Jun-Young Park

List of Publications by Year in Descending Order

148 papers	2,376 citations	26 h-index	37 g-index
160 ext. papers	2,826 ext. citations	5.9 avg, IF	5.11 L-index

#	Paper	IF	Citations
148	Assessing the degradation pattern and mechanism of membranes in polymer electrolyte membrane fuel cells using open-circuit voltage hold and humidity cycle test protocols. *Materials Science for Energy Technologies*, **2022**, 5, 66-73	5.2	0
147	Redox Activity of Li2SP2S5 Electrolyte Inducing Chemo-Mechanical Failure in All-Solid-State Batteries Comprising Sulfur Composite Cathode and LiSi Alloy Anode. *Chemical Engineering Journal*, **2022**, 136229	14.7	1
146	Nonideal defect structure and high-temperature transport properties of misfit-layered cobalt oxide. *Journal of Solid State Chemistry*, **2022**, 123299	3.3	1
145	Pr- and Sm-Substituted Layered Perovskite Oxide Systems for IT-SOFC Cathodes. *Energies*, **2021**, 14, 6739	3.1	2
144	Degradation Mechanisms of Solid Oxide Fuel Cells under Various Thermal Cycling Conditions. *ACS Applied Materials & Interfaces*, **2021**, 13, 49868-49878	9.5	3
143	Multiple perovskite layered lanthanum nickelate Ruddlesden-Popper systems as highly active bifunctional oxygen catalysts. *Chemical Engineering Journal*, **2021**, 409, 128226	14.7	7
142	Novel organic-inorganic polyphosphate based composite material as highly dense and robust electrolyte for low temperature fuel cells. *Journal of Power Sources*, **2021**, 493, 229696	8.9	3
141	High Capacity, Rate-Capability, and Power Delivery at High-Temperature by an Oxygen-Deficient Perovskite Oxide as Proton Insertion Anodes for Energy Storage Devices. *Journal of the Electrochemical Society*, **2021**, 168, 070540	3.9	0
140	Cobalt-free perovskite Ba1-xNdxFeO3-□air electrode materials for reversible solid oxide cells. *Ceramics International*, **2021**, 47, 7985-7993	5.1	8
139	Activity of layered swedenborgite structured Y0.8Er0.2BaCo3.2Ga0.8O7+□for oxygen electrode reactions in at intermediate temperature reversible ceramic cells. *Journal of Materials Chemistry A*, **2021**, 9, 607-621	13	10
138	Ultrahigh-sensitive mixed-potential ammonia sensor using dual-functional NiWO electrocatalyst for exhaust environment monitoring. *Journal of Hazardous Materials*, **2021**, 403, 123797	12.8	12
137	Transition from perovskite to misfit-layered structure materials: a highly oxygen deficient and stable oxygen electrode catalyst. *Energy and Environmental Science*, **2021**, 14, 2472-2484	35.4	13
136	Improved mechanical strength, proton conductivity and power density in an all-protonicSceramic fuel cell at intermediate temperature. *Scientific Reports*, **2021**, 11, 19382	4.9	6
135	Triple perovskite structured Nd1.5Ba1.5CoFeMnO9□oxygen electrode materials for highly efficient and stable reversible protonic ceramic cells. *Journal of Power Sources*, **2021**, 510, 230409	8.9	6
134	Design concept of co-ionic conducting solid oxide electrolyte for stable operation in a cell-imbalanced fuel cell stack. *Journal of Power Sources*, **2021**, 512, 230483	8.9	1
133	Synergistic Design of AnataseRutile TiO2 Nanostructured Heterophase Junctions toward Efficient Photoelectrochemical Water Oxidation. *Coatings*, **2020**, 10, 557	2.9	6
132	Degradation studies of ceria-based solid oxide fuel cells at intermediate temperature under various load conditions. *Journal of Power Sources*, **2020**, 452, 227758	8.9	14

131	3D architecture double perovskite NdBa0.5Sr0.5Co1.5Fe0.5O5+□embedded hollow-net Co3O4 bifunctional electrocatalysts coupled with N-doped CNT and reduced graphene oxide for oxygen electrode reactions. *Journal of Alloys and Compounds*, **2020**, 823, 153782	5.7	7
130	High conductivity and high density SrCe0.5Zr0.35Y0.1A0.05O3-□(A = Gd, Sm) proton-conducting electrolytes for IT-SOFCs. *Ionics*, **2020**, 26, 1297-1305	2.7	3
