

Stable High-Index Faceted Pt Skin on Zigzag-Like Pt Catalysis

Advanced Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	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.	3.3	14
2	Exploration of nanowire- and nanotube-based electrocatalysts for oxygen reduction and oxygen evolution reaction. <i>Materials Today Nano</i> , 2018, 3, 54-68.	4.6	32
3	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.	7.1	23
4	L1₂ Atomic Ordered Substrate Enhanced Pt-Skin Cu₃Pt Catalyst for Efficient Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38015-38023.	8.0	28
5	Engineering porosity into trimetallic PtPdNi nanospheres for enhanced electrocatalytic oxygen reduction activity. <i>Green Energy and Environment</i> , 2018, 3, 352-359.	8.7	14
6	N,S-Atom-coordinated Co₉S₈ ternary dopants within a porous graphene framework as efficient catalysts for oxygen reduction/evolution reactions. <i>Dalton Transactions</i> , 2018, 47, 14992-15001.	3.3	37
7	3D PtFe Clusters with Cube-in-Cube Structure Enhance Oxygen Reduction Catalysis and Electrochemical Sensing. <i>Small Methods</i> , 2018, 2, 1800073.	8.6	34
8	Ultrathin PtPd-Based Nanorings with Abundant Step Atoms Enhance Oxygen Catalysis. <i>Advanced Materials</i> , 2018, 30, e1802136.	21.0	107
9	Aqueous Synthesis of Ultrathin Platinum/Non-Noble Metal Alloy Nanowires for Enhanced Hydrogen Evolution Activity. <i>Angewandte Chemie</i> , 2018, 130, 11852-11856.	2.0	42
10	Aqueous Synthesis of Ultrathin Platinum/Non-Noble Metal Alloy Nanowires for Enhanced Hydrogen Evolution Activity. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11678-11682.	13.8	133
11	1D alloy ultrafine Pt-Fe nanowires as efficient electrocatalysts for alcohol electrooxidation in alkaline media. <i>Nanoscale</i> , 2018, 10, 16468-16473.	5.6	24
12	A facile and general approach for the direct fabrication of N-rGO-metal(metal oxides)-Pt composites as electrocatalyst for oxygen reduction reactions. <i>RSC Advances</i> , 2018, 8, 27246-27252.	3.6	9
13	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.	5.6	110
14	Locally-ordered PtNiPb ternary nano-pompons as efficient bifunctional oxygen reduction and methanol oxidation catalysts. <i>Nanoscale</i> , 2019, 11, 16945-16953.	5.6	18
15	Tailor-Made Pt Catalysts with Improved Oxygen Reduction Reaction Stability/Durability. <i>ACS Catalysis</i> , 2019, 9, 8622-8645.	11.2	82
16	UV detector based on an FTO/TiO₂/MoO₃ heterojunction with a potential well trapping electrons in the dark. <i>Nanotechnology</i> , 2019, 30, 465501.	2.6	15
17	Achievements, challenges and perspectives on cathode catalysts in proton exchange membrane fuel cells for transportation. <i>Nature Catalysis</i> , 2019, 2, 578-589.	34.4	760
18	PtNi colloidal nanoparticle clusters: Tuning electronic structure and boundary density of nanocrystal subunits for enhanced electrocatalytic properties. <i>Journal of Catalysis</i> , 2019, 376, 87-100.	6.2	18

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19	Challenges and recent advancements of functionalization of two-dimensional nanostructured molybdenum trioxide and dichalcogenides. <i>Nanoscale</i> , 2019, 11, 15709-15738.	5.6	27
20	Novel networked wicker-like PtFe nanowires with branch-rich exteriors for efficient electrocatalysis. <i>Nanoscale</i> , 2019, 11, 15561-15566.	5.6	32
21	Intermetallic Nanoparticles: Synthetic Control and Their Enhanced Electrocatalysis. <i>Accounts of Chemical Research</i> , 2019, 52, 2015-2025.	15.6	200
22	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.	3.8	56
23	Programmable Exposure of Pt Active Facets for Efficient Oxygen Reduction. <i>Angewandte Chemie</i> , 2019, 131, 15995-16001.	2.0	14
24	Defect-density control of platinum-based nanoframes with high-index facets for enhanced electrochemical properties. <i>Nano Research</i> , 2019, 12, 2881-2888.	10.4	25
25	In situ formation of porous trimetallic PtRhFe nanospheres decorated on ultrathin MXene nanosheets as highly efficient catalysts for ethanol oxidation. <i>Nano Energy</i> , 2019, 66, 104196.	16.0	39
26	Perforated Pd Nanosheets with Crystalline/Amorphous Heterostructures as a Highly Active Robust Catalyst toward Formic Acid Oxidation. <i>Small</i> , 2019, 15, e1904245.	10.0	81
27	Engineering bunched Pt-Ni alloy nanocages for efficient oxygen reduction in practical fuel cells. <i>Science</i> , 2019, 366, 850-856.	12.6	1,005
28	Direct Hybridization of Noble Metal Nanostructures on 2D Metal-Organic Framework Nanosheets To Catalyze Hydrogen Evolution. <i>Nano Letters</i> , 2019, 19, 8447-8453.	9.1	160
29	Programmable Exposure of Pt Active Facets for Efficient Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15848-15854.	13.8	81
30	Unconventional π - σ Hybridization Interaction in PtGa Ultrathin Nanowires Boosts Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 18083-18090.	13.7	216
31	Modulating the surface segregation of PdCuRu nanocrystals for enhanced all-pH hydrogen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20151-20157.	10.3	36
32	Ultrathin one-dimensional platinum-cobalt nanowires as efficient catalysts for the glycerol oxidation reaction. <i>Journal of Colloid and Interface Science</i> , 2019, 556, 441-448.	9.4	16
33	DFT calculations: A powerful tool for better understanding of electrocatalytic oxygen reduction reactions on Pt-based metallic catalysts. <i>Computational Materials Science</i> , 2019, 170, 109202.	3.0	59
34	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.	5.6	7
35	Concave Cubic Pt-Sm Alloy Nanocrystals with High-Index Facets and Enhanced Electrocatalytic Ethanol Oxidation. <i>ACS Applied Energy Materials</i> , 2019, 2, 7204-7210.	5.1	19
36	Trifunctional Fishbone-like PtCo/Ir Enables High-Performance Zinc-Air Batteries to Drive the Water-Splitting Catalysis. <i>Chemistry of Materials</i> , 2019, 31, 8136-8144.	6.7	55

