

Sang Hoon Joo

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.

178
papers

20,465
citations

63
h-index

142
g-index

187
ext. papers

22,452
ext. citations

10.2
avg, IF

6.85
L-index

#	Paper	IF	Citations
178	Heteroatom-doped nanomaterials/core-shell nanostructure based electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2022 , 10, 987-1021	13	5
177	Circumventing the OCl versus OOH scaling relation in the chlorine evolution reaction: Beyond dimensionally stable anodes. <i>Current Opinion in Electrochemistry</i> , 2022 , 100979	7.2	4
176	Direct propylene epoxidation with oxygen using a photo-electro-heterogeneous catalytic system. <i>Nature Catalysis</i> , 2022 , 5, 37-44	36.5	3
175	Recent advances in non-precious group metal-based catalysts for water electrolysis and beyond. <i>Journal of Materials Chemistry A</i> , 2021 , 10, 50-88	13	4
174	Pt-based Intermetallic Nanocatalysts for Promoting the Oxygen Reduction Reaction. <i>Bulletin of the Korean Chemical Society</i> , 2021 , 42, 724-736	1.2	4
173	Structural Evolution of Atomically Dispersed Fe Species in Fe _N /C Catalysts Probed by X-ray Absorption and ⁵⁷ Fe Mössbauer Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 11928-11938	3.8	1
172	Single-Atom Catalysts: A Perspective toward Application in Electrochemical Energy Conversion. <i>Jacs Au</i> , 2021 , 1, 1086-1100		12
171	Metal carbides as alternative electrocatalysts for energy conversion reactions. <i>Journal of Catalysis</i> , 2021 , 404, 911-911	7.3	4
170	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage. <i>Angewandte Chemie</i> , 2021 , 133, 1461-1469	3.6	0
169	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 1441-1449	16.4	18
168	Heteroatom-doped carbon-based oxygen reduction electrocatalysts with tailored four-electron and two-electron selectivity. <i>Chemical Communications</i> , 2021 , 57, 7350-7361	5.8	6
167	Designing highly active nanoporous carbon H ₂ O ₂ production electrocatalysts through active site identification. <i>CheM</i> , 2021 ,	16.2	18
166	Reversible Ligand Exchange in Atomically Dispersed Catalysts for Modulating the Activity and Selectivity of the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 20528-20534	16.4	4
165	Reversible Ligand Exchange in Atomically Dispersed Catalysts for Modulating the Activity and Selectivity of the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2021 , 133, 20691-20697	3.6	0
164	General Efficacy of Atomically Dispersed Pt Catalysts for the Chlorine Evolution Reaction: Potential-Dependent Switching of the Kinetics and Mechanism. <i>ACS Catalysis</i> , 2021 , 11, 12232-12246	13.1	8
163	Nanoscale electrocatalyst design for alkaline hydrogen evolution reaction through activity descriptor identification. <i>Materials Chemistry Frontiers</i> , 2021 , 5, 4042-4058	7.8	1
162	Ultrasensitive detection of hydrogen peroxide and dopamine using copolymer-grafted metal-organic framework based electrochemical sensor. <i>Analytica Chimica Acta</i> , 2020 , 1118, 26-35	6.6	27