129	Characterization of limiting factors of an all-solid-state Li-ion battery using an embedded indium reference electrode. *Ionics*, **2020**, 26, 1555-1561	2.7	4
128	X-ray photoelectron spectroscopic study of impregnated La0.4Sr0.6Ti0.8Mn0.2O3□d anode material for high temperature-operating solid oxide fuel cell. *Solid State Ionics*, **2020**, 345, 115175	3.3	0
127	Studies on directly grown few layer graphene processed using tape-peeling method. *Carbon*, **2020**, 158, 749-755	10.4	7
126	Structural and electrical properties of novel phosphate based composite electrolyte for low-temperature fuel cells. *Composites Part B: Engineering*, **2020**, 202, 108405	10	10
125	A New High-Performance Proton-Conducting Electrolyte for Next-Generation Solid Oxide Fuel Cells. *Energy Technology*, **2020**, 8, 2000486	3.5	6
124	Single-step prepared Li2S-P2S5-C composite cathode for high areal capacity all-solid-state lithium ion batteries. *Electrochimica Acta*, **2020**, 358, 136884	6.7	5
123	BaCo0.4Fe0.4Zr0.2O3-□Cathode Materials for Protonic Ceramic Fuel Cells. *ECS Transactions*, **2019**, 91, 1503-1507	1	2
122	Syngas Fuelled High Performance Solid Oxide Fuel Cell. *ECS Transactions*, **2019**, 91, 1621-1629	1	4
121	Analysis of Internal Gas Leaks in an MCFC System Package for an LNG-Fueled Ship. *Applied Sciences (Switzerland)*, **2019**, 9, 2330	2.6	3
120	Spatial investigation of electronic properties in composite electrolytes for solid oxide fuel cells using embedded probes. *Journal of Power Sources*, **2019**, 438, 226945	8.9	4
119	Determination of partial conductivities and computational analysis of the theoretical power density of BaZr0.1Ce0.7Y0.1Yb0.1O3□(BZCYYb1711) electrolyte under various PCFC conditions. *Journal of Materials Chemistry A*, **2019**, 7, 21321-21328	13	19
118	Modification of Oxygen-Ionic Transport Barrier of BaCo0.4Zr0.1Fe0.4Y0.1O3□Steam (Air) Electrode by Impregnating Samarium-Doped Ceria Nanoparticles for Proton-Conducting Reversible Solid Oxide Cells. *Journal of the Electrochemical Society*, **2019**, 166, F746-F754	3.9	15
117	Tolerance to carbon corrosion of various carbon structures as catalyst supports for polymer electrolyte membrane fuel cells. *Journal of Materials Chemistry A*, **2019**, 7, 25056-25065	13	23
116	Chemical evolution-induced strengthening on AlCoCrNi dual-phase high-entropy alloy with high specific strength. *Journal of Alloys and Compounds*, **2019**, 777, 828-834	5.7	40
115	Stable ceria-based electrolytes for intermediate temperature-solid oxide fuel cells via hafnium oxide blocking layer. *Journal of Alloys and Compounds*, **2019**, 779, 121-128	5.7	4
114	Operation Protocols To Improve Durability of Protonic Ceramic Fuel Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 457-468	9.5	7

113	Thermally-triggered Dual In-situ Self-healing Metallic Materials. *Scientific Reports*, **2018**, 8, 2120	4.9	7
112	Investigating the effect of current collecting conditions on solid oxide fuel cell (SOFC) performance with additional voltage probes. *International Journal of Hydrogen Energy*, **2018**, 43, 2349-2358	6.7	12
111	Electrochemical properties of electrospinning-fabricated layered perovskite used in cathode materials for a low temperature-operating solid oxide fuel cell. *Thin Solid Films*, **2018**, 660, 663-671	2.2	5
110	Synthesis and electrochemical properties of layered perovskite substituted with heterogeneous lanthanides for intermediate temperature-operating solid oxide fuel cell. *International Journal of Hydrogen Energy*, **2018**, 43, 11378-11385	6.7	3
109	Degradation of Anode-Supported Solid Oxide Fuel Cells under Load Trip and Cycle Conditions and Their Degradation Prevention Operating Logic. *Journal of the Electrochemical Society*, **2018**, 165, F728-F735	3.9	8
