Zhi-You Zhou

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

213 papers	17,791 citations	57 h-index	131 g-index
229 ext. papers	19,936 ext. citations	9.9 avg, IF	6.66 L-index

#	Paper	IF	Citations
213	N, P Dual-Doped Porous Carbon Nanosheets for High-Efficiency CO2 Electroreduction. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1880-1887	8.3	3
212	Impact of Pore Structure on Two-Electron Oxygen Reduction Reaction in Nitrogen-Doped Carbon Materials: Rotating Ring-Disk Electrode vs. Flow Cell.. *ChemSusChem*, **2022**, e202102587	8.3	1
211	Electrochemical synthesis of Tetrahexahedral Cu nanocrystals with high-index facets for efficient nitrate electroreduction. *Journal of Electroanalytical Chemistry*, **2022**, 907, 116022	4.1	1
210	P-d orbital hybridization induced by monodispersed Ga site on Pt3Mn nanocatalyst boosts ethanol electrooxidation.. *Angewandte Chemie - International Edition*, **2022**,	16.4	15
209	Revealing the concentration of hydrogen peroxide in fuel cell catalyst layers by an in-operando approach. *Chinese Journal of Catalysis*, **2022**, 43, 1918-1926	11.3	1
208	Grain boundary enriched CuO nanobundle for efficient non-invasive glucose sensors/fuel cells. *Journal of Colloid and Interface Science*, **2021**, 609, 139-148	9.3	0
207	Effect of Acid Treatment on Electrocatalytic Performance of PtNi Catalyst. *Chemical Research in Chinese Universities*, **2021**, 37, 686-695	2.2	0
206	A general strategy for synthesizing hierarchical architectures assembled by dendritic Pt-based nanoalloys for electrochemical hydrogen evolution. *International Journal of Hydrogen Energy*, **2021**, 46, 11573-11586	6.7	5
205	Recent Advances in Electrocatalysts for Proton Exchange Membrane Fuel Cells and Alkaline Membrane Fuel Cells. *Advanced Materials*, **2021**, e2006292	24	71
204	Interface-Rich Three-Dimensional Au-Doped PtBi Intermetallics as Highly Effective Anode Catalysts for Application in Alkaline Ethylene Glycol Fuel Cells. *Advanced Functional Materials*, **2021**, 31, 2103671	15.6	11
203	Improved Stability of Octahedral PtCu by Rh Doping for the Oxygen Reduction Reaction. *ChemElectroChem*, **2021**, 8, 2425-2430	4.3	1
202	An oxygen-blocking oriented multifunctional solid□electrolyte interphase as a protective layer for a lithium metal anode in lithium□oxygen batteries. *Energy and Environmental Science*, **2021**, 14, 1439-1448	35.4	13
201	Structurally Disordered Phosphorus-Doped Pt as a Highly Active Electrocatalyst for an Oxygen Reduction Reaction. *ACS Catalysis*, **2021**, 11, 355-363	13.1	25
200	A General Carboxylate-Assisted Approach to Boost the ORR Performance of ZIF-Derived Fe/N/C Catalysts for Proton Exchange Membrane Fuel Cells. *Advanced Functional Materials*, **2021**, 31, 2009645	15.6	36
199	Ultrathin PdAuBiTe Nanosheets as High-Performance Oxygen Reduction Catalysts for a Direct Methanol Fuel Cell Device. *Advanced Materials*, **2021**, 33, e2103383	24	13
198	Generation Pathway of Hydroxyl Radical in Fe/N/C-Based Oxygen Reduction Electrocatalysts under Acidic Media. *Journal of Physical Chemistry Letters*, **2021**, 12, 7797-7803	6.4	5
197	Double boosting single atom Fe□N4 sites for high efficiency O2 and CO2 electroreduction. *Carbon*, **2021**, 182, 109-116	10.4	9

196	Surface structure effects of electrocatalytic conversion of ethane on Pt single crystal electrodes. *Journal of Electroanalytical Chemistry*, **2021**, 896, 115252	4.1	0
195	A Mild CO Etching Method To Tailor the Pore Structure of Platinum-Free Oxygen Reduction Catalysts in Proton Exchange Membrane Fuel Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 45661-45669	9.5	7
