

Shichun Mu

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#	Paper	IF	Citations
309	From 3D ZIF Nanocrystals to Co _N /C Nanorod Array Electrocatalysts for ORR, OER, and Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1704638	15.6	541
308	Multifunctional Mo _N /C@MoS ₂ Electrocatalysts for HER, OER, ORR, and Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2017 , 27, 1702300	15.6	519
307	RuP ₂ -Based Catalysts with Platinum-like Activity and Higher Durability for the Hydrogen Evolution Reaction at All pH Values. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 11559-11564	16.4	429
306	Co ₂ P@N Double Active Centers Confined in N-Doped Carbon Nanotube: Heterostructural Engineering for Trifunctional Catalysis toward HER, ORR, OER, and Zn-Air Batteries Driven Water Splitting. <i>Advanced Functional Materials</i> , 2018 , 28, 1805641	15.6	303
305	Carbon Nanosheets Containing Discrete Co-N-B-C Active Sites for Efficient Oxygen Electrocatalysis and Rechargeable Zn-Air Batteries. <i>ACS Nano</i> , 2018 , 12, 1894-1901	16.7	294
304	An Isolated Zinc-Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 2622-2626	16.4	292
303	2D Dual-Metal Zeolitic-Imidazolate-Framework-(ZIF)-Derived Bifunctional Air Electrodes with Ultrahigh Electrochemical Properties for Rechargeable Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1705048	15.6	269
302	A universal synthesis strategy for P-rich noble metal diphosphide-based electrocatalysts for the hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2019 , 12, 952-957	35.4	265
301	Fe, Cu-Coordinated ZIF-Derived Carbon Framework for Efficient Oxygen Reduction Reaction and Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1802596	15.6	245
300	A New Core/Shell NiAu/Au Nanoparticle Catalyst with Pt-like Activity for Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5859-62	16.4	229
299	Interface Engineering of Hierarchical Branched Mo-Doped Ni ₃ S ₂ /Ni _x Py Hollow Heterostructure Nanorods for Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , 2020 , 10, 1903891	21.8	225
298	Metal-organic frameworks derived reverse-encapsulation Co-NC@Mo ₂ C complex for efficient overall water splitting. <i>Nano Energy</i> , 2019 , 57, 746-752	17.1	222
297	Polyaniline-functionalized carbon nanotube supported platinum catalysts. <i>Langmuir</i> , 2011 , 27, 5582-8	4	215
296	Nitrogen-doped reduced graphene oxide supports for noble metal catalysts with greatly enhanced activity and stability. <i>Applied Catalysis B: Environmental</i> , 2013 , 132-133, 379-388	21.8	211
295	N-P-O co-doped high performance 3D graphene prepared through red phosphorous-assisted cutting-thin technique: A universal synthesis and multifunctional applications. <i>Nano Energy</i> , 2016 , 28, 346-355	17.1	181
294	Sulfuration of an Fe-N-C Catalyst Containing Fe C/Fe Species to Enhance the Catalysis of Oxygen Reduction in Acidic Media and for Use in Flexible Zn-Air Batteries. <i>Advanced Materials</i> , 2018 , 30, e1804504	24	179
293	N,B-codoped defect-rich graphitic carbon nanocages as high performance multifunctional electrocatalysts. <i>Nano Energy</i> , 2017 , 42, 334-340	17.1	170

292	Flexible molybdenum phosphide nanosheet array electrodes for hydrogen evolution reaction in a wide pH range. <i>Applied Catalysis B: Environmental</i> , 2016 , 196, 193-198	21.8	164
291	Phytic acid-derivative transition metal phosphides encapsulated in N,P-codoped carbon: an efficient and durable hydrogen evolution electrocatalyst in a wide pH range. <i>Nanoscale</i> , 2017 , 9, 3555-3560	7.7	158
290	Iron-Doped Nickel Phosphide Nanosheet Arrays: An Efficient Bifunctional Electrocatalyst for Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 26001-26007	9.5	158
289	Effects of Intrinsic Pentagon Defects on Electrochemical Reactivity of Carbon Nanomaterials. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3859-3864	16.4	146