161	Selective electrocatalysis imparted by metal-insulator transition for durability enhancement of automotive fuel cells. <i>Nature Catalysis</i> , 2020 , 3, 639-648	36.5	32
160	Electrocatalyst design for promoting two-electron oxygen reduction reaction: Isolation of active site atoms. <i>Current Opinion in Electrochemistry</i> , 2020 , 21, 109-116	7.2	18
159	Electrical Conductivity Gradient Based on Heterofibrous Scaffolds for Stable Lithium-Metal Batteries. <i>Advanced Functional Materials</i> , 2020 , 30, 1908868	15.6	34
158	Atomically dispersed Pt-N sites as efficient and selective electrocatalysts for the chlorine evolution reaction. <i>Nature Communications</i> , 2020 , 11, 412	17.4	59
157	Membraneless enzymatic biofuel cells using iron and cobalt co-doped ordered mesoporous porphyrinic carbon based catalyst. <i>Applied Surface Science</i> , 2020 , 511, 145449	6.7	17
156	Recent advances in nanostructured intermetallic electrocatalysts for renewable energy conversion reactions. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 8195-8217	13	34
155	Dual catalytic functions of biomimetic, atomically dispersed iron-nitrogen doped carbon catalysts for efficient enzymatic biofuel cells. <i>Chemical Engineering Journal</i> , 2020 , 381, 122679	14.7	24
154	Enhanced Activity and Stability of Nanoporous PtIr Electrocatalysts for Unitized Regenerative Fuel Cell. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1423-1428	6.1	4
153	Monomeric MoS ₂ -Derived Polymeric Chains with Active Molecular Units for Efficient Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2020 , 10, 652-662	13.1	16
152	A General Strategy to Atomically Dispersed Precious Metal Catalysts for Unravelling Their Catalytic Trends for Oxygen Reduction Reaction. <i>ACS Nano</i> , 2020 , 14, 1990-2001	16.7	58
151	Thermal Transformation of Molecular Ni ²⁺ /Ni ⁴⁺ Sites for Enhanced CO ₂ Electroreduction Activity. <i>ACS Catalysis</i> , 2020 , 10, 10920-10931	13.1	32
150	Intermetallic PtCu Nanoframes as Efficient Oxygen Reduction Electrocatalysts. <i>Nano Letters</i> , 2020 , 20, 7413-7421	11.5	46
149	Immobilizing single atom catalytic sites onto highly reduced carbon hosts: Fe ⁰ /CNT as a durable oxygen reduction catalyst for Na ⁺ /ir batteries. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 18891-18902	13	17
148	Highly dispersed Pd catalysts supported on various carbons for furfural hydrogenation. <i>Catalysis Today</i> , 2020 , 350, 71-79	5.3	16
147	Ordered Mesoporous Metastable FeMoC _{1-x} with Enhanced Water Dissociation Capability for Boosting Alkaline Hydrogen Evolution Activity. <i>Advanced Functional Materials</i> , 2019 , 29, 1901217	15.6	48
146	Asymmetric polystyrene-poly lactide bottlebrush random copolymers: Synthesis, self-assembly and nanoporous structures. <i>Polymer</i> , 2019 , 175, 49-56	3.9	9
145	Structure-dependent catalytic properties of mesoporous cobalt oxides in furfural hydrogenation. <i>Applied Catalysis A: General</i> , 2019 , 583, 117125	5.1	16
144	Unassisted solar lignin valorisation using a compartmented photo-electro-biochemical cell. <i>Nature Communications</i> , 2019 , 10, 5123	17.4	25