194	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	11.3	3
193	Tetrahexahedral PdRh nanocrystals with tunable composition as a highly efficient electrocatalyst for ethylene glycol oxidation. *Journal of Materials Chemistry A*, **2021**, 9, 11049-11055	13	6
192	Highly efficient ethylene production via electrocatalytic hydrogenation of acetylene under mild conditions. *Nature Communications*, **2021**, 12, 7072	17.4	7
191	High-Index-Facet- and High-Surface-Energy Nanocrystals of Metals and Metal Oxides as Highly Efficient Catalysts. *Joule*, **2020**, 4, 2562-2598	27.8	43
190	Realizing a CO-free pathway and enhanced durability in highly dispersed Cu-doped PtBi nanoalloys towards methanol full electrooxidation. *Journal of Materials Chemistry A*, **2020**, 8, 11564-11572	13	29
189	Hierarchically Porous Carbons Derived from Nonporous Coordination Polymers. *ACS Applied Materials & Interfaces*, **2020**, 12, 25211-25220	9.5	12
188	Porous Carbon Membrane-Supported Atomically Dispersed Pyrrole-Type Fe?N as Active Sites for Electrochemical Hydrazine Oxidation Reaction. *Small*, **2020**, 16, e2002203	11	19
187	Ultrasmall Pd-Cu-Pt Trimetallic Twin Icosahedrons Boost the Electrocatalytic Performance of Glycerol Oxidation at the Operating Temperature of Fuel Cells. *Advanced Functional Materials*, **2020**, 30, 1908235	15.6	50
186	Graphene-covered FePc as a model of the encapsulated type of catalyst for the oxygen reduction reaction. *Electrochemistry Communications*, **2020**, 112, 106670	5.1	5
185	First-principles microkinetics simulations of electrochemical reduction of CO2 over Cu catalysts. *Electrochimica Acta*, **2020**, 335, 135665	6.7	14
184	KOH-doped polybenzimidazole membrane for direct hydrazine fuel cell. *Journal of Colloid and Interface Science*, **2020**, 563, 27-32	9.3	15
183	Hollow PtCu octahedral nanoalloys: Efficient bifunctional electrocatalysts towards oxygen reduction reaction and methanol oxidation reaction by regulating near-surface composition. *Journal of Colloid and Interface Science*, **2020**, 562, 244-251	9.3	33
182	Intermetallic PtBi Nanoplates with High Catalytic Activity towards Electro-oxidation of Formic Acid and Glycerol. *ChemElectroChem*, **2020**, 7, 239-245	4.3	20
181	Fluorescence detection of hydroxyl radical generated from oxygen reduction on Fe/N/C catalyst. *Science China Chemistry*, **2020**, 63, 198-202	7.9	14
180	ZIF-derived Co□□ ORR catalyst with high performance in proton exchange membrane fuel cells. *Progress in Natural Science: Materials International*, **2020**, 30, 855-860	3.6	12
179	Insight into the overpotentials of electrocatalytic hydrogen evolution on black phosphorus decorated with metal clusters. *Electrochimica Acta*, **2020**, 358, 136902	6.7	1

178	Hydrazine Oxidation Reaction: Porous Carbon Membrane-Supported Atomically Dispersed Pyrrole-Type Fe?N4 as Active Sites for Electrochemical Hydrazine Oxidation Reaction (Small 31/2020). *Small*, **2020**, 16, 2070171	11	2
177	Atomically deviated Pd-Te nanoplates boost methanol-tolerant fuel cells. *Science Advances*, **2020**, 6, eaba2731	14.3	27
176	Highly Reversible O2 Conversions by Coupling LiO2 Intermediate through a Dual-Site Catalyst in Li-O2 Batteries. *Advanced Energy Materials*, **2020**, 10, 2001592	21.8	12
175	A Lattice-Oxygen-Involved Reaction Pathway to Boost Urea Oxidation. *Angewandte Chemie - International Edition*, **2019**, 58, 16820-16825	16.4	85