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37	Rational synthesis of Pt-based dandelion-like yolk-shell nanoparticles with enhanced oxygen reduction properties. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3329-3334.	4.9	1
38	Wavy PtCu alloy nanowire networks with abundant surface defects enhanced oxygen reduction reaction. <i>Nano Research</i> , 2019, 12, 2766-2773.	10.4	48
39	Direct Growth of Highly Strained Pt Islands on Branched Ni Nanoparticles for Improved Hydrogen Evolution Reaction Activity. <i>Journal of the American Chemical Society</i> , 2019, 141, 16202-16207.	13.7	113
40	One-nanometer-thick platinum-based nanowires with controllable surface structures. <i>Nano Research</i> , 2019, 12, 1721-1726.	10.4	18
41	Strain engineering of metal-based nanomaterials for energy electrocatalysis. <i>Chemical Society Reviews</i> , 2019, 48, 3265-3278.	38.1	401
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44	Boosting Electrocatalytic Activities of Pt-Based Mesoporous Nanoparticles for Overall Water Splitting by a Facile Ni, P Co-Incorporation Strategy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9709-9716.	6.7	35
45	Framework-Porphyrin-Derived Single-Atom Bifunctional Oxygen Electrocatalysts and their Applications in Zn-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1900592.	21.0	256
46	Highly Dispersed and Crystalline Ta ₂ O ₅ Anchored Pt Electrocatalyst with Improved Activity and Durability Toward Oxygen Reduction: Promotion by Atomic-Scale Pt-Ta ₂ O ₅ Interactions. <i>ACS Catalysis</i> , 2019, 9, 3278-3288.	11.2	63
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54	Highly active zigzag-like Pt-Zn alloy nanowires with high-index facets for alcohol electrooxidation. <i>Nano Research</i> , 2019, 12, 1173-1179.	10.4	65

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56	Platinum Group Nanowires for Efficient Electrocatalysis. <i>Small Methods</i> , 2019, 3, 1800545.	8.6	53
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74	2D and 3D Characterization of PtNi Nanowire Electrode Composition and Structure. <i>ACS Applied Nano Materials</i> , 2019, 2, 525-534.	5.0	10
75	Rh-doped PdAg nanoparticles as efficient methanol tolerance electrocatalytic materials for oxygen reduction. <i>Science Bulletin</i> , 2019, 64, 54-62.	9.0	33
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77	Interface modulation of twinned PtFe nanoplates branched 3D architecture for oxygen reduction catalysis. <i>Science Bulletin</i> , 2020, 65, 97-104.	9.0	42
78	Platinum-group-metal catalysts for proton exchange membrane fuel cells: From catalyst design to electrode structure optimization. <i>EnergyChem</i> , 2020, 2, 100023.	19.1	138
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80	Trimetallic platinum-nickel-palladium nanorods with abundant bumps as robust catalysts for methanol electrooxidation. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 512-518.	9.4	25
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82	Direct <i>In Situ</i> Raman Spectroscopic Evidence of Oxygen Reduction Reaction Intermediates at High-Index Pt(<i>hkl</i>) Surfaces. <i>Journal of the American Chemical Society</i> , 2020, 142, 715-719.	13.7	154
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119	Strategies for design of electrocatalysts for hydrogen evolution under alkaline conditions. <i>Materials Today</i> , 2020, 36, 125-138.	14.2	308
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299	Optimization and regulation of catalytic activity and stability: Ptâ€“Ni diamond-shaped pearl nanochains with core-shell structure as high-efficient oxygen reduction reaction catalysts. <i>Materials Chemistry and Physics</i> , 2024, 316, 129127.	4.0	0
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301	Strain engineering of Pt-based electrocatalysts for oxygen reaction reduction. <i>Frontiers in Energy</i> , 2024, 18, 241-262.	2.3	0
302	Self-Assembly Intermetallic PtCu₃ Core with High-Index Faceted Pt Shell for High-Efficiency Oxygen Reduction. <i>Nano Letters</i> , 2024, 24, 3213-3220.	9.1	0
303	Intermetallic Pdâ€“Y nanoparticles/N-doped carbon nanotubes as multi-active catalysts for oxygen reduction reaction, ethanol oxidation reaction, and zincâ€“air batteries. <i>Nanoscale</i> , 2024, 16, 7532-7546.	5.6	0
304	Progress of Pt and iron-group transition metal alloy catalysts with high ORR activity for PEMFCs. <i>Journal of Electroanalytical Chemistry</i> , 2024, 959, 118165.	3.8	0
305	Self-Sustainable Lattice Strains of Morphology-Tuned Nanowires in Electrocatalysis. <i>ACS Catalysis</i> , 2024, 14, 4709-4718.	11.2	0