Ji-Won Son

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#	Paper	IF	Citations
168	Demonstrating the potential of yttrium-doped barium zirconate electrolyte for high-performance fuel cells. <i>Nature Communications</i> , 2017 , 8, 14553	17.4	143
167	High-Performance Micro-Solid Oxide Fuel Cells Fabricated on Nanoporous Anodic Aluminum Oxide Templates. <i>Advanced Functional Materials</i> , 2011 , 21, 1154-1159	15.6	133
166	A 5 Lb cm2 protonic ceramic fuel cell with a power density of 1.3 W cm2 at 600 LC. <i>Nature Energy</i> , 2018 , 3, 870-875	62.3	125
165	Extremely thin bilayer electrolyte for solid oxide fuel cells (SOFCs) fabricated by chemical solution deposition (CSD). <i>Advanced Materials</i> , 2012 , 24, 3373-7	24	103
164	The potential and challenges of thin-film electrolyte and nanostructured electrode for yttria-stabilized zirconia-base anode-supported solid oxide fuel cells. <i>Journal of Power Sources</i> , 2014 , 247, 105-111	8.9	89
163	Low Temperature Performance Improvement of SOFC with Thin Film Electrolyte and Electrodes Fabricated by Pulsed Laser Deposition. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B1484	3.9	71
162	Structural Characterization and Catalytic Activity of Ce0.65Zr0.25RE0.1O2lNanocrystalline Powders Synthesized by the Glycine-Nitrate Process. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 3467-3	4 7 6	66
161	Nano-tailoring of infiltrated catalysts for high-temperature solid oxide regenerative fuel cells. <i>Nano Energy</i> , 2017 , 36, 9-20	17.1	64
160	Fabrication and performance evaluation of 3-cell SOFC stack based on planar 10 cm 🗓 0 cm anode-supported cells. <i>Journal of Power Sources</i> , 2006 , 159, 478-483	8.9	60
159	Microstructural factors of electrodes affecting the performance of anode-supported thin film yttria-stabilized zirconia electrolyte (~1fh) solid oxide fuel cells. <i>Journal of Power Sources</i> , 2011 , 196, 7169-7174	8.9	56
158	Suppression of Ni agglomeration in PLD fabricated Ni-YSZ composite for surface modification of SOFC anode. <i>Journal of the European Ceramic Society</i> , 2010 , 30, 3415-3423	6	54
157	High-Performance Protonic Ceramic Fuel Cells with 1 µm Thick Y:Ba(Ce, Zr)O3 Electrolytes. <i>Advanced Energy Materials</i> , 2018 , 8, 1801315	21.8	51
156	Effect of nickel nano-particle sintering on methane reforming activity of Ni-CGO cermet anodes for internal steam reforming SOFCs. <i>Applied Catalysis B: Environmental</i> , 2011 , 101, 531-539	21.8	51
155	Synthesis of nano-crystalline Ce0.9Gd0.1O1.95 electrolyte by novel solgel thermolysis process for IT-SOFCs. <i>Journal of the European Ceramic Society</i> , 2008 , 28, 3107-3112	6	51
154	The effect of an ultra-thin zirconia blocking layer on the performance of a 1-th-thick gadolinia-doped ceria electrolyte solid-oxide fuel cell. <i>Journal of Power Sources</i> , 2012 , 206, 91-96	8.9	49
153	High performance air electrode for solid oxide regenerative fuel cells fabricated by infiltration of nano-catalysts. <i>Journal of Power Sources</i> , 2014 , 250, 15-20	8.9	48
152	Superior sinterability of nano-crystalline gadolinium doped ceria powders synthesized by co-precipitation method. <i>Journal of Alloys and Compounds</i> , 2010 , 495, 238-241	5.7	48

151	Effects of crystallinity and impurities on the electrical conductivity of Lillallrl thin films. <i>Thin Solid Films</i> , 2015 , 576, 55-60	2.2	47	
150	Highly Dense Mn-Co Spinel Coating for Protection of Metallic Interconnect of Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F1389-F1394	3.9	45	
149	Pulsed laser deposition of single phase LiNbO3 thin film waveguides. <i>Journal of Electroceramics</i> , 2006 , 17, 591-595	1.5	45	•
148	Impact of nanostructured anode on low-temperature performance of thin-film-based anode-supported solid oxide fuel cells. <i>Journal of Power Sources</i> , 2016 , 315, 324-330	8.9	45	
