

Jun-Young Park

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8069585/jun-young-park-publications-by-citations.pdf>
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Oxygen-deficient triple perovskites as highly active and durable bifunctional electrocatalysts for oxygen electrode reactions. <i>Science Advances</i> , 2018 , 4, eaap9360	14.3	136
147	Fabrication and Characterization of High-Conductivity Bilayer Electrolytes for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 2402-2408	3.8	57
146	Various synthesis methods of aliovalent-doped ceria and their electrical properties for intermediate temperature solid oxide electrolytes. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 1571-1587	6.7	53
145	Energy harvesting efficiency of piezoelectric polymer film with graphene and metal electrodes. <i>Scientific Reports</i> , 2017 , 7, 17290	4.9	44
144	Enhancing Activity and Stability of Cobalt Oxide Electrocatalysts for the Oxygen Evolution Reaction via Transition Metal Doping. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3020-F3028	3.9	44
143	Stable and high conductivity ceria/bismuth oxide bilayer electrolytes for lower temperature solid oxide fuel cells. <i>Ionics</i> , 2006 , 12, 15-20	2.7	43
142	Enhanced proton conductivity of yttrium-doped barium zirconate with sinterability in protonic ceramic fuel cells. <i>Journal of Alloys and Compounds</i> , 2015 , 639, 435-444	5.7	42
141	Lifetime prediction of a polymer electrolyte membrane fuel cell via an accelerated startup/shutdown cycle test. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 9775-9781	6.7	42
140	Degradation pattern prediction of a polymer electrolyte membrane fuel cell stack with series reliability structure via durability data of single cells. <i>Applied Energy</i> , 2014 , 131, 48-55	10.7	40
139	Dye-sensitized solar cells using ion-gel electrolytes for long-term stability. <i>Journal of Power Sources</i> , 2012 , 201, 395-401	8.9	40
138	Mass balance research for high electrochemical performance direct methanol fuel cells with reduced methanol crossover at various operating conditions. <i>Journal of Power Sources</i> , 2008 , 178, 181-187	8.9	40
137	The operating mode dependence on electrochemical performance degradation of direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2008 , 33, 4833-4843	6.7	40
136	Chemical evolution-induced strengthening on AlCoCrNi dual-phase high-entropy alloy with high specific strength. <i>Journal of Alloys and Compounds</i> , 2019 , 777, 828-834	5.7	40
135	Electrochemical properties of dual phase neodymium-doped ceria alkali carbonate composite electrolytes in intermediate temperature. <i>Journal of Power Sources</i> , 2015 , 275, 563-572	8.9	38
134	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3072-8	9.5	38
133	Understanding the relationship between microstructure and mechanical properties of AlCuBi ultrafine eutectic composites. <i>Materials and Design</i> , 2016 , 92, 1038-1045	8.1	37
132	B-site doping effects of NdBa _{0.75} Ca _{0.25} Co ₂ O ₅ +δ double perovskite catalysts for oxygen evolution and reduction reactions. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 17807-17818	13	36

131	Micro-to-nano-scale deformation mechanisms of a bimodal ultrafine eutectic composite. <i>Scientific Reports</i> , 2014 , 4, 6500	4.9	36
130	Impact of framework structure of ordered mesoporous carbons on the performance of supported Pt catalysts for oxygen reduction reaction. <i>Carbon</i> , 2014 , 72, 354-364	10.4	35
129	Highly active and durable nitrogen doped-reduced graphene oxide/double perovskite bifunctional hybrid catalysts. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 13019-13031	13	34
