Jaeyoung Lee

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.

232 papers	7,257 citations	46 h-index	73 g-index
248 ext. papers	8,082 ext. citations	6.4 avg, IF	6.31 L-index

#	Paper	IF	Citations
232	High-performance capacitive deionization electrodes through regulated electrodeposition of manganese oxide and nickel-manganese oxide/hydroxide onto activated carbon. *Separation and Purification Technology*, **2022**, 280, 119873	8.3	2
231	Syngas production for Fischer-Tropsch process via co-electrolytic processes of CO2 reduction and NH3 oxidation. *Chemical Engineering Journal*, **2022**, 430, 132563	14.7	2
230	Steam activation of Fe-N-C catalyst for advanced power performance of alkaline hydrazine fuel cells. *Journal of Energy Chemistry*, **2022**, 64, 276-285	12	4
229	Biomass-derived bifunctional electrocatalysts for oxygen reduction and evolution reaction: A review. *Journal of Energy Chemistry*, **2022**, 65, 149-172	12	16
228	Nanostructured cobalt-based metal-organic framework/cadmium sulfide electrocatalyst for enhanced oxygen evolution reaction and anion exchange membrane-based water electrolysis: Synergistic effect. *Journal of Power Sources*, **2022**, 527, 231151	8.9	2
227	Boosting the oxygen evolution reaction performance of wrinkled Mn(OH)2 via conductive activation with a carbon binder. *Journal of Energy Chemistry*, **2022**, 71, 580-587	12	1
226	Rapid determination of lithium-ion battery degradation: High C-rate LAM and calculated limiting LLI. *Journal of Energy Chemistry*, **2021**, 67, 663-663	12	3
225	Carbon-Based Capacitive Deionization Electrodes: Development Techniques and its Influence on Electrode Properties. *Chemical Record*, **2021**, 21, 820-840	6.6	6
224	Contribution of Interstitial Boron in a Boron-Incorporated Palladium Catalyst Toward Formate Oxidation in an Alkaline Direct Formate Fuel Cell. *ACS Catalysis*, **2021**, 11, 4722-4729	13.1	11
223	Formation of 1-Butanol from CO2 without *CO Dimerization on a Phosphorus-Rich Copper Cathode. *ACS Energy Letters*, **2021**, 6, 2090-2095	20.1	8
222	Crusty-Structured Nanoparticles as Anode Catalysts in Alkaline Fuel Cells. *ACS Applied Nano Materials*, **2021**, 4, 8145-8153	5.6	1
221	Improved electrosorption kinetics in meso/microporous carbon composite electrode for swift salt removal. *Catalysis Today*, **2021**, 359, 133-140	5.3	4
220	The effect of morphological difference and hydride incorporation on the activity of Pd/C catalysts in direct alkaline formate fuel cell. *Catalysis Today*, **2021**, 359, 28-34	5.3	6
219	Improved Redox Reaction of Lithium Polysulfides on the Interfacial Boundary of Polar CoC O as a Polysulfide Catenator for a High-Capacity Lithium-Sulfur Battery. *ChemSusChem*, **2021**, 14, 876-883	8.3	7
218	In situ demonstration of anodic interface degradation during water electrolysis: Corrosion and passivation. *Electrochimica Acta*, **2021**, 365, 137276	6.7	5
217	Extensive Active-Site Formation in Trirutile CoSb2O6 by Oxygen Vacancy for Oxygen Evolution Reaction in Anion Exchange Membrane Water Splitting. *ACS Energy Letters*, **2021**, 6, 364-370	20.1	23
216	Dischargeable nickel matrix charges iron species for oxygen evolution electrocatalysis. *Electrochimica Acta*, **2021**, 386, 138401	6.7	2

215	Rhodium-molybdenum oxide electrocatalyst with dual active sites for electrochemical ammonia synthesis under neutral pH condition. *Journal of Electroanalytical Chemistry*, **2021**, 896, 115157	4.1	1