147	In-situ nano-alloying Pd-Ni for economical control of syngas production from high-temperature thermo-electrochemical reduction of steam/CO2. <i>Applied Catalysis B: Environmental</i> , 2017 , 200, 265-273	3 ^{21.8}	44	
146	Acceleration tests: Degradation of anode-supported planar solid oxide fuel cells at elevated operating temperatures. <i>Journal of Power Sources</i> , 2017 , 360, 284-293	8.9	43	
145	Physical and Microstructural Properties of NiO- and Ni-YSZ Composite Thin Films Fabricated by Pulsed-Laser Deposition at TI 00°C. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 3059-3064	3.8	42	
144	Characterization of the electrode and electrolyte interfaces of LSGM-based SOFCs. <i>Solid State Ionics</i> , 2006 , 177, 2155-2158	3.3	42	
143	The effect of fuel utilization on heat and mass transfer within solid oxide fuel cells examined by three-dimensional numerical simulations. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 97, 77-9) 3 .9	41	
142	Fabrication of lanthanum strontium cobalt ferrite (LSCF) cathodes for high performance solid oxide fuel cells using a low price commercial inkjet printer. <i>Journal of Power Sources</i> , 2016 , 306, 503-509	8.9	40	
141	Direct Applicability of La0.6Sr0.4CoO3 In hin Film Cathode to Yttria Stabilised Zirconia Electrolytes at T I650 IC. <i>Fuel Cells</i> , 2010 , 10, 1057-1065	2.9	40	
140	Catalytic behavior of metal catalysts in high-temperature RWGS reaction: In-situ FT-IR experiments and first-principles calculations. <i>Scientific Reports</i> , 2017 , 7, 41207	4.9	39	
139	Three dimensional representations of partial ionic and electronic conductivity based on defect structure analysis of BaZr0.85Y0.15O3\(\text{U}Solid\) State Ionics, 2011 , 203, 9-17	3.3	39	
138	TllusionalTnano-size effect due to artifacts of in-plane conductivity measurements of ultra-thin films. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 6133-7	3.6	38	
137	High-performance thin-film protonic ceramic fuel cells fabricated on anode supports with a non-proton-conducting ceramic matrix. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6395-6403	13	35	
136	The thermomechanical stability of micro-solid oxide fuel cells fabricated on anodized aluminum oxide membranes. <i>Journal of Power Sources</i> , 2012 , 210, 178-183	8.9	34	
135	High-Performance Protonic Ceramic Fuel Cells with Thin-Film Yttrium-Doped Barium Cerate-Zirconate Electrolytes on Compositionally Gradient Anodes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9097-103	9.5	34	
134	Gas transport in hydrogen electrode of solid oxide regenerative fuel cells for power generation and hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 3868-3878	6.7	33	

133	Thermo-mechanical stability of multi-scale-architectured thin-film-based solid oxide fuel cells assessed by thermal cycling tests. <i>Journal of Power Sources</i> , 2014 , 249, 125-130	8.9	33
132	Particle size effects on temperature-dependent performance of LiCoO2 in lithium batteries. Journal of Power Sources, 2006 , 158, 1419-1424	8.9	33
131	Synthesis, sintering and conductivity behavior of ceria-doped Scandia-stabilized zirconia. <i>Solid State Ionics</i> , 2014 , 263, 103-109	3.3	32
130	Promotion of Pt/CeO catalyst by hydrogen treatment for low-temperature CO oxidation <i>RSC Advances</i> , 2019 , 9, 27002-27012	3.7	31
129	High performance Bi-layered electrolytes via atomic layer deposition for solid oxide fuel cells. Journal of Power Sources, 2014 , 253, 114-122	8.9	31
128	Micro ceramic fuel cells with multilayered yttrium-doped barium cerate and zirconate thin film electrolytes. <i>Journal of Power Sources</i> , 2014 , 248, 1163-1169	8.9	30