128	Studies on Ionic Conductivity of Sr ²⁺ -Doped CeP ₂ O ₇ Electrolyte in Humid Atmosphere. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 2653-2661	3.8	34
127	Performance improvement of all-solid-state Li-S batteries with optimizing morphology and structure of sulfur composite electrode. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 787-794	5.7	33
126	High performance membrane electrode assemblies by optimization of coating process and catalyst layer structure in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 5096-5103	6.7	32
125	Robust NdBa _{0.5} Sr _{0.5} Co _{1.5} Fe _{0.5} O _{5+δ} cathode material and its degradation prevention operating logic for intermediate temperature-solid oxide fuel cells. <i>Journal of Power Sources</i> , 2016 , 331, 495-506	8.9	30
124	Experimental evidence of hydrogen-oxygen decoupled diffusion into BaZr _{0.6} Ce _{0.25} Y _{0.15} O _{3-δ} . <i>Acta Materialia</i> , 2013 , 61, 1274-1283	8.4	28
123	Lifetime prediction through accelerated degradation testing of membrane electrode assemblies in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 9166-9176	6.7	28
122	Effect of Annealing in Ar/H ₂ Environment on Chemical Vapor Deposition-Grown Graphene Transferred With Poly (Methyl Methacrylate). <i>IEEE Nanotechnology Magazine</i> , 2015 , 14, 70-74	2.6	25
121	Development of triode-type carbon nanotube field-emitter arrays with suppression of diode emission by forming electroplated Ni wall structure. <i>Journal of Vacuum Science & Technology and Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003 , 21, 375		25
120	Combinatorial Influence of Bimodal Size of B ₂ TiCu Compounds on Plasticity of Ti-Cu-Ni-Zr-Sn-Si Bulk Metallic Glass Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 2376-2381	2.3	24
119	Inorganic gel and liquid crystal based smart window using silica sol-gel process. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 159, 488-495	6.4	24
118	Flexible polymer dispersed liquid crystal film with graphene transparent electrodes. <i>Current Applied Physics</i> , 2016 , 16, 409-414	2.6	23
117	Addition effects of erbia-stabilized bismuth oxide on ceria-based carbonate composite electrolytes for intermediate temperature-solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 16823-16834	6.7	23
116	A prediction model of degradation rate for membrane electrode assemblies in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 5749-5758	6.7	23
115	Stable operation of air-blowing direct methanol fuel cells with high performance. <i>Journal of Power Sources</i> , 2008 , 179, 1-8	8.9	23
114	Tolerance to carbon corrosion of various carbon structures as catalyst supports for polymer electrolyte membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25056-25065	13	23

- 113 Improving the plasticity and strength of Fe_{1.1}Ni_{0.9}B ultrafine eutectic composite. *Materials & Design*, **2015**, 76, 190-195 22
- 112 PdO-doped BaZr_{0.8}Y_{0.2}O_{3-δ} electrolyte for intermediate-temperature protonic ceramic fuel cells. *Acta Materialia*, **2014**, 66, 273-283 8.4 22
- 111 Electrical Behavior of Ce_{0.2}O₇ Electrolyte for the Application in Low-Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. *Journal of the Electrochemical Society*, **2012**, 159, F819-F825 3.9 22
- 110 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
- 109 Electrical and physical properties of composite BaZr_{0.85}Y_{0.15}O_{3-δ}-Nd_{0.1}Ce_{0.9}O_{2-δ} electrolytes for intermediate temperature-solid oxide fuel cells. *Journal of Power Sources*, **2016**, 336, 437-446 8.9 20
- 108 Characterization of Graphene-based FET Fabricated using a Shadow Mask. *Scientific Reports*, **2016**, 6, 25050 4.9 20
