Hyunjoo Lee

List of Publications by Citations

170 papers	10,305 citations	50 h-index	98 g-index
178 ext. papers	11,921 ext. citations	9.5 avg, IF	6.67 L-index

#	Paper	IF	Citations
170	Shaping binary metal nanocrystals through epitaxial seeded growth. *Nature Materials*, **2007**, 6, 692-7	27	1073
169	Platinum nanoparticle shape effects on benzene hydrogenation selectivity. *Nano Letters*, **2007**, 7, 3097-101	12.5	747
168	Morphological control of catalytically active platinum nanocrystals. *Angewandte Chemie - International Edition*, **2006**, 45, 7824-8	16.4	572
167	Single-Atom Catalyst of Platinum Supported on Titanium Nitride for Selective Electrochemical Reactions. *Angewandte Chemie - International Edition*, **2016**, 55, 2058-62	16.4	537
166	Localized Pd overgrowth on cubic Pt nanocrystals for enhanced electrocatalytic oxidation of formic acid. *Journal of the American Chemical Society*, **2008**, 130, 5406-7	16.4	383
165	Support Effects in Single-Atom Platinum Catalysts for Electrochemical Oxygen Reduction. *ACS Catalysis*, **2017**, 7, 1301-1307	13.1	276
164	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	5.3	247
163	A combination of two visible-light responsive photocatalysts for achieving the Z-scheme in the solid state. *ACS Nano*, **2011**, 5, 4084-90	16.7	192
162	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	16.4	186
161	Morphological Control of Catalytically Active Platinum Nanocrystals. *Angewandte Chemie*, **2006**, 118, 7988-7992	3.6	175
160	Balancing activity, stability and conductivity of nanoporous core-shell iridium/iridium oxide oxygen evolution catalysts. *Nature Communications*, **2017**, 8, 1449	17.4	168
159	Uncoupling the size and support effects of Ni catalysts for dry reforming of methane. *Applied Catalysis B: Environmental*, **2017**, 203, 625-632	21.8	164
158	A combustion-free methodology for synthesizing zeolites and zeolite-like materials. *Nature*, **2003**, 425, 385-8	50.4	161
157	Influence of Aspect Ratio of TiO2 Nanorods on the Photocatalytic Decomposition of Formic Acid. *Journal of Physical Chemistry C*, **2009**, 113, 3050-3055	3.8	157
156	Single-Atom Catalysts of Precious Metals for Electrochemical Reactions. *ChemSusChem*, **2018**, 11, 104-118	8.3	154
155	The Role of Organic Capping Layers of Platinum Nanoparticles in Catalytic Activity of CO Oxidation. *Catalysis Letters*, **2009**, 129, 1-6	2.8	149
154	Ultrathin IrO2 Nanoneedles for Electrochemical Water Oxidation. *Advanced Functional Materials*, **2018**, 28, 1704796	15.6	139