214	Improved Redox Reaction of Lithium Polysulfides on the Interfacial Boundary of Polar CoC O as a Polysulfide Catenator for a High-Capacity Lithium-Sulfur Battery. *ChemSusChem*, **2021**, 14, 757	8.3	1
213	Moderate oxophilic CoFe in carbon nanofiber for the oxygen evolution reaction in anion exchange membrane water electrolysis. *Electrochimica Acta*, **2020**, 353, 136521	6.7	17
212	Solid polymer electrolytes from double-comb Poly(methylhydrosiloxane) based on quaternary ammonium moiety-containing crosslinking system for Li/S battery. *Journal of Power Sources*, **2020**, 450, 227690	8.9	9
211	Enhanced corrosion tolerance and highly durable ORR activity by low Pt electrocatalyst on unique pore structured CNF in PEM fuel cell. *Electrochimica Acta*, **2020**, 348, 136346	6.7	21
210	Optimized electrode structure for performance and mechanical stability in a direct formate fuel cell using cation ionomer. *Sustainable Energy and Fuels*, **2020**, 4, 1899-1907	5.8	5
209	Looking Back and Looking Ahead in Electrochemical Reduction of CO. *Chemical Record*, **2020**, 20, 89-101	6.6	6
208	The Role of Lone-Pair Electrons in Pt-N Interactions for the Oxygen Reduction Reaction in Polymer Exchange Membrane Fuel Cells. *ChemSusChem*, **2020**, 13, 1751-1758	8.3	7
207	Narrow size distribution of Pt nanoparticles covered by an S-doped carbon layer for an improved oxygen reduction reaction in fuel cells. *Journal of Power Sources*, **2020**, 450, 227650	8.9	17
206	Iridium oxide fabrication and application: A review. *Journal of Energy Chemistry*, **2020**, 46, 152-172	12	26
205	Crosslinked poly(allyl glycidyl ether) with pendant nitrile groups as solid polymer electrolytes for Li‖S batteries. *Electrochimica Acta*, **2020**, 362, 137141	6.7	3
204	Au on highly hydrophobic carbon substrate for improved selective CO production from CO2 in gas-phase electrolytic cell. *Catalysis Today*, **2020**, 355, 340-346	5.3	11
203	The Role of Lone-Pair Electrons in Pt-N Interactions for the Oxygen Reduction Reaction in Polymer Exchange Membrane Fuel Cells. *ChemSusChem*, **2020**, 13, 1660	8.3	
202	Optimistic performance of carbon-free hydrazine fuel cells based on controlled electrode structure and water management. *Journal of Energy Chemistry*, **2020**, 51, 175-181	12	10
201	Experimental and Density Functional Theory Corroborated Optimization of Durable Metal Embedded Carbon Nanofiber for Oxygen Electrocatalysis. *Journal of Physical Chemistry Letters*, **2019**, 10, 3109-3114	6.4	11
200	Reduction of Iridium Loading to the Minimum Level Required for Water Oxidation Electrocatalysis without Sacrificing the Electrochemical Stability. *Journal of Physical Chemistry C*, **2019**,	3.8	13
199	Recent advances in water-splitting electrocatalysts based on manganese oxide. *Carbon Resources Conversion*, **2019**, 2, 242-255	4.7	13
198	Dehydration Pathway for the Dissociation of Gas-Phase Formic Acid on Pt(111) Surface Observed via Ambient-Pressure XPS. *Journal of Physical Chemistry C*, **2018**, 122, 2064-2069	3.8	13

197	Al-incorporation into Li7La3Zr2O12 solid electrolyte keeping stabilized cubic phase for all-solid-state Li batteries. *Journal of Energy Chemistry*, **2018**, 27, 1501-1508	12	30
196	Enhanced Capacitive Deionization of Graphene Nanoplatelet/Activated Carbon Composite Electrode. *ECS Transactions*, **2018**, 85, 1321-1327	1	3