127	Enhanced oxygen diffusion in epitaxial lanthanum\(\text{B}\)trontium\(\text{B}\)obaltite thin film cathodes for micro solid oxide fuel cells. \(\text{Energy and Environmental Science}\), 2013, 6, 116-120	35.4	30
126	Surface Tuning of Solid Oxide Fuel Cell Cathode by Atomic Layer Deposition. <i>Advanced Energy Materials</i> , 2018 , 8, 1802506	21.8	30
125	Suppression of Cation Segregation in (La,Sr)CoO by Elastic Energy Minimization. <i>ACS Applied Materials & ACS Applied & ACS Applied Materials & ACS Applied & A</i>	9.5	29
124	Optimization of current collection to reduce the lateral conduction loss of thin-film-processed cathodes. <i>Journal of Power Sources</i> , 2013 , 230, 109-114	8.9	29
123	Electrochemical analysis of high-performance protonic ceramic fuel cells based on a columnar-structured thin electrolyte. <i>Applied Energy</i> , 2019 , 233-234, 29-36	10.7	29
122	Three-dimensional microstructure of high-performance pulsed-laser deposited Ni-YSZ SOFC anodes. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 15249-55	3.6	28
121	Thin film yttria-stabilized zirconia electrolyte for intermediate-temperature solid oxide fuel cells (IT-SOFCs) by chemical solution deposition. <i>Journal of the European Ceramic Society</i> , 2012 , 32, 1733-174	1 6	28
120	Low temperature fabrication of nano-structured porous LSMMSZ composite cathode film by aerosol deposition. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 2627-2630	5.7	28
119	SOFCs with Sc-Doped Zirconia Electrolyte and Co-Containing Perovskite Cathodes. <i>Journal of the Electrochemical Society</i> , 2007 , 154, B480	3.9	28
118	Engineering of Charged Defects at Perovskite Oxide Surfaces for Exceptionally Stable Solid Oxide Fuel Cell Electrodes. <i>ACS Applied Materials & Empty Interfaces</i> , 2020 , 12, 21494-21504	9.5	26
117	Oxidation Behavior of Tungsten in H[sub 2]O[sub 2]- and Fe(NO[sub 3])[sub 3]-Base Aqueous Slurries. <i>Journal of the Electrochemical Society</i> , 2006 , 153, B169	3.9	26
116	Fast Magneto-Ionic Switching of Interface Anisotropy Using Yttria-Stabilized Zirconia Gate Oxide. <i>Nano Letters</i> , 2020 , 20, 3435-3441	11.5	25

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115	Application to Gradient-Structured Thin-film Cathode of SOFC. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B1000	3.9	25	
114	Enhanced catalytic activity of nanostructured, A-site deficient (La0.7Sr0.3)0.95(Co0.2Fe0.8)O3 for SOFC cathodes. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25102-25111	13	25	
113	Characterization of Thin-Film YSZ Deposited via EB-PVD Technique in Anode-supported SOFCs. Journal of the Electrochemical Society, 2006 , 153, A961	3.9	24	
112	Thermal conditions and heat transfer characteristics of high-temperature solid oxide fuel cells investigated by three-dimensional numerical simulations. <i>Energy</i> , 2017 , 120, 293-305	7.9	23	
111	Design and processing parameters of La2NiO4+Ebased cathode for anode-supported planar solid oxide fuel cells (SOFCs). <i>Journal of Power Sources</i> , 2015 , 297, 370-378	8.9	23	
110	Fabrication of anode-supported protonic ceramic fuel cell with Ba(Zr 0.85 Y 0.15)O 3 B a(Ce 0.9 Y 0.1)O 3 B dual-layer electrolyte. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 12812-12818	6.7	23	
109	Limitation of Thickness Increment of Lanthanum Strontium Cobaltite Cathode Fabricated by Pulsed Laser Deposition. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B1	3.9	21	
108	Lattice-strain effect on oxygen vacancy formation in gadolinium-doped ceria. <i>Journal of Electroceramics</i> , 2014 , 32, 72-77	1.5	20	
107	Effect of Elastic Network of Ceramic Fillers on Thermal Cycle Stability of a Solid Oxide Fuel Cell Stack. <i>Advanced Energy Materials</i> , 2012 , 2, 461-468	21.8	20	
106	Fabrication and characterization of all-ceramic solid oxide fuel cells based on composite oxide anode. <i>Journal of Power Sources</i> , 2013 , 241, 440-448	8.9	20	