143	Activity Origin and Multifunctionality of Pt-Based Intermetallic Nanostructures for Efficient Electrocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 11242-11254	13.1	56
142	Dimeric Fe Sites Effectively Activate Oxygen Molecule. <i>Chem</i> , 2019 , 5, 3006-3007	16.2	4
141	Heterogeneous Co ₂ /C Electrocatalysts with Controlled Cobalt Site Densities for the Hydrogen Evolution Reaction: Structure-Activity Correlations and Kinetic Insights. <i>ACS Catalysis</i> , 2019 , 9, 83-97	13.1	82
140	Topotactic Transformations in an Icosahedral Nanocrystal to Form Efficient Water-Splitting Catalysts. <i>Advanced Materials</i> , 2019 , 31, e1805546	24	59
139	Active Edge-Site-Rich Carbon Nanocatalysts with Enhanced Electron Transfer for Efficient Electrochemical Hydrogen Peroxide Production. <i>Angewandte Chemie</i> , 2019 , 131, 1112-1117	3.6	13
138	Active Edge-Site-Rich Carbon Nanocatalysts with Enhanced Electron Transfer for Efficient Electrochemical Hydrogen Peroxide Production. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 1100-1105	16.4	128
137	Nanocrevase-Rich Carbon Fibers for Stable Lithium and Sodium Metal Anodes. <i>Nano Letters</i> , 2019 , 19, 1504-1511	11.5	88
136	Impact of Textural Properties of Mesoporous Porphyrinic Carbon Electrocatalysts on Oxygen Reduction Reaction Activity. <i>ChemElectroChem</i> , 2018 , 5, 1928-1936	4.3	21
135	Vertex-Reinforced PtCuCo Ternary Nanoframes as Efficient and Stable Electrocatalysts for the Oxygen Reduction Reaction and the Methanol Oxidation Reaction. <i>Advanced Functional Materials</i> , 2018 , 28, 1706440	15.6	128
134	Preferential horizontal growth of tungsten sulfide on carbon and insight into active sulfur sites for the hydrogen evolution reaction. <i>Nanoscale</i> , 2018 , 10, 3838-3848	7.7	22
133	Strategies for Enhancing the Electrocatalytic Activity of Mn/C Catalysts for the Oxygen Reduction Reaction. <i>Topics in Catalysis</i> , 2018 , 61, 1077-1100	2.3	18
132	Realizing High-Performance Li-Polysulfide Full Cells by using a Lithium Bis(trifluoromethanesulfonyl)imide Salt Electrolyte for Stable Cyclability. <i>ChemSusChem</i> , 2018 , 11, 3402-3409	8.3	3
131	An IrRu alloy nanocactus on Cu ₂ S@IrSy as a highly efficient bifunctional electrocatalyst toward overall water splitting in acidic electrolytes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 16130-16138	13	44
130	MOF-Derived Cu@Cu ₂ O Nanocatalyst for Oxygen Reduction Reaction and Cycloaddition Reaction. <i>Nanomaterials</i> , 2018 , 8,	5.4	43
129	Hollow nanoparticles as emerging electrocatalysts for renewable energy conversion reactions. <i>Chemical Society Reviews</i> , 2018 , 47, 8173-8202	58.5	157
128	A facet-controlled RhPbS nanocage as an efficient and robust electrocatalyst toward the hydrogen evolution reaction. <i>Nanoscale</i> , 2018 , 10, 9845-9850	7.7	20
127	Nanodendrites of platinum-group metals for electrocatalytic applications. <i>Nano Research</i> , 2018 , 11, 6111-6140	16.33	
126	Hierarchically porous adamantane-shaped carbon nanoframes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18906-18911	13	20

125	Oxygen-deficient triple perovskites as highly active and durable bifunctional electrocatalysts for oxygen electrode reactions. <i>Science Advances</i> , 2018 , 4, eaap9360	14.3	136
124	Ni@Ru and NiCo@Ru Core-Shell Hexagonal Nanosandwiches with a Compositionally Tunable Core and a Regioselectively Grown Shell. <i>Small</i> , 2018 , 14, 1702353	11	45
123	AASStacked Trilayer Hexagonal Boron Nitride Membrane for Proton Exchange Membrane Fuel Cells. <i>ACS Nano</i> , 2018 , 12, 10764-10771	16.7	28
122	Highly Crystalline Pd ₁₃ Cu ₃ S ₇ Nanoplates Prepared via Partial Cation Exchange of Cu _{1.81} S Templates as an Efficient Electrocatalyst for the Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2018 , 30, 6884-6892	9.6	25
121	Promoting Oxygen Reduction Reaction Activity of Fe _N /C Electrocatalysts by Silica-Coating-Mediated Synthesis for Anion-Exchange Membrane Fuel Cells. <i>Chemistry of Materials</i> , 2018 , 30, 6684-6701	9.6	69
120	Cobalt Assisted Synthesis of IrCu Hollow Octahedral Nanocages as Highly Active Electrocatalysts toward Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2017 , 27, 1604688	15.6	145
119	Roles of Fe-N and Fe-FeC@C Species in Fe-N/C Electrocatalysts for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 9567-9575	9.5	115
118	Morphology controlled synthesis of 2-D Ni ₃ S ₂ and NiS ₂ nanostructures on Ni foam towards oxygen evolution reaction. <i>Nano Convergence</i> , 2017 , 4,	9.2	22
117	Cactus-Like Hollow Cu S@Ru Nanoplates as Excellent and Robust Electrocatalysts for the Alkaline Hydrogen Evolution Reaction. <i>Small</i> , 2017 , 13, 1700052	11	69
116	Iridium-Based Multimetallic Nanoframe@Nanoframe Structure: An Efficient and Robust Electrocatalyst toward Oxygen Evolution Reaction. <i>ACS Nano</i> , 2017 , 11, 5500-5509	16.7	173
115	High-performance Fe ₅ C ₂ @CMK-3 nanocatalyst for selective and high-yield production of gasoline-range hydrocarbons. <i>Journal of Catalysis</i> , 2017 , 349, 66-74	7.3	17
114	Direct conversion of coordination compounds into Ni ₂ P nanoparticles entrapped in 3D mesoporous graphene for an efficient hydrogen evolution reaction. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 973-978	7.8	33
113	Lanthanide metal-assisted synthesis of rhombic dodecahedral M _{Ni} (M = Ir and Pt) nanoframes toward efficient oxygen evolution catalysis. <i>Nano Energy</i> , 2017 , 42, 17-25	17.1	72
112	Recent advances in unveiling active sites in molybdenum sulfide-based electrocatalysts for the hydrogen evolution reaction. <i>Nano Convergence</i> , 2017 , 4, 19	9.2	38
111	Molecularly dispersed nickel-containing species on the carbon nitride network as electrocatalysts for the oxygen evolution reaction. <i>Carbon</i> , 2017 , 124, 180-187	10.4	45
110	Synthesis of compositionally tunable, hollow mixed metal sulphide CoNiS octahedral nanocages and their composition-dependent electrocatalytic activities for oxygen evolution reaction. <i>Nanoscale</i> , 2017 , 9, 15397-15406	7.7	40
109	MXene: an emerging two-dimensional material for future energy conversion and storage applications. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24564-24579	13	291
108	Electrocatalysts composed of a Co(acetylacetonate) ₂ molecule and refluxed graphene oxide for an oxygen reduction reaction. <i>New Journal of Chemistry</i> , 2017 , 41, 6203-6209	3.6	5