108	B-site doping effects of NdBa0.75Ca0.25Co2O5+□double perovskite catalysts for oxygen evolution and reduction reactions. *Journal of Materials Chemistry A*, **2018**, 6, 17807-17818	13	36
107	Cooperative deformation behavior between the shear band and boundary sliding of an Al-based nanostructure-dendrite composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 735, 81-88	5.3	19
106	Oxygen-deficient triple perovskites as highly active and durable bifunctional electrocatalysts for oxygen electrode reactions. *Science Advances*, **2018**, 4, eaap9360	14.3	136
105	Durability tests of BCY-BZY electrolyte fuel cells under severe operating conditions. *Journal of Alloys and Compounds*, **2018**, 735, 2341-2347	5.7	7
104	WSSe Nanoparticles Decorated Three-Dimensional Graphene on Nickel Foam: A Robust and Highly Efficient Electrocatalyst for the Hydrogen Evolution Reaction. *Nanomaterials*, **2018**, 8,	5.4	19
103	Degradation behavior of Ni-YSZ anode-supported solid oxide fuel cell (SOFC) as a function of H2S concentration. *International Journal of Hydrogen Energy*, **2018**, 43, 22511-22518	6.7	19
102	Enhanced performance of intermediate temperature-solid oxide fuel cells with a bimodal shape Nd 0.2 Ce 0.8 O 2□electrolyte. *Journal of Alloys and Compounds*, **2017**, 706, 330-339	5.7	2
101	Quantized interfacial properties at lead sulfide/Zn1⊠MgxO energy harvesting assembly: Formation of nanocrystal solid solution. *Solar Energy Materials and Solar Cells*, **2017**, 164, 156-164	6.4	5
100	Highly active and durable nitrogen doped-reduced graphene oxide/double perovskite bifunctional hybrid catalysts. *Journal of Materials Chemistry A*, **2017**, 5, 13019-13031	13	34
99	Performance improvement of all-solid-state Li-S batteries with optimizing morphology and structure of sulfur composite electrode. *Journal of Alloys and Compounds*, **2017**, 723, 787-794	5.7	33
98	Investigation of Electronic Transport Property and Durability of BCY-BZY Electrolyte Cells Using Embedded Probes. *Electrochimica Acta*, **2017**, 236, 399-407	6.7	11
97	High-Temperature Current Collection Enabled by the in Situ Phase Transformation of Cobalt-Nickel Foam for Solid Oxide Fuel Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 39407-39415	9.5	7
96	Oxygen electrode reactions of doped BiFeO3 materials for low and elevated temperature fuel cell applications. *RSC Advances*, **2017**, 7, 47643-47653	3.7	12

95	Electrochemcial Performances of La-Doped SrTiO3Anode Materials for Intermediate Temperature-Solid Oxide Fuel Cells. *ECS Transactions*, **2017**, 78, 1237-1243	1	2
94	Energy harvesting efficiency of piezoelectric polymer film with graphene and metal electrodes. *Scientific Reports*, **2017**, 7, 17290	4.9	44
93	Synthesis, structure and electrochemical performance of double perovskite oxide Sr2Fe1-xTixNbO6-δas SOFC electrode. *Journal of Alloys and Compounds*, **2017**, 724, 666-673	5.7	11
92	Inorganic gel and liquid crystal based smart window using silica sol-gel process. *Solar Energy Materials and Solar Cells*, **2017**, 159, 488-495	6.4	24
91	Electrochemical properties and durability of in-situ composite cathodes with SmBa0.5Sr0.5Co2O5+δfor metal supported solid oxide fuel cells. *International Journal of Hydrogen Energy*, **2017**, 42, 1212-1220	6.7	10
90	Tunable Exciton Dissociation and Luminescence Quantum Yield at a Wide Band Gap Nanocrystal/Quasi-Ordered Regioregular Polythiophene interface. *Journal of Physical Chemistry C*, **2016**, 120, 26119-26128	3.8	4
89	Experimental data of inorganic gel based smart window using silica sol-gel process. *Data in Brief*, **2016**, 9, 716-722	1.2	
88	Electrical and physical properties of composite BaZr0.85Y0.15O3δ-Nd0.1Ce0.9O2δelectrolytes for intermediate temperature-solid oxide fuel cells. *Journal of Power Sources*, **2016**, 336, 437-446	8.9	20
