Hyunjoo Lee

List of Publications by Year in descending order

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Version: 2024-02-01

174 papers	13,644 citations	22153 59 h-index	22832 112 g-index

178 all docs	178 docs citations	178 times ranked	15807 citing authors

#	Article	IF	Citations
1	Shaping binary metal nanocrystals through epitaxial seeded growth. Nature Materials, 2007, 6, 692-697.	27.5	1,156
2	Platinum Nanoparticle Shape Effects on Benzene Hydrogenation Selectivity. Nano Letters, 2007, 7, 3097-3101.	9.1	811
3	Singleâ€Atom Catalyst of Platinum Supported on Titanium Nitride for Selective Electrochemical Reactions. Angewandte Chemie - International Edition, 2016, 55, 2058-2062.	13.8	708
4	Morphological Control of Catalytically Active Platinum Nanocrystals. Angewandte Chemie - International Edition, 2006, 45, 7824-7828.	13.8	608
5	Localized Pd Overgrowth on Cubic Pt Nanocrystals for Enhanced Electrocatalytic Oxidation of Formic Acid. Journal of the American Chemical Society, 2008, 130, 5406-5407.	13.7	399
6	Support Effects in Single-Atom Platinum Catalysts for Electrochemical Oxygen Reduction. ACS Catalysis, 2017, 7, 1301-1307.	11.2	363
7	Selective Activation of Methane on Single-Atom Catalyst of Rhodium Dispersed on Zirconia for Direct Conversion. Journal of the American Chemical Society, 2017, 139, 17694-17699.	13.7	297
8	Synthesis of functionalized porous silicas via templating method as heavy metal ion adsorbents: the introduction of surface hydrophilicity onto the surface of adsorbents. Microporous and Mesoporous Materials, 2001, 50, 77-90.	4.4	274
9	Investigation of the Support Effect in Atomically Dispersed Pt on WO_{3â^'x} for Utilization of Pt in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 16038-16042.	13.8	271
10	Balancing activity, stability and conductivity of nanoporous core-shell iridium/iridium oxide oxygen evolution catalysts. Nature Communications, 2017, 8, 1449.	12.8	250
11	Uncoupling the size and support effects of Ni catalysts for dry reforming of methane. Applied Catalysis B: Environmental, 2017, 203, 625-632.	20.2	237
12	Ultrathin IrO₂ Nanoneedles for Electrochemical Water Oxidation. Advanced Functional Materials, 2018, 28, 1704796.	14.9	226
13	Highly durable metal ensemble catalysts with full dispersion for automotive applications beyond single-atom catalysts. Nature Catalysis, 2020, 3, 368-375.	34.4	220
14	General technoeconomic analysis for electrochemical coproduction coupling carbon dioxide reduction with organic oxidation. Nature Communications, 2019, 10, 5193.	12.8	219
15	Singleâ€Atom Catalysts of Precious Metals for Electrochemical Reactions. ChemSusChem, 2018, 11, 104-113.	6.8	218
16	A Combination of Two Visible-Light Responsive Photocatalysts for Achieving the Z-Scheme in the Solid State. ACS Nano, 2011, 5, 4084-4090.	14.6	203
17	A combustion-free methodology for synthesizing zeolites and zeolite-like materials. Nature, 2003, 425, 385-388.	27.8	179
18	Influence of Aspect Ratio of TiO2 Nanorods on the Photocatalytic Decomposition of Formic Acid. Journal of Physical Chemistry C, 2009, 113, 3050-3055.	3.1	172

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19	Fully Dispersed Rh Ensemble Catalyst To Enhance Low-Temperature Activity. Journal of the American Chemical Society, 2018, 140, 9558-9565.	13.7	170
20	The Role of Organic Capping Layers of Platinum Nanoparticles in Catalytic Activity of CO Oxidation. Catalysis Letters, 2009, 129, 1-6.	2.6	159