288	Rational Design of Holey 2D Nonlayered Transition Metal Carbide/Nitride Heterostructure Nanosheets for Highly Efficient Water Oxidation. <i>Advanced Energy Materials</i> , 2019 , 9, 1803768	21.8	143
287	Nitrogen-Doped carbon coupled FeNi ₃ intermetallic compound as advanced bifunctional electrocatalyst for OER, ORR and zn-air batteries. <i>Applied Catalysis B: Environmental</i> , 2020 , 268, 118729	21.8	141
286	A highly electronic conductive cobalt nickel sulphide dendrite/quasi-spherical nanocomposite for a supercapacitor electrode with ultrahigh areal specific capacitance. <i>Journal of Power Sources</i> , 2015 , 295, 314-322	8.9	139
285	A universal synthesis strategy for single atom dispersed cobalt/metal clusters heterostructure boosting hydrogen evolution catalysis at all pH values. <i>Nano Energy</i> , 2019 , 59, 472-480	17.1	138
284	Regulating Fe-spin state by atomically dispersed Mn-N in Fe-N-C catalysts with high oxygen reduction activity. <i>Nature Communications</i> , 2021 , 12, 1734	17.4	138
283	Porous polyaniline-derived FeN _x C/C catalysts with high activity and stability towards oxygen reduction reaction using ferric chloride both as an oxidant and iron source. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 1242-1246	13	136
282	General Strategy for the Synthesis of Transition-Metal Phosphide/N-Doped Carbon Frameworks for Hydrogen and Oxygen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 16187-16193	9.5	135
281	Defect Engineering in Carbon-Based Electrocatalysts: Insight into Intrinsic Carbon Defects. <i>Advanced Functional Materials</i> , 2020 , 30, 2001097	15.6	132
280	Self-Organized 3D Porous Graphene Dual-Doped with Biomass-Sponsored Nitrogen and Sulfur for Oxygen Reduction and Evolution. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 29408-29418	9.5	127
279	Ru-doped 3D flower-like bimetallic phosphide with a climbing effect on overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2020 , 279, 119396	21.8	127
278	Coupling NiSe ₂ -Ni ₂ P heterostructure nanowrinkles for highly efficient overall water splitting. <i>Journal of Catalysis</i> , 2019 , 377, 600-608	7.3	123
277	Semimetallic MoP ₂ : an active and stable hydrogen evolution electrocatalyst over the whole pH range. <i>Nanoscale</i> , 2016 , 8, 8500-4	7.7	123
276	Transition-Metal Phosphides: Activity Origin, Energy-Related Electrocatalysis Applications, and Synthetic Strategies. <i>Advanced Functional Materials</i> , 2020 , 30, 2004009	15.6	122
275	All-solid-state high performance asymmetric supercapacitors based on novel MnS nanocrystal and activated carbon materials. <i>Scientific Reports</i> , 2016 , 6, 23289	4.9	120

274	Engineered Graphene Materials: Synthesis and Applications for Polymer Electrolyte Membrane Fuel Cells. <i>Advanced Materials</i> , 2017 , 29, 1601741	24	118
273	Morphology controlled synthesis of monodisperse cobalt hydroxide for supercapacitor with high performance and long cycle life. <i>Journal of Power Sources</i> , 2014 , 256, 160-169	8.9	118
272	Template-free hydrothermal synthesis of nickel cobalt hydroxide nanoflowers with high performance for asymmetric supercapacitor. <i>Electrochimica Acta</i> , 2015 , 161, 279-289	6.7	118
271	Hydrogen storage in carbon nanotubes modified by microwave plasma etching and Pd decoration. <i>Carbon</i> , 2006 , 44, 762-767	10.4	118
270	MOF-derived 3D Fe-N-S co-doped carbon matrix/nanotube nanocomposites with advanced oxygen reduction activity and stability in both acidic and alkaline media. <i>Applied Catalysis B: Environmental</i> , 2019 , 250, 143-149	21.8	117
269	Defect and pyridinic nitrogen engineering of carbon-based metal-free nanomaterial toward oxygen reduction. <i>Nano Energy</i> , 2018 , 52, 307-314	17.1	114