107	Recent Progress in the Identification of Active Sites in Pyrolyzed Fe _N /C Catalysts and Insights into Their Role in Oxygen Reduction Reaction. <i>Journal of Electrochemical Science and Technology</i> , 2017 , 8, 169-182	3.2	16
106	Rational design of Pt-Ni-Co ternary alloy nanoframe crystals as highly efficient catalysts toward the alkaline hydrogen evolution reaction. <i>Nanoscale</i> , 2016 , 8, 16379-16386	7.7	99
105	Self-Supported Mesoporous Pt-Based Bimetallic Nanospheres Containing an Intermetallic Phase as Ultrastable Oxygen Reduction Electrocatalysts. <i>Small</i> , 2016 , 12, 5347-5353	11	63
104	Electrocatalytic performances of heteroatom-containing functionalities in N-doped reduced graphene oxides. <i>Journal of Industrial and Engineering Chemistry</i> , 2016 , 42, 149-156	6.3	19
103	Patternable Nanoporous Carbon Electrodes for Use as Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A1886-A1892	3.9	2
102	A General Approach to Preferential Formation of Active Fe-N Sites in Fe-N/C Electrocatalysts for Efficient Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15046-15056	16.4	523
101	Shape effects of nickel phosphide nanocrystals on hydrogen evolution reaction. <i>CrystEngComm</i> , 2016 , 18, 6083-6089	3.3	66
100	Size-Dependent Activity Trends Combined with in Situ X-ray Absorption Spectroscopy Reveal Insights into Cobalt Oxide/Carbon Nanotube-Catalyzed Bifunctional Oxygen Electrocatalysis. <i>ACS Catalysis</i> , 2016 , 6, 4347-4355	13.1	95
99	Graphitic Nanoshell/Mesoporous Carbon Nanohybrids as Highly Efficient and Stable Bifunctional Oxygen Electrocatalysts for Rechargeable Aqueous Na ₂ Air Batteries. <i>Advanced Energy Materials</i> , 2016 , 6, 1501794	21.8	106
98	Facet-controlled hollow Rh ₂ S ₃ hexagonal nanoprisms as highly active and structurally robust catalysts toward hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2016 , 9, 850-856	35.4	91
97	Control of the surface atomic population of Rh _{0.5} Pd _{0.5} bimetallic nanoparticles supported on CeO ₂ . <i>Catalysis Today</i> , 2016 , 260, 95-99	5.3	8
96	Effect of surface oxygen functionalization of carbon support on the activity and durability of Pt/C catalysts for the oxygen reduction reaction. <i>Carbon</i> , 2016 , 101, 449-457	10.4	86
95	Enhancement of oxygen reduction reaction activities by Pt nanoclusters decorated on ordered mesoporous porphyrinic carbons. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 5869-5876	13	16
94	Synthesis of bare Pt ₃ Ni nanorods from PtNi@Ni core-shell nanorods by acid etching: one-step surfactant removal and phase conversion for optimal electrochemical performance toward oxygen reduction reaction. <i>CrystEngComm</i> , 2016 , 18, 6002-6007	3.3	14
93	Ordered mesoporous copper oxide nanostructures as highly active and stable catalysts for aqueous click reactions. <i>Catalysis Communications</i> , 2016 , 81, 24-28	3.2	19
92	Enhancing Activity and Stability of Cobalt Oxide Electrocatalysts for the Oxygen Evolution Reaction via Transition Metal Doping. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3020-F3028	3.9	44
91	Ternary dendritic nanowires as highly active and stable multifunctional electrocatalysts. <i>Nanoscale</i> , 2016 , 8, 15167-72	7.7	20
90	Simple coordination complex-derived three-dimensional mesoporous graphene as an efficient bifunctional oxygen electrocatalyst. <i>Chemical Communications</i> , 2015 , 51, 6773-6	5.8	41

