incorporated Alloy Catalysts: Synthesis, Properties, and Applications. <i>Advanced Materials</i> , 2021, 33, e2005988.	11.1	84
1083	Engineering sub-nano structures with highly jagged edges on the Pt surface of Pt/C electrocatalysts to promote oxygen reduction reactions. <i>Electrochimica Acta</i> , 2021, 372, 137868.	2.6	3
1084	2021 Roadmap: electrocatalysts for green catalytic processes. <i>JPhys Materials</i> , 2021, 4, 022004.	1.8	57
1085	Computational high-throughput screening of alloy nanoclusters for electrocatalytic hydrogen evolution. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	46
1086	Stabilizing Pt-Based Electrocatalysts for Oxygen Reduction Reaction: Fundamental Understanding and Design Strategies. <i>Advanced Materials</i> , 2021, 33, e2006494.	11.1	182

#	ARTICLE	IF	CITATIONS
1087	In-operando surface-sensitive probing of electrochemical reactions on nanoparticle electrocatalysts: Spectroscopic characterization of reaction intermediates and elementary steps of oxygen reduction reaction on Pt. <i>Journal of Catalysis</i> , 2021, 396, 32-39.	3.1	11
1088	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. <i>Nano Letters</i> , 2021, 21, 3989-3996.	4.5	37
1089	Ordered clustering of single atomic Te vacancies in atomically thin PtTe ₂ promotes hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 2351.	5.8	83
1090	Dopants in the Design of Noble Metal Nanoparticle Electrocatalysts and their Effect on Surface Energy and Coordination Chemistry at the Nanocrystal Surface. <i>Advanced Energy Materials</i> , 2021, 11, 2100265.	10.2	25
1091	Surface active-site engineering in hierarchical PtNi nanocatalysts for efficient triiodide reduction reaction. <i>Nano Research</i> , 2021, 14, 4714-4718.	5.8	11
1092	Electron-rich isolated Pt active sites in ultrafine PtFe ₃ intermetallic catalyst for efficient alkene hydrosilylation. <i>Journal of Catalysis</i> , 2021, 396, 351-359.	3.1	16
1093	A thermodynamics study of hydrogen interaction with (1 1 0) transition metal surfaces. <i>Applied Surface Science</i> , 2021, 545, 148961.	3.1	6
1094	Pt/Fe ₂ O ₃ with Pt-Fe pair sites as a catalyst for oxygen reduction with ultralow Pt loading. <i>Nature Energy</i> , 2021, 6, 614-623.	19.8	274
1095	Library Creation of Ultrasmall Multi-metallic Nanoparticles Confined in Mesoporous MFI Zeolites. <i>Angewandte Chemie</i> , 2021, 133, 14692-14698.	1.6	4
1096	Multidimensional Nonstoichiometric Electrode Materials for Electrochemical Energy Conversion and Storage. <i>Advanced Energy Materials</i> , 2022, 12, 2100640.	10.2	25
1097	Bridging the gap between highly active oxygen reduction reaction catalysts and effective catalyst layers for proton exchange membrane fuel cells. <i>Nature Energy</i> , 2021, 6, 475-486.	19.8	252
1098	Pt-Co@Pt Octahedral Nanocrystals: Enhancing Their Activity and Durability toward Oxygen Reduction with an Intermetallic Core and an Ultrathin Shell. <i>Journal of the American Chemical Society</i> , 2021, 143, 8509-8518.	6.6	128
1099	Composition-tunable PtCu porous nanowires as highly active and durable catalyst for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 18284-18293.	3.8	18
1100	Ultimate Corrosion to Pt-Cu Electrocatalysts for Enhancing Methanol Oxidation Activity and Stability in Acidic Media. <i>Chemistry - A European Journal</i> , 2021, 27, 9124-9128.	1.7	15
1101	Library Creation of Ultrasmall Multi-metallic Nanoparticles Confined in Mesoporous MFI Zeolites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14571-14577.	7.2	11
1102	Theoretical screening of VSe ₂ as support for enhanced electrocatalytic performance of transition-metal single atoms. <i>Journal of Colloid and Interface Science</i> , 2021, 590, 210-218.	5.0	28
1103	Catalysis of core-shell nanoparticle M@Pt (M Co and Ni) for oxygen reduction reaction and its electronic structure in comparison to Pt nanoparticle. <i>Journal of Catalysis</i> , 2021, 397, 13-26.	3.1	13
1104	Surface/Near-Surface Structure of Highly Active and Durable Pt-Based Catalysts for Oxygen Reduction Reaction: A Review. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100025.	2.8	4

#	ARTICLE	IF	CITATIONS
1105	Electrochemical Catalysts for Green Hydrogen Energy. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100019.	2.8	4
1106	Ternary nickel-tungsten-copper alloy rivals platinum for catalyzing alkaline hydrogen oxidation. <i>Nature Communications</i> , 2021, 12, 2686.	5.8	98
1107	Counterion Gradients around Charged Metal Nanoparticles Enabling Basic Electronics without Semiconductors. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6102-6110.	2.1	2
1108	Atomic Structural Evolution of Single-Layer Pt Clusters as Efficient Electrocatalysts. <i>Small</i> , 2021, 17, e2100732.	5.2	26
1109	Direct correlation of oxygen adsorption on platinum-electrolyte interfaces with the activity in the oxygen reduction reaction. <i>Science Advances</i> , 2021, 7, .	4.7	44
1110	Yolk-Shell Pt-NiCe@SiO ₂ Single-Atom-Alloy Catalysts for Low-Temperature Dry Reforming of Methane. <i>ACS Catalysis</i> , 2021, 11, 8247-8260.	5.5	61
1111	Direct Integration of Strained Pt Catalysts into Proton-Exchange Membrane Fuel Cells with Atomic Layer Deposition. <i>Advanced Materials</i> , 2021, 33, e2007885.	11.1	10
1112	Solvent-free microwave synthesis of ultra-small Ru-Mo ₂ C@CNT with strong metal-support interaction for industrial hydrogen evolution. <i>Nature Communications</i> , 2021, 12, 4018.	5.8	160
1113	Single Metal Atom Supported on N-Doped 2D Nitride Black Phosphorus: An Efficient Electrocatalyst for the Oxygen Evolution and Oxygen Reduction Reactions. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12541-12550.	1.5	24
1114	Dual Inorganic Sacrificial Template Synthesis of Hierarchically Porous Carbon with Specific N Sites for Efficient Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 28140-28149.	4.0	12
1115	Platinum single-atom catalyst coupled with transition metal/metal oxide heterostructure for accelerating alkaline hydrogen evolution reaction. <i>Nature Communications</i> , 2021, 12, 3783.	5.8	355
1116	Structural Changes of Intermetallic Catalysts under Reaction Conditions. <i>Small Structures</i> , 2021, 2, 2100011.	6.9	21
1117	Dense Pt Nanowire Electrocatalyst for Improved Fuel Cell Performance Using a Graphitic Carbon Nitride-Decorated Hierarchical Nanocarbon Support. <i>Small</i> , 2021, 17, e2102288.	5.2	59
1119	Improved Stability of Octahedral PtCu by Rh Doping for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2021, 8, 2425-2430.	1.7	7
1120	Ball-Milling Effect on Biomass-Derived Nanocarbon Catalysts for the Oxygen Reduction Reaction. <i>ChemistrySelect</i> , 2021, 6, 6019-6028.	0.7	10
1121	Advanced Research Progress on High-Efficient Utilization of Pt Electrocatalysts in Fuel Cells. <i>Energy Technology</i> , 2021, 9, 2100227.	1.8	8
1122	Current progress of Pt-based ORR electrocatalysts for PEMFCs: An integrated view combining theory and experiment. <i>Materials Today Physics</i> , 2021, 19, 100406.	2.9	65
1123	A universal CoO/CoSe ₂ heterostructure electrocatalyst towards hydrogen evolution reaction via in-situ partial surface-oxidation-selenization method. <i>Materials Chemistry and Physics</i> , 2021, 267, 124644.	2.0	9

#	ARTICLE	IF	CITATIONS
1125	Ultrahigh-Volumetric-Energy-Density Lithiumâ€“Sulfur Batteries with Lean Electrolyte Enabled by Cobalt-Doped MoSe ₂ /Ti ₃ C ₂ T _x MXene Bifunctional Catalyst. ACS Nano, 2021, 15, 11619-11633.	7.3	115
1126	Designing the next generation of proton-exchange membrane fuel cells. Nature, 2021, 595, 361-369.	13.7	1,012
1127	Hydrogen-Intercalation-Induced Lattice Expansion of Pd@Pt Coreâ€“Shell Nanoparticles for Highly Efficient Electrocatalytic Alcohol Oxidation. Journal of the American Chemical Society, 2021, 143, 11262-11270.	6.6	121
1128	Ultrathin Ptâ€“Cuâ€“Ni Ternary Alloy Nanowires with Multimetallic Interplay for Boosted Methanol Oxidation Activity. ACS Applied Energy Materials, 2021, 4, 6824-6832.	2.5	10
1129	A Large-Scalable, Surfactant-Free, and Ultrastable Ru-Doped Pt ₃ Co Oxygen Reduction Catalyst. Nano Letters, 2021, 21, 6625-6632.	4.5	43
1130	Atomic Regulation of PGM Electrocatalysts for the Oxygen Reduction Reaction. Frontiers in Chemistry, 2021, 9, 699861.	1.8	6
1131	Integrating Pt ₁₆ Te Nanotroughs and Nanopillars into a 3D â€œSelfâ€“Supportedâ€“Hierarchical Nanostructure for Boosting Methanol Electrooxidation. Small, 2021, 17, e2101499.	5.2	13
1132	Hierarchically Fractal PtPdCu Sponges and their Directed Mass- and Electron-Transfer Effects. Nano Letters, 2021, 21, 7870-7878.	4.5	47
1133	Rational Design of Singleâ€“Atom Site Electrocatalysts: From Theoretical Understandings to Practical Applications. Advanced Materials, 2021, 33, e2008151.	11.1	175
1134	Recent Advances in Electrode Design for Rechargeable Zincâ€“Air Batteries. Small Science, 2021, 1, 2100044.	5.8	47
1135	Templated-Assisted Synthesis of Structurally Ordered Intermetallic Pt ₃ Co with Ultralow Loading Supported on 3D Porous Carbon for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 37133-37141.	4.0	25
1136	Size and Composition Dependence of Oxygen Reduction Reaction Catalytic Activities of Mo-Doped PtNi/C Octahedral Nanocrystals. ACS Catalysis, 2021, 11, 11407-11415.	5.5	26
1137	Effects of the induced micro- and meso-porosity on the single site density and turn over frequency of Fe-N-C carbon electrodes for the oxygen reduction reaction. Applied Catalysis B: Environmental, 2021, 291, 120068.	10.8	62
1138	Rational Design of Highly Stable and Active MXeneâ€“Based Bifunctional ORR/OER Doubleâ€“Atom Catalysts. Advanced Materials, 2021, 33, e2102595.	11.1	137
1139	Recent advances of layered double hydroxidesâ€“based bifunctional electrocatalysts for ORR and OER. Materials Today Chemistry, 2021, 21, 100488.	1.7	15
1140	Doping engineering on carbons as electrocatalysts for oxygen reduction reaction. Fundamental Research, 2021, 1, 807-823.	1.6	19
1141	Enhancement of Activity and Development of Low Pt Content Electrocatalysts for Oxygen Reduction Reaction in Acid Media. Molecules, 2021, 26, 5147.	1.7	11
1142	Recent developments in Ptâ€“Co catalysts for proton-exchange membrane fuel cells. Current Opinion in Electrochemistry, 2021, 28, 100715.	2.5	23