174	High Catalytic Activity of Pt(100) for CH4 Electrochemical Conversion. *ACS Catalysis*, **2019**, 9, 10159-10165	13.1	8
173	The construction of integrated Si-based micro proton exchange membrane fuel cells with improved performances. *Nano Energy*, **2019**, 61, 604-610	17.1	6
172	A functionalized membrane for lithium–oxygen batteries to suppress the shuttle effect of redox mediators. *Journal of Materials Chemistry A*, **2019**, 7, 14260-14270	13	24
171	Synergy between Plasmonic and Electrocatalytic Activation of Methanol Oxidation on Palladium-Silver Alloy Nanotubes. *Angewandte Chemie - International Edition*, **2019**, 58, 8794-8798	16.4	66
170	Pd Nanocrystals with Continuously Tunable High-Index Facets as a Model Nanocatalyst. *ACS Catalysis*, **2019**, 9, 3144-3152	13.1	41
169	Polyhedron-Assembled Ternary PtCuCo Nanochains: Integrated Functions Enhance the Electrocatalytic Performance of Methanol Oxidation at Elevated Temperature. *ACS Applied Materials & Interfaces*, **2019**, 11, 32282-32290	9.5	26
168	Trimetallic palladium-copper-cobalt alloy wavy nanowires improve ethanol electrooxidation in alkaline medium. *Nanoscale*, **2019**, 11, 19448-19454	7.7	21
167	Excavated cubic platinum-iridium alloy nanocrystals with high-index facets as highly efficient electrocatalysts in N fixation to NH. *Chemical Communications*, **2019**, 55, 9335-9338	5.8	28
166	Theory on optimizing the activity of electrocatalytic proton coupled electron transfer reactions. *Journal of Catalysis*, **2019**, 376, 17-24	7.3	9
165	Hierarchically porous carbons as supports for fuel cell electrocatalysts with atomically dispersed Fe-N moieties. *Chemical Science*, **2019**, 10, 8236-8240	9.4	23
164	Surface composition-tunable octahedral PtCu nanoalloys advance the electrocatalytic performance on methanol and ethanol oxidation. *Science China Materials*, **2019**, 62, 1877-1887	7.1	22
163	Superior Selectivity and Tolerance towards Metal-Ion Impurities of a Fe/N/C Catalyst for CO Reduction. *ChemSusChem*, **2019**, 12, 3988-3995	8.3	12
162	A Lattice-Oxygen-Involved Reaction Pathway to Boost Urea Oxidation. *Angewandte Chemie*, **2019**, 131, 16976-16981	3.6	15
161	Advances in Active Site Structure of Carbon-Based Non-Precious Metal Catalysts for Oxygen Reduction Reaction. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2019**, 35, 472-485	3.8	23

160	Electrochemical CO reduction on Cu and Au electrodes studied using in situ sum frequency generation spectroscopy. *Physical Chemistry Chemical Physics*, **2019**, 21, 25047-25053	3.6	15
159	Excavated RhNi alloy nanobranches enable superior CO-tolerance and CO2 selectivity at low potentials toward ethanol electro-oxidation. *Journal of Materials Chemistry A*, **2019**, 7, 26266-26271	13	9
158	Versatile, Robust, and Facile Approach for in Situ Monitoring Electrocatalytic Processes through Liquid Electrochemical NMR Spectroscopy. *Analytical Chemistry*, **2019**, 91, 1686-1691	7.8	14
157	Promoting Ethylene Selectivity from CO Electroreduction on CuO Supported onto CO Capture Materials. *ChemSusChem*, **2018**, 11, 881-887	8.3	36
156	Fluorescence enhancement mediated by high-index-faceted Pt nanocrystals: roles of crystal structures. *Chemical Communications*, **2018**, 54, 2016-2019	5.8	2
155	Ammonia electrooxidation on dendritic Pt nanostructures in alkaline solutions investigated by in-situ FTIR spectroscopy and online electrochemical mass spectroscopy. *Journal of Electroanalytical Chemistry*, **2018**, 819, 495-501	4.1	19