268	MoC quantum dot embedded chitosan-derived nitrogen-doped carbon for efficient hydrogen evolution in a broad pH range. <i>Chemical Communications</i> , 2016 , 52, 12753-12756	5.8	112
267	CoP quantum dot embedded N, P dual-doped carbon self-supported electrodes with flexible and binder-free properties for efficient hydrogen evolution reactions. <i>Nanoscale</i> , 2018 , 10, 2902-2907	7.7	110
266	Hexapod PtRuCu Nanocrystalline Alloy for Highly Efficient and Stable Methanol Oxidation. <i>ACS Catalysis</i> , 2018 , 8, 7578-7584	13.1	109
265	Defective N/S-Codoped 3D Cheese-Like Porous Carbon Nanomaterial toward Efficient Oxygen Reduction and Zn-Air Batteries. <i>Small</i> , 2018 , 14, e1800563	11	105
264	Synthesis of Capsule-like Porous Hollow Nanonickel Cobalt Sulfides via Cation Exchange Based on the Kirkendall Effect for High-Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9721-32	9.5	103
263	Smart reconstruction of dual-carbon decorated MnO for anode with high-capacity and ultralong-life lithium storage properties. <i>Carbon</i> , 2017 , 115, 95-104	10.4	102
262	Surface reconstruction engineering of cobalt phosphides by Ru inducement to form hollow Ru-RuPx-CoxP pre-electrocatalysts with accelerated oxygen evolution reaction. <i>Nano Energy</i> , 2018 , 53, 270-276	17.1	102
261	Atomic scale enhancement of metal-support interactions between Pt and ZrC for highly stable electrocatalysts. <i>Energy and Environmental Science</i> , 2015 , 8, 1450-1455	35.4	101
260	Surface Evolution of PtCu Alloy Shell over Pd Nanocrystals Leads to Superior Hydrogen Evolution and Oxygen Reduction Reactions. <i>ACS Energy Letters</i> , 2018 , 3, 940-945	20.1	99
259	Simultaneous sulfonation and reduction of graphene oxide as highly efficient supports for metal nanocatalysts. <i>Carbon</i> , 2014 , 66, 312-319	10.4	98
258	In situ derived Fe/N/S-codoped carbon nanotubes from ZIF-8 crystals as efficient electrocatalysts for the oxygen reduction reaction and zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20093-20099	13.0	97
257	Graphene quantum dots encapsulated tremella-like NiCo ₂ O ₄ for advanced asymmetric supercapacitors. <i>Carbon</i> , 2019 , 146, 1-8	10.4	96

256	Ultrasmall tungsten phosphide nanoparticles embedded in nitrogen-doped carbon as a highly active and stable hydrogen-evolution electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 15327-15332	13	96
255	Bifunctional effect of reduced graphene oxides to support active metal nanoparticles for oxygen reduction reaction and stability. <i>Journal of Materials Chemistry</i> , 2012 , 22, 21298		95
254	Honeycomb-like mesoporous cobalt nickel phosphate nanospheres as novel materials for high performance supercapacitor. <i>Electrochimica Acta</i> , 2016 , 190, 118-125	6.7	93
253	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	7.3	91
252	Ultralow Ru Loading Transition Metal Phosphides as High-Efficient Bifunctional Electrocatalyst for a Solar-to-Hydrogen Generation System. <i>Advanced Energy Materials</i> , 2020 , 10, 2000814	21.8	88
251	Highly active platinum nanoparticles on graphene nanosheets with a significant improvement in stability and CO tolerance. <i>Langmuir</i> , 2012 , 28, 3979-86	4	86
250	Synthesis of graphene oxide anchored porous manganese sulfide nanocrystals via the nanoscale Kirkendall effect for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 12913-12919	13	84
249	Top-Down Strategy to Synthesize Mesoporous Dual Carbon Armored MnO Nanoparticles for Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 12680-12686	9.5	83
248	Single-Atom Catalysts for Electrochemical Hydrogen Evolution Reaction: Recent Advances and Future Perspectives. <i>Nano-Micro Letters</i> , 2020 , 12, 21	19.5	83
247	Nano-ceramic support materials for low temperature fuel cell catalysts. <i>Nanoscale</i> , 2014 , 6, 5063-74	7.7	83