#	ARTICLE	IF	CITATIONS
1143	Wet Deposition of Mercury and Dissolved Organic Carbon during Pre-Monsoon and Monsoon Periods at Sitapuri Site in Delhi (India). <i>Current World Environment Journal</i> , 2021, 16, 530-539.	0.2	0
1144	Alloy Nanostructured Catalysts for Cathodic Reactions in Energy Conversion and Fuel Generation. <i>Energy & Fuels</i> , 2021, 35, 18857-18870.	2.5	8
1145	Atomic level engineering of noble metal nanocrystals for energy conversion catalysis. <i>Journal of Energy Chemistry</i> , 2021, 63, 604-624.	7.1	12
1146	Improvement of Oxygen Reduction Performance in Alkaline Media by Tuning Phase Structure of Pd@Bi Nanocatalysts. <i>Journal of the American Chemical Society</i> , 2021, 143, 15891-15897.	6.6	47
1147	Controlling the microscopic morphology and permeability of catalyst layers in proton exchange membrane fuel cells by adjusting catalyst ink agglomerates. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32215-32225.	3.8	15
1148	Design concept for electrocatalysts. <i>Nano Research</i> , 2022, 15, 1730-1752.	5.8	396
1149	Bimetal Organic Framework Derived Atomically Dispersed Mn and N Codoped Porous Carbon for Efficient Oxygen Reduction. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 4452-4457.	1.0	4
1150	Cluster Expansion of Alloy Theory: A Review of Historical Development and Modern Innovations. <i>Jom</i> , 2021, 73, 3326-3346.	0.9	7
1151	Mesoporous Au films assembled on flexible cellulose nanopaper as high-performance SERS substrates. <i>Chemical Engineering Journal</i> , 2021, 419, 129445.	6.6	69
1152	Small Transition-Metal Mixed Clusters as Activators of the C=O Bond. Fe _n Cu _m @CO (n + m = 6): A Theoretical Approach. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7940-7955.	1.1	3
1153	Designed Synthesis and Catalytic Mechanisms of Non-Precious Metal Single-Atom Catalysts for Oxygen Reduction Reaction. <i>Small Methods</i> , 2021, 5, e2100865.	4.6	39
1154	Embedding Pt-Ni octahedral nanoparticles in the 3D nitrogen-doped porous graphene for enhanced oxygen reduction activity. <i>Electrochimica Acta</i> , 2021, 391, 138956.	2.6	10
1155	Surface lattice engineering for fine-tuned spatial configuration of nanocrystals. <i>Nature Communications</i> , 2021, 12, 5661.	5.8	17
1156	Cobalt single atom site isolated Pt nanoparticles for efficient ORR and HER in acid media. <i>Nano Energy</i> , 2021, 88, 106221.	8.2	181
1157	Sb-modulated synthesis of novel CoSb alloy nanoparticles anchored on N-doped carbon as oxygen electrocatalysts. <i>Applied Surface Science</i> , 2021, 562, 150112.	3.1	6
1158	Carbon nanotube-bridged N-doped mesoporous carbon nanosphere with atomic and nanoscaled M (M = Fe, Co) species for synergistically enhanced oxygen reduction reaction. <i>Chemical Engineering Journal</i> , 2021, 421, 129689.	6.6	22
1159	Biomass-derived N,S co-doped 3D multichannel carbon supported Au@Pd@Pt catalysts for oxygen reduction. <i>Environmental Research</i> , 2021, 202, 111684.	3.7	15
1160	Direct integration of ultralow-platinum alloy into nanocarbon architectures for efficient oxygen reduction in fuel cells. <i>Science Bulletin</i> , 2021, 66, 2207-2216.	4.3	49

#	ARTICLE	IF	CITATIONS
1161	Electrodeposited PtNi nanoparticles towards oxygen reduction reaction: A study on nucleation and growth mechanism. Chinese Journal of Catalysis, 2021, 42, 2068-2077.	6.9	11
1162	Structural transformations of metal alloys under electrocatalytic conditions. Current Opinion in Electrochemistry, 2021, 30, 100796.	2.5	5
1163	Electrochemical catalytic mechanism of single transition metal atom embedded BC ₃ monolayer for oxygen reduction and evolution reactions. Chemical Engineering Journal, 2021, 425, 130631.	6.6	18
1164	Effect of heterostructure engineering on electronic structure and transport properties of two-dimensional halide perovskites. Computational Materials Science, 2021, 200, 110823.	1.4	10
1165	Optimized oxygen reduction activity by tuning shell component in Pd@Pt-based core-shell electrocatalysts. Journal of Colloid and Interface Science, 2021, 604, 301-309.	5.0	4
1166	High activity and durability of carbon-supported core-shell PtP @Pt/C catalyst for oxygen reduction reaction. Chinese Journal of Catalysis, 2021, 42, 2173-2180.	6.9	27
1167	Review of electrochemical oxidation desulfurization for fuels and minerals. Fuel, 2021, 305, 121562.	3.4	30
1168	Ultrasmall Pt ₂ Sr alloy nanoparticles as efficient bifunctional electrocatalysts for oxygen reduction and hydrogen evolution in acidic media. Journal of Energy Chemistry, 2022, 64, 315-322.	7.1	28
1169	Revealing the role of mo doping in promoting oxygen reduction reaction performance of Pt ₃ Co nanowires. Journal of Energy Chemistry, 2022, 66, 16-23.	7.1	36
1170	Ultrathin PtMo-CeO hybrid nanowire assemblies as high-performance multifunctional catalysts for methanol oxidation, oxygen reduction and hydrogen oxidation. Chemical Engineering Journal, 2022, 429, 132435.	6.6	28
1171	Ultra-small platinum nanoparticles segregated by nickle sites for efficient ORR and HER processes. Journal of Energy Chemistry, 2022, 65, 48-54.	7.1	63
1172	Enhanced oxygen reduction and methanol oxidation reaction over self-assembled Pt-M (M=Co, Ni) nanoflowers. Journal of Colloid and Interface Science, 2022, 607, 1411-1423.	5.0	26
1173	Facile Aqueous-Phase Synthesis of Pd@FePt Core-Shell Nanoparticles for Methanol Oxidation Reaction. Catalysts, 2021, 11, 130.	1.6	3
1174	First synthesis of air-stable NiZn homogeneous alloy nanoparticles through chemical reduction. Materials Advances, 2021, 2, 684-687.	2.6	1
1175	Predicting activation energies for vacancy-mediated diffusion in alloys using a transition-state cluster expansion. Physical Review Materials, 2021, 5, .	0.9	7
1176	Boosting alkaline hydrogen evolution performance with alkaline electro-activated ultrafine candied haws-shaped PtW _{Ni} nanoalloys. Dalton Transactions, 2021, 50, 11099-11105.	1.6	2
1177	Electrocatalysis using nanomaterials. Frontiers of Nanoscience, 2021, 18, 343-420.	0.3	2
1178	Oxygen Reduction Reaction of Third Element-Modified Pt/Pd(111): Effect of Atomically Controlled Ir Locations on the Activity and Durability. ACS Catalysis, 2021, 11, 1554-1562.	5.5	12