154	Liquid-inlet online electrochemical mass spectrometry for the in operando monitoring of direct ethanol fuel cells. *Electrochemistry Communications*, **2018**, 87, 91-95	5.1	5
153	Effects of atom arrangement and thickness of Pt atomic layers on Pd nanocrystals for electrocatalysis. *Electrochimica Acta*, **2018**, 271, 519-525	6.7	6
152	Three-Dimensional Networks of S-Doped Fe/N/C with Hierarchical Porosity for Efficient Oxygen Reduction in Polymer Electrolyte Membrane Fuel Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 14602-14613	9.5	40
151	Tuning Electrochemical Properties of Li-Rich Layered Oxide Cathodes by Adjusting Co/Ni Ratios and Mechanism Investigation Using in situ X-ray Diffraction and Online Continuous Flow Differential Electrochemical Mass Spectrometry. *ACS Applied Materials & Interfaces*, **2018**, 10, 12666-12677	9.5	42
150	Rational Design and Synthesis of Low-Temperature Fuel Cell Electrocatalysts. *Electrochemical Energy Reviews*, **2018**, 1, 54-83	29.3	72
149	Identifying the Active Site of N-Doped Graphene for Oxygen Reduction by Selective Chemical Modification. *ACS Energy Letters*, **2018**, 3, 986-991	20.1	68
148	Surface Fluorination to Boost the Stability of the Fe/N/C Cathode in Proton Exchange Membrane Fuel Cells. *ChemElectroChem*, **2018**, 5, 1914-1921	4.3	41
147	Constructing canopy-shaped molecular architectures to create local Pt surface sites with high tolerance to H2S and CO for hydrogen electrooxidation. *Energy and Environmental Science*, **2018**, 11, 166-171	35.4	20
146	Optimum Cu nanoparticle catalysts for CO2 hydrogenation towards methanol. *Nano Energy*, **2018**, 43, 200-209	17.1	91
145	High selectivity PtRh/RGO catalysts for ethanol electro-oxidation at low potentials: Enhancing the efficiency of CO2 from alcoholic groups. *Electrochimica Acta*, **2018**, 292, 208-216	6.7	29
144	Controlling Reversible Expansion of Li2O2 Formation and Decomposition by Modifying Electrolyte in Li-O2 Batteries. *CheM*, **2018**, 4, 2685-2698	16.2	31
143	Comparative Study of the Oxygen Reduction Reaction on Pyrolyzed FePc in Acidic and Alkaline Media. *ChemElectroChem*, **2018**, 5, 3946-3952	4.3	14

142	Comparative investigation of CO2 and oxygen reduction on Fe/N/C catalysts. *Electrochemistry Communications*, **2018**, 97, 82-86	5.1	11
141	Nickel Complexes with Non-innocent Ligands as Highly Active Electrocatalysts for Hydrogen Evolution. *Chinese Journal of Chemistry*, **2018**, 36, 1161-1164	4.9	5
140	Intrinsic composition and electronic effects of multicomponent platinum nanocatalysts with high activity and selectivity for ethanol oxidation reaction. *Journal of Materials Chemistry A*, **2018**, 6, 11270-11280	13	22
139	Suppression Effect of Small Organic Molecules on Oxygen Reduction Activity of Fe/N/C Catalysts. *ACS Energy Letters*, **2018**, 3, 1396-1401	20.1	24
138	Selective formation of C2 products from the electrochemical conversion of CO2 on CuO-derived copper electrodes comprised of nanoporous ribbon arrays. *Catalysis Today*, **2017**, 288, 18-23	5.3	21
137	Shape transformation of {hk0}-faceted Pt nanocrystals from a tetrahexahedron into a truncated ditetragonal prism. *Chemical Communications*, **2017**, 53, 3236-3238	5.8	14
136	Constructing a Triple-Phase Interface in Micropores to Boost Performance of Fe/N/C Catalysts for Direct Methanol Fuel Cells. *ACS Energy Letters*, **2017**, 2, 645-650	20.1	61
135	A breakthrough in electrocatalysis of CO2 conversion. *National Science Review*, **2017**, 4, 155-156	10.8	5
