

Zhi-You Zhou

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213
papers

17,791
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229
ext. papers

19,936
ext. citations

9.9
avg, IF

6.66
L-index

#	Paper	IF	Citations
213	Synthesis of tetrahedral platinum nanocrystals with high-index facets and high electro-oxidation activity. <i>Science</i> , 2007 , 316, 732-5	33.3	2612
212	Shell-isolated nanoparticle-enhanced Raman spectroscopy. <i>Nature</i> , 2010 , 464, 392-5	50.4	2595
211	Freestanding palladium nanosheets with plasmonic and catalytic properties. <i>Nature Nanotechnology</i> , 2011 , 6, 28-32	28.7	1219
210	Nanomaterials of high surface energy with exceptional properties in catalysis and energy storage. <i>Chemical Society Reviews</i> , 2011 , 40, 4167-85	58.5	668
209	Phenylenediamine-based FeN(x)/C catalyst with high activity for oxygen reduction in acid medium and its active-site probing. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10882-5	16.4	499
208	Platinum Metal Catalysts of High-Index Surfaces: From Single-Crystal Planes to Electrochemically Shape-Controlled Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 19801-19817	3.8	488
207	Direct electrodeposition of tetrahedral Pd nanocrystals with high-index facets and high catalytic activity for ethanol electrooxidation. <i>Journal of the American Chemical Society</i> , 2010 , 132, 7580-1	16.4	417
206	Interfacial electronic effects control the reaction selectivity of platinum catalysts. <i>Nature Materials</i> , 2016 , 15, 564-9	27	413
205	S-Doping of an Fe/N/C ORR Catalyst for Polymer Electrolyte Membrane Fuel Cells with High Power Density. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 9907-10	16.4	335
204	Crystal habit-tuned nanoplate material of Li[Li _{1/3} -2x/3Ni _x Mn _{2/3-x/3} O] for high-rate performance lithium-ion batteries. <i>Advanced Materials</i> , 2010 , 22, 4364-7	24	302
203	Shape-controlled synthesis of gold nanoparticles in deep eutectic solvents for studies of structure-functionality relationships in electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 9100-3	16.4	300
202	High-index faceted platinum nanocrystals supported on carbon black as highly efficient catalysts for ethanol electrooxidation. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 411-4	16.4	295
201	Pyrolyzed Fe/N/C Composite as an Efficient Non-precious Metal Catalyst for Oxygen Reduction Reaction in Acidic Medium. <i>ACS Catalysis</i> , 2014 , 4, 3928-3936	13.1	251
200	Simplifying the creation of hollow metallic nanostructures: one-pot synthesis of hollow palladium/platinum single-crystalline nanocubes. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4808-12	16.4	244
199	Controlled formation of concave tetrahedral/trigonal bipyramidal palladium nanocrystals. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13916-7	16.4	222
198	In situ FTIR spectroscopic studies of electrooxidation of ethanol on Pd electrode in alkaline media. <i>Electrochimica Acta</i> , 2010 , 55, 7995-7999	6.7	165
197	Nanoparticle catalysts with high energy surfaces and enhanced activity synthesized by electrochemical method. <i>Faraday Discussions</i> , 2008 , 140, 81-92; discussion 93-112	3.6	157