#	ARTICLE	IF	CITATIONS
1179	Pd@Pt Tesseract for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2021, 143, 496-503.	6.6	100
1180	Highly efficient and selective nitrate electroreduction to ammonia catalyzed by molecular copper catalyst@Ti ₃ C ₂ T MXene. Journal of Materials Chemistry A, 2021, 9, 21771-21778.	5.2	53
1181	PtNiFe nanoalloys with co-existence of energy-optimized active surfaces for synergistic catalysis of oxygen reduction and evolution. Journal of Materials Chemistry A, 2021, 9, 16187-16195.	5.2	9
1182	Rationalization of promoted reverse water gas shift reaction by Pt ₃ Ni alloy: Essential contribution from ensemble effect. Journal of Chemical Physics, 2021, 154, 014702.	1.2	6
1183	Multimetallic Catalysts and Electrocatalysts: Dynamic Core-Shell Nanostructures. Nanostructure Science and Technology, 2021, , 61-82.	0.1	1
1184	Accurate simulation of surfaces and interfaces of ten FCC metals and steel using Lennard-Jones potentials. Npj Computational Materials, 2021, 7, .	3.5	28
1185	PtPd hollow nanocubes with enhanced alloy effect and active facets for efficient methanol oxidation reaction. Chemical Communications, 2021, 57, 986-989.	2.2	44
1186	The Advanced Designs of High-Performance Platinum-Based Electrocatalysts: Recent Progresses and Challenges. Advanced Materials Interfaces, 2018, 5, 1800486.	1.9	55
1187	Photoassisted Oxygen Reduction Reaction in H ₂ O ₂ Fuel Cells. Angewandte Chemie, 2016, 128, 14968-14971.	1.6	25
1188	Controllable constructing alloy dendrites with fractal structure as free-standing electrode for enhanced oxygen evolution. International Journal of Energy Research, 2020, 44, 4249-4259.	2.2	3
1189	PEM Fuel Cells, Modeling. , 2017, , 1-61.		3
1190	Suppressing the surface passivation of Pt-Mo nanowires via constructing Mo-Se coordination for boosting HER performance. Nano Research, 2021, 14, 2659-2665.	5.8	24
1191	Active nickel derived from coordination complex with weak inter/intra-molecular interactions for efficient hydrogen evolution via a tandem mechanism. Journal of Catalysis, 2020, 389, 29-37.	3.1	7
1192	Atomic-scale study of nanocatalysts by aberration-corrected electron microscopy. Journal of Physics Condensed Matter, 2020, 32, 413004.	0.7	2
1193	Local Coordination and Ordering Engineering to Design Efficient Core-Shell Oxygen Reduction Catalysts. Journal of the Electrochemical Society, 2020, 167, 144501.	1.3	5
1194	Modified Floating Electrode Apparatus for Advanced Characterization of Oxygen Reduction Reaction Electrocatalysts. Journal of the Electrochemical Society, 2020, 167, 166501.	1.3	25
1196	Surface and interface engineering of hollow carbon sphere-based electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2021, 9, 25706-25730.	5.2	15
1197	Synthesis of Pd ₃ Sn and PdCuSn Nanorods with L1 ₂ Phase for Highly Efficient Electrocatalytic Ethanol Oxidation. Advanced Materials, 2022, 34, e2106115.	11.1	65

#	ARTICLE	IF	CITATIONS
1198	Advancements in cathode catalyst and cathode layer design for proton exchange membrane fuel cells. Nature Communications, 2021, 12, 5984.	5.8	120
1199	Crystal Phase Transition Creates a Highly Active and Stable RuC _X Nanosurface for Hydrogen Evolution Reaction in Alkaline Media. Advanced Materials, 2021, 33, e2105248.	11.1	27
1200	Advanced Cathode Electrocatalysts for Fuel Cells: Understanding, Construction, and Application of Carbon-Based and Platinum-Based Nanomaterials. , 2021, 3, 1610-1634.		26
1201	Cobalt-Based Electrocatalysts as Air Cathodes in Rechargeable Zn-Air Batteries: Advances and Challenges. Small Structures, 2021, 2, 2100144.	6.9	40
1202	Armoring the Pt/C Catalyst with Fine Atomic-Scale Tungsten Species to Increase Tolerance against Thermal and Fuel Cell Stresses. ACS Applied Energy Materials, 0, , .	2.5	2
1203	Seeded Synthesis of Unconventional 2H-Phase Pd Alloy Nanomaterials for Highly Efficient Oxygen Reduction. Journal of the American Chemical Society, 2021, 143, 17292-17299.	6.6	59
1204	Surface unsaturated WO _x activating PtNi alloy nanowires for oxygen reduction reaction. Journal of Colloid and Interface Science, 2022, 607, 1928-1935.	5.0	22
1205	Spontaneous amorphous oxide-interfaced ultrafine noble metal nanoclusters for unexpected anodic electrocatalysis. Chem Catalysis, 2021, 1, 1104-1117.	2.9	14
1206	Geometric and electronic modulation of fcc NiCo alloy by Group-8 B metal doping to accelerate hydrogen evolution reaction in acidic and alkaline media. Chemical Engineering Journal, 2022, 430, 133110.	6.6	31
1207	Edge-hosted Fe-N ₃ sites on a multiscale porous carbon framework combining high intrinsic activity with efficient mass transport for oxygen reduction. Chem Catalysis, 2021, 1, 1291-1307.	2.9	86
1208	Self-built field induces surface electrons to reduce H ⁺ to atomic H* for photocatalytic hydrodechlorination of 2-chlorophenols. Chemical Engineering Journal Advances, 2021, 8, 100194.	2.4	4
1209	One-Dimensional Colloidal Hetero-Nanomaterials with Programmed Semiconductor Morphology and Metal Location for Enhancing Solar Energy Conversion. Springer Theses, 2018, , 77-94.	0.0	0
1210	Density Functional Theory Study of Separated Adsorption of O ₂ and CO on Pt@X(X = Pd, Tj ETQq0 0,0,rgBT /Oylock 10 0,1		
1211	PEM Fuel Cells: Modeling. , 2019, , 235-293.		1
1212	Synthesis and Design of a Highly Stable Platinum Nickel Electrocatalyst for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 52681-52687.	4.0	14
1213	How Can We Efficiently Fabricate Nanostructured Materials with Unprecedented Properties?. Accounts of Materials Research, 0, , .	5.9	1
1214	Outstanding Oxygen Reduction Reaction Catalytic Performance of In-PtNi Octahedral Nanoparticles Designed via Computational Dopant Screening. Chemistry of Materials, 2021, 33, 8895-8903.	3.2	17
1215	Recent trends of extremophiles application in Microbial Electrochemical Systems as Energy scavenger: A mini review. IOP Conference Series: Materials Science and Engineering, 0, 991, 012066.	0.3	1

#	ARTICLE	IF	CITATIONS
1216	Thermally driven interfacial diffusion synthesis of composition-controllable Pt-Pb bimetallic nanoparticles boosts oxygen reduction and methanol oxidation electrocatalysis. <i>Renewable Energy</i> , 2022, 182, 627-633.	4.3	4
1217	Porous, thick nitrogen-doped carbon encapsulated large PtNi core-shell nanoparticles for oxygen reduction reaction with extreme stability and activity. <i>Carbon</i> , 2022, 186, 36-45.	5.4	15
1218	Atomically Precise Nanoclusters as Electrocatalysts. <i>Molecular Catalysis</i> , 2020, , 39-68.	1.3	3
1219	Achievements in Pt nanoalloy oxygen reduction reaction catalysts: strain engineering, stability and atom utilization efficiency. <i>Chemical Communications</i> , 2021, 57, 12898-12913.	2.2	21
1220	Differences in the Electrochemical Performance of Pt-Based Catalysts Used for Polymer Electrolyte Membrane Fuel Cells in Liquid Half- and Full-Cells. <i>Chemical Reviews</i> , 2021, 121, 15075-15140.	23.0	104
1221	Pt-Free Metal Nanocatalysts for the Oxygen Reduction Reaction Combining Experiment and Theory: An Overview. <i>Molecules</i> , 2021, 26, 6689.	1.7	11
1222	Understanding the Single Atom Doping Effects in Oxygen Reduction with Atomically Precise Metal Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2021, 125, 24831-24836.	1.5	7
1223	Electronic Structure Regulation of Single-Atom Catalysts for Electrochemical Oxygen Reduction to H_2O_2 . <i>Small</i> , 2022, 18, e2103824.	5.2	49
1224	Electrophoretic deposition of carbon-supported octahedral Pt-Ni alloy nanoparticle catalysts for cathode in polymer electrolyte membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 1833-1844.	3.8	8
1225	In Situ/Operando Insights into the Stability and Degradation Mechanisms of Heterogeneous Electrocatalysts. <i>Small</i> , 2022, 18, e2104205.	5.2	14
1227	Nanocatalysts for proton exchange fuel cells: design, preparation, and utilization. , 2022, , 465-545.		3
1228	Structural evolution of Pt-based oxygen reduction reaction electrocatalysts. <i>Chinese Journal of Catalysis</i> , 2022, 43, 47-58.	6.9	20
1229	Highly active oxygen evolution reaction electrocatalyst based on defective-CeO _{2-x} decorated MOF(Ni/Fe). <i>Electrochimica Acta</i> , 2022, 403, 139630.	2.6	13
1230	Meta-analysis of commercial Pt/C measurements for oxygen reduction reactions via data mining. <i>Chinese Journal of Catalysis</i> , 2022, 43, 116-121.	6.9	9
1231	Electrocatalytic volcano relations: surface occupation effects and rational kinetic models. <i>Chinese Journal of Catalysis</i> , 2022, 43, 2-10.	6.9	9
1232	Nanofabrication through molding. <i>Progress in Materials Science</i> , 2022, 125, 100891.	16.0	39
1233	Highly stable Pt ₃ Ni ultralong nanowires tailored with trace Mo for the ethanol oxidation. <i>Nano Research</i> , 2022, 15, 3230-3238.	5.8	10
1234	Ladder-type π -conjugated metallophthalocyanine covalent organic frameworks with boosted oxygen reduction reaction activity and durability for zinc-air batteries. <i>Chemical Engineering Journal</i> , 2022, 435, 133872.	6.6	25