87	Characterization of Graphene-based FET Fabricated using a Shadow Mask. *Scientific Reports*, **2016**, 6, 25050	4.9	20
86	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. *ACS Applied Materials & Interfaces*, **2016**, 8, 3072-8	9.5	38
85	Flexible polymer dispersed liquid crystal film with graphene transparent electrodes. *Current Applied Physics*, **2016**, 16, 409-414	2.6	23
84	Understanding the relationship between microstructure and mechanical properties of Al□Cu□Si ultrafine eutectic composites. *Materials and Design*, **2016**, 92, 1038-1045	8.1	37
83	Enhancement of Bifunctional Activity of the Hybrid Catalyst of Hollow-Net Structure Co3O4and Carbon Nanotubes. *Journal of the Electrochemical Society*, **2016**, 163, F3041-F3050	3.9	7
82	Enhancing Activity and Stability of Cobalt Oxide Electrocatalysts for the Oxygen Evolution Reaction via Transition Metal Doping. *Journal of the Electrochemical Society*, **2016**, 163, F3020-F3028	3.9	44
81	Robust NdBa0.5Sr0.5Co1.5Fe0.5O5+δcathode material and its degradation prevention operating logic for intermediate temperature-solid oxide fuel cells. *Journal of Power Sources*, **2016**, 331, 495-506	8.9	30
80	Characterisation of carbon nanotube pastes for field emission using their sheet resistances. *Applied Surface Science*, **2015**, 353, 54-62	6.7	1
79	Designing porous metallic glass compact enclosed with surface iron oxides. *Journal of Alloys and Compounds*, **2015**, 635, 233-237	5.7	5
78	Improving the plasticity and strength of Fe□Nb□B ultrafine eutectic composite. *Materials & Design*, **2015**, 76, 190-195		22

77	Enhanced proton conductivity of yttrium-doped barium zirconate with sinterability in protonic ceramic fuel cells. *Journal of Alloys and Compounds*, **2015**, 639, 435-444	5.7	42
76	Degradation analysis of anode-supported intermediate temperature-solid oxide fuel cells under various failure modes. *Journal of Power Sources*, **2015**, 276, 120-132	8.9	18
75	Effect of Ni and Mn on the Mechanical Properties of 22Cr Micro-duplex Stainless Steel. *Acta Metallurgica Sinica (English Letters)*, **2015**, 28, 32-38	2.5	9
74	Effect of partial substitution of Sn4+ by M4+ (M=Si, ti, and Ce) on sinterability and ionic conductivity of SnP2O7. *Ceramics International*, **2015**, 41, 3339-3343	5.1	8
73	Electrochemical properties of dual phase neodymium-doped ceria alkali carbonate composite electrolytes in intermediate temperature. *Journal of Power Sources*, **2015**, 275, 563-572	8.9	38
72	Simple and Precise Quantification of Iron Catalyst Content in Carbon Nanotubes Using UV/Visible Spectroscopy. *ChemistryOpen*, **2015**, 4, 613-9	2.3	14
71	EFFECT OF ELECTRODE DESIGN ON ELECTROCHEMICAL PERFORMANCE OF ALL-SOLID-STATE LITHIUM SECONDARY BATTERIES USING LITHIUM-SILICIDE ANODES. *Electrochimica Acta*, **2015**, 185, 242-249	6.7	7
70	Dense composite electrolytes of Gd3+-doped cerium phosphates for low-temperature proton-conducting ceramic-electrolyte fuel cells. *Ceramics International*, **2015**, 41, 4814-4821	5.1	11
69	Effect of Annealing in Ar/H2 Environment on Chemical Vapor Deposition-Grown Graphene Transferred With Poly (Methyl Methacrylate). *IEEE Nanotechnology Magazine*, **2015**, 14, 70-74	2.6	25
68	Surface exchange kinetics and chemical diffusivities of $BaZr_{0.2}Ce_{0.65}Y_{0.15}O_{3-\delta}$ by electrical conductivity relaxation. *Journal of Alloys and Compounds*, **2014**, 610, 301-307	5.7	7
67	Improvement on performance and efficiency of direct methanol fuel cells using hydrocarbon-based membrane electrode assembly. *Applied Energy*, **2014**, 115, 95-102	10.7	17
66	PdO-doped $BaZr_{0.8}Y_{0.2}O_{3-\delta}$ electrolyte for intermediate-temperature protonic ceramic fuel cells. *Acta Materialia*, **2014**, 66, 273-283	8.4	22
65	General algorithm and method for scanning a via hole by using critical-dimension atomic force microscopy. *Journal of the Korean Physical Society*, **2014**, 64, 1643-1647	0.6	2