195	Improved water management of Pt/C cathode modified by graphitized carbon nanofiber in proton exchange membrane fuel cell. *Journal of Power Sources*, **2018**, 399, 350-356	8.9	25
194	Ethylene Selectivity in CO Electroreduction when using Cu Oxides: An In Situ ATR-SEIRAS Study. *ChemElectroChem*, **2018**, 5, 558-564	4.3	17
193	Adsorbed Hydrogen as a Site-Occupying Species in the Electrocatalytic Oxidation of Formate on Pd/C in Alkaline Medium. *Journal of the Electrochemical Society*, **2018**, 165, J3266-J3270	3.9	9
192	Electrocatalytic Activity of Carbon in N-Doped Graphene to Achieve High-Energy Density Li□S Batteries. *Journal of Physical Chemistry C*, **2018**, 122, 23045-23052	3.8	13
191	Peptide-Programmable Nanoparticle Superstructures with Tailored Electrocatalytic Activity. *ACS Nano*, **2018**, 12, 6554-6562	16.7	12
190	The Effect of Synthesis Temperature on Pd-H Catalyst Structure for Alkaline Direct Formate Fuel Cells. *ECS Transactions*, **2018**, 85, 149-158	1	7
189	Catalytically active highly metallic palladium on carbon support for oxidation of HCOO □*Catalysis Today*, **2017**, 295, 26-31	5.3	22
188	Tree-Bark-Shaped N-Doped Porous Carbon Anode for Hydrazine Fuel Cells. *Angewandte Chemie*, **2017**, 129, 13698-13701	3.6	4
187	Tree-Bark-Shaped N-Doped Porous Carbon Anode for Hydrazine Fuel Cells. *Angewandte Chemie - International Edition*, **2017**, 56, 13513-13516	16.4	23
186	Anion dependent CO/H 2 production ratio from CO 2 reduction on Au electro-catalyst. *Catalysis Today*, **2017**, 295, 82-88	5.3	23
185	A graphitic edge plane rich meso-porous carbon anode for alkaline water electrolysis. *Physical Chemistry Chemical Physics*, **2017**, 19, 21987-21995	3.6	8
184	Importance of Ag□Cu Biphasic Boundaries for Selective Electrochemical Reduction of CO2 to Ethanol. *ACS Catalysis*, **2017**, 7, 8594-8604	13.1	192
183	Enhancement of catalytic activity of a programmed gold nanoparticle superstructure modulated by supramolecular protein assembly. *Catalysis Today*, **2017**, 295, 95-101	5.3	3
182	Origin of peculiar electrochemical phenomena in direct carbon fuel cells. *Chemical Engineering Journal*, **2017**, 327, 1163-1175	14.7	3
181	Meticulous insight on the state of fuel in a solid oxide carbon fuel cell. *Chemical Engineering Journal* , **2017**, 308, 974-979	14.7	5
180	Bulk pH contribution to CO/HCOO□production from CO2 on oxygen-evacuated Cu2O electrocatalyst. *Catalysis Today*, **2017**, 288, 11-17	5.3	11

179	Induced changes of Pt/C in activity and durability through heat-treatment for oxygen reduction reaction in acidic medium. *International Journal of Hydrogen Energy*, **2017**, 42, 22830-22840	6.7	5
178	Ameliorated performance in a direct carbon fuel cell using Sn mediator on Ni–YSZ anode surface. *Catalysis Today*, **2016**, 260, 158-164	5.3	8
177	Peptide-based bimetallic nanostructures with tailored surface compositions and their oxygen electroreduction activities. *CrystEngComm*, **2016**, 18, 6024-6028	3.3	8
176	Dip-coating synthesis of high-surface area nanostructured FeB for direct usage as anode in metal/metalloid-air battery. *Current Applied Physics*, **2016**, 16, 1075-1080	2.6	13
175	Pore-filled anion-exchange membranes for electrochemical energy conversion applications. *Electrochimica Acta*, **2016**, 222, 212-220	6.7	19
174	Influence of the mediating behaviour of Sn according to its particle size on a Ni/yttria-stabilised zirconia porous anode structure in a direct carbon fuel cell. *RSC Advances*, **2016**, 6, 109036-109044	3.7	3