196	Alloy tetrahedral PdPt catalysts: enhancing significantly the catalytic activity by synergy effect of high-index facets and electronic structure. <i>Chemical Science</i> , 2012 , 3, 1157	9.4	139
195	Electrochemical preparation of Pd nanorods with high-index facets. <i>Chemical Communications</i> , 2009 , 1502-4	5.8	139
194	Electrocatalysis of Ethanol on a Pd Electrode in Alkaline Media: An in Situ Attenuated Total Reflection Surface-Enhanced Infrared Absorption Spectroscopy Study. <i>ACS Catalysis</i> , 2014 , 4, 798-803	13.1	134
193	Pd-Pt random alloy nanocubes with tunable compositions and their enhanced electrocatalytic activities. <i>Chemical Communications</i> , 2010 , 46, 1491-3	5.8	125
192	Networking Pyrolyzed Zeolitic Imidazolate Frameworks by Carbon Nanotubes Improves Conductivity and Enhances Oxygen-Reduction Performance in Polymer-Electrolyte-Membrane Fuel Cells. <i>Advanced Materials</i> , 2017 , 29, 1604556	24	119
191	Significantly enhancing catalytic activity of tetrahedral Pt nanocrystals by Bi adatom decoration. <i>Journal of the American Chemical Society</i> , 2011 , 133, 12930-3	16.4	117
190	S-Doping of an Fe/N/C ORR Catalyst for Polymer Electrolyte Membrane Fuel Cells with High Power Density. <i>Angewandte Chemie</i> , 2015 , 127, 10045-10048	3.6	116
189	Structure Design and Performance Tuning of Nanomaterials for Electrochemical Energy Conversion and Storage. <i>Accounts of Chemical Research</i> , 2016 , 49, 2569-2577	24.3	111
188	Electrochemically Shape-Controlled Synthesis in Deep Eutectic Solvents: A New Route to Prepare Pt Nanocrystals Enclosed by High-Index Facets with High Catalytic Activity. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 2040-2044	3.8	108
187	Octahedral PtCu alloy nanocrystals with high performance for oxygen reduction reaction and their enhanced stability by trace Au. <i>Nano Energy</i> , 2017 , 33, 65-71	17.1	106
186	Electrochemical synthesis of tetrahedral rhodium nanocrystals with extraordinarily high surface energy and high electrocatalytic activity. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 5097-101	16.4	106
185	Synthesis of convex hexoctahedral Pt micro/nanocrystals with high-index facets and electrochemistry-mediated shape evolution. <i>Journal of the American Chemical Society</i> , 2013 , 135, 18754-18757	16.4	94
184	Preparation of PtNi hollow nanospheres for the electrocatalytic oxidation of methanol. <i>Journal of Power Sources</i> , 2011 , 196, 5844-5848	8.9	94
183	Optimum Cu nanoparticle catalysts for CO ₂ hydrogenation towards methanol. <i>Nano Energy</i> , 2018 , 43, 200-209	17.1	91
182	Electrochemically shape-controlled synthesis in deep eutectic solvents of Pt nanoflowers with enhanced activity for ethanol oxidation. <i>Electrochimica Acta</i> , 2012 , 76, 468-474	6.7	90
181	Tuning the shape and catalytic activity of Fe nanocrystals from rhombic dodecahedra and tetragonal bipyramids to cubes by electrochemistry. <i>Journal of the American Chemical Society</i> , 2009 , 131, 10860-2	16.4	90
180	Electrochemical preparation of platinum nanothorn assemblies with high surface enhanced Raman scattering activity. <i>Chemical Communications</i> , 2006 , 4090-2	5.8	88
179	Electrochemically shape-controlled synthesis in deep eutectic solvents: triambic icosahedral platinum nanocrystals with high-index facets and their enhanced catalytic activity. <i>Chemical Communications</i> , 2013 , 49, 11152-4	5.8	87