21	Heteropolyacid supported on Zr-Beta zeolite as an active catalyst for one-pot transformation of furfural to Î³-valerolactone. Applied Catalysis B: Environmental, 2019, 241, 588-597.	20.2	153
22	Highly Durable Platinum Singleâ€Atom Alloy Catalyst for Electrochemical Reactions. Advanced Energy Materials, 2018, 8, 1701476.	19.5	152
23	Highly Cokeâ€Resistant Ni Nanoparticle Catalysts with Minimal Sintering in Dry Reforming of Methane. ChemSusChem, 2014, 7, 451-456.	6.8	151
24	Promoting Effects of Hydrothermal Treatment on the Activity and Durability of Pd/CeO₂ Catalysts for CO Oxidation. ACS Catalysis, 2017, 7, 7097-7105.	11.2	151
25	Probing Hot Electron Flow Generated on Pt Nanoparticles with Au/TiO₂Schottky Diodes during Catalytic CO Oxidation. Nano Letters, 2008, 8, 2388-2392.	9.1	137
26	Highly Water-Resistant La-Doped Co₃O₄ Catalyst for CO Oxidation. ACS Catalysis, 2019, 9, 10093-10100.	11.2	126
27	Atomically Dispersed Platinum on Gold Nano-Octahedra with High Catalytic Activity on Formic Acid Oxidation. ACS Catalysis, 2013, 3, 437-443.	11.2	125
28	Structure dependent active sites of Ni_xS_y as electrocatalysts for hydrogen evolution reaction. Nanoscale, 2015, 7, 5157-5163.	5.6	121
29	Selective conversion of glycerol to 1,3-propanediol using Pt-sulfated zirconia. Green Chemistry, 2011, 13, 2004.	9.0	116
30	Performance of shape-controlled Pd nanoparticles in the selective hydrogenation of acetylene. Journal of Catalysis, 2013, 306, 146-154.	6.2	116
31	Shape effects of cuprous oxide particles on stability in water and photocatalytic water splitting. Journal of Materials Chemistry A, 2015, 3, 156-162.	10.3	114
32	Controlling the Oxidation State of Pt Single Atoms for Maximizing Catalytic Activity. Angewandte Chemie - International Edition, 2020, 59, 20691-20696.	13.8	113
33	Rational Design of TiC-Supported Single-Atom Electrocatalysts for Hydrogen Evolution and Selective Oxygen Reduction Reactions. ACS Energy Letters, 2019, 4, 126-132.	17.4	104
34	Sn-doped Ni/YSZ anode catalysts with enhanced carbon deposition resistance for an intermediate temperature SOFC. Applied Catalysis B: Environmental, 2010, 97, 108-114.	20.2	101
35	Quasi-graphitic carbon shell-induced Cu confinement promotes electrocatalytic CO2 reduction toward C2+ products. Nature Communications, 2021, 12, 3765.	12.8	99
36	Heterogeneous Atomic Catalysts Overcoming the Limitations of Single-Atom Catalysts. ACS Nano, 2020, 14, 14355-14374.	14.6	97

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37	Singleâ€Atom Catalyst of Platinum Supported on Titanium Nitride for Selective Electrochemical Reactions. Angewandte Chemie, 2016, 128, 2098-2102.	2.0	94
38	Energy-efficient CO2 hydrogenation with fast response using photoexcitation of CO2 adsorbed on metal catalysts. Nature Communications, 2018, 9, 3027.	12.8	86
39	Distinct activation of Cu-MOR for direct oxidation of methane to methanol. Chemical Communications, 2017, 53, 4116-4119.	4.1	85
40	Electrochemical CO2 reduction using alkaline membrane electrode assembly on various metal electrodes. Journal of CO2 Utilization, 2019, 31, 244-250.	6.8	85
41	Enhanced stability of Niâ€“Fe/GDC solid oxide fuel cell anodes for dry methane fuel. Catalysis Communications, 2010, 12, 36-39.	3.3	84
42	Employing electrostatic self-assembly of tailored nickel sulfide nanoparticles for quasi-solid-state dye-sensitized solar cells with Pt-free counter electrodes. Chemical Communications, 2012, 48, 9501.	4.1	84