- 107 Operating Temperature Dependency on Performance Degradation of Direct Methanol Fuel Cells. *Fuel Cells*, **2012**, 12, 426-438 2.9 20
- 106 High-temperature transport properties of La_{0.1}Sr_{0.9}Co_{0.8}Fe_{0.2}O_{3-δ} *Solid State Ionics*, **2011**, 192, 269-274 3.3 20
- 105 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
- 104 Determination of partial conductivities and computational analysis of the theoretical power density of BaZr_{0.1}Ce_{0.7}Y_{0.1}Yb_{0.1}O_{3-δ} (BZCYYb1711) electrolyte under various PCFC conditions. *Journal of Materials Chemistry A*, **2019**, 7, 21321-21328 13 19
- 103 High-current field emission of point-type carbon nanotube emitters on Ni-coated metal wires. *Carbon*, **2012**, 50, 2126-2133 10.4 19
- 102 WSe 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
- 101 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
- 100 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
- 99 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
- 98 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
- 97 Ionic Conductivity of Gd³⁺-Doped Cerium Pyrophosphate Electrolytes with Core-Shell Structure. *Journal of the Electrochemical Society*, **2014**, 161, F464-F472 3.9 17
- 96 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

95	Effect of microstructure modulation on mechanical properties of Ti-Fe-Sn ultrafine eutectic composites. <i>Metals and Materials International</i> , 2011 , 17, 873-877	2.4	16
94	Highly Sensitive/Selective Miniature Potentiometric Carbon Monoxide Gas Sensors with Titania-Based Sensing Elements. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 1062-1068	3.8	16
93	Modification of Oxygen-Ionic Transport Barrier of BaCo _{0.4} Zr _{0.1} Fe _{0.4} Y _{0.1} O _{3-δ} Steam (Air) Electrode by Impregnating Samarium-Doped Ceria Nanoparticles for Proton-Conducting Reversible Solid Oxide Cells. <i>Journal of the Electrochemical Society</i> , 2019 , 166, F746-F754	3.9	15
92	Composite of Ce _{0.8} Gd _{0.2} O _{2-δ} and GdBaCo ₂ O _{5+δ} as oxygen separation membranes. <i>Solid State Ionics</i> , 2010 , 181, 1680-1684	3.3	15
91	35-Watt polymer electrolyte membrane fuel cell system for notebook computer using a compact fuel processor. <i>Journal of Power Sources</i> , 2008 , 185, 171-178	8.9	15
90	Lower Temperature Electrolytic Reduction of CO[sub 2] to O[sub 2] and CO with High-Conductivity Solid Oxide Bilayer Electrolytes. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A1654	3.9	15
89	Degradation studies of ceria-based solid oxide fuel cells at intermediate temperature under various load conditions. <i>Journal of Power Sources</i> , 2020 , 452, 227758	8.9	14
88	Ceria-based electrolyte reinforced by sol-gel technique for intermediate-temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9867-9872	6.7	14
87	Simple and Precise Quantification of Iron Catalyst Content in Carbon Nanotubes Using UV/Visible Spectroscopy. <i>ChemistryOpen</i> , 2015 , 4, 613-9	2.3	14
86	Ionic conductivity of Mn ²⁺ doped dense tin pyrophosphate electrolytes synthesized by a new co-precipitation method. <i>Journal of the European Ceramic Society</i> , 2014 , 34, 2967-2976	6	14
85	Influence and mitigation methods of reaction intermediates on cell performance in direct methanol fuel cell system. <i>Journal of Power Sources</i> , 2011 , 196, 5446-5452	8.9	14
84	Effect of the porous carbon layer in the cathode gas diffusion media on direct methanol fuel cell performances. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 8257-8262	6.7	14
83	The stress-dependent piezoelectric coefficient of ZnO wire measured by piezoresponse force microscopy. <i>Scripta Materialia</i> , 2012 , 66, 101-104	5.6	13