178	Electrochemically shape-controlled synthesis of trapezohedral platinum nanocrystals with high electrocatalytic activity. <i>Chemical Communications</i> , 2012 , 48, 9531-3	5.8	87
177	A Lattice-Oxygen-Involved Reaction Pathway to Boost Urea Oxidation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16820-16825	16.4	85
176	Shape-Controlled Synthesis of Gold Nanoparticles in Deep Eutectic Solvents for Studies of Structure-Functionality Relationships in Electrocatalysis. <i>Angewandte Chemie</i> , 2008 , 120, 9240-9243	3.6	85
175	Insight into the different ORR catalytic activity of Fe/N/C between acidic and alkaline media: Protonation of pyridinic nitrogen. <i>Electrochemistry Communications</i> , 2016 , 73, 71-74	5.1	84
174	Enhancement of the electrocatalytic activity of Pt nanoparticles in oxygen reduction by chlorophenyl functionalization. <i>Chemical Communications</i> , 2012 , 48, 3391-3	5.8	84
173	Electrochemically Seed-Mediated Synthesis of Sub-10 nm Tetrahedral Pt Nanocrystals Supported on Graphene with Improved Catalytic Performance. <i>Journal of the American Chemical Society</i> , 2016 , 138, 5753-6	16.4	84
172	Tuning Pt-skin to Ni-rich surface of Pt ₃ Ni catalysts supported on porous carbon for enhanced oxygen reduction reaction and formic electro-oxidation. <i>Nano Energy</i> , 2016 , 19, 198-209	17.1	83
171	Seed Displacement, Epitaxial Synthesis of Rh/Pt Bimetallic Ultrathin Nanowires for Highly Selective Oxidizing Ethanol to CO ₂ . <i>Chemistry of Materials</i> , 2010 , 22, 2395-2402	9.6	83
170	In-situ infrared spectroscopic studies of electrochemical energy conversion and storage. <i>Accounts of Chemical Research</i> , 2012 , 45, 485-94	24.3	81
169	Modeling Fe/N/C Catalysts in Monolayer Graphene. <i>ACS Catalysis</i> , 2017 , 7, 139-145	13.1	79
168	Ligand-Mediated Electrocatalytic Activity of Pt Nanoparticles for Oxygen Reduction Reactions. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 10592-10598	3.8	73
167	Rational Design and Synthesis of Low-Temperature Fuel Cell Electrocatalysts. <i>Electrochemical Energy Reviews</i> , 2018 , 1, 54-83	29.3	72
166	Recent Advances in Electrocatalysts for Proton Exchange Membrane Fuel Cells and Alkaline Membrane Fuel Cells. <i>Advanced Materials</i> , 2021 , e2006292	24	71
165	Aminothiazole-derived N,S,Fe-doped graphene nanosheets as high performance electrocatalysts for oxygen reduction. <i>Chemical Communications</i> , 2015 , 51, 17092-5	5.8	68
164	Identifying the Active Site of N-Doped Graphene for Oxygen Reduction by Selective Chemical Modification. <i>ACS Energy Letters</i> , 2018 , 3, 986-991	20.1	68
163	Combined EC-NMR and In Situ FTIR Spectroscopic Studies of Glycerol Electrooxidation on Pt/C, PtRu/C, and PtRh/C. <i>ACS Catalysis</i> , 2016 , 6, 7686-7695	13.1	67
162	Synergy between Plasmonic and Electrocatalytic Activation of Methanol Oxidation on Palladium-Silver Alloy Nanotubes. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8794-8798	16.4	66
161	Shaping Single-Crystalline Trimetallic PtPdRh Nanocrystals toward High-Efficiency CO ₂ Splitting of Ethanol in Conversion to CO ₂ . <i>ACS Catalysis</i> , 2015 , 5, 1995-2008	13.1	63