43	Shape effect of ceria in Cu/ceria catalysts for preferential CO oxidation. Journal of Molecular Catalysis A, 2011, 335, 82-88.	4.8	83
44	Direct conversion of cellulose into sorbitol using dual-functionalized catalysts in neutral aqueous solution. Catalysis Communications, 2012, 19, 115-118.	3.3	82
45	Effective depolymerization of concentrated acid hydrolysis lignin using a carbon-supported ruthenium catalyst in ethanol/formic acid media. Bioresource Technology, 2017, 234, 424-431.	9.6	79
46	Steam treatment on Ni/Î³-Al2O3 for enhanced carbon resistance in combined steam and carbon dioxide reforming of methane. Applied Catalysis B: Environmental, 2013, 134-135, 103-109.	20.2	78
47	Shaped Irâ€“Ni bimetallic nanoparticles for minimizing Ir utilization in oxygen evolution reaction. Chemical Communications, 2016, 52, 5641-5644.	4.1	78
48	Au-doped PtCo/C catalyst preventing Co leaching for proton exchange membrane fuel cells. Applied Catalysis B: Environmental, 2019, 247, 142-149.	20.2	76
49	Change in the catalytic reactivity of Pt nanocubes in the presence of different surface-capping agents. Catalysis Communications, 2009, 10, 1305-1309.	3.3	73
50	Amine-Functionalized Covalent Organic Framework for Efficient SO2 Capture with High Reversibility. Scientific Reports, 2017, 7, 557.	3.3	73
51	Palladium Singleâ€Atom Catalysts Supported on C@C₃N₄ for Electrochemical Reactions. ChemElectroChem, 2019, 6, 4757-4764.	3.4	70
52	Facet-Dependent Mn Doping on Shaped Co₃O₄ Crystals for Catalytic Oxidation. ACS Catalysis, 2021, 11, 11066-11074.	11.2	69
53	10⁵ Cyclable Pseudocapacitive Na-Ion Storage of Hierarchically Structured Phosphorus-Incorporating Nanoporous Carbons in Organic Electrolytes. ACS Energy Letters, 2018, 3, 724-732.	17.4	68
54	Enhanced activity and durability of Ru catalyst dispersed on zirconia for dry reforming of methane. Catalysis Today, 2017, 293-294, 122-128.	4.4	67

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55	Heterogeneous catalysts for catalytic CO2 conversion into value-added chemicals. BMC Chemical Engineering, 2019, 1, .	3.4	64
56	Electronic structure modification of platinum on titanium nitride resulting in enhanced catalytic activity and durability for oxygen reduction and formic acid oxidation. Applied Catalysis B: Environmental, 2015, 174-175, 35-42.	20.2	63
57	Facile preparation of high performance visible light sensitive photo-catalysts. Applied Catalysis B: Environmental, 2010, 94, 241-247.	20.2	62
58	Confinement of sulfur in the micropores of honeycomb-like carbon derived from lignin for lithium-sulfur battery cathode. Chemical Engineering Journal, 2020, 382, 122946.	12.7	61
59	Highly durable fuel cell catalysts using crosslinkable block copolymer-based carbon supports with ultralow Pt loadings. Energy and Environmental Science, 2020, 13, 4921-4929.	30.8	61
60	Platinum Nanoparticles Encapsulated by Aminopeptidase: A Multifunctional Bioinorganic Nanohybrid Catalyst. Angewandte Chemie - International Edition, 2011, 50, 11924-11929.	13.8	60
61	Production of high carbon number hydrocarbon fuels from a lignin-derived Î±-O-4 phenolic dimer, benzyl phenyl ether, via isomerization of ether to alcohols on high-surface-area silica-alumina aerogel catalysts. Applied Catalysis B: Environmental, 2013, 142-143, 668-676.	20.2	58