#	ARTICLE	IF	CITATIONS
1235	Band Gap of Pb(Fe _{0.5} Nb _{0.5})O ₃ Thin Films Prepared by Pulsed Laser Deposition. <i>Materials</i> , 2021, 14, 6841.	1.3	4
1236	Insights into the pH-dependent Behavior of N-Doped Carbons for the Oxygen Reduction Reaction by First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26429-26436.	1.5	3
1237	A Facile Route to Synthesis of Hierarchically Porous Carbon via Micelle System for Bifunctional Electrochemical Application. <i>Frontiers in Chemistry</i> , 2021, 9, 762103.	1.8	5
1238	Rapid and large-scale synthesis of ultra-small immiscible alloy supported catalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120916.	10.8	20
1239	Improving the Activity of Electrocatalysts toward the Hydrogen Evolution Reaction, the Oxygen Evolution Reaction, and the Oxygen Reduction Reaction via Modification of Metal and Ligand of Conductive Two-Dimensional Metal-Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 11652-11658.	2.1	36
1240	Performance improvement of ultra-low Pt proton exchange membrane fuel cell by catalyst layer structure optimization. <i>Chinese Journal of Chemical Engineering</i> , 2022, 41, 473-479.	1.7	7
1241	Single-atom catalysis for zinc-air/O ₂ batteries, water electrolyzers and fuel cells applications. <i>Energy Storage Materials</i> , 2022, 45, 504-540.	9.5	39
1242	Pt-Ni alloy catalyst supported on carbon aerogel via one-step method for oxygen reduction reaction. <i>Journal of Solid State Electrochemistry</i> , 2022, 26, 481-490.	1.2	8
1243	d Orbital Hybridization Induced by a Monodispersed Ga Site on a Pt ₃ Mn Nanocatalyst Boosts Ethanol Electrooxidation. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	134
1244	Gas Crossover Regulation by Porosity-Controlled Glass Sheet Achieves Pure Hydrogen Production by Buffered Water Electrolysis at Neutral pH. <i>ChemSusChem</i> , 2022, 15, e202102294.	3.6	13
1245	Clarifying the critical roles of iron in boosting oxygen reduction: Single Fe atoms anchored on carbon vacancies as efficient active sites. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121035.	10.8	27
1246	Cobalt-Doping Stabilized Active and Durable Sub-2 nm Pt Nanoclusters for Low-Loading PEMFC Cathode. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	35
1248	Catalyst overcoating engineering towards high-performance electrocatalysis. <i>Chemical Society Reviews</i> , 2022, 51, 188-236.	18.7	53
1249	High-loaded sub-6 nm Pt ₁ Co ₁ intermetallic compounds with highly efficient performance expression in PEMFCs. <i>Energy and Environmental Science</i> , 2022, 15, 278-286.	15.6	81
1250	Stability of single-atom catalysts for electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5835-5849.	5.2	40
1251	Cu-template-dependent synthesis of PtCu nanotubes for oxygen reduction reactions. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 6217-6226.	3.8	8
1252	d Orbital Hybridization Induced by a Monodispersed Ga Site on a Pt ₃ Mn Nanocatalyst Boosts Ethanol Electrooxidation. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	19
1253	Improved Oxygen Evolution and Oxygen Reduction Behavior of NiCo ₂ O ₄ : Revisiting the Use of Mesocarbon Microbeads. <i>Journal of the Electrochemical Society</i> , 2022, 169, 026515.	1.3	3

#	ARTICLE	IF	CITATIONS
1254	NiFe-LDHs@MnO ₂ heterostructure as a bifunctional electrocatalyst for oxygen-involved reactions and Zn-air batteries. <i>Ionics</i> , 2022, 28, 1273-1283.	1.2	11
1255	<i>Operando</i> Imaging of Ce Radical Scavengers in a Practical Polymer Electrolyte Fuel Cell by 3D Fluorescence CT-XAFS and Depth-Profiling Nano-XAFS-SEM/EDS Techniques. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 6762-6776.	4.0	11
1256	Sulphonated melamine polymer for enhancing the oxygen reduction reaction activity and stability of a Pt catalyst. <i>Journal of Electroanalytical Chemistry</i> , 2022, 908, 116103.	1.9	7
1257	Efficiently catalyzed sea urchin-like mixed phase SmMn ₂ O ₅ /MnO ₂ for oxygen reduction reaction in zinc-air battery. <i>Materials Research Bulletin</i> , 2022, 149, 111744.	2.7	6
1258	Single-atom alloy with Pt-Co dual sites as an efficient electrocatalyst for oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2022, 306, 121112.	10.8	74
1259	Pt-Co single atom alloy catalysts: Accelerated water dissociation and hydrogen evolution by strain regulation. <i>Journal of Energy Chemistry</i> , 2022, 69, 44-53.	7.1	31
1260	Atomic alloys of nickel-platinum on carbon network for methanol oxidation. <i>Nano Energy</i> , 2022, 95, 106984.	8.2	31
1261	“é...žðæ°Sèj~ãŽŸç”μâ,~âCE-æ’æ€Sçš,,pHã¾4èμ-æ€Sèμ-æ°: <i>Scientia Sinica Chimica</i> , 2022, , .	0.2	0
1262	Structure-design and synthesis of nickel-cobalt oxide/sulfide/phosphide composite nanowire arrays for efficient overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 10616-10627.	3.8	21
1263	A General Concurrent Template Strategy for Ordered Mesoporous Intermetallic Nanoparticles with Controllable Catalytic Performance. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
1264	Current Trends in Platinum-Based Ternary Alloys as Promising Electrocatalysts for the Oxygen Reduction Reaction: A Mini Review. <i>Energy & Fuels</i> , 2022, 36, 2306-2322.	2.5	22
1265	Efficient Hydrogen Evolution Reaction with Bulk and Nanostructured Mitrofanovite Pt ₃ Te ₄ . <i>Nanomaterials</i> , 2022, 12, 558.	1.9	3
1266	Pt nanorods oriented on Gd-doped ceria polyhedra enable superior oxygen reduction catalysis for fuel cells. <i>Journal of Catalysis</i> , 2022, 407, 300-311.	3.1	17
1267	A General Concurrent Template Strategy for Ordered Mesoporous Intermetallic Nanoparticles with Controllable Catalytic Performance. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	35
1268	Coordination environments tune the activity of oxygen catalysis on single atom catalysts: A computational study. <i>Nano Research</i> , 2022, 15, 3073-3081.	5.8	58
1269	Edge Effect Promotes Graphene-Confining Single-Atom Co ^{N₄} and Rh ^{N₄} for Bifunctional Oxygen Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2022, 126, 30-39.	1.5	17
1270	Solvothermal Synthesis of Nanostructured Pt _n Ni Tetrahedrons with Enhanced Platinum Utilization and Activity toward Oxygen Reduction Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2021, 125, 27199-27206.	1.5	8
1271	Minutely Surficial Functionalization of Ce-O-Pt Linkages on Pt/C for Enhanced Electrocatalytic Methanol Oxidation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
1272	Mechano-Thermal Milling Synthesis of Atomically Dispersed Platinum with Spin Polarization Induced by Cobalt Atoms Towards Enhanced Oxygen Reduction Reaction. SSRN Electronic Journal, 0, , .	0.4	0
1273	Ternary PdNiMo Alloy as Bifunctional Nanocatalysts for Oxygen Reduction Reaction and Hydrogen Revolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
1274	Minutely Surficial Functionalization of Ce-O-Pt Linkages on Pt/C for Enhanced Electrocatalytic Methanol Oxidation. SSRN Electronic Journal, 0, , .	0.4	0
1275	Atomically ordered Pt ₃ Mn intermetallic electrocatalysts for the oxygen reduction reaction in fuel cells. Journal of Materials Chemistry A, 2022, 10, 7399-7408.	5.2	26
1276	Hexagonal PtBi Intermetallic Inlaid with Sub μ m Monolayer Pb Oxyhydroxide Boosts Methanol Oxidation. Small, 2022, 18, e2107803.	5.2	24
1277	Structural Evolution of a PtRh Nanodendrite Electrocatalyst and Its Ultrahigh Durability toward Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 3302-3308.	5.5	21
1278	Surfactant assisted geometric barriers on PtNi@C electrocatalyst for phosphoric acid fuel cells. Journal of Industrial and Engineering Chemistry, 2022, 110, 198-205.	2.9	6
1279	Ultrastable bimetallic Fe ₂ Mo for efficient oxygen reduction reaction in pH-universal applications. Nano Research, 2022, 15, 4950-4957.	5.8	8
1280	Corrosion Chemistry of Electrocatalysts. Advanced Materials, 2022, 34, e2200840.	11.1	43
1281	Geometric Engineering of Porous PtCu Nanotubes with Ultrahigh Methanol Oxidation and Oxygen Reduction Capability. Small, 2022, 18, e2107387.	5.2	61
1282	Achieving complete electrooxidation of ethanol by single atomic Rh decoration of Pt nanocubes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112109119.	3.3	40
1283	Elucidating the Correlation between ORR Polarization Curves and Kinetics at Metal-Electrolyte Interfaces. ACS Applied Materials & Interfaces, 2022, 14, 13891-13903.	4.0	18
1284	In vivo three-dimensional multispectral photoacoustic imaging of dual enzyme-driven cyclic cascade reaction for tumor catalytic therapy. Nature Communications, 2022, 13, 1298.	5.8	91
1285	Doubling Micropore of Carbon Skeleton via Regulating Molecular Structure of Carbohydrate for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2022, 169, 046510.	1.3	0
1286	An accurate and general local electronic structural descriptor for oxygen reduction on metal surface alloys: Potential of breaking scaling relationship and application to PtZn ones with superior activity. Applied Surface Science, 2022, 592, 153325.	3.1	4
1287	Recent advances in the application of machine-learning algorithms to predict adsorption energies. Trends in Chemistry, 2022, 4, 347-360.	4.4	4
1288	Porphyrim polymer-derived single-atom Fe assisted by Fe ₂ O ₃ with oxygen vacancy for efficient oxygen reduction reaction. Applied Surface Science, 2022, 592, 153301.	3.1	14
1289	Colloidal Polydopamine Beads: A Photothermally Active Support for Noble Metal Nanocatalysts. ACS Applied Materials & Interfaces, 2022, 14, 17560-17569.	4.0	23