64	Degradation pattern prediction of a polymer electrolyte membrane fuel cell stack with series reliability structure via durability data of single cells. *Applied Energy*, **2014**, 131, 48-55	10.7	40
63	Combinatorial Influence of Bimodal Size of B2 TiCu Compounds on Plasticity of Ti-Cu-Ni-Zr-Sn-Si Bulk Metallic Glass Composites. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 2376-2381	2.3	24
62	Post-mortem analysis of a long-term tested proton exchange membrane fuel cell stack under low cathode humidification conditions. *Journal of Power Sources*, **2014**, 253, 90-97	8.9	12
61	New metric for evaluating the purity of single-walled carbon nanotubes using ultraviolet–visible-near infrared absorption spectroscopy. *Carbon*, **2014**, 75, 68-80	10.4	5
60	Highly conductive barium zirconate-based carbonate composite electrolytes for intermediate temperature-protonic ceramic fuel cells. *Journal of Alloys and Compounds*, **2014**, 585, 103-110	5.7	21

59	Mechanically stable tuning fork sensor with high quality factor for the atomic force microscope. *Scanning*, **2014**, 36, 632-9	1.6	3
58	Micro-to-nano-scale deformation mechanisms of a bimodal ultrafine eutectic composite. *Scientific Reports*, **2014**, 4, 6500	4.9	36
57	Electrochromic Device Containing Heptyl Viologen, PEDOT, TiO2and TEMPO. *Journal of the Electrochemical Society*, **2014**, 161, H716-H721	3.9	7
56	Competition between Charge Transport and Energy Barrier in Injection-Limited Metal/Quantum Dot Nanocrystal Contacts. *Chemistry of Materials*, **2014**, 26, 6393-6400	9.6	11
55	Ionic Conductivity of Gd3+Doped Cerium Pyrophosphate Electrolytes with Core-Shell Structure. *Journal of the Electrochemical Society*, **2014**, 161, F464-F472	3.9	17
54	Mn2+-Doped CeP2O7Composite Electrolytes for Application in Low Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. *Journal of the Electrochemical Society*, **2014**, 161, F133-F138	3.9	13
53	Partial Conductivities and Chemical Diffusivities of Multi-Ion Transporting BaZrxCe0.85-xY0.15O3-δ (x = 0, 0.2, 0.4 and 0.6). *Journal of the Electrochemical Society*, **2014**, 161, F991-F1001	3.9	7
52	Charge and Mass Transport Properties of BaCe0.45Zr0.4Y0.15O3-δ *Journal of the Electrochemical Society*, **2014**, 161, F710-F716	3.9	13
51	Impact of framework structure of ordered mesoporous carbons on the performance of supported Pt catalysts for oxygen reduction reaction. *Carbon*, **2014**, 72, 354-364	10.4	35
50	Ionic conductivity of Mn2+ doped dense tin pyrophosphate electrolytes synthesized by a new co-precipitation method. *Journal of the European Ceramic Society*, **2014**, 34, 2967-2976	6	14
49	Study of Electrical Conductivity of BaZr0.85-xPdxY0.15O3-δ Carbonates Composite Materials. *Journal of the Korean Ceramic Society*, **2014**, 51, 283-288	2.2	
48	Ceria-based electrolyte reinforced by sol–gel technique for intermediate-temperature solid oxide fuel cells. *International Journal of Hydrogen Energy*, **2013**, 38, 9867-9872	6.7	14
47	Electrical conductivity of M2+-doped (M=Mg, Ca, Sr, Ba) cerium pyrophosphate-based composite electrolytes for low-temperature proton conducting electrolyte fuel cells. *Journal of Alloys and Compounds*, **2013**, 578, 279-285	5.7	16
46	Heterogeneous duplex structured Ti–Sn–Mo alloys with high strength and large plastic deformability. *Journal of Alloys and Compounds*, **2013**, 574, 546-551	5.7	12
45	Microstructure–polarization relations in nickel/ gadolinia-doped ceria anode for intermediate-temperature solid oxide fuel cells. *Ceramics International*, **2013**, 39, 4713-4718	5.1	13
44	Experimental evidence of hydrogen–oxygen decoupled diffusion into BaZr0.6Ce0.25Y0.15O3-δ *Acta Materialia*, **2013**, 61, 1274-1283	8.4	28