160	Tetrahexahedral Pt Nanocrystal Catalysts Decorated with Ru Adatoms and Their Enhanced Activity in Methanol Electrooxidation. <i>ACS Catalysis</i> , 2012 , 2, 708-715	13.1	63
159	Simplifying the Creation of Hollow Metallic Nanostructures: One-Pot Synthesis of Hollow Palladium/Platinum Single-Crystalline Nanocubes. <i>Angewandte Chemie</i> , 2009 , 121, 4902-4906	3.6	62
158	Constructing a Triple-Phase Interface in Micropores to Boost Performance of Fe/N/C Catalysts for Direct Methanol Fuel Cells. <i>ACS Energy Letters</i> , 2017 , 2, 645-650	20.1	61
157	Infrared spectroelectrochemical study of dissociation and oxidation of methanol at a palladium electrode in alkaline solution. <i>Langmuir</i> , 2013 , 29, 1709-16	4	61
156	Interfacial Effects in PdAg Bimetallic Nanosheets for Selective Dehydrogenation of Formic Acid. <i>ChemNanoMat</i> , 2016 , 2, 28-32	3.5	57
155	A non-intermetallic PtPb/C catalyst of hollow structure with high activity and stability for electrooxidation of formic acid. <i>Chemical Communications</i> , 2010 , 46, 4252-4	5.8	57
154	Butylphenyl-functionalized palladium nanoparticles as effective catalysts for the electrooxidation of formic acid. <i>Chemical Communications</i> , 2011 , 47, 6075-7	5.8	57
153	Tunable aqueous phase synthesis and shape-dependent electrochemical properties of rhodium nanostructures. <i>Inorganic Chemistry</i> , 2010 , 49, 5515-21	5.1	55
152	Electrocatalytic reduction of CO ₂ to CO with 100% faradaic efficiency by using pyrolyzed zeolitic imidazolate frameworks supported on carbon nanotube networks. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24867-24873	13	52
151	Ultrasmall Pd-Cu-Pt Trimetallic Twin Icosahedrons Boost the Electrocatalytic Performance of Glycerol Oxidation at the Operating Temperature of Fuel Cells. <i>Advanced Functional Materials</i> , 2020 , 30, 1908235	15.6	50
150	Cu overlayers on tetrahedral Pd nanocrystals with high-index facets for CO electroreduction to alcohols. <i>Chemical Communications</i> , 2017 , 53, 8085-8088	5.8	49
149	In situ rapid-scan time-resolved microscope FTIR spectroelectrochemistry: study of the dynamic processes of methanol oxidation on a nanostructured Pt electrode. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 573, 111-119	4.1	49
148	High-Index Faceted Platinum Nanocrystals Supported on Carbon Black as Highly Efficient Catalysts for Ethanol Electrooxidation. <i>Angewandte Chemie</i> , 2010 , 122, 421-424	3.6	48
147	Pt nanoparticle netlike-assembly as highly durable and highly active electrocatalyst for oxygen reduction reaction. <i>Chemical Communications</i> , 2011 , 47, 3407-9	5.8	47
146	Pt-group bimetallic nanocrystals with high-index facets as high performance electrocatalysts. <i>Faraday Discussions</i> , 2013 , 162, 77-89	3.6	46
145	CoPt nanoparticles and their catalytic properties in electrooxidation of CO and CH ₃ OH studied by in situ FTIRS. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 3645-54	3.6	44
144	High-Index-Facet- and High-Surface-Energy Nanocrystals of Metals and Metal Oxides as Highly Efficient Catalysts. <i>Joule</i> , 2020 , 4, 2562-2598	27.8	43
143	Shape transformation from Pt nanocubes to tetrahedra with size near 10nm. <i>Electrochemistry Communications</i> , 2012 , 22, 61-64	5.1	43