#	ARTICLE	IF	CITATIONS
1290	Gas Diffusion Layer with a Regular Hydrophilic Structure Boosts the Power Density of Proton Exchange Membrane Fuel Cells via the Construction of Water Highways. ACS Applied Materials & Interfaces, 2022, 14, 17578-17584.	4.0	6
1291	In situ coupling of NiFe nanoparticles on carbonized wood for oxygen evolution reaction. Catalysis Communications, 2022, 165, 106442.	1.6	3
1292	Ion implantation synthesis of long-term stable high-entropy metallic glass nanoparticles. Journal of Alloys and Compounds, 2022, 906, 164303.	2.8	8
1293	Nitrogen doped porous carbon polyhedral supported Fe and Ni dual-metal single-atomic catalysts: template-free and metal ligand-free synthesis with microwave-assistance and d-band center modulating for boosted ORR catalysis in zinc-air batteries. Chemical Engineering Journal, 2022, 437, 135295.	6.6	45
1294	Atomically dispersed antimony on N-doped carbon for highly efficient oxygen reduction reaction. Chemical Engineering Journal, 2022, 439, 135700.	6.6	18
1295	Layered Pt-Co alloys: Bulk, surface and nanoparticle analysis, based on DFT. Surface Science, 2022, 721, 122082.	0.8	1
1296	Rational design ternary platinum based electrocatalysts for effective methanol oxidation reaction. Journal of Energy Chemistry, 2022, 70, 230-235.	7.1	75
1297	Ordered PtFeIr Intermetallic Nanowires Prepared through a Silica Protection Strategy for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2022, 61, .	7.2	61
1298	Progressions in cathodic catalysts for oxygen reduction and hydrogen evolution in bioelectrochemical systems: Molybdenum as the next-generation catalyst. Catalysis Reviews - Science and Engineering, 2023, 65, 986-1078.	5.7	3
1299	Sublayer Stable Fe Dopant in Porous Pd Metallene Boosts Oxygen Reduction Reaction. ACS Nano, 2022, 16, 522-532.	7.3	52
1301	Materials Engineering toward Durable Electrocatalysts for Proton Exchange Membrane Fuel Cells. Advanced Energy Materials, 2022, 12, .	10.2	61
1302	Ambient Synthesis of Pt-Reactive Metal Alloy and High-Entropy Alloy Nanocatalysts Utilizing Hydrogen Cold Plasma. Chemistry of Materials, 2022, 34, 266-272.	3.2	11
1303	Ordered PtFeIr Intermetallic Nanowires Prepared through a Silica Protection Strategy for the Oxygen Reduction Reaction. Angewandte Chemie, 2022, 134, .	1.6	8
1304	Understanding the Crucial Significance of the Temperature and Potential Window on the Stability of Carbon Supported Pt-Alloy Nanoparticles as Oxygen Reduction Reaction Electrocatalysts. ACS Catalysis, 2022, 12, 101-115.	5.5	38
1305	Hollow-Structure Pt-Ni Nanoparticle Electrocatalysts for Oxygen Reduction Reaction. Molecules, 2022, 27, 2524.	1.7	6
1306	Interface-rich Au-doped PdBi alloy nanochains as multifunctional oxygen reduction catalysts boost the power density and durability of a direct methanol fuel cell device. Nano Research, 2022, 15, 6036-6044.	5.8	26
1307	Carbon Shell on Active Nanocatalyst for Stable Electrocatalysis. Accounts of Chemical Research, 2022, 55, 1278-1289.	7.6	86
1308	Oxygen reduction reaction on Pt-based electrocatalysts: Four-electron vs. two-electron pathway. Chinese Journal of Catalysis, 2022, 43, 1433-1443.	6.9	37

#	ARTICLE	IF	CITATIONS
1310	PEM Fuel cell and electrolysis cell technologies and hydrogen infrastructure development – a review. <i>Energy and Environmental Science</i> , 2022, 15, 2288-2328.	15.6	167
1311	A Unique Nanocomposite with Feco Nanoalloy Anchored on S, N Co-Doped Carbonaceous Matrix for High Bifunctional Oxygen Reduction Reaction/Oxygen Evolution Reaction Electrocatalytic Property in Zn-Air Battery. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1312	Catalytic approaches towards highly durable proton exchange membrane fuel cells with minimized Pt use. <i>Chemical Science</i> , 2022, 13, 6782-6795.	3.7	11
1313	High-Performance Intermetallic Ptco Oxygen Reduction Catalyst Promoted by Molybdenum. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1314	Finding efficient catalyst designs: A high-precision method to reveal active sites. <i>Chem Catalysis</i> , 2022, 2, 657-659.	2.9	0
1315	Boosting the Performance Gain of Ru/C for Hydrogen Evolution Reaction Via Surface Engineering. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	7
1316	Effect of Different Carbon Supports on the Activity of PtNi Bimetallic Catalysts toward the Oxygen Reduction. <i>Catalysts</i> , 2022, 12, 477.	1.6	5
1317	Oxygen reduction reaction and proton exchange membrane fuel cell performance of pulse electrodeposited Pt–Ni and Pt–Ni–Mo(O) nanoparticles. <i>Materials Today Energy</i> , 2022, 27, 101023.	2.5	3
1318	Molybdenum-doped ordered L1 ₀ PdZn nanosheets for enhanced oxygen reduction electrocatalysis. <i>SusMat</i> , 2022, 2, 347-356.	7.8	13
1319	Stable and high-performance N-micro/mesoporous carbon-supported Pt/Co nanoparticles-GDE for electrocatalytic oxygen reduction in PEMFC. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 19252-19262.	3.8	9
1320	Understanding the Performance Increase of Catalysts Supported on N-Functionalized Carbon in PEMFC Catalyst Layers. <i>Journal of the Electrochemical Society</i> , 2022, 169, 054520.	1.3	10
1321	Selenium-doped copper oxide nanoarrays: Robust electrocatalyst for the oxygen evolution reaction with ultralow overpotential. <i>Applied Materials Today</i> , 2022, 27, 101485.	2.3	4
1322	Dual isolated bimetal single-atom catalysts for tumor ROS cycle and parallel catalytic therapy. <i>Nano Today</i> , 2022, 44, 101493.	6.2	28
1323	Improved platinum–nickel nanoparticles with dopamine-derived carbon shells for proton exchange membrane fuel cells. <i>International Journal of Energy Research</i> , 0, , .	2.2	1
1324	Rhodium/Manganese bimetallic synergistic catalysis in hydroformylation of formaldehyde: A combined experimental and theoretical study. <i>Molecular Catalysis</i> , 2022, 525, 112360.	1.0	0
1325	Well-controlled Pt–CeO ₂ –nitrogen doped carbon triple-junction catalysts with enhanced activity and durability for the oxygen reduction reaction. <i>Sustainable Energy and Fuels</i> , 2022, 6, 2989-2995.	2.5	4
1326	Coordinatively Unsaturated PtCo Flowers Assembled with Ultrathin Nanosheets for Enhanced Oxygen Reduction. <i>ACS Catalysis</i> , 2022, 12, 6478-6485.	5.5	29
1327	Construction of hierarchical P/Ni-Ag@AgCoPBA hollowstructures for boosting water oxidation activity. <i>Chemical Engineering Journal</i> , 2022, 446, 137046.	6.6	7

#	ARTICLE	IF	CITATIONS
1328	Stability of Platinum-Group-Metal-Based Electrocatalysts in Proton Exchange Membrane Fuel Cells. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	25
1329	Oxygen reduction reaction measurements on platinum electrocatalysts in gas diffusion electrode half-cells: Influence of electrode preparation, measurement protocols and common pitfalls. <i>Journal of Power Sources</i> , 2022, 539, 231530.	4.0	5
1330	Tuning the surface structure and phase structure of PtCu ₃ nanoparticle for highly efficient electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 20816-20824.	3.8	3
1331	Minutely Surficial Functionalization of Ce-O-Pt Linkages on Pt/C for Enhanced Electrocatalytic Methanol Oxidation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1332	Ru decorated Pt ₂ CoNi/C nanoparticles as a proficient electrocatalyst for oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165520.	2.8	4
1333	Phosphorus-doping-tuned PtNi concave nanocubes with high-index facets for enhanced methanol oxidation reaction. <i>Nano Research</i> , 2022, 15, 6961-6968.	5.8	21
1334	NiO boosted Pt-shell for efficient hydrogen evolution reaction. <i>Materials Today Sustainability</i> , 2022, 19, 100170.	1.9	1
1335	Configuration-Dependent Bimetallic Metal-Organic Frameworks Nanorods for Efficient Electrocatalytic Water Oxidation. <i>ChemElectroChem</i> , 0, , .	1.7	0
1336	N-doped carbon networks as bifunctional electrocatalyst toward integrated electrochemical devices for Zn-air batteries driving microbial CO ₂ electrolysis cell. <i>Journal of CO₂ Utilization</i> , 2022, 62, 102068.	3.3	3
1337	Oxygen reduction reaction in hydrogen fuel cells. , 2022, , 277-303.		0
1338	Colloidal synthesis of nanoparticles: from bimetallic to high entropy alloys. <i>Nanoscale</i> , 2022, 14, 9832-9841.	2.8	13
1339	Ordered Mesoporous Intermetallic Trimetals for Efficient and pH-Universal Hydrogen Evolution Electrocatalysis. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	36
1340	Highly Active and Stable Large Mo-Doped Pt-Ni Octahedral Catalysts for ORR: Synthesis, Post-treatments, and Electrochemical Performance and Stability. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 29690-29702.	4.0	6
1341	Experimental Sabatier plot for predictive design of active and stable Pt-alloy oxygen reduction reaction catalysts. <i>Nature Catalysis</i> , 2022, 5, 513-523.	16.1	57
1342	Gram-Scale Synthesis of Carbon-Supported Sub-5 nm PtNi Nanocrystals for Efficient Oxygen Reduction. <i>Metals</i> , 2022, 12, 1078.	1.0	2
1343	High-entropy alloy nanoparticles as a promising electrocatalyst to enhance activity and durability for oxygen reduction. <i>Nano Research</i> , 2022, 15, 7868-7876.	5.8	29
1344	RuO ₂ /rGO heterostructures as mimic peroxidases for colorimetric detection of glucose. <i>Mikrochimica Acta</i> , 2022, 189, .	2.5	8
1346	Cotton-derived carbon fiber-supported Ni nanoparticles as nanoislands to anchor single-atom Pt for efficient catalytic reduction of 4-nitrophenol. <i>Applied Catalysis A: General</i> , 2022, 643, 118734.	2.2	11