62	Spectroscopic Study of Tetradecyltrimethylammonium Bromide Ptâ^'C₁₄TAB Nanoparticles: Structure and Stability. Langmuir, 2009, 25, 6665-6671.	3.5	56
63	Synthesis of biolubricants using sulfated zirconia catalysts. Applied Catalysis A: General, 2013, 455, 164-171.	4.3	54
64	Utilization of shape-controlled nanoparticles as catalysts with enhanced activity and selectivity. RSC Advances, 2014, 4, 41017-41027.	3.6	54
65	REMOVAL OF COPPER IONS USING FUNCTIONALIZED MESOPOROUS SILICA IN AQUEOUS SOLUTION. Separation Science and Technology, 2001, 36, 2433-2448.	2.5	53
66	Platinum dendrites with controlled sizes for oxygen reduction reaction. Electrochemistry Communications, 2010, 12, 1596-1599.	4.7	49
67	Investigation of the Support Effect in Atomically Dispersed Pt on WO 3â^' x for Utilization of Pt in the Hydrogen Evolution Reaction. Angewandte Chemie, 2019, 131, 16184-16188.	2.0	49
68	High Facets on Nanowrinkled Cu via Chemical Vapor Deposition Graphene Growth for Efficient CO₂ Reduction into Ethanol. ACS Catalysis, 2021, 11, 5658-5665.	11.2	46
69	Heteropolyacid catalysts for Diels-Alder cycloaddition of 2,5-dimethylfuran and ethylene to renewable p -xylene. Catalysis Today, 2017, 293-294, 167-175.	4.4	44
70	Changes in the oxidation state of Pt single-atom catalysts upon removal of chloride ligands and their effect for electrochemical reactions. Chemical Communications, 2019, 55, 6389-6392.	4.1	44
71	Shape-Controlled Nanocrystals for Catalytic Applications. Catalysis Surveys From Asia, 2012, 16, 14-27.	2.6	42
72	Surface Plasmon Aided Ethanol Dehydrogenation Using Agâ€“Ni Binary Nanoparticles. ACS Catalysis, 2017, 7, 2294-2302.	11.2	42

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73	Tuning the band-gap energy of TiO2-C nanoparticle for high performance photo-catalyst. Electrochemistry Communications, 2010, 12, 769-772.	4.7	41
74	Electrochemically deposited Sn catalysts with dense tips on a gas diffusion electrode for electrochemical CO₂ reduction. Journal of Materials Chemistry A, 2020, 8, 9032-9038.	10.3	41
75	Selective hydrogenation of furanic aldehydes using Ni nanoparticle catalysts capped with organic molecules. Journal of Catalysis, 2016, 344, 609-615.	6.2	39
76	Enhancing stability of octahedral PtNi nanoparticles for oxygen reduction reaction by halide treatment. Journal of Power Sources, 2016, 307, 883-890.	7.8	39
77	Synthesis of aluminaâ€“carbon composite material for the catalytic conversion of furfural to furfuryl alcohol. Journal of Industrial and Engineering Chemistry, 2017, 52, 59-65.	5.8	39
78	Characterization of photocatalytic performance of silver deposited TiO2 nanorods. Electrochemistry Communications, 2009, 11, 363-366.	4.7	38
79	In situ shaping of Pt nanoparticles directly overgrown on carbon supports. Chemical Communications, 2012, 48, 6396.	4.1	37
80	Shape effect of Pt nanocrystals on electrocatalytic hydrogenation. Catalysis Communications, 2009, 11, 7-10.	3.3	36
81	Monodisperse IrOx deposited on Pt/C for reversal tolerant anode in proton exchange membrane fuel cell. Journal of Power Sources, 2019, 443, 227270.	7.8	36
82	Design Principles of NiFe-Layered Double Hydroxide Anode Catalysts for Anion Exchange Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2021, 13, 37179-37186.	8.0	36
83	Shaped Ni nanoparticles with an unconventional hcp crystalline structure. Chemical Communications, 2014, 50, 6353.	4.1	35
84	Zeolite Synthesis Using Degradable Structure-Directing Agents and Pore-Filling Agentsâ€. Journal of Physical Chemistry B, 2005, 109, 2187-2191.	2.6	34