89	Mesoporous monoliths of inverse bicontinuous cubic phases of block copolymer bilayers. <i>Nature Communications</i> , 2015 , 6, 6392	17.4	50
88	Green synthesis of the reduced graphene oxide@ultra-quasi-shell@core nanocomposite: A highly efficient and stable solar-light-induced catalyst for organic dye degradation in water. <i>Applied Surface Science</i> , 2015 , 358, 159-167	6.7	37
87	Noncovalent Surface Locking of Mesoporous Silica Nanoparticles for Exceptionally High Hydrophobic Drug Loading and Enhanced Colloidal Stability. <i>Biomacromolecules</i> , 2015 , 16, 2701-14	6.9	42
86	Nanoscale adhesion between Pt nanoparticles and carbon support and its influence on the durability of fuel cells. <i>Current Applied Physics</i> , 2015 , 15, S108-S114	2.6	8
85	Monolayer-precision synthesis of molybdenum sulfide nanoparticles and their nanoscale size effects in the hydrogen evolution reaction. <i>ACS Nano</i> , 2015 , 9, 3728-39	16.7	165
84	Impact of a conductive oxide core in tungsten sulfide-based nanostructures on the hydrogen evolution reaction. <i>Chemical Communications</i> , 2015 , 51, 8334-7	5.8	43
83	Noncovalent Polymer-Gatekeeper in Mesoporous Silica Nanoparticles as a Targeted Drug Delivery Platform. <i>Advanced Functional Materials</i> , 2015 , 25, 957-965	15.6	119
82	Structural Evolution of Chemically-Driven RuO ₂ Nanowires and 3-Dimensional Design for Photo-Catalytic Applications. <i>Scientific Reports</i> , 2015 , 5, 11933	4.9	16
81	Coordination Chemistry of [Co(acac) ₂] with N-Doped Graphene: Implications for Oxygen Reduction Reaction Reactivity of Organometallic Co-O ₄ -N Species. <i>Angewandte Chemie</i> , 2015 , 127, 12813-12817	3.6	8
80	Coordination Chemistry of [Co(acac) ₂] with N-Doped Graphene: Implications for Oxygen Reduction Reaction Reactivity of Organometallic Co-O ₄ -N Species. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 12622-6	16.4	79
79	Skeletal octahedral nanoframe with Cartesian coordinates via geometrically precise nanoscale phase segregation in a Pt@Ni core-shell nanocrystal. <i>ACS Nano</i> , 2015 , 9, 2856-67	16.7	153
78	Synthesis of ordered mesoporous phenanthrenequinone-carbon via interaction-dependent vapor pressure for rechargeable batteries. <i>Scientific Reports</i> , 2014 , 4, 7404	4.9	26
77	Colloidal inverse bicontinuous cubic membranes of block copolymers with tunable surface functional groups. <i>Nature Chemistry</i> , 2014 , 6, 534-41	17.6	102
76	Production of novel FeOOH/reduced graphene oxide hybrids and their performance as oxygen reduction reaction catalysts. <i>Carbon</i> , 2014 , 80, 127-134	10.4	35
75	An ice-templated, pH-tunable self-assembly route to hierarchically porous graphene nanoscroll networks. <i>Nanoscale</i> , 2014 , 6, 9734-41	7.7	95
74	Intrinsic relationship between enhanced oxygen reduction reaction activity and nanoscale work function of doped carbons. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8875-8	16.4	273
73	A transformative route to nanoporous manganese oxides of controlled oxidation states with identical textural properties. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 10435-10443	13	79
72	Catalytic conversion of <i>Laminaria japonica</i> over microporous zeolites. <i>Energy</i> , 2014 , 66, 2-6	7.9	44