173	Electrode Architecture in Galvanic and Electrolytic Energy Cells. *Angewandte Chemie - International Edition*, **2016**, 55, 4870-80	16.4	16
172	Metal-Derived Mesoporous Structure of a Carbon Nanofiber Electrocatalyst for Improved Oxygen Evolution Reaction in Alkaline Water Electrolysis. *ChemElectroChem*, **2016**, 3, 1720-1724	4.3	11
171	Electro-oxidation of mixed reactants of ethanol and formate on Pd/C in alkaline fuel cells. *Journal of Energy Chemistry*, **2016**, 25, 683-690	12	17
170	Positively charged carbon electrocatalyst for enhanced power performance of L-ascorbic acid fuel cells. *Journal of Energy Chemistry*, **2016**, 25, 793-797	12	11
169	High-Power-Density Semiconductor–Air Batteries Based on P-Type Germanium with Different Crystal Orientations. *ChemElectroChem*, **2016**, 3, 242-246	4.3	7
168	Atomic layer deposition of ultrathin layered TiO2 on Pt/C cathode catalyst for extended durability in polymer electrolyte fuel cells. *Journal of Energy Chemistry*, **2016**, 25, 258-264	12	18
167	SPPO pore-filled composite membranes with electrically aligned ion channels via a lab-scale continuous caster for fuel cells: An optimal DC electric field strength-IEC relationship. *Journal of Membrane Science*, **2016**, 501, 15-23	9.6	14
166	Surface analysis and dynamics. *Catalysis Today*, **2016**, 260, 1-2	5.3	2
165	Development of high quality Fe3O4/rGO composited electrode for low energy water treatment. *Journal of Energy Chemistry*, **2016**, 25, 354-360	12	18
164	Effect of transition metal induced pore structure on oxygen reduction reaction of electrospun fibrous carbon. *Catalysis Today*, **2016**, 260, 82-88	5.3	28
163	Polydimethylsiloxane treated cathode catalyst layer to prolong hydrogen fuel cell lifetime. *Catalysis Today*, **2016**, 262, 155-160	5.3	18
162	Competitiveness of Formic Acid Fuel Cells: In Comparison with Methanol. *Applied Chemistry for Engineering*, **2016**, 27, 123-127		4

161	Current Status of Thermoelectric Power Generation Technology. *Applied Chemistry for Engineering*, **2016**, 27, 353-357		1
160	Electrode Build-Up of Reducible Metal Composites toward Achievable Electrochemical Conversion of Carbon Dioxide. *ChemSusChem*, **2016**, 9, 333-44	8.3	63
159	Alkaline Ammonia Electrolysis on Electrodeposited Platinum for Controllable Hydrogen Production. *ChemSusChem*, **2016**, 9, 403-8	8.3	44
158	Elektrodenarchitektur in galvanischen und elektrolytischen Energiezellen. *Angewandte Chemie*, **2016**, 128, 4952-4962	3.6	
157	Observation of in situ oxidation dynamics of vanadium thin film with ambient pressure X-ray photoemission spectroscopy. *Journal of Applied Physics*, **2016**, 120, 205305	2.5	10
156	Nitrogen-Deficient ORR Active Sites Formation by Iron-Assisted Water Vapor Activation of Electrospun Carbon Nanofibers. *Journal of Physical Chemistry C*, **2016**, 120, 7705-7714	3.8	43
155	Porous and Conductive Fibrous Carbon for Enhanced Electrocatalytic Oxygen Reduction Reaction in Alkaline Media. *Journal of Physical Chemistry C*, **2016**, 120, 22342-22348	3.8	11
154	Improvement of water softening efficiency in capacitive deionization by ultra purification process of reduced graphene oxide. *Current Applied Physics*, **2015**, 15, 1397-1401	2.6	23