82	Microstructure/polarization relations in nickel/ gadolinia-doped ceria anode for intermediate-temperature solid oxide fuel cells. <i>Ceramics International</i> , 2013 , 39, 4713-4718	5.1	13
81	Characteristics of dye-sensitized solar cells with surface-modified multi-walled carbon nanotubes as counter electrodes. <i>Journal of Materials Science</i> , 2013 , 48, 906-912	4.3	13
80	Mn ²⁺ -Doped Ce ₂ O ₇ Composite Electrolytes for Application in Low Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F133-F138	3.9	13
79	Charge and Mass Transport Properties of BaCe _{0.45} Zr _{0.4} Y _{0.15} O _{3-δ} . <i>Journal of the Electrochemical Society</i> , 2014 , 161, F710-F716	3.9	13
78	Optimization of mechanical properties of Ti-Be-Sn alloys by controlling heterogeneous eutectic structure. <i>Intermetallics</i> , 2012 , 23, 27-31	3.5	13

77	Titania-Based Miniature Potentiometric Carbon Monoxide Gas Sensors with High Sensitivity. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 742-749	3.8	13
76	Low and high temperature storage characteristics of membrane electrode assemblies for direct methanol fuel cells. <i>Journal of Power Sources</i> , 2009 , 187, 103-111	8.9	13
75	Graphite patterning in a controlled gas environment. <i>Nanotechnology</i> , 2011 , 22, 335304	3.4	13
74	Transition from perovskite to misfit-layered structure materials: a highly oxygen deficient and stable oxygen electrode catalyst. <i>Energy and Environmental Science</i> , 2021 , 14, 2472-2484	35.4	13
73	Oxygen electrode reactions of doped BiFeO ₃ materials for low and elevated temperature fuel cell applications. <i>RSC Advances</i> , 2017 , 7, 47643-47653	3.7	12
72	Investigating the effect of current collecting conditions on solid oxide fuel cell (SOFC) performance with additional voltage probes. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 2349-2358	6.7	12
71	Post-mortem analysis of a long-term tested proton exchange membrane fuel cell stack under low cathode humidification conditions. <i>Journal of Power Sources</i> , 2014 , 253, 90-97	8.9	12
70	Heterogeneous duplex structured Ti ₃ SnMo alloys with high strength and large plastic deformability. <i>Journal of Alloys and Compounds</i> , 2013 , 574, 546-551	5.7	12
69	Ultrahigh-sensitive mixed-potential ammonia sensor using dual-functional NiWO electrocatalyst for exhaust environment monitoring. <i>Journal of Hazardous Materials</i> , 2021 , 403, 123797	12.8	12
68	Investigation of Electronic Transport Property and Durability of BCY-BZY Electrolyte Cells Using Embedded Probes. <i>Electrochimica Acta</i> , 2017 , 236, 399-407	6.7	11
67	Synthesis, structure and electrochemical performance of double perovskite oxide Sr ₂ Fe _{1-x} Ti _x NbO _{6-δ} as SOFC electrode. <i>Journal of Alloys and Compounds</i> , 2017 , 724, 666-673	5.7	11
66	Dense composite electrolytes of Gd ³⁺ -doped cerium phosphates for low-temperature proton-conducting ceramic-electrolyte fuel cells. <i>Ceramics International</i> , 2015 , 41, 4814-4821	5.1	11
65	Competition between Charge Transport and Energy Barrier in Injection-Limited Metal/Quantum Dot Nanocrystal Contacts. <i>Chemistry of Materials</i> , 2014 , 26, 6393-6400	9.6	11
64	Electrochemical properties and durability of in-situ composite cathodes with SmBa _{0.5} Sr _{0.5} Co ₂ O _{5+δ} for metal supported solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 1212-1220	6.7	10
63	Solid-state phase transformation-induced heterogeneous duplex structure in Ti ₃ SnBe alloys. <i>Journal of Alloys and Compounds</i> , 2012 , 515, 86-89	5.7	10
62	Structural and electrical properties of novel phosphate based composite electrolyte for low-temperature fuel cells. <i>Composites Part B: Engineering</i> , 2020 , 202, 108405	10	10