85	Surface-specific overgrowth of platinum on shaped gold nanocrystals. Physical Chemistry Chemical Physics, 2009, 11, 9759.	2.8	34
86	Surfactant-assisted synthesis of MgO: Characterization and catalytic activity on the transesterification of dimethyl carbonate with glycerol. Applied Catalysis A: General, 2014, 484, 33-38.	4.3	33
87	Solidâ€state polymerization and characterization of a copolyamide based on adipic acid, 1,4â€butanediamine, and 2,5â€furandicarboxylic acid. Journal of Applied Polymer Science, 2016, 133, .	2.6	33
88	Highly Selective Production of Acrylic Acid from Glycerol via Two Steps Using Au/CeO₂ Catalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 11371-11376.	6.7	33
89	Unraveling the origin of extraordinary lean NOx reduction by CO over Ir-Ru bimetallic catalyst at low temperature. Applied Catalysis B: Environmental, 2021, 280, 119374.	20.2	33
90	â€˜Clickâ€™ Preparation of CuPt Nanorodâ€Anchored Graphene Oxide as a Catalyst in Water. Small, 2012, 8, 3161-3168.	10.0	32

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91	Waterâ€Assisted Selective Hydrodeoxygenation of Ligninâ€Derived Guaiacol to Monooxygenates. ChemCatChem, 2015, 7, 2669-2674.	3.7	32
92	Light-assisted surface reactions on metal nanoparticles. Catalysis Science and Technology, 2018, 8, 3718-3727.	4.1	32
93	Transformation of carbon dioxide into carbon nanotubes for enhanced ion transport and energy storage. Nanoscale, 2020, 12, 7822-7833.	5.6	32
94	Nitrile-functionalized tertiary amines as highly efficient and reversible SO2 absorbents. Journal of Hazardous Materials, 2014, 264, 136-143.	12.4	30
95	Enhanced Catalytic Activity of (DMSO)₂PtCl₂ for the Methane Oxidation in the SO₃â€“H₂SO₄ System. ACS Catalysis, 2018, 8, 11854-11862.	11.2	30
96	Cellulose triacetateâ€based polymer gel electrolytes. Journal of Applied Polymer Science, 2010, 115, 32-36.	2.6	29
97	PtRu nano-dandelions on thiolated carbon nanotubes: a new synthetic strategy for supported bimetallic coreâ€“shell clusters on the atomic scale. Chemical Communications, 2010, 46, 2085.	4.1	29
98	Effect of TiO₂ Nanoparticle Shape on Hydrogen Evolution via Water Splitting. Journal of Nanoscience and Nanotechnology, 2011, 11, 1688-1691.	0.9	29
99	Three-Dimensional Reduced-Symmetry of Colloidal Plasmonic Nanoparticles. Nano Letters, 2012, 12, 2436-2440.	9.1	29
100	Enhanced electrocatalytic performance due to anomalous compressive strain and superior electron retention properties of highly porous Pt nanoparticles. Journal of Catalysis, 2012, 291, 69-78.	6.2	29
101	Lean NOx trap catalysts with high low-temperature activity and hydrothermal stability. Applied Catalysis B: Environmental, 2020, 270, 118871.	20.2	29
102	Ultraâ€Low Pt Loaded Porous Carbon Microparticles with Controlled Channel Structure for Highâ€Performance Fuel Cell Catalysts. Advanced Energy Materials, 2021, 11, 2102970.	19.5	29
103	Shape- and Composition-Controlled Ptâ€“Feâ€“Co Nanoparticles for Electrocatalytic Methanol Oxidation. Topics in Catalysis, 2010, 53, 686-693.	2.8	28
104	Facile preparation of water soluble CuPt nanorods with controlled aspect ratio and study on their catalytic properties in water. Journal of Materials Chemistry, 2011, 21, 11956.	6.7	28
105	Hydrophilic-hydrophobic dual catalyst layers for proton exchange membrane fuel cells under low humidity. Electrochemistry Communications, 2018, 97, 105-109.	4.7	28