153	Direct power generation from waste coffee grounds in a biomass fuel cell. *Journal of Power Sources* , **2015**, 296, 433-439	8.9	32
152	An optimized mild reduction route towards excellent cobalt□graphene catalysts for water oxidation. *RSC Advances*, **2015**, 5, 64858-64864	3.7	2
151	Ultrahigh purification in concentrated NaOH by electrowinning for solar cell application. *Separation and Purification Technology*, **2015**, 145, 24-28	8.3	1
150	Influence of Solution pH on Pt Anode Catalyst in Direct Formic Acid Fuel Cells. *ACS Catalysis*, **2015**, 5, 6848-6851	13.1	20
149	Enhanced electrical and mass transfer characteristics of acid-treated carbon nanotubes for capacitive deionization. *Current Applied Physics*, **2015**, 15, 1539-1544	2.6	20
148	High-temperature liquid Sn-air energy storage cell. *Journal of Energy Chemistry*, **2015**, 24, 614-619	12	7
147	Sustainable production of formic acid by electrolytic reduction of gaseous carbon dioxide. *Journal of Materials Chemistry A*, **2015**, 3, 3029-3034	13	78
146	Electrocatalytic Oxidation of Formic Acid: Closing the Gap Between Fundamental Study and Technical Applications. *Electrocatalysis*, **2015**, 6, 20-32	2.7	21
145	Insights into an autonomously formed oxygen-evacuated Cu2O electrode for the selective production of C2H4 from CO2. *Physical Chemistry Chemical Physics*, **2015**, 17, 824-30	3.6	150
144	Improvement of Energy Capacity with Vitamin C Treated Dual-Layered Graphene-Sulfur Cathodes in Lithium-Sulfur Batteries. *ChemSusChem*, **2015**, 8, 2754	8.3	3

143	Electrocatalytic Production of C3-C4 Compounds by Conversion of CO2 on a Chloride-Induced Bi-Phasic Cu2O-Cu Catalyst. *Angewandte Chemie - International Edition*, **2015**, 54, 14701-5	16.4	185
142	Designing a Highly Active Metal-Free Oxygen Reduction Catalyst in Membrane Electrode Assemblies for Alkaline Fuel Cells: Effects of Pore Size and Doping-Site Position. *Angewandte Chemie - International Edition*, **2015**, 54, 9230-4	16.4	105
141	Designing a Highly Active Metal-Free Oxygen Reduction Catalyst in Membrane Electrode Assemblies for Alkaline Fuel Cells: Effects of Pore Size and Doping-Site Position. *Angewandte Chemie*, **2015**, 127, 9362-9366	3.6	9
140	Electrocatalytic Production of C3-C4 Compounds by Conversion of CO2 on a Chloride-Induced Bi-Phasic Cu2O-Cu Catalyst. *Angewandte Chemie*, **2015**, 127, 14914-14918	3.6	101
139	Improvement of Energy Capacity with Vitamin C Treated Dual-Layered Graphene-Sulfur Cathodes in Lithium-Sulfur Batteries. *ChemSusChem*, **2015**, 8, 2883-91	8.3	19
138	Diagnosis of the measurement inconsistencies of carbon-based electrocatalysts for the oxygen reduction reaction in alkaline media. *RSC Advances*, **2015**, 5, 1571-1580	3.7	32
137	Electrochemical codeposition of Pt/graphene catalyst for improved methanol oxidation. *Current Applied Physics*, **2015**, 15, 219-225	2.6	31
136	Alkaline CO2 Electrolysis toward Selective and Continuous HCOO⁻ Production over SnO2 Nanocatalysts. *Journal of Physical Chemistry C*, **2015**, 119, 4884-4890	3.8	106
135	Controlled electrochemical etching of nanoporous Si anodes and its discharge behavior in alkaline Si-air batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 3126-32	9.5	16
134	III-V Tandem, CuInGa(S,Se)2, and Cu2ZnSn(S,Se)4 Compound Semiconductor Thin Film Solar Cells. *Applied Chemistry for Engineering*, **2015**, 26, 526-532		
133	Excavated Fe-N-C sites for enhanced electrocatalytic activity in the oxygen reduction reaction. *ChemSusChem*, **2014**, 7, 1289-94	8.3	33