142	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. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 12666-12677	9.5	42
141	Pd Nanocrystals with Continuously Tunable High-Index Facets as a Model Nanocatalyst. <i>ACS Catalysis</i> , 2019 , 9, 3144-3152	13.1	41
140	IR Optical Properties of Pt Nanoparticles and Their Agglomerates Investigated by in Situ FTIRS Using CO as the Probe Molecule. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 9808-9812	3.4	41
139	Surface Fluorination to Boost the Stability of the Fe/N/C Cathode in Proton Exchange Membrane Fuel Cells. <i>ChemElectroChem</i> , 2018 , 5, 1914-1921	4.3	41
138	Three-Dimensional Networks of S-Doped Fe/N/C with Hierarchical Porosity for Efficient Oxygen Reduction in Polymer Electrolyte Membrane Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 14602-14613	9.5	40
137	Promoting Ethylene Selectivity from CO Electroreduction on CuO Supported onto CO Capture Materials. <i>ChemSusChem</i> , 2018 , 11, 881-887	8.3	36
136	Designing Pt-Based Electrocatalysts with High Surface Energy. <i>ACS Energy Letters</i> , 2017 , 2, 1892-1900	20.1	36
135	A General Carboxylate-Assisted Approach to Boost the ORR Performance of ZIF-Derived Fe/N/C Catalysts for Proton Exchange Membrane Fuel Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2009645	15.6	36
134	Electrochemically Shape-Controlled Synthesis of Pd Concave-Disdyakis Tricontahedra in Deep Eutectic Solvent. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 15569-15577	3.8	34
133	Facile synthesis of PdPt nanoalloys with sub-2.0 nm islands as robust electrocatalysts for methanol oxidation. <i>Chemical Communications</i> , 2014 , 50, 13551-4	5.8	33
132	In situ FTIR spectroscopic studies of ethylene glycol electrooxidation on Pd electrode in alkaline solution: The effects of concentration. <i>Journal of Electroanalytical Chemistry</i> , 2013 , 688, 165-171	4.1	33
131	Facets and surface relaxation of tetrahedral platinum nanocrystals. <i>Applied Physics Letters</i> , 2007 , 91, 121901	3.4	33
130	Surface modification and electrocatalytic properties of Pt(100), Pt(110), Pt(320) and Pt(331) electrodes with Sb towards HCOOH oxidation. <i>Electrochimica Acta</i> , 2001 , 46, 4339-4348	6.7	33
129	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	9.3	33
128	Hydrogen adsorption-mediated synthesis of concave Pt nanocubes and their enhanced electrocatalytic activity. <i>Nanoscale</i> , 2016 , 8, 11559-64	7.7	33
127	Enhancing the activity and tuning the mechanism of formic acid oxidation at tetrahedral Pt nanocrystals by Au decoration. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 16415-23	3.6	32
126	PdSn nanocatalysts supported on carbon nanotubes synthesized in deep eutectic solvents with high activity for formic acid electrooxidation. <i>RSC Advances</i> , 2016 , 6, 60400-60406	3.7	31
125	Direct growth of carbon nanofibers to generate a 3D porous platform on a metal contact to enable an oxygen reduction reaction. <i>ACS Nano</i> , 2012 , 6, 10720-6	16.7	31

124	Controlling Reversible Expansion of Li ₂ O ₂ Formation and Decomposition by Modifying Electrolyte in Li-O ₂ Batteries. <i>Chem</i> , 2018 , 4, 2685-2698	16.2	31
123	In situ STM studies of electrochemical growth of nanostructured Ni films and their anomalous IR properties. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 4309-16	3.4	30
122	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	13	29
121	RhPt flowerlike bimetallic nanocrystals with tunable composition as superior electrocatalysts for methanol oxidation. <i>Langmuir</i> , 2014 , 30, 5711-5	4	29
120	Platinum nanoparticles functionalized with acetylene derivatives: Electronic conductivity and electrocatalytic activity in oxygen reduction. <i>Journal of Electroanalytical Chemistry</i> , 2013 , 688, 143-150	4.1	29
119	Explicit Detection of the Mechanism of Platinum Nanoparticle Shape Control by Polyvinylpyrrolidone. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 7532-7542	3.8	29
118	High selectivity PtRh/RGO catalysts for ethanol electro-oxidation at low potentials: Enhancing the efficiency of CO ₂ from alcoholic groups. <i>Electrochimica Acta</i> , 2018 , 292, 208-216	6.7	29
117	Excavated cubic platinum-iridium alloy nanocrystals with high-index facets as highly efficient electrocatalysts in N fixation to NH ₃ . <i>Chemical Communications</i> , 2019 , 55, 9335-9338	5.8	28
116	Tris(N-pyrrolidinyl)phosphine substituted diiron dithiolate related to iron-only hydrogenase active site: Synthesis, characterization and electrochemical properties. <i>Journal of Organometallic Chemistry</i> , 2006 , 691, 4633-4640	2.3	28
115	Electrooxidation of Dimethoxymethane on a Platinum Electrode in Acidic Solutions Studied by in Situ FTIR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 19012-19017	3.8	27
114	Atomically deviated Pd-Te nanoplates boost methanol-tolerant fuel cells. <i>Science Advances</i> , 2020 , 6, eaba1731	17.3	27
113	Polyhedron-Assembled Ternary PtCuCo Nanochains: Integrated Functions Enhance the Electrocatalytic Performance of Methanol Oxidation at Elevated Temperature. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 32282-32290	9.5	26
112	Irreversible adsorption of Sn adatoms on basal planes of Pt single crystal and its impact on electrooxidation of ethanol. <i>Electrochimica Acta</i> , 2008 , 53, 6081-6088	6.7	26
111	Electrochemical preparation and structural characterization of Co thin films and their anomalous IR properties. <i>Langmuir</i> , 2006 , 22, 10575-83	4	26
110	Overpotential-dependent shape evolution of gold nanocrystals grown in a deep eutectic solvent. <i>Nano Research</i> , 2016 , 9, 3547-3557	10	25
109	Electrochemical preparation of iron cuboid nanoparticles and their catalytic properties for nitrite reduction. <i>Electrochimica Acta</i> , 2008 , 53, 6938-6943	6.7	25
108	Structurally Disordered Phosphorus-Doped Pt as a Highly Active Electrocatalyst for an Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021 , 11, 355-363	13.1	25
107	Nitrogen-doped carbon nanotubes with encapsulated Fe nanoparticles as efficient oxygen reduction catalyst for alkaline membrane direct ethanol fuel cells. <i>Carbon</i> , 2017 , 125, 605-613	10.4	24