246	Hydrothermal synthesis of a flower-like nano-nickel hydroxide for high performance supercapacitors. <i>Electrochimica Acta</i> , 2014 , 123, 158-166	6.7	83
245	Perfluorosulfonic acid-functionalized Pt/carbon nanotube catalysts with enhanced stability and performance for use in proton exchange membrane fuel cells. <i>Carbon</i> , 2011 , 49, 82-88	10.4	83
244	Transition metal/nitrogen dual-doped mesoporous graphene-like carbon nanosheets for the oxygen reduction and evolution reactions. <i>Nanoscale</i> , 2016 , 8, 13311-20	7.7	81
243	A highly stable catalyst for PEM fuel cell based on durable titanium diboride support and polymer stabilization. <i>Applied Catalysis B: Environmental</i> , 2010 , 93, 233-240	21.8	81
242	Iron oxide and phosphide encapsulated within N,P-doped microporous carbon nanofibers as advanced tri-functional electrocatalyst toward oxygen reduction/evolution and hydrogen evolution reactions and zinc-air batteries. <i>Journal of Power Sources</i> , 2019 , 413, 367-375	8.9	81
241	Three dimensional few-layer porous carbon nanosheets towards oxygen reduction. <i>Applied Catalysis B: Environmental</i> , 2017 , 211, 148-156	21.8	79
240	Egg derived nitrogen-self-doped carbon/carbon nanotube hybrids as noble-metal-free catalysts for oxygen reduction. <i>Journal of Power Sources</i> , 2014 , 271, 522-529	8.9	79
239	Nanocarbon-intercalated and Fe ^{II} -codoped graphene as a highly active noble-metal-free bifunctional electrocatalyst for oxygen reduction and evolution. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1930-1934	13	78

238	Transforming waste biomass with an intrinsically porous network structure into porous nitrogen-doped graphene for highly efficient oxygen reduction. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 10392-9	3.6	78
237	RuP2-Based Catalysts with Platinum-like Activity and Higher Durability for the Hydrogen Evolution Reaction at All pH Values. <i>Angewandte Chemie</i> , 2017 , 129, 11717-11722	3.6	78
236	An Isolated ZincCobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. <i>Angewandte Chemie</i> , 2019 , 131, 2648-2652	3.6	78
235	An ambient aqueous synthesis for highly dispersed and active Pd/C catalyst for formic acid electro-oxidation. <i>Journal of Power Sources</i> , 2010 , 195, 7246-7249	8.9	75
234	Nano-silicon carbide supported catalysts for PEM fuel cells with high electrochemical stability and improved performance by addition of carbon. <i>Applied Catalysis B: Environmental</i> , 2010 , 100, 190-196	21.8	75
233	Carbon nanotubes intercalated Co/N-doped porous carbon nanosheets as efficient electrocatalyst for oxygen reduction reaction and zinc-air batteries. <i>Chemical Engineering Journal</i> , 2018 , 342, 163-170	14.7	74
232	The role of iron nitrides in the Fe-N-C catalysis system towards the oxygen reduction reaction. <i>Nanoscale</i> , 2017 , 9, 7641-7649	7.7	73
231	Mesoporous-silica induced doped carbon nanotube growth from metal-organic frameworks. <i>Nanoscale</i> , 2018 , 10, 6147-6154	7.7	73
230	Graphene/carbon nanospheres sandwich supported PEM fuel cell metal nanocatalysts with remarkably high activity and stability. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 2126-2132	13	72
229	Ultrafine Molybdenum Carbide Nanocrystals Confined in Carbon Foams via a Colloid-Confinement Route for Efficient Hydrogen Production. <i>Small Methods</i> , 2018 , 2, 1700396	12.8	69
228	Keratin-derived S/N co-doped graphene-like nanobubble and nanosheet hybrids for highly efficient oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 15870-15879	13	69
227	Hierarchical three-dimensional MnO nanorods/carbon anodes for ultralong-life lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 16936-16945	13	68