105	Study on the Electrode Reaction Mechanism of Pulsed-Laser Deposited Thin-Film La1\(\text{NSrxCoO3}(\text{k} = 0.2. 0.4) \) Cathodes. <i>Journal of the Electrochemical Society</i> , 2012 , 159, F639-F643	3.9	20	
104	Highly durable solid oxide fuel cells: suppressing chemical degradation via rational design of a diffusion-blocking layer. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15083-15094	13	19	
103	Fabrication of thin-film gadolinia-doped ceria (GDC) interdiffusion barrier layers for intermediate-temperature solid oxide fuel cells (IT-SOFCs) by chemical solution deposition (CSD). <i>Ceramics International</i> , 2014 , 40, 8135-8142	5.1	19	
102	Transmission Electron Microscopy Study on Microstructure and Interfacial Property of Thin Film Electrolyte SOFC. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, B26		19	
101	Substrate effect on the electrical properties of sputtered YSZ thin films for co-planar SOFC applications. <i>Journal of Electroceramics</i> , 2010 , 24, 153-160	1.5	19	
100	Scale-Up of Thin-Film Deposition-Based Solid Oxide Fuel Cell by Sputtering, a Commercially Viable Thin-Film Technology. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F613-F617	3.9	19	
99	Low-temperature sintering of Ba(Zr,Y)O3-based proton conducting oxides using BaOfauO eutectic flux as sintering aid. <i>Ceramics International</i> , 2016 , 42, 10476-10481	5.1	18	
98	Optical absorption and XPS studies of (Ba 1½ Sr x)(Ce 0.75 Zr 0.10 Y 0.15)O 3lelectrolytes for protonic ceramic fuel cells. <i>Ceramics International</i> , 2016 , 42, 10366-10372	5.1	17	

97	Influence of background oxygen pressure on film properties of pulsed laser deposited Y:BaZrO3. <i>Thin Solid Films</i> , 2014 , 552, 24-31	2.2	17
96	Enhanced Densification of In2O3 Ceramics by Presintering with Low Pressure (5 MPa). <i>Journal of the American Ceramic Society</i> , 2005 , 81, 2489-2492	3.8	17
95	Incorporation of a Pd catalyst at the fuel electrode of a thin-film-based solid oxide cell by multi-layer deposition and its impact on low-temperature co-electrolysis. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 7433-7444	13	16
94	Low-temperature co-sintering technique for the fabrication of multi-layer functional ceramics for solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 1417-1425	6	16
93	Fabrication and characterization of Ba(Zr0.84Y0.15Cu0.01)O3Delectrolyte-based protonic ceramic fuel cells. <i>Ceramics International</i> , 2013 , 39, 9605-9611	5.1	16
92	Multiscale structured low-temperature solid oxide fuel cells with 13 W power at 500 LC. Energy and Environmental Science, 2020 , 13, 3459-3468	35.4	15
91	Influence of current collector and cathode area discrepancy on performance evaluation of solid oxide fuel cell with thin-film-processed cathode. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2014 , 1, 313-316	3.8	15
90	Highly active and thermally stable single-atom catalysts for high-temperature electrochemical devices. <i>Energy and Environmental Science</i> , 2020 , 13, 4903-4920	35.4	15
89	High Performance Anode-Supported Solid Oxide Fuel Cells with Thin Film Yttria-Stabilized Zirconia Membrane Prepared by Aerosol-Assisted Chemical Vapor Deposition. <i>Journal of the Electrochemical Society</i> , 2017 , 164, F484-F490	3.9	14
88	Effect of Ba-deficiency on the phase and structural stability of (BaSr)(CeZr)O3-based proton conducting oxides. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 11022-11031	6.7	14
87	Specific considerations for obtaining appropriate La1\(\mathbb{B}\)SrxGa1\(\mathbb{J}\)MgyO3\(\mathbb{L}\)hin films using pulsed-laser deposition and its influence on the performance of solid-oxide fuel cells. <i>Journal of Power Sources</i> , 2015 , 274, 41-47	8.9	14