61	Activity of layered swedenborgite structured Y _{0.8} Er _{0.2} BaCo _{3.2} Ga _{0.8} O _{7+δ} for oxygen electrode reactions in at intermediate temperature reversible ceramic cells. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 607-621	13	10
60	Effect of Ni and Mn on the Mechanical Properties of 22Cr Micro-duplex Stainless Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015 , 28, 32-38	2.5	9

59	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] [J]. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B189	3.9	9
58	Effect of partial substitution of Sn ⁴⁺ by M ⁴⁺ (M=Si, Ti, and Ce) on sinterability and ionic conductivity of SnP ₂ O ₇ . <i>Ceramics International</i> , 2015 , 41, 3339-3343	5.1	8
57	Degradation of Anode-Supported Solid Oxide Fuel Cells under Load Trip and Cycle Conditions and Their Degradation Prevention Operating Logic. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F728-F735	7.9	8
56	Cobalt-free perovskite Ba _{1-x} Nd _x FeO _{3-δ} as air electrode materials for reversible solid oxide cells. <i>Ceramics International</i> , 2021 , 47, 7985-7993	5.1	8
55	High-Temperature Current Collection Enabled by the in Situ Phase Transformation of Cobalt-Nickel Foam for Solid Oxide Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 39407-39415	9.5	7
54	3D architecture double perovskite NdBa _{0.5} Sr _{0.5} Co _{1.5} Fe _{0.5} O _{5+δ} embedded hollow-net Co ₃ O ₄ bifunctional electrocatalysts coupled with N-doped CNT and reduced graphene oxide for oxygen electrode reactions. <i>Journal of Alloys and Compounds</i> , 2020 , 823, 153782	5.7	7
53	Thermally-triggered Dual In-situ Self-healing Metallic Materials. <i>Scientific Reports</i> , 2018 , 8, 2120	4.9	7
52	Surface exchange kinetics and chemical diffusivities of BaZr _{0.2} Ce _{0.65} Y _{0.15} O _{3-δ} by electrical conductivity relaxation. <i>Journal of Alloys and Compounds</i> , 2014 , 610, 301-307	5.7	7
51	EFFECT OF ELECTRODE DESIGN ON ELECTROCHEMICAL PERFORMANCE OF ALL-SOLID-STATE LITHIUM SECONDARY BATTERIES USING LITHIUM-SILICIDE ANODES. <i>Electrochimica Acta</i> , 2015 , 185, 242-249	6.7	7
50	Electrochromic Device Containing Heptyl Viologen, PEDOT, TiO ₂ and TEMPO. <i>Journal of the Electrochemical Society</i> , 2014 , 161, H716-H721	3.9	7
49	Partial Conductivities and Chemical Diffusivities of Multi-Ion Transporting BaZr _x Ce _{0.85-x} Y _{0.15} O _{3-δ} (x = 0, 0.2, 0.4 and 0.6). <i>Journal of the Electrochemical Society</i> , 2014 , 161, F991-F1001	7.8	7
48	Degradation mechanisms and mitigation strategies of metal cations in recycled fuel for direct methanol fuel cell membrane electrode assembly. <i>Journal of Power Sources</i> , 2013 , 242, 646-655	8.9	7
47	Effect of solubility on strengthening of Ag/Cu ultrafine eutectic composites. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 9015-9018	5.7	7
46	Stable operation of air-blowing direct methanol fuel cell stacks through uniform oxidant supply by varying fluid flow fixtures and developing the flow sensor. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 9205-9215	6.7	7
45	The possible failure mode and effect analysis of membrane electrode assemblies and their potential solutions in direct methanol fuel cell systems for portable applications. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 7982-7990	6.7	7
44	Studies on directly grown few layer graphene processed using tape-peeling method. <i>Carbon</i> , 2020 , 158, 749-755	10.4	7
43	Multiple perovskite layered lanthanum nickelate Ruddlesden-Popper systems as highly active bifunctional oxygen catalysts. <i>Chemical Engineering Journal</i> , 2021 , 409, 128226	14.7	7
42	Enhancement of Bifunctional Activity of the Hybrid Catalyst of Hollow-Net Structure Co ₃ O ₄ and Carbon Nanotubes. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3041-F3050	3.9	7