134	Fe, N, S-doped porous carbon as oxygen reduction reaction catalyst in acidic medium with high activity and durability synthesized using CaCl 2 as template. *Chinese Journal of Catalysis*, **2017**, 38, 673-682	11.3	16
133	Nanocrystal Catalysts of High-Energy Surface and Activity. *Studies in Surface Science and Catalysis*, **2017**, 177, 439-475	1.8	2
132	In Situ Monitoring Potential-Dependent Electrochemical Process by Liquid NMR Spectroelectrochemical Determination: A Proof-of-Concept Study. *Analytical Chemistry*, **2017**, 89, 3810-3813	7.8	16
131	Octahedral PtCu alloy nanocrystals with high performance for oxygen reduction reaction and their enhanced stability by trace Au. *Nano Energy*, **2017**, 33, 65-71	17.1	106
130	Nitrogen-doped carbon nanotubes with encapsulated Fe nanoparticles as efficient oxygen reduction catalyst for alkaline membrane direct ethanol fuel cells. *Carbon*, **2017**, 125, 605-613	10.4	24
129	Quantifying defect-enhanced chemical functionalization of single-layer graphene and its application in supramolecular assembly. *Journal of Materials Chemistry A*, **2017**, 5, 24257-24262	13	8
128	Electronic Structures of Divinylchalcogenophene-Bridged Biruthenium Complexes: Exploring Trends from O to Te. *European Journal of Inorganic Chemistry*, **2017**, 2017, 5015-5026	2.3	9
127	Preparation and utilization of a sub-5 nm PbO2 colloid as an excellent co-catalyst for Pt-based catalysts toward ethanol electro-oxidation. *New Journal of Chemistry*, **2017**, 41, 12123-12130	3.6	11
126	Designing Pt-Based Electrocatalysts with High Surface Energy. *ACS Energy Letters*, **2017**, 2, 1892-1900	20.1	36
125	Electrocatalytic reduction of CO2 to CO with 100% faradaic efficiency by using pyrolyzed zeolitic imidazolate frameworks supported on carbon nanotube networks. *Journal of Materials Chemistry A*, **2017**, 5, 24867-24873	13	52

124	Cu overlayers on tetrahexahedral Pd nanocrystals with high-index facets for CO electroreduction to alcohols. *Chemical Communications*, **2017**, 53, 8085-8088	5.8	49
123	Seeds and Potentials Mediated Synthesis of High-Index Faceted Gold Nanocrystals with Enhanced Electrocatalytic Activities. *Langmuir*, **2017**, 33, 6991-6998	4	22
122	Modeling Fe/N/C Catalysts in Monolayer Graphene. *ACS Catalysis*, **2017**, 7, 139-145	13.1	79
121	Networking Pyrolyzed Zeolitic Imidazolate Frameworks by Carbon Nanotubes Improves Conductivity and Enhances Oxygen-Reduction Performance in Polymer-Electrolyte-Membrane Fuel Cells. *Advanced Materials*, **2017**, 29, 1604556	24	119
120	Overpotential-dependent shape evolution of gold nanocrystals grown in a deep eutectic solvent. *Nano Research*, **2016**, 9, 3547-3557	10	25
119	Influence of transition metal modification of oxide-derived Cu electrodes in electroreduction of CO2. *Chinese Journal of Catalysis*, **2016**, 37, 1070-1075	11.3	12
118	Structure Design and Performance Tuning of Nanomaterials for Electrochemical Energy Conversion and Storage. *Accounts of Chemical Research*, **2016**, 49, 2569-2577	24.3	111
117	Insight into the different ORR catalytic activity of Fe/N/C between acidic and alkaline media: Protonation of pyridinic nitrogen. *Electrochemistry Communications*, **2016**, 73, 71-74	5.1	84
116	PdSn nanocatalysts supported on carbon nanotubes synthesized in deep eutectic solvents with high activity for formic acid electrooxidation. *RSC Advances*, **2016**, 6, 60400-60406	3.7	31
115	Electrochemically Shape-Controlled Synthesis of Pd Concave-Disdyakis Triacontahedra in Deep Eutectic Solvent. *Journal of Physical Chemistry C*, **2016**, 120, 15569-15577	3.8	34