86	Record-low sintering-temperature (600ITC) of solid-oxide fuel cell electrolyte. <i>Journal of Alloys and Compounds</i> , 2016 , 672, 397-402	5.7	14
85	Ceria-based electrolyte reinforced by solgel technique for intermediate-temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9867-9872	6.7	14
84	Effect of secondary metal catalysts on butane internal steam reforming operation of thin-film solid oxide fuel cells at 500B00 °C. Applied Catalysis B: Environmental, 2020, 263, 118349	21.8	14
83	Fabrication of dense and defect-free diffusion barrier layer via constrained sintering for solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 3219-3223	6	13
82	Palladium incorporation at the anode of thin-film solid oxide fuel cells and its effect on direct utilization of butane fuel at 600 °C. <i>Applied Energy</i> , 2019 , 243, 155-164	10.7	13
81	Catalytic Effect of Pd-Ni Bimetallic Catalysts on High-Temperature Co-Electrolysis of Steam/CO2Mixtures. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3171-F3178	3.9	13
80	MicrostructureBolarization 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

79	The Effect of Post-Annealing on the Properties of a Pulsed-Laser-Deposited La0.6Sr0.4CoO3-ECe0.9Gd0.1O2-Nano-Composite Cathode. <i>Journal of the Electrochemical Society</i> , 2013, 160, F1027-F1032	3.9	13	
78	Sub-micron ferroelectric domain engineering in liquid phase epitaxy LiNbO3 by direct-write e-beam techniques. <i>Journal of Crystal Growth</i> , 2005 , 281, 492-500	1.6	13	
77	Physical and Electrochemical Characteristics of Pulsed Laser Deposited La0.6Sr0.4CoO3ECe0.9Gd0.1O2Nanocomposites as a Function of the Mixing Ratio. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F16-F22	3.9	12	
76	Constrained Sintering in Fabrication of Solid Oxide Fuel Cells. <i>Materials</i> , 2016 , 9,	3.5	12	
75	Sintered powder-base cathode over vacuum-deposited thin-film electrolyte of low-temperature solid oxide fuel cell: Performance and stability. <i>Electrochimica Acta</i> , 2019 , 296, 1055-1063	6.7	12	
74	Protonic ceramic electrolysis cells for fuel production: a brief review. <i>Journal of the Korean Ceramic Society</i> , 2020 , 57, 480-494	2.2	11	
73	Three-dimensional thermal stress analysis of the re-oxidized Ni-YSZ anode functional layer in solid oxide fuel cells. <i>Journal of Alloys and Compounds</i> , 2018 , 752, 148-154	5.7	11	
72	Improved electrochemical performance and durability of butane-operating low-temperature solid oxide fuel cell through palladium infiltration. <i>International Journal of Energy Research</i> , 2020 , 44, 9995-	10 0 67	11	
71	Atomistic Assessments of Lithium-Ion Conduction Behavior in Glass-Ceramic Lithium Thiophosphates. <i>ACS Applied Materials & Discourse (Materials & Discourse)</i> 11, 13-18	9.5	11	
70	Interpretation of Impedance Spectra of Solid Oxide Fuel Cells: L-Curve Criterion for Determination of Regularization Parameter in Distribution Function of Relaxation Times Technique. <i>Jom</i> , 2019 , 71, 38	32 5-3 83	34 ¹⁰	
69	Cobalt oxide co-doping effect on the sinterability and electrical conductivity of nano-crystalline Gd-doped ceria. <i>Ceramics International</i> , 2012 , 38, S497-S500	5.1	10	
68	Solid oxide fuel cells with zirconia/ceria bilayer electrolytes via roll calendering process. <i>Journal of Alloys and Compounds</i> , 2020 , 846, 156318	5.7	10	
67	Thermally Induced S-Sublattice Transition of LiPS for Fast Lithium-Ion Conduction. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5592-5597	6.4	10	
66	Structural optimization of (La, Sr)CoO3-based multilayered composite cathode forßolid-oxide fuel cells. <i>Journal of Power Sources</i> , 2013 , 228, 97-103	8.9	9	
65	Superior compositional homogeneity and long-term catalytic stability of Nite0.75Zr0.25O2 cermets prepared via glycine nitrate process. <i>Catalysis Communications</i> , 2009 , 10, 1334-1338	3.2	9	