132	The influence of a fibrous carbon envelope on the formation of CoFe nanoparticles for durable electrocatalytic oxygen evolution. *Physical Chemistry Chemical Physics*, **2014**, 16, 13807-13	3.6	37
131	Quasi-perpetual discharge behaviour in p-type Ge-air batteries. *Physical Chemistry Chemical Physics*, **2014**, 16, 22487-94	3.6	16
130	Quasi-photonic crystal effect of TiCl₄ electrolyte matrix in unipolar dye-absorber devices. *ACS Applied Materials & Interfaces*, **2014**, 6, 14399-404	9.5	5
129	Enhancing Role of Nickel in the Nickel–Palladium Bilayer for Electrocatalytic Oxidation of Ethanol in Alkaline Media. *Journal of Physical Chemistry C*, **2014**, 118, 22473-22478	3.8	31
128	in-situ electrochemical extended X-ray absorption fine structure spectroscopy study on the reactivation of Pd electrocatalyst in formic acid oxidation. *Electrochimica Acta*, **2014**, 140, 525-528	6.7	6
127	Controlled water flooding of polymer electrolyte fuel cells applying superhydrophobic gas diffusion layer. *Current Applied Physics*, **2014**, 14, 1374-1379	2.6	16
126	Functionalized graphene-based cathode for highly reversible lithium-sulfur batteries. *ChemSusChem*, **2014**, 7, 1265-73	8.3	46

125	Facile preparation of SnC2O4 nanowires for anode materials of a Li ion battery. *Current Applied Physics*, **2014**, 14, 892-896	2.6	7
124	Gently reduced graphene oxide incorporated into cobalt oxalate rods as bifunctional oxygen electrocatalyst. *Electrochimica Acta*, **2014**, 140, 404-411	6.7	34
123	Electrocatalytic oxygen evolution reaction at a FeNi composite on a carbon nanofiber matrix in alkaline media. *Chinese Journal of Catalysis*, **2014**, 35, 891-895	11.3	26
122	Durable power performance of a direct ash-free coal fuel cell. *Electrochimica Acta*, **2014**, 115, 511-517	6.7	52
121	High Energy Density Germanium Anodes for Next Generation Lithium Ion Batteries. *Applied Chemistry for Engineering*, **2014**, 25, 1-13		14
120	Carbon Electrodes in Capacitive Deionization Process. *Applied Chemistry for Engineering*, **2014**, 25, 346-351		2
119	Oxygen electrocatalysis in chemical energy conversion and storage technologies. *Current Applied Physics*, **2013**, 13, 309-321	2.6	148
118	Carbon dioxide reforming of methane over mesoporous Ni/SiO2. *Fuel*, **2013**, 112, 111-116	7.1	38
117	Influence of acid/base co-catalyst on the photoelectrochemical properties of TiO2 thin films in dye-sensitized solar cells. *Electrochimica Acta*, **2013**, 107, 619-623	6.7	4
116	Pyrolytic carbon infiltrated nanoporous alumina reducing contact resistance of aluminum/carbon interface. *Electrochimica Acta*, **2013**, 89, 173-179	6.7	6
115	End-group cross-linked large-size composite membranes via a lab-made continuous caster: enhanced oxidative stability and scale-up feasibility in a 50 cm2 single-cell and a 220 W class 5-cell PEFC stack. *RSC Advances*, **2013**, 3, 24154	3.7	3
114	FeB catalyst fabricated by hybrid capacitive adsorption□hemical reduction method and its application for hydrogen production from NaBH4 solution. *Catalysis Today*, **2013**, 216, 240-245	5.3	27
113	An etched nanoporous Ge anode in a novel metal-air energy conversion cell. *Physical Chemistry Chemical Physics*, **2013**, 15, 6333-8	3.6	17
112	Enhanced electrocatalysis of PtRu onto graphene separated by Vulcan carbon spacer. *Journal of Power Sources*, **2013**, 222, 261-266	8.9	45