43	Characteristics of dye-sensitized solar cells with surface-modified multi-walled carbon nanotubes as counter electrodes. *Journal of Materials Science*, **2013**, 48, 906-912	4.3	13
42	Various synthesis methods of aliovalent-doped ceria and their electrical properties for intermediate temperature solid oxide electrolytes. *International Journal of Hydrogen Energy*, **2013**, 38, 1571-1587	6.7	53

41	Degradation mechanisms and mitigation strategies of metal cations in recycled fuel for direct methanol fuel cell membrane electrode assembly. *Journal of Power Sources*, **2013**, 242, 646-655	8.9	7
40	Studies on Ionic Conductivity of Sr2+-Doped CeP2O7 Electrolyte in Humid Atmosphere. *Journal of Physical Chemistry C*, **2013**, 117, 2653-2661	3.8	34
39	Lifetime prediction of a polymer electrolyte membrane fuel cell via an accelerated startup□shutdown cycle test. *International Journal of Hydrogen Energy*, **2012**, 37, 9775-9781	6.7	42
38	The stress-dependent piezoelectric coefficient of ZnO wire measured by piezoresponse force microscopy. *Scripta Materialia*, **2012**, 66, 101-104	5.6	13
37	Dye-sensitized solar cells using ion-gel electrolytes for long-term stability. *Journal of Power Sources* , **2012**, 201, 395-401	8.9	40
36	Electrical Behavior of CeP2O7Electrolyte for the Application in Low-Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. *Journal of the Electrochemical Society*, **2012**, 159, F819-F825	3.9	22
35	Optimization of mechanical properties of Ti□Fe□Sn alloys by controlling heterogeneous eutectic structure. *Intermetallics*, **2012**, 23, 27-31	3.5	13
34	Solid-state phase transformation-induced heterogeneous duplex structure in Ti□Sn□Fe alloys. *Journal of Alloys and Compounds*, **2012**, 515, 86-89	5.7	10
33	Addition effects of erbia-stabilized bismuth oxide on ceria-based carbonate composite electrolytes for intermediate temperature-□olid oxide fuel cells. *International Journal of Hydrogen Energy*, **2012** , 37, 16823-16834	6.7	23
32	Operating Temperature Dependency on Performance Degradation of Direct Methanol Fuel Cells. *Fuel Cells*, **2012**, 12, 426-438	2.9	20
31	High-current field emission of point-type carbon nanotube emitters on Ni-coated metal wires. *Carbon*, **2012**, 50, 2126-2133	10.4	19
30	Operational characteristics of the direct methanol fuel cell stack on fuel and energy efficiency with performance and stability. *International Journal of Hydrogen Energy*, **2012**, 37, 5946-5957	6.7	18
29	Effect of solubility on strengthening of Ag□Cu ultrafine eutectic composites. *Journal of Alloys and Compounds*, **2011**, 509, 9015-9018	5.7	7
28	Effect of microstructure modulation on mechanical properties of Ti-Fe-Sn ultrafine eutectic composites. *Metals and Materials International*, **2011**, 17, 873-877	2.4	16
27	Influence and mitigation methods of reaction intermediates on cell performance in direct methanol fuel cell system. *Journal of Power Sources*, **2011**, 196, 5446-5452	8.9	14
26	High performance membrane electrode assemblies by optimization of coating process and catalyst layer structure in direct methanol fuel cells. *International Journal of Hydrogen Energy*, **2011**, 36, 5096-5103	6.7	32
25	Stable operation of air-blowing direct methanol fuel cell stacks through uniform oxidant supply by varying fluid flow fixtures and developing the flow sensor. *International Journal of Hydrogen Energy* , **2011**, 36, 9205-9215	6.7	7
24	High-temperature transport properties of La0.1Sr0.9Co0.8Fe0.2O3□*Solid State Ionics*, **2011**, 192, 269-274	3.3	20

23	Graphite patterning in a controlled gas environment. *Nanotechnology*, **2011**, 22, 335304	3.4	13
22	Determination of Oxygen Chemical Diffusivity from Chemical Expansion Relaxation for BaCo[sub 0.7]Fe[sub 0.22]Nb[sub 0.08]O[sub 3] *Journal of the Electrochemical Society*, **2011**, 158, B189	3.9	9