106	Controlling the Oxidation State of Pt Single Atoms for Maximizing Catalytic Activity. Angewandte Chemie, 2020, 132, 20872-20877.	2.0	28
107	Selectivity Modulated by Surface Ligands on Cu₂O/TiO₂ Catalysts for Gas-Phase Photocatalytic Reduction of Carbon Dioxide. Journal of Physical Chemistry C, 2019, 123, 29184-29191.	3.1	27
108	Improved solid oxide fuel cell anodes for the direct utilization of methane using Sn-doped Ni/YSZ catalysts. Catalysis Communications, 2009, 11, 180-183.	3.3	26

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109	Study on Dissolution and Regeneration of Poplar Wood in Imidazolium-Based Ionic Liquids. Journal of Wood Chemistry and Technology, 2011, 31, 89-102.	1.7	26
110	Synergistic Effect of Cu/CeO₂ and Ptâ€"BaO/CeO₂ Catalysts for a Low-Temperature Lean NO_x Trap. Environmental Science & Technology, 2019, 53, 2900-2907.	10.0	26
111	Atomically ordered Pt₃Mn intermetallic electrocatalysts for the oxygen reduction reaction in fuel cells. Journal of Materials Chemistry A, 2022, 10, 7399-7408.	10.3	26
112	CO oxidation on SnO₂ surfaces enhanced by metal doping. Catalysis Science and Technology, 2018, 8, 782-789.	4.1	25
113	Amorphous Ir atomic clusters anchored on crystalline IrO2 nanoneedles for proton exchange membrane water oxidation. Journal of Power Sources, 2022, 524, 231069.	7.8	25
114	Lens-Shaped Carbon Particles with Perpendicularly-Oriented Channels for High-Performance Proton Exchange Membrane Fuel Cells. ACS Nano, 2022, 16, 2988-2996.	14.6	24
115	Chemical and Thermal Stability of Pt Nanocubes Synthesized with Various Surface-Capping Agents. Journal of Nanoscience and Nanotechnology, 2010, 10, 233-239.	0.9	23
116	Electrocatalytic properties of platinum overgrown on various shapes of gold nanocrystals. Journal of Molecular Catalysis A, 2010, 333, 6-10.	4.8	23
117	Platinumâ€"titanium intermetallic nanoparticle catalysts for oxygen reduction reaction with enhanced activity and durability. Electrochemistry Communications, 2016, 66, 66-70.	4.7	23
118	Design of an Ultrastable and Highly Active Ceria Catalyst for CO Oxidation by Rare-Earth- and Transition-Metal Co-Doping. ACS Catalysis, 2020, 10, 14877-14886.	11.2	23
119	Surface Restructuring of Supported Nano-Ceria for Improving Sulfur Resistance. ACS Catalysis, 2021, 11, 7154-7159.	11.2	23
120	Absorption and desorption of SO 2 in aqueous solutions of diamine-based molten salts. Journal of Hazardous Materials, 2015, 289, 63-71.	12.4	21
121	Diamine-Anchored Polystyrene Resins for Reversible SO₂ Adsorption. ACS Sustainable Chemistry and Engineering, 2016, 4, 2012-2019.	6.7	20
122	Production of acrylic acid from biomass-derived allyl alcohol by selective oxidation using Au/ceria catalysts. Catalysis Science and Technology, 2016, 6, 3616-3622.	4.1	19
123	Reversible absorption of SO2 with alkyl-anilines: The effects of alkyl group on aniline and water. Journal of Industrial and Engineering Chemistry, 2019, 69, 338-344.	5.8	18
124	Singleâ€Phase Formation of Rh₂O₃ Nanoparticles on hâ€BN Support for Highly Controlled Methane Partial Oxidation to Syngas. Angewandte Chemie - International Edition, 2021, 60, 25411-25418.	13.8	17
125	Top-down shaping of metal nanoparticles in solution: partially etched Au@Pt nanoparticles with unique morphology. Chemical Communications, 2011, 47, 8079.	4.1	16
126	Pt black catalyzed methane oxidation to methyl bisulfate in H2SO4-SO3. Journal of Catalysis, 2019, 374, 230-236.	6.2	16