111	Ultrafast and stable hydrogen generation from sodium borohydride in methanol and water over FeB nanoparticles. *Journal of Power Sources*, **2013**, 243, 444-450	8.9	89
110	Interfacial Charge-Transfer Loss in Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2013**, 117, 2734-2739	3.8	14
109	Enhanced reversible capacity of Li-S battery cathode based on graphene oxide. *Journal of Energy Chemistry*, **2013**, 22, 336-340	12	29
108	On the Origin of Electrocatalytic Oxygen Reduction Reaction on Electrospun Nitrogen□arbon Species. *Journal of Physical Chemistry C*, **2013**, 117, 11619-11624	3.8	108

107	Self-Organized One-Dimensional Cobalt Compound Nanostructures from CoC2O4 for Superior Oxygen Evolution Reaction. *Journal of Physical Chemistry C*, **2013**, 117, 23712-23715	3.8	24
106	Open circuit interaction of borohydride with oxidized platinum surfaces. *Electrochemistry Communications*, **2012**, 16, 107-109	5.1	8
105	Clean hydrogen production from methanol–water solutions via power-saved electrolytic reforming process. *Journal of Power Sources*, **2012**, 198, 218-222	8.9	51
104	Effect of thermal treatment on the aluminum hydroxide nanofibers synthesized by electrolysis of Al plates. *Microelectronic Engineering*, **2012**, 89, 89-91	2.5	10
103	Comparable mono and bipolar connection of capacitive deionization stack in NaCl treatment. *Journal of Industrial and Engineering Chemistry*, **2012**, 18, 763-766	6.3	16
102	Atomic-layer-deposited TiO2 on cathode gas diffusion layer for low humidity operation in hydrogen fuel cells. *Electrochemistry Communications*, **2012**, 24, 108-111	5.1	21
101	Enhanced Seebeck Coefficients of Thermoelectric Bi2Te3 Nanowires as a Result of an Optimized Annealing Process. *Journal of Physical Chemistry C*, **2012**, 116, 19512-19516	3.8	24
100	Nanoparticle-enhanced surface plasmon resonance detection of proteins at attomolar concentrations: comparing different nanoparticle shapes and sizes. *Analytical Chemistry*, **2012**, 84, 1702-7	7.8	134
99	High-Density Nanoporous Structures for Enhanced Electrocatalysis. *Journal of Physical Chemistry C*, **2012**, 116, 2915-2918	3.8	4
98	Fast and selective Cu2O nanorod growth into anodic alumina templates via electrodeposition. *Current Applied Physics*, **2012**, 12, 60-64	2.6	25
97	Improved dimensional stability of Nafion membrane modified using a layer by layer self-assembly of biophilic polymers. *Current Applied Physics*, **2012**, 12, 1235-1238	2.6	4
96	Bifunctional silver nanoparticle cathode in microbial fuel cells for microbial growth inhibition with comparable oxygen reduction reaction activity. *Environmental Science & Technology*, **2011**, 45, 5441-6	10.3	94
95	Enhanced anode interface for electrochemical oxidation of solid fuel in direct carbon fuel cells: The role of liquid Sn in mixed state. *Journal of Power Sources*, **2011**,	8.9	4
94	A facile route for preparation of non-noble CNF cathode catalysts in alkaline ethanol fuel cells. *Electrochimica Acta*, **2011**, 56, 9186-9190	6.7	46
93	A stable Ni–B catalyst in hydrogen generation via NaBH4 hydrolysis. *Catalysis Communications*, **2011**, 16, 120-123	3.2	33
92	Autonomous interfacial creation of nanostructured lead oxide. *Nanoscale*, **2011**, 3, 4984	7.7	7
91	Surface Modifications of a Carbon Anode Catalyst by Control of Functional Groups for Vitamin C Fuel Cells. *Electrocatalysis*, **2011**, 2, 200-206	2.7	2