226	Activating rhodium phosphide-based catalysts for the pH-universal hydrogen evolution reaction. <i>Nanoscale</i> , 2018 , 10, 12407-12412	7.7	68
225	Facile Synthesis of Defect-Rich and S/N Co-Doped Graphene-Like Carbon Nanosheets as an Efficient Electrocatalyst for Primary and All-Solid-State Zn-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24545-24554	9.5	65
224	Cage-confinement pyrolysis route to size-controlled molybdenum-based oxygen electrode catalysts: From isolated atoms to clusters and nanoparticles. <i>Nano Energy</i> , 2020 , 67, 104288	17.1	65
223	Double Metal Diphosphide Pair Nanocages Coupled with P-Doped Carbon for Accelerated Oxygen and Hydrogen Evolution Kinetics. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 727-733	9.5	65
222	Integrated design and construction of WP/W nanorod array electrodes toward efficient hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2017 , 327, 705-712	14.7	64
221	Molybdenum Carbide-Derived Chlorine-Doped Ordered Mesoporous Carbon with Few-Layered Graphene Walls for Energy Storage Applications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3702-3712	9.5	63

220	Ultrastable nitrogen-doped carbon encapsulating molybdenum phosphide nanoparticles as highly efficient electrocatalyst for hydrogen generation. <i>Nanoscale</i> , 2016 , 8, 17256-17261	7.7	62
219	Dual active nitrogen doped hierarchical porous hollow carbon nanospheres as an oxygen reduction electrocatalyst for zinc-air batteries. <i>Nanoscale</i> , 2017 , 9, 13257-13263	7.7	62
218	Ultra-thin N-doped-graphene encapsulated Ni nanoparticles coupled with MoO ₂ nanosheets for highly efficient water splitting at large current density. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 14545-14554	12.1	61
217	Ultrahigh Conductive Copper/Large Flake Size Graphene Heterostructure Thin-Film with Remarkable Electromagnetic Interference Shielding Effectiveness. <i>Small</i> , 2018 , 14, e1704332	11	61
216	N,P-coordinated fullerene-like carbon nanostructures with dual active centers toward highly-efficient multi-functional electrocatalysis for CO ₂ RR, ORR and Zn-air battery. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15271-15277	13	60
215	Surface nitridation of nickel-cobalt alloy nanocactoids raises the performance of water oxidation and splitting. <i>Applied Catalysis B: Environmental</i> , 2020 , 270, 118889	21.8	60
214	Flexible graphite films with high conductivity for radio-frequency antennas. <i>Carbon</i> , 2018 , 130, 164-169	10.4	60
213	Nanocrystalline-Li ₂ FeSiO ₄ synthesized by carbon frameworks as an advanced cathode material for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 6870-6878	13	60
212	A Generic Conversion Strategy: From 2D Metal Carbides (M _x C _y) to M-Self-Doped Graphene toward High-Efficiency Energy Applications. <i>Advanced Functional Materials</i> , 2017 , 27, 1604904	15.6	59
211	Nano-boron carbide supported platinum catalysts with much enhanced methanol oxidation activity and CO tolerance. <i>Journal of Materials Chemistry</i> , 2012 , 22, 9155		59
210	Efficient water splitting catalyzed by flexible NiP ₂ nanosheet array electrodes under both neutral and alkaline solutions. <i>New Journal of Chemistry</i> , 2017 , 41, 2154-2159	3.6	58
209	Transforming Two-Dimensional Boron Carbide into Boron and Chlorine Dual-Doped Carbon Nanotubes by Chlorination for Efficient Oxygen Reduction. <i>ACS Energy Letters</i> , 2018 , 3, 184-190	20.1	57
208	Construction of an iron and oxygen co-doped nickel phosphide based on MOF derivatives for highly efficient and long-enduring water splitting. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4570-4578	13	56
207	Highly sensitive wearable sensor based on a flexible multi-layer graphene film antenna. <i>Science Bulletin</i> , 2018 , 63, 574-579	10.6	56