153	Investigation of the Support Effect in Atomically Dispersed Pt on WO for Utilization of Pt in the Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 16038-16042	16.4	133
152	Probing hot electron flow generated on Pt nanoparticles with Au/TiO2 Schottky diodes during catalytic CO oxidation. *Nano Letters*, **2008**, 8, 2388-92	11.5	128
151	Highly coke-resistant ni nanoparticle catalysts with minimal sintering in dry reforming of methane. *ChemSusChem*, **2014**, 7, 451-6	8.3	119
150	Highly Durable Platinum Single-Atom Alloy Catalyst for Electrochemical Reactions. *Advanced Energy Materials*, **2018**, 8, 1701476	21.8	110
149	Atomically Dispersed Platinum on Gold Nano-Octahedra with High Catalytic Activity on Formic Acid Oxidation. *ACS Catalysis*, **2013**, 3, 437-443	13.1	110
148	General technoeconomic analysis for electrochemical coproduction coupling carbon dioxide reduction with organic oxidation. *Nature Communications*, **2019**, 10, 5193	17.4	109
147	Selective conversion of glycerol to 1,3-propanediol using Pt-sulfated zirconia. *Green Chemistry*, **2011**, 13, 2004	10	105
146	Promoting Effects of Hydrothermal Treatment on the Activity and Durability of Pd/CeO2 Catalysts for CO Oxidation. *ACS Catalysis*, **2017**, 7, 7097-7105	13.1	100
145	Structure dependent active sites of NixSy as electrocatalysts for hydrogen evolution reaction. *Nanoscale*, **2015**, 7, 5157-63	7.7	100
144	Shape effects of cuprous oxide particles on stability in water and photocatalytic water splitting. *Journal of Materials Chemistry A*, **2015**, 3, 156-162	13	99
143	Performance of shape-controlled Pd nanoparticles in the selective hydrogenation of acetylene. *Journal of Catalysis*, **2013**, 306, 146-154	7.3	94
142	Heteropolyacid supported on Zr-Beta zeolite as an active catalyst for one-pot transformation of furfural to γvalerolactone. *Applied Catalysis B: Environmental*, **2019**, 241, 588-597	21.8	94
141	Fully Dispersed Rh Ensemble Catalyst To Enhance Low-Temperature Activity. *Journal of the American Chemical Society*, **2018**, 140, 9558-9565	16.4	89
140	Highly durable metal ensemble catalysts with full dispersion for automotive applications beyond single-atom catalysts. *Nature Catalysis*, **2020**, 3, 368-375	36.5	87
139	Sn-doped Ni/YSZ anode catalysts with enhanced carbon deposition resistance for an intermediate temperature SOFC. *Applied Catalysis B: Environmental*, **2010**, 97, 108-114	21.8	87
138	Single-Atom Catalyst of Platinum Supported on Titanium Nitride for Selective Electrochemical Reactions. *Angewandte Chemie*, **2016**, 128, 2098-2102	3.6	81
137	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, 9501-3	5.8	80
136	Shape effect of ceria in Cu/ceria catalysts for preferential CO oxidation. *Journal of Molecular Catalysis A*, **2011**, 335, 82-88		78

135	Direct conversion of cellulose into sorbitol using dual-functionalized catalysts in neutral aqueous solution. *Catalysis Communications*, **2012**, 19, 115-118	3.2	75
134	Enhanced stability of NiFe/GDC solid oxide fuel cell anodes for dry methane fuel. *Catalysis Communications*, **2010**, 12, 36-39	3.2	73
133	Distinct activation of Cu-MOR for direct oxidation of methane to methanol. *Chemical Communications*, **2017**, 53, 4116-4119	5.8	71
132	Steam treatment on Ni/γAl2O3 for enhanced carbon resistance in combined steam and carbon dioxide reforming of methane. *Applied Catalysis B: Environmental*, **2013**, 134-135, 103-109	21.8	71
131	Rational Design of TiC-Supported Single-Atom Electrocatalysts for Hydrogen Evolution and Selective Oxygen Reduction Reactions. *ACS Energy Letters*, **2019**, 4, 126-132	20.1	69
130	Change in the catalytic reactivity of Pt nanocubes in the presence of different surface-capping agents. *Catalysis Communications*, **2009**, 10, 1305-1309	3.2	60
129	Highly Water-Resistant La-Doped Co3O4 Catalyst for CO Oxidation. *ACS Catalysis*, **2019**, 9, 10093-10100	13.1	57
128	105 Cyclable Pseudocapacitive Na-Ion Storage of Hierarchically Structured Phosphorus-Incorporating Nanoporous Carbons in Organic Electrolytes. *ACS Energy Letters*, **2018**, 3, 724-732	20.1	57
127	Facile preparation of high performance visible light sensitive photo-catalysts. *Applied Catalysis B: Environmental*, **2010**, 94, 241-247	21.8	57
126	Effective depolymerization of concentrated acid hydrolysis lignin using a carbon-supported ruthenium catalyst in ethanol/formic acid media. *Bioresource Technology*, **2017**, 234, 424-431	11	54
125	Shaped Ir-Ni bimetallic nanoparticles for minimizing Ir utilization in oxygen evolution reaction. *Chemical Communications*, **2016**, 52, 5641-4	5.8	54
124	Energy-efficient CO hydrogenation with fast response using photoexcitation of CO adsorbed on metal catalysts. *Nature Communications*, **2018**, 9, 3027	17.4	54
123	Platinum nanoparticles encapsulated by aminopeptidase: a multifunctional bioinorganic nanohybrid catalyst. *Angewandte Chemie - International Edition*, **2011**, 50, 11924-9	16.4	54
122	Amine-Functionalized Covalent Organic Framework for Efficient SO Capture with High Reversibility. *Scientific Reports*, **2017**, 7, 557	4.9	52
121	Spectroscopic study of tetradecyltrimethylammonium bromide Pt-C14TAB nanoparticles: structure and stability. *Langmuir*, **2009**, 25, 6665-71	4	51
120	Production of high carbon number hydrocarbon fuels from a lignin-derived β-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	21.8	50
119	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	21.8	50
118	REMOVAL OF COPPER IONS USING FUNCTIONALIZED MESOPOROUS SILICA IN AQUEOUS SOLUTION. *Separation Science and Technology*, **2001**, 36, 2433-2448	2.5	49