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127	Oxidative Methane Conversion to Ethane on Highly Oxidized Pd/CeO₂ Catalysts Below 400â€‰Â°C. ChemSusChem, 2020, 13, 677-681.	6.8	16
128	A distinct platinum growth mode on shaped gold nanocrystals. Chemical Communications, 2012, 48, 257-259.	4.1	15
129	Understanding the unique interaction of amine-containing ionic compounds with SO2 for high absorption capacity. RSC Advances, 2013, 3, 25944.	3.6	15
130	The role of surface hydroxyl groups on a single-atomic Rh₁/ZrO₂ catalyst for direct methane oxidation. Chemical Communications, 2021, 57, 1671-1674.	4.1	15
131	Highly Durable Heterogeneous Atomic Catalysts. Accounts of Chemical Research, 2022, 55, 1372-1382.	15.6	15
132	Metal ion-assisted reshaping of Cu2O nanocrystals for catalytic applications. Journal of Materials Chemistry A, 2013, 1, 14183.	10.3	14
133	Diels-Alder cycloaddition of oxidized furans and ethylene over supported heteropolyacid catalysts for renewable terephthalic acid. Catalysis Today, 2020, 351, 37-43.	4.4	14
134	Shape effect of Agâ€“Ni binary nanoparticles on catalytic hydrogenation aided by surface plasmons. Chemical Communications, 2015, 51, 12316-12319.	4.1	13
135	Y2O3-Inserted Co-Pd/zeolite catalysts for reductive amination of polypropylene glycol. Applied Catalysis A: General, 2018, 568, 114-122.	4.3	13
136	Ring-opening metathesis polymerization of tetracyclododecene using various catalyst systems. Journal of Applied Polymer Science, 2010, 116, 479-485.	2.6	12
137	Hydrolysis of ionic cellulose to glucose. Bioresource Technology, 2014, 167, 484-489.	9.6	12
138	Mn-doped CuO Co3O4CeO2 catalyst with enhanced activity and durability for hydrocarbon oxidation. Molecular Catalysis, 2019, 467, 9-15.	2.0	12
139	Gas-Permeable Iron-Doped Ceria Shell on Rh Nanoparticles with High Activity and Durability. Jacs Au, 2022, 2, 1115-1122.	7.9	12
140	Controlled Doping of Electrocatalysts through Engineering Impurities. Advanced Materials, 2022, 34, e2203030.	21.0	12
141	Synthesis of molecular sieves using ketal structure-directing agents and their degradation inside the pore space. Microporous and Mesoporous Materials, 2006, 88, 266-274.	4.4	11
142	Shaped platinum nanoparticles directly synthesized inside mesoporous silica supports. Nanoscale, 2014, 6, 12540-12546.	5.6	11
143	Stabilization of acid-rich bio-oil by catalytic mild hydrotreating. Environmental Pollution, 2021, 272, 116180.	7.5	11
144	Pt-IrOx catalysts immobilized on defective carbon for efficient reversal tolerant anode in proton exchange membrane fuel cells. Journal of Catalysis, 2021, 395, 404-411.	6.2	11

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145	Microwave-assisted phenolation of acid-insoluble Klason lignin and its application in adhesion. Green Chemistry, 2022, 24, 2051-2061.	9.0	11
146	Catalytic approaches towards highly durable proton exchange membrane fuel cells with minimized Pt use. Chemical Science, 2022, 13, 6782-6795.	7.4	11
147	Selective CO adsorption using sulfur-doped Ni supported by petroleum-based activated carbon. Journal of Industrial and Engineering Chemistry, 2020, 83, 289-296.	5.8	10
148	Electrodeposited Snâ€“Cu@Sn dendrites for selective electrochemical CO₂ reduction to formic acid. Nanoscale, 2022, 14, 9297-9303.	5.6	10
149	One-pot synthesis of Pd@PdPt coreâ€“shell nanocubes on carbon supports. RSC Advances, 2014, 4, 63677-63680.	3.6	9