#	ARTICLE	IF	CITATIONS
1347	S heteroatom doping in highly porous carbonaceous spheres for boosted oxygen reduction reaction of atomically dispersed Fe ^{N4} active sites. <i>Carbon</i> , 2022, 197, 112-119.	5.4	22
1348	Towards high-performance electrocatalysts: Activity optimization strategy of 2D MXenes-based nanomaterials for water-splitting. <i>Coordination Chemistry Reviews</i> , 2022, 469, 214668.	9.5	37
1349	New challenges in oxygen reduction catalysis: a consortium retrospective to inform future research. <i>Energy and Environmental Science</i> , 2022, 15, 3775-3794.	15.6	19
1350	Importance of Chemical Activation and the Effect of Low Operation Voltage on the Performance of Pt-Alloy Fuel Cell Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2022, 5, 8862-8877.	2.5	15
1351	Excess dopant effect in platinum-based alloys toward the oxygen electroreduction reaction. <i>Bulletin of the Korean Chemical Society</i> , 2022, 43, 1093-1097.	1.0	6
1352	Intermetallic PtFe Electrocatalysts for the Oxygen Reduction Reaction: Ordering Degree-Dependent Performance. <i>Small</i> , 2022, 18, .	5.2	32
1353	Low-Pt NiNC-Supported PtNi Nanoalloy Oxygen Reduction Reaction Electrocatalysts-In Situ Tracking of the Atomic Alloying Process. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	24
1354	Low-Pt NiNC-Supported PtNi Nanoalloy Oxygen Reduction Reaction Electrocatalysts-In Situ Tracking of the Atomic Alloying Process. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	1
1355	Extension of inducing effect of support coordination on Ni-based ordered alloys catalyst for selective hydrogenation. <i>Chemical Engineering Science</i> , 2022, 260, 117852.	1.9	1
1356	Highly stable cathodes for proton exchange membrane fuel cells: Novel carbon supported Au@PtNiAu concave octahedral core-shell nanocatalyst. <i>Journal of Colloid and Interface Science</i> , 2022, 626, 1040-1050.	5.0	6
1357	An Efficient Electrocatalyst (PtCo/C) for the Oxygen Reduction Reaction. <i>Catalysts</i> , 2022, 12, 794.	1.6	3
1358	High-performance intermetallic PtCo oxygen reduction catalyst promoted by molybdenum. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121767.	10.8	7
1359	Transition Metal (Co, Ni, Fe, Cu) Single-Atom Catalysts Anchored on 3D Nitrogen-Doped Porous Carbon Nanosheets as Efficient Oxygen Reduction Electrocatalysts for Zn-Air Battery. <i>Small</i> , 2022, 18, .	5.2	49
1360	Spin State as a Participator for Demetalation Durability and Activity of Fe ^{N4} -C Electrocatalysts. <i>Journal of Physical Chemistry C</i> , 2022, 126, 13168-13181.	1.5	15
1361	Ultrasmall, Coating-Free, Pyramidal Platinum Nanoparticles for High Stability Fuel Cell Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 36570-36581.	4.0	7
1362	Descriptor-Free Design of Multicomponent Catalysts. <i>ACS Catalysis</i> , 2022, 12, 10562-10571.	5.5	11
1363	Iron- and Cobalt-Doped Palladium/Carbon Nanoparticles as Catalysts for Formic Acid Oxidation. <i>ACS Applied Nano Materials</i> , 2022, 5, 12407-12412.	2.4	6
1364	National Policies, Recent Research Hotspots, and Application of Sustainable Energy: Case of China, USA, and European Countries. <i>Sustainability</i> , 2022, 14, 10014.	1.6	2

#	ARTICLE	IF	CITATIONS
1365	Batch synthesis of high activity and durability carbon supported platinum catalysts for oxygen reduction reaction using a new facile continuous microwave pipeline technology. <i>Journal of Colloid and Interface Science</i> , 2022, 628, 174-188.	5.0	7
1366	Emerging electrocatalytic activities in transition metal selenides: synthesis, electronic modulation, and structure-performance correlations. <i>Chemical Engineering Journal</i> , 2023, 451, 138514.	6.6	28
1367	Fundamental principles and environmental applications of electrochemical hydrogen peroxide production: A review. <i>Chemical Engineering Journal</i> , 2023, 452, 139371.	6.6	3
1368	Variable nanosheets for highly efficient oxygen evolution reaction. <i>CheM</i> , 2022, 8, 3241-3251.	5.8	21
1369	Coordination environment engineering of graphene-supported single/dual-Pd-site catalysts improves the electrocatalytic ORR activity. <i>Applied Surface Science</i> , 2022, 606, 154749.	3.1	7
1370	Improving the Orr Performance by Enhancing the Pt Oxidation Resistance. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1371	Enhanced oxygen transport in ionomer films on platinum electrodes via a local electric field. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21102-21111.	5.2	7
1372	Density functional theory based computational investigations on the stability of highly active trimetallic PtPdCu nanoalloys for electrochemical oxygen reduction. <i>Faraday Discussions</i> , 0, , .	1.6	1
1373	Novel Pt ₁ Nanoflowers Regulated by a Third Element (Rh, Ru, Pd) as Efficient Multifunctional Electrocatalysts for Orr, Mor and Her. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1374	On the electrocatalytical oxygen reduction reaction activity and stability of quaternary RhMo-doped PtNi/C octahedral nanocrystals. <i>Chemical Science</i> , 2022, 13, 9295-9304.	3.7	12
1375	A theoretical roadmap for the best oxygen reduction activity in two-dimensional transition metal tellurides. <i>Chemical Science</i> , 2022, 13, 11048-11057.	3.7	2
1376	Chemical ordering and temperature effects on the thermal conductivity of Ag ⁺ Au and Ag ⁺ Pd bimetallic bulk and nanocluster systems. <i>New Journal of Chemistry</i> , 2022, 46, 19213-19229.	1.4	5
1377	High-entropy-alloy nanoparticles synthesized by laser metallurgy using a multivariate MOF. <i>Materials Chemistry Frontiers</i> , 2022, 6, 2796-2802.	3.2	8
1378	Fatigue of Flexible and Stretchable Electronic Structures. , 2022, , .		0
1379	Status and prospects of electrocatalysts for lithium-sulfur battery under lean electrolyte and high sulfur loading conditions. <i>Chemical Engineering Journal</i> , 2023, 452, 139344.	6.6	6
1380	Science and engineering for non-noble-metal-based electrocatalysts to boost their ORR performance: A critical review. <i>Coordination Chemistry Reviews</i> , 2023, 474, 214854.	9.5	63
1381	Rapid Screening of Bimetallic Electrocatalysts Using Single Nanoparticle Collision Electrochemistry. <i>Journal of the American Chemical Society</i> , 2022, 144, 16480-16489.	6.6	24
1382	Nanostructured Materials for Hydrogen Storage and Generation and Oxygen Reduction Reaction. <i>ACS Symposium Series</i> , 0, , 131-168.	0.5	1

#	ARTICLE	IF	CITATIONS
1383	Ordered Intermetallic PtCu Catalysts Made from Pt@Cu Core/Shell Structures for Oxygen Reduction Reaction. <i>Inorganic Chemistry</i> , 2022, 61, 15239-15246.	1.9	8
1384	Interstitial Carbon-Doped PdMo Bimetallene for High-Performance Oxygen Reduction Reaction. <i>ACS Energy Letters</i> , 2022, 7, 3329-3336.	8.8	24
1385	Recent Progress in High Entropy Alloys for Electrocatalysts. <i>Electrochemical Energy Reviews</i> , 2022, 5, .	13.1	45
1386	Recent Progress in Developing a LiOH-Based Reversible Nonaqueous Lithium-Air Battery. <i>Advanced Materials</i> , 2023, 35, .	11.1	7
1387	F-doping-Enhanced Carrier Transport in the SnO ₂ /Perovskite Interface for High-Performance Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 42093-42101.	4.0	19
1388	Catalysis of Alloys: Classification, Principles, and Design for a Variety of Materials and Reactions. <i>Chemical Reviews</i> , 2023, 123, 5859-5947.	23.0	63
1389	Mechanistic Diversity of Transfer Hydrogenolysis over Noble Metal Nanocatalysts: Pt- and Ru-Catalyzed Azo-Hydrogenolysis by Various Hydrogen Donors. <i>Journal of Physical Chemistry C</i> , 2022, 126, 17102-17113.	1.5	1
1390	Controlled Synthesis of Carbon-Supported Pt-Based Electrocatalysts for Proton Exchange Membrane Fuel Cells. <i>Electrochemical Energy Reviews</i> , 2022, 5, .	13.1	23
1391	Enhanced Activity of Oxygen Reduction Reaction on Pr ₆ O ₁₁ -Assisted PtPr Alloy Electrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 41861-41869.	4.0	6
1392	Ultrathin Nanotube Structure for Mass-Efficient and Durable Oxygen Reduction Reaction Catalysts in PEM Fuel Cells. <i>Journal of the American Chemical Society</i> , 2022, 144, 19106-19114.	6.6	34
1393	Self-Propelled Nanomotors with an Alloyed Engine for Emergency Rescue of Traumatic Brain Injury. <i>Advanced Materials</i> , 2022, 34, .	11.1	15
1394	A unique nanocomposite with FeCo nanoalloy anchored on S, N co-doped carbonaceous matrix for high bifunctional oxygen reduction reaction/oxygen evolution reaction electrocatalytic property in Zn-air battery. <i>Journal of Colloid and Interface Science</i> , 2023, 630, 170-181.	5.0	7
1395	Synthesis of a Co-N _x type catalyst derived from the pyrolysis of a covalent triazine-based framework for oxygen reduction reaction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 924, 116879.	1.9	1
1396	Regulating the scaling relationship for high catalytic kinetics and selectivity of the oxygen reduction reaction. <i>Nature Communications</i> , 2022, 13, .	5.8	65
1397	Are Fe-N-C Electrocatalysts an Alternative to Pt-Based Electrocatalysts for the Next Generation of Proton Exchange Membrane Fuel Cells?. <i>ACS Catalysis</i> , 2022, 12, 13853-13875.	5.5	24
1398	Intermetallic Nanocrystal Discovery through Modulation of Atom Stacking Hierarchy. <i>ACS Nano</i> , 2022, 16, 20796-20804.	7.3	2
1399	Novel PtNi nanoflowers regulated by a third element (Rh, Ru, Pd) as efficient multifunctional electrocatalysts for ORR, MOR and HER. <i>Chemical Engineering Journal</i> , 2023, 454, 140131.	6.6	14
1400	Synergy of Platinum Single Atoms and Platinum Atomic Clusters on Sulfur-Doped Titanium Nitride Nanotubes for Enhanced Hydrogen Evolution Reaction. <i>Small</i> , 2022, 18, .	5.2	13