206	Rational inert-basal-plane activating design of ultrathin 1T' phase MoS ₂ with a MoO ₃ heterostructure for enhancing hydrogen evolution performances. <i>Nanoscale</i> , 2018 , 10, 16531-16538	7.7	56
205	Synergizing in-grown Ni ₃ N/Ni heterostructured core and ultrathin Ni ₃ N surface shell enables self-adaptive surface reconfiguration and efficient oxygen evolution reaction. <i>Nano Energy</i> , 2020 , 78, 105355	17.1	56
204	Ionothermal Route to Phase-Pure RuB ₂ Catalysts for Efficient Oxygen Evolution and Water Splitting in Acidic Media. <i>ACS Energy Letters</i> , 2020 , 5, 2909-2915	20.1	56
203	One particle@one cell: Highly monodispersed PtPd bimetallic nanoparticles for enhanced oxygen reduction reaction. <i>Nano Energy</i> , 2014 , 8, 214-222	17.1	55

202	Synergistic Coupling of Ni Nanoparticles with Ni C Nanosheets for Highly Efficient Overall Water Splitting. <i>Small</i> , 2020 , 16, e2001642	11	55
201	Li ₂ FeSiO ₄ nanorods bonded with graphene for high performance batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9601-9608	13	54
200	One-pot synthesis of Pt/CeO ₂ /C catalyst for improving the ORR activity and durability of PEMFC. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 13011-13019	6.7	53
199	Synthesis and electrochemical performance of Li ₂ FeSiO ₄ /C/carbon nanosphere composite cathode materials for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2013 , 572, 158-162	5.7	51
198	Porous graphene supported Pt catalysts for proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2014 , 132, 356-363	6.7	50
197	Synthesis of peanut-like hierarchical manganese carbonate microcrystals via magnetically driven self-assembly for high performance asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 3923-3931	13	49
196	A novel synthesis of carbon nanotubes directly from an indecomposable solid carbon source for electrochemical applications. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 2137-2146	13	49
195	Defect and Doping Co-Engineered Non-Metal Nanocarbon ORR Electrocatalyst. <i>Nano-Micro Letters</i> , 2021 , 13, 65	19.5	49
194	Ultrathin carbon layer stabilized metal catalysts towards oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 14007-14014	13	48
193	A highly ordered multi-layered hydrogenated TiO ₂ -II phase nanowire array negative electrode for 2.4 V aqueous asymmetric supercapacitors with high energy density and long cycle life. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 623-632	13	48
192	Constructing carbon-coated high-index (222) faceted tantalum carbide nanocrystals as a robust hydrogen evolution catalyst. <i>Nano Energy</i> , 2017 , 36, 374-380	17.1	47
191	Hierarchical shuttle-like Li ₂ FeSiO ₄ as a highly efficient cathode material for lithium-ion batteries. <i>Journal of Power Sources</i> , 2013 , 242, 171-178	8.9	47
190	Regulative Electronic States around Ruthenium/Ruthenium Disulphide Heterointerfaces for Efficient Water Splitting in Acidic Media. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 12328-12334	16.4	47
189	Graphene activated 3D-hierarchical flower-like Li ₂ FeSiO ₄ for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16567-16573	13	46
188	Twinned Tungsten Carbonitride Nanocrystals Boost Hydrogen Evolution Activity and Stability. <i>Small</i> , 2019 , 15, e1900248	11	44
187	Improved lifetime of PEM fuel cell catalysts through polymer stabilization. <i>Electrochemistry Communications</i> , 2009 , 11, 1610-1614	5.1	44
186	Au nanoparticles self-assembled onto Nafion membranes for use as methanol-blocking barriers. <i>Electrochemistry Communications</i> , 2005 , 7, 1143-1147	5.1	43
185	Boron-rich environment boosting ruthenium boride on B, N doped carbon outperforms platinum for hydrogen evolution reaction in a universal pH range. <i>Nano Energy</i> , 2020 , 75, 104881	17.1	43