21	Property Characterization and Analysis in Performance, Efficiency and Durability of the Membrane Electrode Assembly for Polymer Electrolyte Membrane Fuel Cell. *Journal of Korean Powder Metallurgy Institute*, **2011**, 18, 473-481	0.1	
20	Titania-Based Miniature Potentiometric Carbon Monoxide Gas Sensors with High Sensitivity. *Journal of the American Ceramic Society*, **2010**, 93, 742-749	3.8	13
19	Highly Sensitive/Selective Miniature Potentiometric Carbon Monoxide Gas Sensors with Titania-Based Sensing Elements. *Journal of the American Ceramic Society*, **2010**, 93, 1062-1068	3.8	16
18	The possible failure mode and effect analysis of membrane electrode assemblies and their potential solutions in direct methanol fuel cell systems for portable applications. *International Journal of Hydrogen Energy*, **2010**, 35, 7982-7990	6.7	7
17	Lifetime prediction through accelerated degradation testing of membrane electrode assemblies in direct methanol fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 9166-9176	6.7	28
16	Composite of Ce0.8Gd0.2O2 and GdBaCo2O5+ as oxygen separation membranes. *Solid State Ionics*, **2010**, 181, 1680-1684	3.3	15
15	A Scientific Approach for Improving Sensitivity and Selectivity of Miniature, Solid-state, Potentiometric Carbon Monoxide Gas Sensors by Differential Electrode Equilibria Mechanism. *Journal of the Korean Ceramic Society*, **2010**, 47, 92-96	2.2	
14	A prediction model of degradation rate for membrane electrode assemblies in direct methanol fuel cells. *International Journal of Hydrogen Energy*, **2009**, 34, 5749-5758	6.7	23
13	Effect of the porous carbon layer in the cathode gas diffusion media on direct methanol fuel cell performances. *International Journal of Hydrogen Energy*, **2009**, 34, 8257-8262	6.7	14
12	Low and high temperature storage characteristics of membrane electrode assemblies for direct methanol fuel cells. *Journal of Power Sources*, **2009**, 187, 103-111	8.9	13
11	Mass balance research for high electrochemical performance direct methanol fuel cells with reduced methanol crossover at various operating conditions. *Journal of Power Sources*, **2008**, 178, 181-187	8.9	40
10	Stable operation of air-blowing direct methanol fuel cells with high performance. *Journal of Power Sources*, **2008**, 179, 1-8	8.9	23
9	35-We polymer electrolyte membrane fuel cell system for notebook computer using a compact fuel processor. *Journal of Power Sources*, **2008**, 185, 171-178	8.9	15
8	The operating mode dependence on electrochemical performance degradation of direct methanol fuel cells. *International Journal of Hydrogen Energy*, **2008**, 33, 4833-4843	6.7	40
7	Fabrication and Characterization of Miniaturized SOFC by Colloidal Process. *ECS Transactions*, **2007**, 7, 743-748	1	3
6	Stable and high conductivity ceria/bismuth oxide bilayer electrolytes for lower temperature solid oxide fuel cells. *Ionics*, **2006**, 12, 15-20	2.7	43

5	Fabrication and Characterization of High-Conductivity Bilayer Electrolytes for Intermediate-Temperature Solid Oxide Fuel Cells. *Journal of the American Ceramic Society*, **2005**, 88, 2402-2408	3.8	57
4	Lower Temperature Electrolytic Reduction of CO[sub 2] to O[sub 2] and CO with High-Conductivity Solid Oxide Bilayer Electrolytes. *Journal of the Electrochemical Society*, **2005**, 152, A1654	3.9	15
3	Development of triode-type carbon nanotube field-emitter arrays with suppression of diode emission by forming electroplated Ni wall structure. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 375		25
2	Stable High Conductivity Bilayered Electrolytes for Low Temperature Solid Oxide Fuel Cells. *ECS Proceedings Volumes*, **2003**, 2003-07, 289-298		3
1	Ceramic fuel cells using novel proton-conducting BaCe0.5Zr0.3Y0.1Yb0.05Zn0.05O3-□electrolyte. *Journal of Solid State Electrochemistry*,1	2.6	1