117	Synthesis of biolubricants using sulfated zirconia catalysts. *Applied Catalysis A: General*, **2013**, 455, 164-171	5.1	48
116	Enhanced activity and durability of Ru catalyst dispersed on zirconia for dry reforming of methane. *Catalysis Today*, **2017**, 293-294, 122-128	5.3	47
115	Au-doped PtCo/C catalyst preventing Co leaching for proton exchange membrane fuel cells. *Applied Catalysis B: Environmental*, **2019**, 247, 142-149	21.8	47
114	Utilization of shape-controlled nanoparticles as catalysts with enhanced activity and selectivity. *RSC Advances*, **2014**, 4, 41017-41027	3.7	47
113	Electrochemical CO2 reduction using alkaline membrane electrode assembly on various metal electrodes. *Journal of CO2 Utilization*, **2019**, 31, 244-250	7.6	44
112	Platinum dendrites with controlled sizes for oxygen reduction reaction. *Electrochemistry Communications*, **2010**, 12, 1596-1599	5.1	43
111	Controlling the Oxidation State of Pt Single Atoms for Maximizing Catalytic Activity. *Angewandte Chemie - International Edition*, **2020**, 59, 20691-20696	16.4	38
110	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	5.8	37
109	Shape-Controlled Nanocrystals for Catalytic Applications. *Catalysis Surveys From Asia*, **2012**, 16, 14-27	2.8	37
108	Confinement of sulfur in the micropores of honeycomb-like carbon derived from lignin for lithium-sulfur battery cathode. *Chemical Engineering Journal*, **2020**, 382, 122946	14.7	37
107	Tuning the band-gap energy of TiO2-xCx nanoparticle for high performance photo-catalyst. *Electrochemistry Communications*, **2010**, 12, 769-772	5.1	36
106	Palladium Single-Atom Catalysts Supported on C@C3N4 for Electrochemical Reactions. *ChemElectroChem*, **2019**, 6, 4757-4764	4.3	35
105	Enhancing stability of octahedral PtNi nanoparticles for oxygen reduction reaction by halide treatment. *Journal of Power Sources*, **2016**, 307, 883-890	8.9	35
104	Shape effect of Pt nanocrystals on electrocatalytic hydrogenation. *Catalysis Communications*, **2009**, 11, 7-10	3.2	34
103	Selective hydrogenation of furanic aldehydes using Ni nanoparticle catalysts capped with organic molecules. *Journal of Catalysis*, **2016**, 344, 609-615	7.3	33
102	Investigation of the Support Effect in Atomically Dispersed Pt on WO3− for Utilization of Pt in the Hydrogen Evolution Reaction. *Angewandte Chemie*, **2019**, 131, 16184-16188	3.6	33
101	Surface Plasmon Aided Ethanol Dehydrogenation Using AgNi Binary Nanoparticles. *ACS Catalysis*, **2017**, 7, 2294-2302	13.1	32
100	Characterization of photocatalytic performance of silver deposited TiO2 nanorods. *Electrochemistry Communications*, **2009**, 11, 363-366	5.1	32