106	A functionalized membrane for lithium-oxygen batteries to suppress the shuttle effect of redox mediators. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14260-14270	13	24
105	PtCu alloy with high density of surface Pt defects for efficient catalysis of breaking C-C bond in ethanol. <i>Electrochimica Acta</i> , 2014 , 125, 29-37	6.7	24
104	Butylphenyl-functionalized Pt nanoparticles as CO-resistant electrocatalysts for formic acid oxidation. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1412-7	3.6	24
103	Suppression Effect of Small Organic Molecules on Oxygen Reduction Activity of Fe/N/C Catalysts. <i>ACS Energy Letters</i> , 2018 , 3, 1396-1401	20.1	24
102	Hierarchically porous carbons as supports for fuel cell electrocatalysts with atomically dispersed Fe-N moieties. <i>Chemical Science</i> , 2019 , 10, 8236-8240	9.4	23
101	Advances in Active Site Structure of Carbon-Based Non-Precious Metal Catalysts for Oxygen Reduction Reaction. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , 2019 , 35, 472-485	3.8	23
100	Highly active Fe, N co-doped graphene nanoribbon/carbon nanotube composite catalyst for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2016 , 222, 1922-1930	6.7	23
99	Probing the Electronic Structure of Heterogeneous Metal Interfaces by Transition Metal Shelled Gold Nanoparticle-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 20684-20691	2.8	23
98	Surface composition-tunable octahedral PtCu nanoalloys advance the electrocatalytic performance on methanol and ethanol oxidation. <i>Science China Materials</i> , 2019 , 62, 1877-1887	7.1	22
97	Seeds and Potentials Mediated Synthesis of High-Index Faceted Gold Nanocrystals with Enhanced Electrocatalytic Activities. <i>Langmuir</i> , 2017 , 33, 6991-6998	4	22
96	Facile synthesis of a platinum-lead oxide nanocomposite catalyst with high activity and durability for ethanol electrooxidation. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 16424-32	3.6	22
95	Intrinsic composition and electronic effects of multicomponent platinum nanocatalysts with high activity and selectivity for ethanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11270-11280	1.3	22
94	Selective formation of C ₂ products from the electrochemical conversion of CO ₂ on CuO-derived copper electrodes comprised of nanoporous ribbon arrays. <i>Catalysis Today</i> , 2017 , 288, 18-23	5.3	21
93	Trimetallic palladium-copper-cobalt alloy wavy nanowires improve ethanol electrooxidation in alkaline medium. <i>Nanoscale</i> , 2019 , 11, 19448-19454	7.7	21
92	Enhanced activity of rare earth doped PtRu/C catalysts for methanol electro-oxidation. <i>Electrochimica Acta</i> , 2011 , 56, 8912-8918	6.7	21
91	Abnormal Infrared Effects of Nanostructured Rhodium Thin Films for CO Adsorption at Solid/Gas Interfaces. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 11778-11783	3.4	21
90	A mesoporous Fe/N/C ORR catalyst for polymer electrolyte membrane fuel cells. <i>Chinese Journal of Catalysis</i> , 2016 , 37, 1103-1108	11.3	21
89	HD kinetic isotope effects of alcohol electrooxidation on Au, Pd and Pt electrodes in alkaline solutions. <i>Electrochemistry Communications</i> , 2013 , 37, 49-52	5.1	20