#	ARTICLE	IF	CITATIONS
1401	Photo-dynamics in 2D materials: Processes, tunability and device applications. <i>Physics Reports</i> , 2022, 993, 1-70.	10.3	4
1402	Highly dispersed La ³⁺ /N ²⁺ C sites anchored in hierarchically porous nitrogen-doped carbon as bifunctional catalysts for high-performance rechargeable Zn ²⁺ air batteries. <i>Energy Storage Materials</i> , 2023, 54, 313-322.	9.5	21
1403	Ultrafine PdAgAu alloy nanowires for ethanol oxidation electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2022, 10, 24051-24055.	5.2	5
1404	A ternary PdNiMo alloy as a bifunctional nanocatalyst for the oxygen reduction reaction and hydrogen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 6574-6583.	3.0	8
1405	Precise and scalable fabrication of metal pair-site catalysts enabled by intramolecular integrated donor atoms. <i>Journal of Materials Chemistry A</i> , 2022, 10, 25307-25318.	5.2	4
1406	Si Doping Enables Activity and Stability Enhancement on Atomically Dispersed Fe ²⁺ /N ²⁺ /C Electrocatalysts for Oxygen Reduction in Acid. <i>ChemSusChem</i> , 2023, 16, .	3.6	2
1407	An integrated platinum-nanocarbon electrocatalyst for efficient oxygen reduction. <i>Nature Communications</i> , 2022, 13, .	5.8	62
1408	Segregation of Re at the $\sqrt{3}\sqrt{3}\times\sqrt{3}\sqrt{3}$ boundary of Ni-based single crystal superalloys revealed by first-principles calculations based Monte-Carlo simulations. <i>Journal of Materials Science and Technology</i> , 2023, 143, 54-61.	5.6	5
1409	Improving the ORR performance by enhancing the Pt oxidation resistance. <i>Journal of Catalysis</i> , 2022, 416, 311-321.	3.1	13
1410	Pinpointing the axial ligand effect on platinum single-atom-catalyst towards efficient alkaline hydrogen evolution reaction. <i>Nature Communications</i> , 2022, 13, .	5.8	77
1411	Research progress of Pt and Pt-based cathode electrocatalysts for proton-exchange membrane fuel cells. <i>Chinese Physics B</i> , 2022, 31, 128108.	0.7	3
1413	Ordered CoPt oxygen reduction catalyst with high performance and durability. <i>Chem Catalysis</i> , 2022, 2, 3559-3572.	2.9	13
1414	Synthesis of a Hexagonal-Phase Platinum-Lanthanide Alloy as a Durable Fuel-Cell-Cathode Catalyst. <i>Chemistry of Materials</i> , 2022, 34, 10789-10797.	3.2	8
1415	Gas-Phase Synthesis of PtMo Alloy Electrocatalysts with Enhanced Activity and Durability for Oxygen Reduction Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 15319-15327.	3.2	7
1416	Platinum based high entropy alloy oxygen reduction electrocatalysts for proton exchange membrane fuel cells. <i>Materials Today Nano</i> , 2023, 21, 100282.	2.3	12
1417	An Ultrastable Rechargeable Zinc-Air Battery Using a Janus Superwetting Air Electrode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 52849-52856.	4.0	5
1418	High-Loading Co Single Atoms and Clusters Active Sites toward Enhanced Electrocatalysis of Oxygen Reduction Reaction for High-Performance Zn-Air Battery. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	58
1419	Engineering the catalyst layers towards enhanced local oxygen transport of Low-Pt proton exchange membrane fuel cells: Materials, designs, and methods. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 4389-4417.	3.8	12

#	ARTICLE	IF	CITATIONS
1420	Stability challenges of carbon-supported Pt-nanoalloys as fuel cell oxygen reduction reaction electrocatalysts. <i>Chemical Communications</i> , 2022, 58, 13832-13854.	2.2	12
1421	Surfactant-driven shape evolution to sub-3 nm Pt-rich Pt ₃ Ni dodecahedrons as efficient electrocatalyst for oxygen reduction reaction. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2023, 142, 104615.	2.7	3
1422	Effect of molybdenum doping on the catalytic activity of VS ₂ /CNT for the oxygen reduction reaction in alkaline media. <i>New Journal of Chemistry</i> , 2023, 47, 1291-1298.	1.4	3
1423	Mass Production of Dealloyed Pt ₃ Co/C Catalyst for Oxygen Reduction Catalysis in PEMFC. <i>Journal of Materials Chemistry A</i> , 0, , .	5.2	2
1424	Kirkendall effect-driven formation of hollow PtNi alloy nanostructures with enhanced oxygen reduction reaction performance. <i>Journal of Power Sources</i> , 2023, 556, 232483.	4.0	3
1425	Synthesis of dual-metal single atom in porous carbon with efficient oxygen reduction reaction in both acidic and alkaline electrolytes. <i>Journal of Colloid and Interface Science</i> , 2023, 633, 828-835.	5.0	6
1426	Synergistic effect of Pt-Ni dual single-atoms and alloy nanoparticles as a high-efficiency electrocatalyst to minimize Pt utilization at cathode in polymer electrolyte membrane fuel cells. <i>Journal of Colloid and Interface Science</i> , 2023, 634, 930-939.	5.0	8
1427	Pt-Based Oxygen Reduction Reaction Catalysts in Proton Exchange Membrane Fuel Cells: Controllable Preparation and Structural Design of Catalytic Layer. <i>Nanomaterials</i> , 2022, 12, 4173.	1.9	12
1428	High Performing Chemically Ordered Pt ₂ CoNi/Ti@C as an Efficient and Stable Cathode Catalyst for Oxygen Reduction. <i>ACS Applied Energy Materials</i> , 2022, 5, 14922-14933.	2.5	1
1429	Zinc Intercalated Lattice Expansion of Ultrafine Platinum-Nickel Oxygen Reduction Catalyst for PEMFC. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	17
1430	Catalytic Properties of Molybdenum-Modified Platinum Nanoalloys toward Hydrogen Evolution, Oxygen Reduction Reaction, and Methanol Oxidation. <i>ACS Applied Energy Materials</i> , 2022, 5, 15102-15113.	2.5	2
1432	Higher degree of order enables a more stable fuel cell. <i>Chem Catalysis</i> , 2022, 2, 3282-3285.	2.9	0
1433	Bulk-like Pt(100)-oriented Ultrathin Surface: Combining the Merits of Single Crystals and Nanoparticles to Boost Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	1
1434	The emerging coupled low-PGM and PGM-free catalysts for oxygen reduction reaction. <i>Chem Catalysis</i> , 2023, 3, 100484.	2.9	5
1435	Continuous Production of Carbon-Supported and Surfactant-Free Pt-M (M=Fe, Co, Ni, and Cu) Nanocrystals for Catalyzing Oxygen Reduction. <i>Journal of the Electrochemical Society</i> , 2022, 169, 126507.	1.3	1
1436	PtCoNi ternary intermetallic compounds anchored on Co, Ni and N co-doped mesoporous carbon: Synergetic effect between PtCoNi nanoparticles and doped mesoporous carbon promotes the catalytic activity. <i>Journal of Energy Chemistry</i> , 2023, 78, 340-349.	7.1	7
1437	Bulk-like Pt(100)-oriented Ultrathin Surface: Combining the Merits of Single Crystals and Nanoparticles to Boost Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	10
1438	Enhanced Multifunctional Electrocatalytic Activity of Pt-Co Nanoalloy-Decorated Graphene Oxide Sheets through Strong Metal-Support Interaction. <i>Energy & Fuels</i> , 2022, 36, 15055-15065.	2.5	1

#	ARTICLE	IF	CITATIONS
1439	Research Advances in Amorphousâ€Crystalline Heterostructures Toward Efficient Electrochemical Applications. <i>Small</i> , 2023, 19, .	5.2	25
1440	Synthesis of amorphous Pd-based nanocatalysts for efficient alcoholysis of styrene oxide and electrochemical hydrogen evolution. <i>Nano Research</i> , 2023, 16, 4650-4655.	5.8	10
1441	Skeletal Nanostructures Promoting Electrocatalytic Reactions with Three-Dimensional Frameworks. <i>ACS Catalysis</i> , 2023, 13, 355-374.	5.5	10
1442	Elucidation of Electrochemically Induced but Chemically Driven Pt Dissolution. <i>Jacs Au</i> , 2023, 3, 105-112.	3.6	7
1443	Role of Fluxionality and Metastable Isomers in the ORR Activity: A Case Study. <i>Journal of Physical Chemistry C</i> , 2023, 127, 217-228.	1.5	3
1444	Role of MoO _x Surficial Modification in Enhancing the OER Performance of Ruâ€Pyrochlore. <i>Small</i> , 2023, 19, .	5.2	13
1445	Performance improvement strategies of a cobalt-based electrode for the electrooxidation of sodium borohydride. <i>Sustainable Energy and Fuels</i> , 2023, 7, 682-692.	2.5	3
1446	Ternary PtCoMo Alloy with Dual Surface Co and Mo Defects for Synergistically Enhanced Acidic Oxygen Reduction. <i>ChemElectroChem</i> , 2023, 10, .	1.7	1
1447	Towards ultralow platinum loading proton exchange membrane fuel cells. <i>Energy and Environmental Science</i> , 2023, 16, 1466-1479.	15.6	43
1448	Carbonâ€Based Electrocatalysts for Acidic Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	54
1449	Parameters Affecting the Fuel Cell Reactions on Platinum Bimetallic Nanostructures. <i>Electrochemical Energy Reviews</i> , 2023, 6, .	13.1	9
1450	A Decade of Electrocatalysis with Metal Aerogels: A Perspective. <i>Catalysts</i> , 2023, 13, 167.	1.6	4
1451	Carbonâ€Based Electrocatalysts for Acidic Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	5
1452	Platinum-Cobalt Nanowires for Efficient Alcohol Oxidation Electrocatalysis. <i>Materials</i> , 2023, 16, 840.	1.3	2
1453	Lowâ€Coordination Trimetallic PtFeCo Nanosaws for Practical Fuel Cells. <i>Advanced Materials</i> , 2023, 35, .	11.1	18
1454	Nitrogen doping to accelerate the phase transition to ordered intermetallic Pt ₃ Co catalyst for the oxygen reduction reaction in fuel cells. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4078-4087.	5.2	8
1455	Model Metallic Glasses for Superior Electrocatalytic Performance in a Hydrogen Oxidation Reaction. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 6697-6707.	4.0	0
1456	Coreâ€passivation: A concept for stable coreâ€shell nanoparticles in aqueous electrocatalysis. <i>Nano Select</i> , 0, , .	1.9	0