41	Operation Protocols To Improve Durability of Protonic Ceramic Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 457-468	9.5	7
40	Durability tests of BCY-BZY electrolyte fuel cells under severe operating conditions. <i>Journal of Alloys and Compounds</i> , 2018 , 735, 2341-2347	5.7	7
39	Synergistic Design of Anatase/Rutile TiO ₂ Nanostructured Heterophase Junctions toward Efficient Photoelectrochemical Water Oxidation. <i>Coatings</i> , 2020 , 10, 557	2.9	6
38	A New High-Performance Proton-Conducting Electrolyte for Next-Generation Solid Oxide Fuel Cells. <i>Energy Technology</i> , 2020 , 8, 2000486	3.5	6
37	Improved mechanical strength, proton conductivity and power density in an all-protonic ceramic fuel cell at intermediate temperature. <i>Scientific Reports</i> , 2021 , 11, 19382	4.9	6
36	Triple perovskite structured Nd _{1.5} Ba _{1.5} CoFeMnO ₉ oxygen electrode materials for highly efficient and stable reversible protonic ceramic cells. <i>Journal of Power Sources</i> , 2021 , 510, 230409	8.9	6
35	Quantized interfacial properties at lead sulfide/Zn _{1-x} Mg _x O energy harvesting assembly: Formation of nanocrystal solid solution. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 164, 156-164	6.4	5
34	Designing porous metallic glass compact enclosed with surface iron oxides. <i>Journal of Alloys and Compounds</i> , 2015 , 635, 233-237	5.7	5
33	Electrochemical properties of electrospinning-fabricated layered perovskite used in cathode materials for a low temperature-operating solid oxide fuel cell. <i>Thin Solid Films</i> , 2018 , 660, 663-671	2.2	5
32	New metric for evaluating the purity of single-walled carbon nanotubes using ultraviolet-visible-near infrared absorption spectroscopy. <i>Carbon</i> , 2014 , 75, 68-80	10.4	5
31	Single-step prepared Li ₂ S-P ₂ S ₅ -C composite cathode for high areal capacity all-solid-state lithium ion batteries. <i>Electrochimica Acta</i> , 2020 , 358, 136884	6.7	5
30	Syngas Fuelled High Performance Solid Oxide Fuel Cell. <i>ECS Transactions</i> , 2019 , 91, 1621-1629	1	4
29	Tunable Exciton Dissociation and Luminescence Quantum Yield at a Wide Band Gap Nanocrystal/Quasi-Ordered Regioregular Polythiophene interface. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 26119-26128	3.8	4
28	Spatial investigation of electronic properties in composite electrolytes for solid oxide fuel cells using embedded probes. <i>Journal of Power Sources</i> , 2019 , 438, 226945	8.9	4
27	Characterization of limiting factors of an all-solid-state Li-ion battery using an embedded indium reference electrode. <i>Ionics</i> , 2020 , 26, 1555-1561	2.7	4
26	Stable ceria-based electrolytes for intermediate temperature-solid oxide fuel cells via hafnium oxide blocking layer. <i>Journal of Alloys and Compounds</i> , 2019 , 779, 121-128	5.7	4
25	Analysis of Internal Gas Leaks in an MCFC System Package for an LNG-Fueled Ship. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 2330	2.6	3
24	Synthesis and electrochemical properties of layered perovskite substituted with heterogeneous lanthanides for intermediate temperature-operating solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 11378-11385	6.7	3

23	Mechanically stable tuning fork sensor with high quality factor for the atomic force microscope. <i>Scanning</i> , 2014 , 36, 632-9	1.6	3
22	Fabrication and Characterization of Miniaturized SOFC by Colloidal Process. <i>ECS Transactions</i> , 2007 , 7, 743-748	1	3
21	Stable High Conductivity Bilayered Electrolytes for Low Temperature Solid Oxide Fuel Cells. <i>ECS Proceedings Volumes</i> , 2003 , 2003-07, 289-298		3
20	Degradation Mechanisms of Solid Oxide Fuel Cells under Various Thermal Cycling Conditions. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 49868-49878	9.5	3