64	Thin Film (La0.7Sr0.3)0.95MnO3-Habricated by Pulsed Laser Deposition and Its Application as a Solid Oxide Fuel Cell Cathode for Low-Temperature Operation. <i>Journal of the Korean Ceramic Society</i> , 2010 , 47, 75-81	2.2	9	
63	Powder Packing Behavior and Constrained Sintering in Powder Processing of Solid Oxide Fuel Cells (SOFCs). <i>Journal of the Korean Ceramic Society</i> , 2019 , 56, 130-145	2.2	9	
62	Enhanced sinterability and electrochemical performance of solid oxide fuel cells via a roll calendering process. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9958-9967	13	8	

61	Configuring PSx tetrahedral clusters in Li-excess Li7P3S11 solid electrolyte. APL Materials, 2018, 6, 047	9927	8
60	Open-cell voltage and electrical conductivity of a protonic ceramic electrolyte under two chemical potential gradients. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 14997-15001	3.6	8
59	Role of Ceria-Zirconia Solid Solution with High Oxygen Storage Capacity in Cermet Anodes of Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F883-F888	3.9	8
58	Tailoring ceramic membrane structures of solid oxide fuel cells via polymer-assisted electrospray deposition. <i>Journal of Membrane Science</i> , 2017 , 544, 234-242	9.6	8
57	Effects of B-site substitution on the surface adsorption properties and catalytic activities of La0.8Sr0.2(Mn1\(\text{MCox} \)O3. Applied Catalysis A: General, 2010 , 387, 203-208	5.1	8
56	Strain-Induced Tailoring of Oxygen-Ion Transport in Highly Doped CeO Electrolyte: Effects of Biaxial Extrinsic and Local Lattice Strain. <i>ACS Applied Materials & Discourse Materials</i> (2017), 9, 42415-42419	9.5	8
55	Identification of an Actual Strain-Induced Effect on Fast Ion Conduction in a Thin-Film Electrolyte. <i>Nano Letters</i> , 2018 , 18, 2794-2801	11.5	7
54	Effect of internal and external constraints on sintering behavior of thin film electrolytes for solid oxide fuel cells (SOFCs). <i>Ceramics International</i> , 2014 , 40, 13131-13138	5.1	7
53	Determination of proton transference number of Ba(Zr0.84Y0.15Cu0.01)O3Dia electrochemical concentration cell test. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 2833-2838	2.6	7
52	A comparative study of catalytic partial oxidation of methane over CeO2 supported metallic catalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 6414-9	1.3	7
51	Advanced planar SOFC stack with improved thermo-mechanical reliability and electrochemical performance. <i>Solid State Ionics</i> , 2008 , 179, 1454-1458	3.3	7
50	On the sol-gel synthesis and characterization of (BaSr)(CeZr)O3-based fuel cell electrolytes. <i>Ionics</i> , 2016 , 22, 2529-2538	2.7	6
49	Surface modification of anode substrate via nano-powder slurry spin coating for the thin film electrolyte of solid oxide fuel cell. <i>Thin Solid Films</i> , 2011 , 519, 2534-2539	2.2	6
48	BaCeO3-BaZrO3Solid Solution (BCZY) as a High Performance Electrolyte of Protonic Ceramic Fuel Cells (PCFCs). <i>Journal of the Korean Ceramic Society</i> , 2014 , 51, 271-277	2.2	6
47	High-performance and robust operation of anode-supported solid oxide fuel cells in mixed-gas atmosphere. <i>International Journal of Energy Research</i> , 2016 , 40, 726-732	4.5	5
46	A highly activated and integrated nanoscale interlayer of cathodes in low-temperature solid oxide fuel cells via precursor-solution electrospray method. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 4476-4483	6.7	5
45	Collateral hydrogenation over proton-conducting Ni/BaZrYO catalysts for promoting CO methanation <i>RSC Advances</i> , 2018 , 8, 32095-32101	3.7	5
44	Highly controlled thermal behavior of a conjugated gadolinia-doped ceria nanoparticles synthesized by particle-dispersed glycine-nitrate process. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 2159-2168	6	4