99	Zeolite synthesis using degradable structure-directing agents and pore-filling agents. *Journal of Physical Chemistry B*, **2005**, 109, 2187-91	3.4	32
98	Heterogeneous Atomic Catalysts Overcoming the Limitations of Single-Atom Catalysts. *ACS Nano*, **2020**, 14, 14355-14374	16.7	32
97	Synthesis of alumina□arbon composite material for the catalytic conversion of furfural to furfuryl alcohol. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 59-65	6.3	31
96	Heterogeneous catalysts for catalytic CO2 conversion into value-added chemicals. *BMC Chemical Engineering*, **2019**, 1,	3.5	31
95	In situ shaping of Pt nanoparticles directly overgrown on carbon supports. *Chemical Communications*, **2012**,	5.8	31
94	Surface-specific overgrowth of platinum on shaped gold nanocrystals. *Physical Chemistry Chemical Physics*, **2009**, 11, 9759-65	3.6	31
93	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	5.1	30
92	Heteropolyacid catalysts for Diels-Alder cycloaddition of 2,5-dimethylfuran and ethylene to renewable p -xylene. *Catalysis Today*, **2017**, 293-294, 167-175	5.3	29
91	TClickTpreparation of CuPt nanorod-anchored graphene oxide as a catalyst in water. *Small*, **2012**, 8, 3161-8	11	28
90	Highly durable fuel cell catalysts using crosslinkable block copolymer-based carbon supports with ultralow Pt loadings. *Energy and Environmental Science*, **2020**, 13, 4921-4929	35.4	28
89	Water-Assisted Selective Hydrodeoxygenation of Lignin-Derived Guaiacol to Monooxygenates. *ChemCatChem*, **2015**, 7, 2669-2674	5.2	27
88	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	7.3	26
87	Three-dimensional reduced-symmetry of colloidal plasmonic nanoparticles. *Nano Letters*, **2012**, 12, 2436-40	11.5	26
86	PtRu nano-dandelions on thiolated carbon nanotubes: a new synthetic strategy for supported bimetallic core-shell clusters on the atomic scale. *Chemical Communications*, **2010**, 46, 2085-7	5.8	26
85	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		26
84	Shaped Ni nanoparticles with an unconventional hcp crystalline structure. *Chemical Communications* , **2014**, 50, 6353-6	5.8	25
83	Nitrile-functionalized tertiary amines as highly efficient and reversible SO2 absorbents. *Journal of Hazardous Materials*, **2014**, 264, 136-43	12.8	25
82	Highly Selective Production of Acrylic Acid from Glycerol via Two Steps Using Au/CeO2 Catalysts. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 11371-11376	8.3	25