184	Nitrogen-self-doped carbon with a porous graphene-like structure as a highly efficient catalyst for oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 10851-10857	13	42
183	Na-Mn-O Nanocrystals as a High Capacity and Long Life Anode Material for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1602092	21.8	42
182	Ultrannarrow Graphene Nanoribbons toward Oxygen Reduction and Evolution Reactions. <i>Advanced Science</i> , 2018 , 5, 1801375	13.6	41
181	Cobalt single atom site isolated Pt nanoparticles for efficient ORR and HER in acid media. <i>Nano Energy</i> , 2021 , 88, 106221	17.1	41
180	Carbon dioxide directly induced oxygen vacancy in the surface of lithium-rich layered oxides for high-energy lithium storage. <i>Journal of Power Sources</i> , 2019 , 432, 8-15	8.9	40
179	3D flower-like ZnFe-ZIF derived hierarchical Fe, N-Codoped carbon architecture for enhanced oxygen reduction in both alkaline and acidic media, and zinc-air battery performance. <i>Carbon</i> , 2020 , 161, 502-509	10.4	40
178	Tuning structural stability and lithium-storage properties by d-orbital hybridization substitution in full tetrahedron Li ₂ FeSiO ₄ nanocrystal. <i>Nano Energy</i> , 2016 , 20, 117-125	17.1	40
177	ZIF-8/LiFePO ₄ derived Fe-N-P Co-doped carbon nanotube encapsulated Fe ₂ P nanoparticles for efficient oxygen reduction and Zn-air batteries. <i>Nano Research</i> , 2020 , 13, 818-823	10	39
176	Seed-mediated synthesis of large-diameter ternary TePtCo nanotubes for enhanced oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2018 , 231, 277-282	21.8	39
175	Multihierarchical Structure of Hybridized Phosphates Anchored on Reduced Graphene Oxide for High Power Hybrid Energy Storage Devices. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 5679-5685	8.3	38
174	Electronic Structure Control of Tungsten Oxide Activated by Ni for Ultrahigh-Performance Supercapacitors. <i>Small</i> , 2018 , 14, e1800381	11	38
173	Scalable cellulose-sponsored functionalized carbon nanorods induced by cobalt for efficient overall water splitting. <i>Carbon</i> , 2018 , 137, 274-281	10.4	38
172	Polymers of intrinsic microporosity in electrocatalysis: Novel pore rigidity effects and lamella palladium growth. <i>Electrochimica Acta</i> , 2014 , 128, 3-9	6.7	37
171	High stability platinum electrocatalysts with zirconia-carbon hybrid supports. <i>Journal of Materials Chemistry</i> , 2012 , 22, 1135-1141		37
170	Synergistic effect of cobalt and nickel on the superior electrochemical performances of rGO anchored nickel cobalt binary sulfides. <i>Electrochimica Acta</i> , 2016 , 212, 294-302	6.7	37
169	Nano conductive ceramic wedged graphene composites as highly efficient metal supports for oxygen reduction. <i>Scientific Reports</i> , 2014 , 4, 3968	4.9	36
168	Electronic tuning of confined sub-nanometer cobalt oxide clusters boosting oxygen catalysis and rechargeable Zn-air batteries. <i>Nano Energy</i> , 2021 , 83, 105813	17.1	36
167	Highly Exposed Active Sites of Defect-Enriched Derived MOFs for Enhanced Oxygen Reduction Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 17855-17862	8.3	35

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154	Vacancy-coordinated hydrogen evolution reaction on MoO ₃ anchored atomically dispersed MoRu pairs. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14466-14472	13	31
153	Anion exchange membrane based on alkali doped poly(2,5-benzimidazole) for fuel cell. <i>Solid State Ionics</i> , 2012 , 208, 52-55	3.3	31
152	Significantly Improved Water Oxidation of CoP Catalysts by Electrochemical Activation. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 17851-17859	8.3	30
151	RuRh Bimetallic Nanoring as High-efficiency pH-Universal Catalyst for Hydrogen Evolution Reaction. <i>Advanced Science</i> , 2021 , 8, 2002341	13.6	30
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