71	In situ catalytic pyrolysis of miscanthus over modified SBA-15 catalysts using Py-GC/MS. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 2343-51	1.3	8
70	Carbon nanotubes/heteroatom-doped carbon core-sheath nanostructures as highly active, metal-free oxygen reduction electrocatalysts for alkaline fuel cells. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4102-6	16.4	148
69	Impact of framework structure of ordered mesoporous carbons on the performance of supported Pt catalysts for oxygen reduction reaction. <i>Carbon</i> , 2014 , 72, 354-364	10.4	35
68	Synthesis of boron and nitrogen co-doped graphene nano-platelets using a two-step solution process and catalytic properties for oxygen reduction reaction. <i>Solid State Sciences</i> , 2014 , 33, 1-5	3.4	21
67	Carbon Nanotubes/Heteroatom-Doped Carbon Core-Sheath Nanostructures as Highly Active, Metal-Free Oxygen Reduction Electrocatalysts for Alkaline Fuel Cells. <i>Angewandte Chemie</i> , 2014 , 126, 4186-4190	3.6	63
66	Core-Shell Nanoarchitectures as Stable Nanocatalysts 2014 , 93-119		1
65	Ordered mesoporous Co ₃ O ₄ spinels as stable, bifunctional, noble metal-free oxygen electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9992	13	241
64	Ordered mesoporous porphyrinic carbons with very high electrocatalytic activity for the oxygen reduction reaction. <i>Scientific Reports</i> , 2013 , 3, 2715	4.9	263
63	Nature of Rh Oxide on Rh Nanoparticles and Its Effect on the Catalytic Activity of CO Oxidation. <i>Catalysis Letters</i> , 2013 , 143, 1153-1161	2.8	17
62	Effects of ionomer content on Pt catalyst/ordered mesoporous carbon support in polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2013 , 222, 477-482	8.9	41
61	Polymer electrolyte membrane fuel cell performance degradation by coolant leakage and recovery. <i>Journal of Power Sources</i> , 2013 , 226, 320-328	8.9	8
60	Ordered mesoporous carbon-carbon nanotube nanocomposites as highly conductive and durable cathode catalyst supports for polymer electrolyte fuel cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 1270-1283	13	51
59	Seed-mediated synthesis and structural analysis of hierarchical silver microparticles (HiAgMPs) with highly nanotextured surfaces. <i>Materials Research Bulletin</i> , 2013 , 48, 2333-2339	5.1	4
58	Nanoporous metal oxides with tunable and nanocrystalline frameworks via conversion of metal-organic frameworks. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8940-6	16.4	216
57	Catalytic pyrolysis of biomass components over mesoporous catalysts using Py-GC/MS. <i>Catalysis Today</i> , 2013 , 204, 170-178	5.3	117
56	Three-dimensional pillared metallomacrocyclic-graphene frameworks with tunable micro- and mesoporosity. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 8432	13	30
55	Effect of Pt particle size on the hydroisomerization of n-dodecane over Pt/Ai-SBA-15 catalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 6074-8	1.3	2
54	Catalytic conversion of <i>Undaria Pinnatifida</i> over nanoporous materials using Py-GC/MS. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 7794-800	1.3	2