81	Effect of TiO2 nanoparticle shape on hydrogen evolution via water splitting. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 1688-91	1.3	25
80	Shape- and Composition-Controlled PtFeCo Nanoparticles for Electrocatalytic Methanol Oxidation. *Topics in Catalysis*, **2010**, 53, 686-693	2.3	25
79	Cellulose triacetate-based polymer gel electrolytes. *Journal of Applied Polymer Science*, **2010**, 115, 32-36	2.9	25
78	Solid-state polymerization and characterization of a copolyamide based on adipic acid, 1,4-butanediamine, and 2,5-furandicarboxylic acid. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	24
77	Improved solid oxide fuel cell anodes for the direct utilization of methane using Sn-doped Ni/YSZ catalysts. *Catalysis Communications*, **2009**, 11, 180-183	3.2	23
76	CO oxidation on SnO2 surfaces enhanced by metal doping. *Catalysis Science and Technology*, **2018**, 8, 782-789	5.5	22
75	Chemical and thermal stability of Pt nanocubes synthesized with various surface-capping agents. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 233-9	1.3	22
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	13	21
73	Study on Dissolution and Regeneration of Poplar Wood in Imidazolium-Based Ionic Liquids. *Journal of Wood Chemistry and Technology*, **2011**, 31, 89-102	2	20
72	Electrocatalytic properties of platinum overgrown on various shapes of gold nanocrystals. *Journal of Molecular Catalysis A*, **2010**, 333, 6-10		19
71	Monodisperse IrOx deposited on Pt/C for reversal tolerant anode in proton exchange membrane fuel cell. *Journal of Power Sources*, **2019**, 443, 227270	8.9	18
70	Absorption and desorption of SO2 in aqueous solutions of diamine-based molten salts. *Journal of Hazardous Materials*, **2015**, 289, 63-71	12.8	17
69	Platinum–titanium intermetallic nanoparticle catalysts for oxygen reduction reaction with enhanced activity and durability. *Electrochemistry Communications*, **2016**, 66, 66-70	5.1	17
68	Diamine-Anchored Polystyrene Resins for Reversible SO2 Adsorption. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 2012-2019	8.3	17
67	Quasi-graphitic carbon shell-induced Cu confinement promotes electrocatalytic CO reduction toward C products. *Nature Communications*, **2021**, 12, 3765	17.4	17
66	Hydrophilic-hydrophobic dual catalyst layers for proton exchange membrane fuel cells under low humidity. *Electrochemistry Communications*, **2018**, 97, 105-109	5.1	17
65	Top-down shaping of metal nanoparticles in solution: partially etched Au@Pt nanoparticles with unique morphology. *Chemical Communications*, **2011**, 47, 8079-81	5.8	16
64	Light-assisted surface reactions on metal nanoparticles. *Catalysis Science and Technology*, **2018**, 8, 3718-3727	5.5	16

63	Facet-Dependent Mn Doping on Shaped Co3O4 Crystals for Catalytic Oxidation. *ACS Catalysis*, **2021**, 11, 11066-11074	13.1	16
62	Lean NOx trap catalysts with high low-temperature activity and hydrothermal stability. *Applied Catalysis B: Environmental*, **2020**, 270, 118871	21.8	15
61	Transformation of carbon dioxide into carbon nanotubes for enhanced ion transport and energy storage. *Nanoscale*, **2020**, 12, 7822-7833	7.7	15
60	Understanding the unique interaction of amine-containing ionic compounds with SO2 for high absorption capacity. *RSC Advances*, **2013**, 3, 25944	3.7	15
59	A distinct platinum growth mode on shaped gold nanocrystals. *Chemical Communications*, **2012**, 48, 257-9	5.8	15
58	Synergistic Effect of Cu/CeO and Pt-BaO/CeO Catalysts for a Low-Temperature Lean NO Trap. *Environmental Science & Technology*, **2019**, 53, 2900-2907	10.3	14
57	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	3.8	14
56	Enhanced Catalytic Activity of (DMSO)2PtCl2 for the Methane Oxidation in the SO3–H2SO4 System. *ACS Catalysis*, **2018**, 8, 11854-11862	13.1	14
55	Shape effect of Ag-Ni binary nanoparticles on catalytic hydrogenation aided by surface plasmons. *Chemical Communications*, **2015**, 51, 12316-9	5.8	13
54	High Facets on Nanowrinkled Cu via Chemical Vapor Deposition Graphene Growth for Efficient CO2 Reduction into Ethanol. *ACS Catalysis*, **2021**, 11, 5658-5665	13.1	13
53	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	6.3	13
52	Production of acrylic acid from biomass-derived allyl alcohol by selective oxidation using Au/ceria catalysts. *Catalysis Science and Technology*, **2016**, 6, 3616-3622	5.5	12
51	Hydrolysis of ionic cellulose to glucose. *Bioresource Technology*, **2014**, 167, 484-9	11	12
50	Metal ion-assisted reshaping of Cu2O nanocrystals for catalytic applications. *Journal of Materials Chemistry A*, **2013**, 1, 14183	13	12
49	Shaped platinum nanoparticles directly synthesized inside mesoporous silica supports. *Nanoscale*, **2014**, 6, 12540-6	7.7	11
48	Oxidative Methane Conversion to Ethane on Highly Oxidized Pd/CeO Catalysts Below 400 °C. *ChemSusChem*, **2020**, 13, 677-681	8.3	11
47	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	13.1	10
46	Synthesis of molecular sieves using ketal structure-directing agents and their degradation inside the pore space. *Microporous and Mesoporous Materials*, **2006**, 88, 266-274	5.3	10