114	Interfacial electronic effects control the reaction selectivity of platinum catalysts. *Nature Materials*, **2016**, 15, 564-9	27	413
113	Interfacial Effects in PdAg Bimetallic Nanosheets for Selective Dehydrogenation of Formic Acid. *ChemNanoMat*, **2016**, 2, 28-32	3.5	57
112	Tuning Pt-skin to Ni-rich surface of Pt3Ni catalysts supported on porous carbon for enhanced oxygen reduction reaction and formic electro-oxidation. *Nano Energy*, **2016**, 19, 198-209	17.1	83
111	Highly active Fe, N co-doped graphene nanoribbon/carbon nanotube composite catalyst for oxygen reduction reaction. *Electrochimica Acta*, **2016**, 222, 1922-1930	6.7	23
110	Explicit Detection of the Mechanism of Platinum Nanoparticle Shape Control by Polyvinylpyrrolidone. *Journal of Physical Chemistry C*, **2016**, 120, 7532-7542	3.8	29
109	Electrochemically Seed-Mediated Synthesis of Sub-10 nm Tetrahexahedral Pt Nanocrystals Supported on Graphene with Improved Catalytic Performance. *Journal of the American Chemical Society*, **2016**, 138, 5753-6	16.4	84
108	Probing the Electronic Structure of Heterogeneous Metal Interfaces by Transition Metal Shelled Gold Nanoparticle-Enhanced Raman Spectroscopy. *Journal of Physical Chemistry C*, **2016**, 120, 20684-20691	3.8	23
107	Hydrogen adsorption-mediated synthesis of concave Pt nanocubes and their enhanced electrocatalytic activity. *Nanoscale*, **2016**, 8, 11559-64	7.7	33

106	Combined EC-NMR and In Situ FTIR Spectroscopic Studies of Glycerol Electrooxidation on Pt/C, PtRu/C, and PtRh/C. *ACS Catalysis*, **2016**, 6, 7686-7695	13.1	67
105	A mesoporous Fe/N/C ORR catalyst for polymer electrolyte membrane fuel cells. *Chinese Journal of Catalysis*, **2016**, 37, 1103-1108	11.3	21
104	Aminothiazole-derived N,S,Fe-doped graphene nanosheets as high performance electrocatalysts for oxygen reduction. *Chemical Communications*, **2015**, 51, 17092-5	5.8	68
103	S-Doping of an Fe/N/C ORR Catalyst for Polymer Electrolyte Membrane Fuel Cells with High Power Density. *Angewandte Chemie - International Edition*, **2015**, 54, 9907-10	16.4	335
102	S-Doping of an Fe/N/C ORR Catalyst for Polymer Electrolyte Membrane Fuel Cells with High Power Density. *Angewandte Chemie*, **2015**, 127, 10045-10048	3.6	116
101	Shaping Single-Crystalline Trimetallic PtPdRh Nanocrystals toward High-Efficiency CC Splitting of Ethanol in Conversion to CO2. *ACS Catalysis*, **2015**, 5, 1995-2008	13.1	63
100	One-pot synthesis of PdPt@Pd core–shell nanocrystals with enhanced electrocatalytic activity for formic acid oxidation. *CrystEngComm*, **2014**, 16, 2560-2564	3.3	12
99	PtCu alloy with high density of surface Pt defects for efficient catalysis of breaking CC bond in ethanol. *Electrochimica Acta*, **2014**, 125, 29-37	6.7	24
98	RhPt flowerlike bimetallic nanocrystals with tunable composition as superior electrocatalysts for methanol oxidation. *Langmuir*, **2014**, 30, 5711-5	4	29
97	Facile synthesis of PdPt nanoalloys with sub-2.0 nm islands as robust electrocatalysts for methanol oxidation. *Chemical Communications*, **2014**, 50, 13551-4	5.8	33
96	Electrochemical synthesis of tetrahexahedral rhodium nanocrystals with extraordinarily high surface energy and high electrocatalytic activity. *Angewandte Chemie - International Edition*, **2014**, 53, 5097-101	16.4	106
95	Electrocatalysis of Ethanol on a Pd Electrode in Alkaline Media: An in Situ Attenuated Total Reflection Surface-Enhanced Infrared Absorption Spectroscopy Study. *ACS Catalysis*, **2014**, 4, 798-803	13.1	134