53	Bio-oil upgrading via catalytic pyrolysis of waste mandarin residue over SBA-15 catalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 2566-72	1.3	6
52	Carbon-supported ultra-high loading Pt nanoparticle catalyst by controlled overgrowth of Pt: Improvement of Pt utilization leads to enhanced direct methanol fuel cell performance. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 6880-6885	6.7	39
51	Intrinsic relation between catalytic activity of CO oxidation on Ru nanoparticles and Ru oxides uncovered with ambient pressure XPS. <i>Nano Letters</i> , 2012 , 12, 5761-8	11.5	147
50	Ordered mesoporous carbon nitrides with graphitic frameworks as metal-free, highly durable, methanol-tolerant oxygen reduction catalysts in an acidic medium. <i>Langmuir</i> , 2012 , 28, 991-6	4	130
49	Trend of catalytic activity of CO oxidation on Rh and Ru nanoparticles: Role of surface oxide. <i>Catalysis Today</i> , 2012 , 185, 131-137	5.3	36
48	In situ-generated metal oxide catalyst during CO oxidation reaction transformed from redox-active metal-organic framework-supported palladium nanoparticles. <i>Nanoscale Research Letters</i> , 2012 , 7, 461	5	19
47	Highly interconnected ordered mesoporous carbon-carbon nanotube nanocomposites: Pt-free, highly efficient, and durable counter electrodes for dye-sensitized solar cells. <i>Chemical Communications</i> , 2012 , 48, 8057-9	5.8	106
46	Ordered Mesoporous Carbon Supported Colloidal Pd Nanoparticle Based Model Catalysts for Suzuki Coupling Reactions: Impact of Organic Capping Agents. <i>ChemCatChem</i> , 2012 , 4, 1587-1594	5.2	52
45	Size effect of RhPt bimetallic nanoparticles in catalytic activity of CO oxidation: Role of surface segregation. <i>Catalysis Today</i> , 2012 , 181, 133-137	5.3	47
44	Assembling Gold Nanocubes Into a Nanoporous Gold Material. <i>Bulletin of the Korean Chemical Society</i> , 2012 , 33, 1777-1780	1.2	0
43	Enhancement of electrochemical stability and catalytic activity of Pt nanoparticles via strong metal-support interaction with sulfur-containing ordered mesoporous carbon. <i>Catalysis Today</i> , 2011 , 164, 186-189	5.3	33
42	Ultrathin titania coating for high-temperature stable SiO ₂ /Pt nanocatalysts. <i>Chemical Communications</i> , 2011 , 47, 8412-4	5.8	23
41	Study of electro-chemical properties of metal/oxide interfaces using a newly constructed ambient pressure X-ray photoelectron spectroscopy endstation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011 , 645, 260-265	1.2	18
40	Spectroscopic Study of the Thermal Degradation of PVP-Capped Rh and Pt Nanoparticles in H ₂ and O ₂ Environments. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1117-1126	3.8	88
39	Size effect of ruthenium nanoparticles in catalytic carbon monoxide oxidation. <i>Nano Letters</i> , 2010 , 10, 2709-13	11.5	329
38	Preparation of high loading Pt nanoparticles on ordered mesoporous carbon with a controlled Pt size and its effects on oxygen reduction and methanol oxidation reactions. <i>Electrochimica Acta</i> , 2009 , 54, 5746-5753	6.7	107
37	Thermally stable Pt/mesoporous silica core-shell nanocatalysts for high-temperature reactions. <i>Nature Materials</i> , 2009 , 8, 126-31	27	1256
36	Colloidally Synthesized Monodisperse Rh Nanoparticles Supported on SBA-15 for Size- and Pretreatment-Dependent Studies of CO Oxidation. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8616-8623 ^{3.8}		72