45	Controlling the Oxidation State of Pt Single Atoms for Maximizing Catalytic Activity. *Angewandte Chemie*, **2020**, 132, 20872-20877	3.6	10
44	Ring-opening metathesis polymerization of tetracyclododecene using various catalyst systems. *Journal of Applied Polymer Science*, **2010**, 116, 479-485	2.9	9
43	Y2O3-Inserted Co-Pd/zeolite catalysts for reductive amination of polypropylene glycol. *Applied Catalysis A: General*, **2018**, 568, 114-122	5.1	9
42	One-pot synthesis of Pd@PdPt core□shell nanocubes on carbon supports. *RSC Advances*, **2014**, 4, 63677-63680	3.7	8
41	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	6.7	7
40	A New Energy-Saving Catalytic System: Carbon Dioxide Activation by a Metal/Carbon Catalyst. *ChemSusChem*, **2017**, 10, 3671-3678	8.3	7
39	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	21.8	7
38	Mn-doped CuOCo3O4CeO2 catalyst with enhanced activity and durability for hydrocarbon oxidation. *Molecular Catalysis*, **2019**, 467, 9-15	3.3	6
37	Selective aggregation of polyanion-coated gold nanorods induced by divalent metal ions in an aqueous solution. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 3538-42	1.3	6
36	MODELING OF COPPER ION REMOVAL FROM AQUEOUS SOLUTIONS USING MODIFIED SILICA BEADS. *Chemical Engineering Communications*, **2000**, 181, 37-55	2.2	6
35	Design Principles of NiFe-Layered Double Hydroxide Anode Catalysts for Anion Exchange Membrane Water Electrolyzers. *ACS Applied Materials & Interfaces*, **2021**, 13, 37179-37186	9.5	6
34	The role of surface hydroxyl groups on a single-atomic Rh/ZrO catalyst for direct methane oxidation. *Chemical Communications*, **2021**, 57, 1671-1674	5.8	6
33	Titanium-iridium oxide layer coating to suppress photocorrosion during photocatalytic water splitting. *Korean Journal of Chemical Engineering*, **2015**, 32, 2429-2433	2.8	5
32	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	2.8	5
31	Selective CO adsorption using sulfur-doped Ni supported by petroleum-based activated carbon. *Journal of Industrial and Engineering Chemistry*, **2020**, 83, 289-296	6.3	4
30	Seemingly Negligible Amounts of Platinum Nanoparticles Mislead Electrochemical Oxygen Reduction Reaction Pathway on Platinum Single-Atom Catalysts. *ChemElectroChem*, **2020**, 7, 3716-3719	4.3	4
29	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	3.6	4
28	Diels-Alder cycloaddition of oxidized furans and ethylene over supported heteropolyacid catalysts for renewable terephthalic acid. *Catalysis Today*, **2020**, 351, 37-43	5.3	4