94	Pyrolyzed FeNC Composite as an Efficient Non-precious Metal Catalyst for Oxygen Reduction Reaction in Acidic Medium. *ACS Catalysis*, **2014**, 4, 3928-3936	13.1	251
93	Determination of adsorbed species of hypophosphite electrooxidation on Ni electrode by in situ infrared with shell-isolated nanoparticle-enhanced Raman spectroscopy. *Electrochemistry Communications*, **2014**, 48, 5-9	5.1	4
92	Synthesis of Precious Metal Nanoparticles with High Surface Energy and High Electrocatalytic Activity. *Advances in Electrochemical Science and Engineering*, **2014**, 221-258		
91	Phenylenediamine-based FeN(x)/C catalyst with high activity for oxygen reduction in acid medium and its active-site probing. *Journal of the American Chemical Society*, **2014**, 136, 10882-5	16.4	499
90	Electrochemical Synthesis of Tetrahexahedral Rhodium Nanocrystals with Extraordinarily High Surface Energy and High Electrocatalytic Activity. *Angewandte Chemie*, **2014**, 126, 5197-5201	3.6	8
89	A comparative study of CO adsorption on tetrahexahedral Pt nanocrystals and interrelated Pt single crystal electrodes by using cyclic voltammetry and in situ FTIR spectroscopy. *Faraday Discussions*, **2014**, 176, 409-28	3.6	5

88	Kinetics of thiocyanate orientation conversion on Pt surface studied by in situ step-scan time-resolved microscope FTIR spectroscopy. *Science Bulletin*, **2013**, 58, 622-626		
87	HD kinetic isotope effects of alcohol electrooxidation on Au, Pd and Pt electrodes in alkaline solutions. *Electrochemistry Communications*, **2013**, 37, 49-52	5.1	20
86	Electrodeposition of nanostructured CoNi thin films and their anomalous infrared properties. *Electrochimica Acta*, **2013**, 113, 694-705	6.7	14
85	Pt-group bimetallic nanocrystals with high-index facets as high performance electrocatalysts. *Faraday Discussions*, **2013**, 162, 77-89	3.6	46
84	Electrochemically shape-controlled synthesis in deep eutectic solvents: triambic icosahedral platinum nanocrystals with high-index facets and their enhanced catalytic activity. *Chemical Communications*, **2013**, 49, 11152-4	5.8	87
83	In situ FTIR spectroscopic studies of ethylene glycol electrooxidation on Pd electrode in alkaline solution: The effects of concentration. *Journal of Electroanalytical Chemistry*, **2013**, 688, 165-171	4.1	33
82	Platinum nanoparticles functionalized with acetylene derivatives: Electronic conductivity and electrocatalytic activity in oxygen reduction. *Journal of Electroanalytical Chemistry*, **2013**, 688, 143-150	4.1	29
81	Infrared spectroelectrochemical study of dissociation and oxidation of methanol at a palladium electrode in alkaline solution. *Langmuir*, **2013**, 29, 1709-16	4	61
80	Synthesis of convex hexoctahedral Pt micro/nanocrystals with high-index facets and electrochemistry-mediated shape evolution. *Journal of the American Chemical Society*, **2013**, 135, 18754-7	16.4	94
79	Electrochemically shape-controlled synthesis in deep eutectic solvents of Pt nanoflowers with enhanced activity for ethanol oxidation. *Electrochimica Acta*, **2012**, 76, 468-474	6.7	90
78	Electrochemically Shape-Controlled Synthesis in Deep Eutectic Solvents A New Route to Prepare Pt Nanocrystals Enclosed by High-Index Facets with High Catalytic Activity. *Journal of Physical Chemistry C*, **2012**, 116, 2040-2044	3.8	108
77	Butylphenyl-functionalized Pt nanoparticles as CO-resistant electrocatalysts for formic acid oxidation. *Physical Chemistry Chemical Physics*, **2012**, 14, 1412-7	3.6	24