35	Ultrastable Pt nanoparticles supported on sulfur-containing ordered mesoporous carbon via strong metal-support interaction. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5934		68
34	Functionalized carbon nanotube-poly(arylene sulfone) composite membranes for direct methanol fuel cells with enhanced performance. <i>Journal of Power Sources</i> , 2008 , 180, 63-70	8.9	65
33	Exfoliated Sulfonated Poly(arylene ether sulfone) Clay Nanocomposites. <i>Advanced Materials</i> , 2008 , 20, 2341-2344	24	40
32	Rational Synthesis Pathway for Ordered Mesoporous Carbon with Controllable 30- to 100-Angstrom Pores. <i>Advanced Materials</i> , 2008 , 20, 757-762	24	80
31	Cathode catalyst layer using supported Pt catalyst on ordered mesoporous carbon for direct methanol fuel cell. <i>Journal of Power Sources</i> , 2008 , 180, 724-732	8.9	33
30	Ordered mesoporous carbons with controlled particle sizes as catalyst supports for direct methanol fuel cell cathodes. <i>Carbon</i> , 2008 , 46, 2034-2045	10.4	90
29	Ultrafast production of ordered mesoporous carbons via microwave irradiation. <i>Carbon</i> , 2007 , 45, 2851-2854	28.4	14
28	Direct sulfonation of ordered mesoporous carbon for catalyst support of direct methanol fuel cell. <i>Studies in Surface Science and Catalysis</i> , 2007 , 165, 401-404	1.8	3
27	Ordered mesoporous carbon as new support for direct methanol fuel cell: controlling of microporosity and graphitic character. <i>Studies in Surface Science and Catalysis</i> , 2007 , 165, 397-400	1.8	2
26	Synthesis and characterization of mesoporous carbon for fuel cell applications. <i>Journal of Materials Chemistry</i> , 2007 , 17, 3078		314
25	Preparation of Ultra High Loading Supported Pt Catalyst for Direct Methanol Fuel Cell. <i>Studies in Surface Science and Catalysis</i> , 2006 , 537-544	1.8	2
24	Surface Selective Polymerization of Polypyrrole on Ordered Mesoporous Carbon: Enhancing Interfacial Conductivity for Direct Methanol Fuel Cell Application. <i>Macromolecules</i> , 2006 , 39, 3275-3282	5.5	61
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22	Nanostructured carbon materials synthesized from mesoporous silica crystals by replication. <i>Studies in Surface Science and Catalysis</i> , 2004 , 148, 241-260	1.8	57
21	Synthesis of mesoporous carbons with various pore diameters via control of pore wall thickness of mesoporous silicas. <i>Studies in Surface Science and Catalysis</i> , 2003 , 33-36	1.8	4
20	Structures of silica-mesoporous crystals and novel mesoporous carbon-networks synthesized within the pores. <i>Studies in Surface Science and Catalysis</i> , 2003 , 146, 275-280	1.8	4
19	Thermally induced structural changes in SBA-15 and MSU-H silicas and their implications for synthesis of ordered mesoporous carbons. <i>Studies in Surface Science and Catalysis</i> , 2003 , 49-52	1.8	3
18	Friedel-Crafts alkylation over Al-incorporated mesoporous honeycomb. <i>Studies in Surface Science and Catalysis</i> , 2003 , 146, 669-672	1.8	1

17	Regeneration of mesoporous inorganic materials using ordered mesoporous carbon as the template. <i>Studies in Surface Science and Catalysis</i> , 2003 , 146, 53-56	1.8	7
16	X-ray diffraction analysis of mesostructured materials by continuous density function technique. <i>Studies in Surface Science and Catalysis</i> , 2003 , 146, 299-302	1.8	15
15	Direct observation of 3D mesoporous structure by scanning electron microscopy (SEM): SBA-15 silica and CMK-5 carbon. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 2182-5	16.4	181
14	Pore structure and graphitic surface nature of ordered mesoporous carbons probed by low-pressure nitrogen adsorption. <i>Microporous and Mesoporous Materials</i> , 2003 , 60, 139-149	5.3	43
13	Characterization of Regular and Plugged SBA-15 Silicas by Using Adsorption and Inverse Carbon Replication and Explanation of the Plug Formation Mechanism. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 2205-2213	3.4	167
12	Detailed structure of the hexagonally packed mesostructured carbon material CMK-3. <i>Carbon</i> , 2002 , 40, 2477-2481	10.4	67
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3	Synthesis of Highly Ordered Carbon Molecular Sieves via Template-Mediated Structural Transformation. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 7743-7746	3.4	2106
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1	The structure of MCM-48 determined by electron crystallography. <i>Journal of Electron Microscopy</i> , 1999 , 48, 795-798		122