27	Solventless Catalytic Etherification of Glycerol Using Acetate Salts as Efficient Catalysts. *Bulletin of the Korean Chemical Society*, **2018**, 39, 722-725	1.2	4
26	Pt black catalyzed methane oxidation to methyl bisulfate in H2SO4-SO3. *Journal of Catalysis*, **2019**, 374, 230-236	7.3	3
25	Toward the practical application of direct CO2 hydrogenation technology for methanol production. *International Journal of Energy Research*, **2020**, 44, 8781-8798	4.5	3
24	Amorphous Ir atomic clusters anchored on crystalline IrO2 nanoneedles for proton exchange membrane water oxidation. *Journal of Power Sources*, **2022**, 524, 231069	8.9	3
23	Ultra-Low Pt Loaded Porous Carbon Microparticles with Controlled Channel Structure for High-Performance Fuel Cell Catalysts. *Advanced Energy Materials*,2102970	21.8	3
22	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	7.3	3
21	Stabilization of acid-rich bio-oil by catalytic mild hydrotreating. *Environmental Pollution*, **2021**, 272, 116180	9.3	3
20	Selective Oxidation of Allyl Alcohol to Acrylic Acid in Base-Free Aqueous Solution. *ChemistrySelect*, **2017**, 2, 2420-2425	1.8	2
19	Ionic Liquid-assisted Separation of Carbohydrates from Lignocellulosic Biomass. *Bulletin of the Korean Chemical Society*, **2016**, 37, 1305-1312	1.2	2
18	Orthopalladated complexes as phase-transfer catalysts for asymmetric alkylation of achiral Schiff base esters. *Transition Metal Chemistry*, **2010**, 35, 949-957	2.1	2
17	Improved H utilization by Pd doping in cobalt catalysts for reductive amination of polypropylene glycol.. *RSC Advances*, **2020**, 10, 45159-45169	3.7	2
16	Surface Restructuring of Supported Nano-Ceria for Improving Sulfur Resistance. *ACS Catalysis*, **2021**, 11, 7154-7159	13.1	2
15	Learning the properties of a water-lean amine solvent from carbon capture pilot experiments. *Applied Energy*, **2021**, 283, 116213	10.7	2
14	Controlled doping of electrocatalysts through engineering impurities.. *Advanced Materials*, **2022**, e2203030	24	2
13	Magnesium Oxide-catalyzed Oxidative Depolymerization of EFB Lignin. *Bulletin of the Korean Chemical Society*, **2016**, 37, 515-521	1.2	1
12	Copper oxide shape effect in CeO2/Cu2O catalysts for PROX reaction. *International Journal of Nanotechnology*, **2013**, 10, 735	1.5	1
11	Lens-Shaped Carbon Particles with Perpendicularly-Oriented Channels for High-Performance Proton Exchange Membrane Fuel Cells.. *ACS Nano*, **2022**,	16.7	1
10	Across the Board: Hyunjoo Lee on Electrochemical CO Reduction. *ChemSusChem*, **2020**, 13, 2799-2801	8.3	1

List of Publications

9	Re-dispersion of Pd-based bimetallic catalysts by hydrothermal treatment for CO oxidation.. *RSC Advances*, **2021**, 11, 3104-3109	3.7	1
8	Single-Phase Formation of Rh O Nanoparticles on h-BN Support for Highly Controlled Methane Partial Oxidation to Syngas. *Angewandte Chemie - International Edition*, **2021**, 60, 25411-25418	16.4	1
7	Atomically ordered Pt3Mn intermetallic electrocatalysts for the oxygen reduction reaction in fuel cells. *Journal of Materials Chemistry A*, **2022**, 10, 7399-7408	13	1
6	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	9.5	0
5	Improved catalytic depolymerization of lignin waste using carbohydrate derivatives. *Environmental Pollution*, **2021**, 268, 115674	9.3	0
4	Catalytic Approaches Towards Highly Durable Proton Exchange Membrane Fuel Cells with Minimized Pt Use. *Chemical Science*,	9.4	0
3	Electrocatalysis **2018**, 315-359		
2	Sustainable Electrochemical NO Capture and Storage System Based on the Reversible Fe2+/Fe3+-EDTA Redox Reaction. *Catalysts*, **2022**, 12, 79	4	
1	Single-Phase Formation of Rh2O3 Nanoparticles on h-BN Support for Highly Controlled Methane Partial Oxidation to Syngas. *Angewandte Chemie*, **2021**, 133, 25615	3.6	