90	Changes in the surface structure of Pd/Ta2O5 by oxygen and CO studied using X-ray Photoelectron Spectroscopy (XPS). *Surface and Interface Analysis*, **2011**, 43, 1371-1376	1.5	

89	A high-performing nanostructured TiO2 filter for volatile organic compounds using atomic layer deposition. *Chemical Communications*, **2011**, 47, 5605-7	5.8	28
88	On the origin of reactive Pd catalysts for an electrooxidation of formic acid. *Physical Chemistry Chemical Physics*, **2011**, 13, 6192-6	3.6	14
87	Electrocatalytic reduction of CO2 gas at Sn based gas diffusion electrode. *Current Applied Physics*, **2011**, 11, 986-988	2.6	91
86	Controlling oxygen functional species of graphene oxide for an electro-oxidation of L-ascorbic acid. *Electrochemistry Communications*, **2011**, 13, 677-680	5.1	29
85	Preparation of cost-effective Pt□Co electrodes by pulse electrodeposition for PEMFC electrocatalysts. *Electrochimica Acta*, **2011**, 56, 3036-3041	6.7	55
84	N-heterocyclic carbene□silver complexes: Potential conductive materials for silver pastes in electronic applications. *Polyhedron*, **2011**, 30, 465-469	2.7	5
83	10.2478/s11814-010-0099-5 **2011**, 27, 76		
82	Improved Specific Capacitance of Amorphous Vanadium Pentoxide in a Nanoporous Alumina Template. *Electrochemical and Solid-State Letters*, **2010**, 13, A25		10
81	Development of a 600 W Proton Exchange Membrane Fuel Cell Power System for the Hazardous Mission Robot. *Journal of Fuel Cell Science and Technology*, **2010**, 7,		9
80	Iron-Cobalt Modified Electrospun Carbon Nanofibers as Oxygen Reduction Catalysts in Alkaline Fuel Cells. *ECS Transactions*, **2010**, 33, 1757-1767	1	12
79	Ultra-sensitive detection of IgE using biofunctionalized nanoparticle-enhanced SPR. *Talanta*, **2010**, 81, 1755-9	6.2	78
78	Investigation on removal of hardness ions by capacitive deionization (CDI) for water softening applications. *Water Research*, **2010**, 44, 2267-75	12.5	277
77	Disproportionation of thermoelectric bismuth telluride nanowires as a result of the annealing process. *Physical Chemistry Chemical Physics*, **2010**, 12, 15247-50	3.6	27
76	Analyses of interfacial resistances in a membrane-electrode assembly for a proton exchange membrane fuel cell using symmetrical impedance spectroscopy. *Physical Chemistry Chemical Physics* , **2010**, 12, 15291-300	3.6	15
75	Power factor measurements of bismuth telluride nanowires grown by pulsed electrodeposition. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 43-45	2.5	21
74	Bioaffinity detection of pathogens on surfaces. *Journal of Industrial and Engineering Chemistry*, **2010**, 16, 169-177	6.3	21
73	Electrocatalytic Oxidation of Ethanol on Nanoporous Ni Electrode in Alkaline Media. *Electrocatalysis*, **2010**, 1, 104-107	2.7	8
72	Formic Acid from Carbon Dioxide on Nanolayered Electrocatalyst. *Electrocatalysis*, **2010**, 1, 108-115	2.7	58

71	Graphene Supported Pd Electrocatalysts for Formic Acid Oxidation. *Electrocatalysis*, **2010**, 1, 139-143	2.7	29
70	Catalytic decomposition of nitrous oxide over Fe-BEA zeolites: Essential components of iron active sites. *Korean Journal of Chemical Engineering*, **2010**, 27, 76-82	2.8	13
69	Effect of hydrogen partial pressure on a polymer electrolyte fuel cell performance. *Korean Journal of Chemical Engineering*, **2010**, 27, 843-847	2.8	3
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