19	High conductivity and high density SrCe _{0.5} Zr _{0.35} Y _{0.1} A _{0.05} O _{3-λ} (A = Gd, Sm) proton-conducting electrolytes for IT-SOFCs. <i>Ionics</i> , 2020 , 26, 1297-1305	2.7	3
18	Novel organic-inorganic polyphosphate based composite material as highly dense and robust electrolyte for low temperature fuel cells. <i>Journal of Power Sources</i> , 2021 , 493, 229696	8.9	3
17	Enhanced performance of intermediate temperature-solid oxide fuel cells with a bimodal shape Nd _{0.2} Ce _{0.8} O _{2-λ} electrolyte. <i>Journal of Alloys and Compounds</i> , 2017 , 706, 330-339	5.7	2
16	BaCo _{0.4} Fe _{0.4} Zr _{0.2} O _{3-λ} Cathode Materials for Protonic Ceramic Fuel Cells. <i>ECS Transactions</i> , 2019 , 91, 1503-1507	1	2
15	General algorithm and method for scanning a via hole by using critical-dimension atomic force microscopy. <i>Journal of the Korean Physical Society</i> , 2014 , 64, 1643-1647	0.6	2
14	Electrochemical Performances of La-Doped SrTiO ₃ Anode Materials for Intermediate Temperature-Solid Oxide Fuel Cells. <i>ECS Transactions</i> , 2017 , 78, 1237-1243	1	2
13	Pr- and Sm-Substituted Layered Perovskite Oxide Systems for IT-SOFC Cathodes. <i>Energies</i> , 2021 , 14, 6739	3.1	2
12	Characterisation of carbon nanotube pastes for field emission using their sheet resistances. <i>Applied Surface Science</i> , 2015 , 353, 54-62	6.7	1
11	Ceramic fuel cells using novel proton-conducting BaCe _{0.5} Zr _{0.3} Y _{0.1} Yb _{0.05} Zn _{0.05} O _{3-λ} electrolyte. <i>Journal of Solid State Electrochemistry</i> , 1	2.6	1
10	Design concept of co-ionic conducting solid oxide electrolyte for stable operation in a cell-imbalanced fuel cell stack. <i>Journal of Power Sources</i> , 2021 , 512, 230483	8.9	1
9	Redox Activity of Li ₂ S ₂ S ₅ Electrolyte Inducing Chemo-Mechanical Failure in All-Solid-State Batteries Comprising Sulfur Composite Cathode and Li ₄ Si Alloy Anode. <i>Chemical Engineering Journal</i> , 2022 , 136229	14.7	1
8	Nonideal defect structure and high-temperature transport properties of misfit-layered cobalt oxide. <i>Journal of Solid State Chemistry</i> , 2022 , 123299	3.3	1
7	Assessing the degradation pattern and mechanism of membranes in polymer electrolyte membrane fuel cells using open-circuit voltage hold and humidity cycle test protocols. <i>Materials Science for Energy Technologies</i> , 2022 , 5, 66-73	5.2	0
6	X-ray photoelectron spectroscopic study of impregnated La _{0.4} Sr _{0.6} Ti _{0.8} Mn _{0.2} O _{3-δ} anode material for high temperature-operating solid oxide fuel cell. <i>Solid State Ionics</i> , 2020 , 345, 115175	3.3	0

5	High Capacity, Rate-Capability, and Power Delivery at High-Temperature by an Oxygen-Deficient Perovskite Oxide as Proton Insertion Anodes for Energy Storage Devices. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 070540	3.9	0
4	Experimental data of inorganic gel based smart window using silica sol-gel process. <i>Data in Brief</i> , 2016 , 9, 716-722	1.2	
3	Study of Electrical Conductivity of BaZr _{0.85-x} Pd _x Y _{0.15} O _{3-δ} /Carbonates Composite Materials. <i>Journal of the Korean Ceramic Society</i> , 2014 , 51, 283-288	2.2	
2	A Scientific Approach for Improving Sensitivity and Selectivity of Miniature, Solid-state, Potentiometric Carbon Monoxide Gas Sensors by Differential Electrode Equilibria Mechanism. <i>Journal of the Korean Ceramic Society</i> , 2010 , 47, 92-96	2.2	
1	Property Characterization and Analysis in Performance, Efficiency and Durability of the Membrane Electrode Assembly for Polymer Electrolyte Membrane Fuel Cell. <i>Journal of Korean Powder Metallurgy Institute</i> , 2011 , 18, 473-481	0.1	