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43	3D Evaluation of Porous Zeolite Absorbents Using FIB-SEM Tomography. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2018 , 5, 195-199	3.8	4	
42	Synthesis and conductivity behaviour of proton conducting (1☑)Ba0.6Sr0.4Ce0.75Zr0.10Y0.15O3ExGDC (x=0, 0.2, 0.5) composite electrolytes. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 4710-4718	3.8	4	
41	Sandwiched ultra-thin yttria-stabilized zirconia layer to effectively and reliably block reduction of thin-film gadolinia-doped ceria electrolyte. <i>Journal of the Ceramic Society of Japan</i> , 2015 , 123, 263-267	1	4	
40	Fabrication and Characterization of Composite Sealants for Low Temperature (600~650°C)SOFCs. Journal of the Korean Ceramic Society, 2008 , 45, 802-806	2.2	4	
39	Fabrication of NiO-Y:BaZrO3 Composite Anode for Thin Film-Protonic Ceramic Fuel Cells using Tape-Casting. <i>Journal of the Korean Ceramic Society</i> , 2015 , 52, 320-324	2.2	4	
38	Thermal analysis of a 1-kW hydrogen-fueled solid oxide fuel cell stack by three-dimensional numerical simulation. <i>Energy Conversion and Management</i> , 2020 , 222, 113213	10.6	4	
37	A micro-patterned electrode/electrolyte interface fabricated by soft-lithography for facile oxygen reduction in solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 16534-16541	13	4	
36	Low-temperature processing technique of Ruddlesden-Popper cathode for high-performance solid oxide fuel cells. <i>Journal of Alloys and Compounds</i> , 2021 , 868, 159092	5.7	4	
35	A nanoarchitectured cermet composite with extremely low Ni content for stable high-performance solid oxide fuel cells. <i>Acta Materialia</i> , 2021 , 206, 116580	8.4	4	
34	Comprehensive Understanding of Cathodic and Anodic Polarization Effects on Stability of Nanoscale Oxygen Electrode for Reversible Solid Oxide Cells. <i>ACS Applied Materials & ACS Applied & ACS ACS ACS ACS APPLIED & ACS ACS ACS ACS ACS ACS ACS ACS ACS ACS</i>	9.5	4	
33	Naturally diffused sintering aid for highly conductive bilayer electrolytes in solid oxide cells. <i>Science Advances</i> , 2021 , 7, eabj8590	14.3	4	
32	Fabrication of Large-area Multi-scale-architectured Thin-Film SOFC via Commercially Viable Thin-film Technology. <i>ECS Transactions</i> , 2015 , 68, 1915-1920	1	3	
31	Degradation of hydration kinetics of proton-conducting Ba(Zr0.84Y0.15Cu0.01)O3Iduring conductivity-relaxation experiment. <i>Journal of Power Sources</i> , 2016 , 332, 299-304	8.9	3	
30	Fabrication of Solid Oxide Fuel Cells via Thin Film Techniques. <i>Materials Science Forum</i> , 2010 , 654-656, 2787-2790	0.4	3	
29	Comparisons of the system performance for the small solid oxide fuel cell applications. <i>Current Applied Physics</i> , 2010 , 10, S29-S33	2.6	3	
28	Fabrication and Characterization of Miniaturized SOFC by Colloidal Process. <i>ECS Transactions</i> , 2007 , 7, 743-748	1	3	
27	Direct-write e-beam sub-micron domain engineering in liquid phase epitaxy (LPE) LiNbO3 thin films and single crystal LiNbO3. <i>Journal of Crystal Growth</i> , 2005 , 280, 135-144	1.6	3	
26	Fabrication of Thin Solid Oxide Film Fuel Cells. <i>Journal of the Korean Ceramic Society</i> , 2010 , 47, 82-85	2.2	3	

25	Electrical Characterization of Ultrathin Film Electrolytes for Micro-SOFCs. <i>Journal of the Korean Ceramic Society</i> , 2012 , 49, 404-411	2.2	3
24	Gradient Anode Functional Layer for Thin Y:BaZrxCe1-XO3 Electrolyte in Low-Temperature Solid Oxide Fuel Cells. <i>ECS Transactions</i> , 2015 , 68, 1527-1530	1	2
23	Proton Conduction in Highly Textured Y:BaZrO3 and Y:BaZrCeO3 Thin Films Fabricated by Pulsed Laser Deposition. <i>ECS Transactions</i> , 2012 , 45, 129-133	1	2
22	Thin Film Yttria-Stabilized Zirconia (YSZ) Electrolyte Fabricated by a Novel Chemical Solution Deposition (CSD) Process for Solid Oxide Fuel Cells (SOFCs). <i>Journal of Nanoelectronics and Optoelectronics</i> , 2012 , 7, 554-558	1.3	2