#	ARTICLE	IF	CITATIONS
1457	Sb ₂ S ₃ -templated synthesis of sulfur-doped Sb-N-C with hierarchical architecture and high metal loading for H ₂ O ₂ electrosynthesis. <i>Nature Communications</i> , 2023, 14, .	5.8	42
1458	Ion-Assisted Preparation of Bimetallic Porous Nanodendrites for Active and Stable Water Electrolysis. <i>Small</i> , 0, , 2207332.	5.2	0
1459	Improving Oxygen Reduction Performance of Surface-Layer-Controlled Pt-Ni Nano-Octahedra via Gaseous Etching. <i>Nano Letters</i> , 2023, 23, 3476-3483.	4.5	6
1460	Immobilization of a Molecular Copper Complex and a Carboxylate-Terminated Cocatalyst on a Metal Oxide Electrode for Enhanced Electrocatalytic Oxygen Reduction. <i>ACS Catalysis</i> , 2023, 13, 5599-5608.	5.5	4
1461	Density functional theory studies of Pt ₂ Ga and Pd ₂ Ga monolayers as multifunctional electrocatalytic materials. <i>Computational Materials Science</i> , 2023, 224, 112164.	1.4	0
1462	Recent experimental and theoretical advances in the design and science of high-entropy alloy nanoparticles. <i>Nano Energy</i> , 2023, 110, 108362.	8.2	24
1463	Epitaxial growth of Pt-Pd bimetallic heterostructures for the oxygen reduction reaction. , 2023, 2, 100131.		11
1464	Engineered interfaces for heterostructured intermetallic nanomaterials. , 0, , .		4
1465	Ordered Mesoporous Intermetallic Ga-Pt Nanoparticles: Phase-Controlled Synthesis and Performance in Oxygen Reduction Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	22
1466	Ordered Mesoporous Intermetallic Ga-Pt Nanoparticles: Phase-Controlled Synthesis and Performance in Oxygen Reduction Electrocatalysis. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
1467	Atomic Pd dispersion in triangular Cu nanosheets with dominant (111) plane as a tandem catalyst for highly efficient and selective electrodehalogenation. <i>Applied Catalysis B: Environmental</i> , 2023, 328, 122480.	10.8	10
1468	Electrocatalyst Fabrication Using Metal Nanoparticles Prepared in Ionic Liquids. <i>Chemical Record</i> , 2023, 23, .	2.9	1
1469	Modeling Anion Poisoning during Oxygen Reduction on Pt Near-Surface Alloys. <i>ACS Catalysis</i> , 2023, 13, 2735-2743.	5.5	5
1470	Inducing Fe 3d Electron Delocalization and Spin-State Transition of Fe ₄ Species Boosts Oxygen Reduction Reaction for Wearable Zinc-Air Battery. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	9
1471	Recent advancements in high performance polymer electrolyte fuel cell electrode fabrication – Novel materials and manufacturing processes. <i>Journal of Power Sources</i> , 2023, 562, 232734.	4.0	12
1472	Self-Assembly of Pt ₃ Co Superlattice as a Catalyst for Oxygen Reduction Reaction. <i>Catalysts</i> , 2023, 13, 406.	1.6	1
1473	Recent Development of Fuel Cell Core Components and Key Materials: A Review. <i>Energies</i> , 2023, 16, 2099.	1.6	3
1474	First principles calculation study of single transition metal atom grafted Au ₂₅ as efficient electrocatalysts for OER and ORR. <i>Molecular Catalysis</i> , 2023, 540, 113030.	1.0	0

#	ARTICLE	IF	CITATIONS
1475	Iridium oxide nanoribbons with metastable monoclinic phase for highly efficient electrocatalytic oxygen evolution. <i>Nature Communications</i> , 2023, 14, .	5.8	31
1476	Growth of polyoxomolybdate with a porous pyramidal structure on carbon xerogel nanodiamond as an efficient electro-catalyst for oxygen reduction reaction. <i>RSC Advances</i> , 2023, 13, 8090-8100.	1.7	1
1477	Ordered PtCoFe Ternary Alloy Electrocatalyst Derived from Pre-Synthesized CoFe Hydroxide for Oxygen Reduction Reaction. <i>Energy & Fuels</i> , 2023, 37, 5478-5488.	2.5	1
1478	Rational design of septenary high-entropy alloy for direct ethanol fuel cells. <i>Joule</i> , 2023, 7, 587-602.	11.7	23
1479	In Situ Structure of a Mo-Doped Ptâ€“Ni Catalyst during Electrochemical Oxygen Reduction Resolved from Machine Learning-Based Grand Canonical Global Optimization. <i>Jacs Au</i> , 2023, 3, 1162-1175.	3.6	7
1480	Strengthening oxygen reduction activity based on the cooperation of pyridinic-N and graphitic-N for atomically dispersed Fe sites. <i>Journal of Materials Chemistry A</i> , 2023, 11, 9493-9503.	5.2	5
1481	Design principles for the synthesis of platinumâ€“cobalt intermetallic nanoparticles for electrocatalytic applications. <i>Chemical Communications</i> , 2023, 59, 4852-4871.	2.2	2
1482	Oxygen Evolution/Reduction Reaction Catalysts: From <i>In Situ</i> Monitoring and Reaction Mechanisms to Rational Design. <i>Chemical Reviews</i> , 2023, 123, 6257-6358.	23.0	81
1483	Highly Stable Pt-Based Oxygen Reduction Electrocatalysts toward Practical Fuel Cells: Progress and Perspectives. <i>Materials</i> , 2023, 16, 2590.	1.3	4
1484	Scalable and Controllable Synthesis of Ptâ€“Ni Bunchedâ€“Nanocages Aerogels as Efficient Electrocatalysts for Oxygen Reduction Reaction. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	19
1485	Catalytic Activity Maps for Alloy Nanoparticles. <i>Journal of the American Chemical Society</i> , 2023, 145, 7352-7360.	6.6	10
1486	Unique (100) Surface Configuration Enables Promising Oxygen Reduction Performance for Pt ₃ Co Nanodendrite Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 18217-18228.	4.0	3
1487	Dual Nanozyme-Driven PtSn Bimetallic Nanoclusters for Metal-Enhanced Tumor Photothermal and Catalytic Therapy. <i>ACS Nano</i> , 2023, 17, 6833-6848.	7.3	37
1488	Shape-Controlled Synthesis of Platinum-Based Nanocrystals and Their Electrocatalytic Applications in Fuel Cells. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	19
1489	Interfacial Electron Distribution of Co Nanoparticles Supported on Nâ€“Doped Mesoporous Hollow Carbon Spheres Endows Highly Efficient ORR, OER, and HER. <i>Advanced Materials Interfaces</i> , 2023, 10, .	1.9	3
1490	Synergetic N-doped carbon with MoPd alloy for robust oxygen reduction reaction. <i>Nano Research</i> , 2023, 16, 8996-9002.	5.8	0
1491	Ultrathin ternary PtNiGa nanowires for enhanced oxygen reduction reaction. <i>Chinese Chemical Letters</i> , 2024, 35, 108445.	4.8	2
1492	Revisit to Grain Boundary Effect in Pt Nanocrystals toward the Oxygen Electroreduction Reaction. <i>ChemCatChem</i> , 2023, 15, .	1.8	2

#	ARTICLE	IF	CITATIONS
1505	Mass transport in the cathode. , 2023, , 367-391.		0
1506	Low platinum-based electrocatalysts for fuel cells: status and prospects. , 2023, , 127-175.		0
1516	Reasonably constructed nano-alloyed materials as highly efficient electrocatalysts for the hydrogen evolution reaction. Catalysis Science and Technology, 2023, 13, 4590-4614.	2.1	1
1520	Self-Optimized Ligand Effect of Single-Atom Modifier in Ternary Pt-Based Alloy for Efficient Hydrogen Oxidation. Nano Letters, 2023, 23, 3826-3834.	4.5	11
1527	Recent advances and strategies of electrocatalysts for large current density industrial hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2023, 10, 4632-4649.	3.0	5
1556	The reformation of catalyst: From a trial-and-error synthesis to rational design. Nano Research, 0, , .	5.8	16
1564	New Frontiers for Heterostructured Nanocomposites with Interfacial Functionalities Synthesized via Laser Ablation Synthesis in Solution (LASiS). Challenges and Advances in Computational Chemistry and Physics, 2024, , 157-199.	0.6	0
1580	Oxygen reduction electrocatalysis: From conventional to single-atomic platinum-based catalysts for proton exchange membrane fuel cells. Frontiers in Energy, 0, , .	1.2	1
1586	The role of high-resolution transmission electron microscopy and aberration corrected scanning transmission electron microscopy in unraveling the structureâ€“property relationships of Pt-based fuel cells electrocatalysts. Inorganic Chemistry Frontiers, 0, , .	3.0	1
1608	Single-atom catalysts for electrocatalytic oxygen reduction. , 2024, , 91-118.		0