150	Learning the properties of a water-lean amine solvent from carbon capture pilot experiments. Applied Energy, 2021, 283, 116213.	10.1	9
151	First-principles based phenomenological study of Ni nanocubes: The effects of nanostructuring on carbon poisoning of Ni(0 0 1) nanofacets. Applied Surface Science, 2013, 265, 339-345.	6.1	8
152	A New Energyâ€Saving Catalytic System: Carbon Dioxide Activation by a Metal/Carbon Catalyst. ChemSusChem, 2017, 10, 3671-3678.	6.8	8
153	Solventless Catalytic Etherification of Glycerol Using Acetate Salts as Efficient Catalysts. Bulletin of the Korean Chemical Society, 2018, 39, 722-725.	1.9	8
154	Seemingly Negligible Amounts of Platinum Nanoparticles Mislead Electrochemical Oxygen Reduction Reaction Pathway on Platinum Singleâ€Atom Catalysts. ChemElectroChem, 2020, 7, 3716-3719.	3.4	8
155	Toward the practical application of direct CO 2 hydrogenation technology for methanol production. International Journal of Energy Research, 2020, 44, 8781-8798.	4.5	8
156	Fe/N/C catalysts systhesized using graphene aerogel for electrocatalytic oxygen reduction reaction in an acidic condition. Korean Journal of Chemical Engineering, 2016, 33, 2582-2588.	2.7	7
157	MODELING OF COPPER ION REMOVAL FROM AQUEOUS SOLUTIONS USING MODIFIED SILICA BEADS. Chemical Engineering Communications, 2000, 181, 37-55.	2.6	6
158	Selective Aggregation of Polyanion-Coated Gold Nanorods Induced by Divalent Metal Ions in an Aqueous Solution. Journal of Nanoscience and Nanotechnology, 2010, 10, 3538-3542.	0.9	6
159	Titanium-iridium oxide layer coating to suppress photocorrosion during photocatalytic water splitting. Korean Journal of Chemical Engineering, 2015, 32, 2429-2433.	2.7	6
160	Improved H₂ utilization by Pd doping in cobalt catalysts for reductive amination of polypropylene glycol. RSC Advances, 2020, 10, 45159-45169.	3.6	6
161	Direct Observation of Rhodium Ex-Solution from a Ceria Nanodomain and Its Use for Hydrogen Production via Propane Steam Reforming. ACS Applied Materials & Interfaces, 2021, 13, 48508-48515.	8.0	6
162	Ionic Liquidâ€assisted Separation of Carbohydrates from Lignocellulosic Biomass. Bulletin of the Korean Chemical Society, 2016, 37, 1305-1312.	1.9	4

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163	Selective Oxidation of Allyl Alcohol to Acrylic Acid in Baseâ€Free Aqueous Solution. ChemistrySelect, 2017, 2, 2420-2425.	1.5	4
164	Enhancing the luminescence of carbon nanodots in films by tailoring the functional groups through alkylamine-functionalization and reduction. Physical Chemistry Chemical Physics, 2019, 21, 26095-26101.	2.8	4
165	Improved catalytic depolymerization of lignin waste using carbohydrate derivatives. Environmental Pollution, 2021, 268, 115674.	7.5	4
166	Magnesium Oxideâ€catalyzed Oxidative Depolymerization of <scp>EFB</scp> Lignin. Bulletin of the Korean Chemical Society, 2016, 37, 515-521.	1.9	3
167	Re-dispersion of Pd-based bimetallic catalysts by hydrothermal treatment for CO oxidation. RSC Advances, 2021, 11, 3104-3109.	3.6	3
168	Sustainable Electrochemical NO Capture and Storage System Based on the Reversible Fe2+/Fe3+-EDTA Redox Reaction. Catalysts, 2022, 12, 79.	3.5	3
169	Orthopalladated complexes as phase-transfer catalysts for asymmetric alkylation of achiral Schiff base esters. Transition Metal Chemistry, 2010, 35, 949-957.	1.4	2
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