76	Electrochemically shape-controlled synthesis of trapezohedral platinum nanocrystals with high electrocatalytic activity. *Chemical Communications*, **2012**, 48, 9531-3	5.8	87
75	Facile synthesis of a platinum-lead oxide nanocomposite catalyst with high activity and durability for ethanol electrooxidation. *Physical Chemistry Chemical Physics*, **2012**, 14, 16424-32	3.6	22
74	Direct growth of carbon nanofibers to generate a 3D porous platform on a metal contact to enable an oxygen reduction reaction. *ACS Nano*, **2012**, 6, 10720-6	16.7	31
73	Shape transformation from Pt nanocubes to tetrahexahedra with size near 10nm. *Electrochemistry Communications*, **2012**, 22, 61-64	5.1	43
72	Shape-Controlled Synthesis of Metal Nanoparticles of High Surface Energy and Their Applications in Electrocatalysis **2012**, 117-165		2
71	Alloy tetrahexahedral PdPt catalysts: enhancing significantly the catalytic activity by synergy effect of high-index facets and electronic structure. *Chemical Science*, **2012**, 3, 1157	9.4	139

70	Interaction of citrate with Pt(100) surface investigated by cyclic voltammetry towards understanding the structure-tuning effect in nanomaterials synthesis. *Science China Chemistry*, **2012**, 55, 2353-2358	7.9	5
69	Ligand-Mediated Electrocatalytic Activity of Pt Nanoparticles for Oxygen Reduction Reactions. *Journal of Physical Chemistry C*, **2012**, 116, 10592-10598	3.8	73
68	Enhancement of the electrocatalytic activity of Pt nanoparticles in oxygen reduction by chlorophenyl functionalization. *Chemical Communications*, **2012**, 48, 3391-3	5.8	84
67	Tetrahexahedral Pt Nanocrystal Catalysts Decorated with Ru Adatoms and Their Enhanced Activity in Methanol Electrooxidation. *ACS Catalysis*, **2012**, 2, 708-715	13.1	63
66	Enhancing the activity and tuning the mechanism of formic acid oxidation at tetrahexahedral Pt nanocrystals by Au decoration. *Physical Chemistry Chemical Physics*, **2012**, 14, 16415-23	3.6	32
65	In-situ infrared spectroscopic studies of electrochemical energy conversion and storage. *Accounts of Chemical Research*, **2012**, 45, 485-94	24.3	81
64	Nanomaterials of high surface energy with exceptional properties in catalysis and energy storage. *Chemical Society Reviews*, **2011**, 40, 4167-85	58.5	668
63	Pt nanoparticle netlike-assembly as highly durable and highly active electrocatalyst for oxygen reduction reaction. *Chemical Communications*, **2011**, 47, 3407-9	5.8	47
62	Significantly enhancing catalytic activity of tetrahexahedral Pt nanocrystals by Bi adatom decoration. *Journal of the American Chemical Society*, **2011**, 133, 12930-3	16.4	117
61	Freestanding palladium nanosheets with plasmonic and catalytic properties. *Nature Nanotechnology*, **2011**, 6, 28-32	28.7	1219
60	Enhanced activity of rare earth doped PtRu/C catalysts for methanol electro-oxidation. *Electrochimica Acta*, **2011**, 56, 8912-8918	6.7	21
59	Butylphenyl-functionalized palladium nanoparticles as effective catalysts for the electrooxidation of formic acid. *Chemical Communications*, **2011**, 47, 6075-7	5.8	57
58	Kinetics of dissociative adsorption of ethylene glycol on Pt(s)[n(100)][111)] electrodes in acid solutions. *Electrochemistry Communications*, **2011**, 13, 506-508	5.1	7
57	Preparation of PtNi hollow nanospheres for the electrocatalytic oxidation of methanol. *Journal of Power Sources*, **2011**, 196, 5844-5848	8.9	94
56	Shell-isolated nanoparticle-enhanced Raman spectroscopy. *Nature*, **2010**, 464, 392-5	50.4	2595
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