88	In situ FTIR spectroscopic studies of (bi)sulfate adsorption on electrodes of Pt nanoparticles supported on different substrates. <i>Electrochimica Acta</i> , 2010 , 55, 2065-2072	6.7	20
87	Kinetics of dissociative adsorption of ethylene glycol on Pt(1 0 0) electrode surface in sulfuric acid solutions. <i>Electrochimica Acta</i> , 2004 , 49, 4659-4666	6.7	20
86	In situ FTIRS studies of kinetics of HCOOH oxidation on Pt(110) electrode modified with antimony adatoms. <i>Journal of Electroanalytical Chemistry</i> , 2001 , 500, 233-240	4.1	20
85	Intermetallic PtBi Nanoplates with High Catalytic Activity towards Electro-oxidation of Formic Acid and Glycerol. <i>ChemElectroChem</i> , 2020 , 7, 239-245	4.3	20
84	Constructing canopy-shaped molecular architectures to create local Pt surface sites with high tolerance to H ₂ S and CO for hydrogen electrooxidation. <i>Energy and Environmental Science</i> , 2018 , 11, 166-171	35.4	20
83	Porous Carbon Membrane-Supported Atomically Dispersed Pyrrole-Type Fe ₂ N as Active Sites for Electrochemical Hydrazine Oxidation Reaction. <i>Small</i> , 2020 , 16, e2002203	11	19
82	Ammonia electrooxidation on dendritic Pt nanostructures in alkaline solutions investigated by in-situ FTIR spectroscopy and online electrochemical mass spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 819, 495-501	4.1	19
81	Electrocatalytic reduction of nitric oxide on Pt nanocrystals of different shape in sulfuric acid solutions. <i>Electrochimica Acta</i> , 2010 , 55, 8273-8279	6.7	19
80	In situ step-scan time-resolved microscope FTIR spectroscopy working with a thin-layer cell. <i>Electrochemistry Communications</i> , 2005 , 7, 490-495	5.1	19
79	Study of pyrolyzed hemin/C as non-platinum cathodic catalyst for direct methanol fuel cells. <i>Science China Chemistry</i> , 2010 , 53, 2057-2062	7.9	18
78	Surface processes and kinetics of CO ₂ reduction on Pt(100) electrodes of different surface structure in sulfuric acid solutions. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 3277-3283	3.6	18
77	In situ step-scan time-resolved microscope FTIR spectroscopy applied in irreversible electrochemical reactions. <i>Electrochimica Acta</i> , 2005 , 50, 5163-5171	6.7	17
76	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. <i>Chinese Journal of Catalysis</i> , 2017 , 38, 673-682	11.3	16
75	In Situ Monitoring Potential-Dependent Electrochemical Process by Liquid NMR Spectroelectrochemical Determination: A Proof-of-Concept Study. <i>Analytical Chemistry</i> , 2017 , 89, 3810-3813	7.8	16
74	A Lattice-Oxygen-Involved Reaction Pathway to Boost Urea Oxidation. <i>Angewandte Chemie</i> , 2019 , 131, 16976-16981	3.6	15
73	P-d orbital hybridization induced by monodispersed Ga site on Pt ₃ Mn nanocatalyst boosts ethanol electrooxidation.. <i>Angewandte Chemie - International Edition</i> , 2022 ,	16.4	15
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