21	Effects of mixing state of composite powders on sintering behavior of cathode for solid oxide fuel cells. <i>Ceramics International</i> , 2017 , 43, 11642-11647	5.1	2
20	Performance of Solid Oxide Fuel Cell with Gradient-structured Thin-film Cathode Composed of Pulsed-laser-deposited Lanthanum Strontium Manganite-Yttria-stabilized Zirconia Composite. <i>Journal of the Korean Ceramic Society</i> , 2011 , 48, 487-492	2.2	2
19	Suppression of processing defects in large-scale anode of planar solid oxide fuel cell via multi-layer roll calendering. <i>Journal of Alloys and Compounds</i> , 2020 , 812, 152113	5.7	2
18	Influence of Sintering Additive on the Electrical Conductivity, Chemical Stability and Sinterability of BaCe0.55Zr0.3Y0.15O3-[] <i>ECS Transactions</i> , 2015 , 68, 467-471	1	1
17	Columnar Grain Size Effect on Cross-Plane Conductivity of Yttria-Stabilized Zirconia Thin Films. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F671-F676	3.9	1
16	Facile fabrication of YSZ/GDC multi-layers by using a split target in pulsed laser deposition and their structural and electrical properties. <i>Journal of Electroceramics</i> , 2014 , 33, 25-30	1.5	1
15	Micro-Protonic Ceramic Fuel Cells with Y:BaZrO3 Electrolyte Prepared by Pulsed Laser Deposition (PLD). <i>ECS Transactions</i> , 2013 , 57, 935-938	1	1
14	Influence of wet atmosphere on electrical and transport properties of lanthanum strontium cobalt ferrite cathode materials for protonic ceramic fuel cells. <i>Solid State Ionics</i> , 2013 , 249-250, 112-116	3.3	1
13	Ultimate Performance of Anode-Supported SOFC by Realizing Thin-Film Electrolyte and Nano-Structure Electrode. <i>ECS Transactions</i> , 2013 , 57, 969-973	1	1
12	Electrochemical performance of calcium cobaltite nano-plates. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 4056-60	1.3	1
11	Suppressing Lateral Conduction Loss of Thin-film Cathode by Inserting a Denser Bridging Layer. Journal of the Korean Ceramic Society, 2015 , 52, 304-307	2.2	1
10	Achieving performance and longevity with butane-operated low-temperature solid oxide fuel cells using low-cost Cu and CeO2 catalysts. <i>Journal of Materials Chemistry A</i> ,	13	1
9	Performance analysis of a planar solid oxide fuel cell stack between 750 LC and 500 LC. <i>Journal of Power Sources</i> , 2020 , 474, 228671	8.9	1
8	Synthesis and investigation on stability and electrical conductivity of Ti-doped Ba3CaTa2-xTixO9 (0 lk ll .0) complex oxides. <i>Journal of Alloys and Compounds</i> , 2019 , 775, 736-741	5.7	1

LIST OF PUBLICATIONS

7	Influence of sintering activators on electrical property of BaZr0.85Y0.15O3-[proton-conducting electrolyte. <i>Journal of Power Sources</i> , 2021 , 507, 230296	8.9	1
6	Microstructure refinement of pulsed laser deposited La0.6Sr0.4CoO3II hin-film cathodes for solid oxide fuel cell. <i>Metals and Materials International</i> , 2013 , 19, 1347-1349	2.4	
5	Viable AC Two-Probe Impedance Spectroscopy Based on Spatially-Limited Contact Probe for SOFC Cathode. <i>ECS Transactions</i> , 2011 , 35, 1995-1999	1	
4	Direct-Write E-beam Submicron Domain Engineering in LiNbO3 Thin Films Grown by Liquid Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 784, 1081		
3	Parametric Studies on Suppression of Secondary Phases in LiNbO3 Thin Films Deposited by Pulsed Laser Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 784, 11241		
2	Thermal Evolution of BaO-CuO Flux as Sintering Aid for Proton Conducting Ceramic Fuel Cells. Journal of the Korean Ceramic Society, 2016 , 53, 506-510	2.2	
1	Direct Measurement of Ion Diffusivity in Oxide Thin Film by Using Isotope Tracers and Secondary Ion Mass Spectrometry. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2020 , 7, 405-410	3.8	