

# Sun-Ju Song

## List of Publications by Year in descending order

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131  
papers

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186265  
28  
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131  
all docs

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docs citations

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times ranked

1960  
citing authors

#	ARTICLE	IF	CITATIONS
1	Defect chemistry modeling of high-temperature proton-conducting cerates. <i>Solid State Ionics</i> , 2002, 149, 1-10.	2.7	78
2	Performance of $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ and $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ - $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_2$ oxygen electrodes with $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_2$ barrier layer in reversible solid oxide fuel cells. <i>Journal of Power Sources</i> , 2013, 239, 361-373.	7.8	78
3	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.	5.5	57
4	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.	30.8	53
5	Transition metal oxide (Ni, Co, Fe)-tin oxide nanocomposite sensing electrodes for a mixed-potential based $\text{NO}_2$ sensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 284, 534-544.	7.8	50
6	Chemical Constitution, Physical Properties, and Biocompatibility of Experimentally Manufactured Portland Cement. <i>Journal of Endodontics</i> , 2011, 37, 58-62.	3.1	49
7	Ultrahigh-sensitive mixed-potential ammonia sensor using dual-functional $\text{NiWO}_4$ electrocatalyst for exhaust environment monitoring. <i>Journal of Hazardous Materials</i> , 2021, 403, 123797.	12.4	48
8	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.	7.8	47
9	Performance of Proton-conducting Ceramic-electrolyte Fuel Cell with BZCY40 electrolyte and BSCF5582 cathode. <i>Ceramics International</i> , 2016, 42, 3776-3785.	4.8	44
10	Electrochemical Impedance Analysis of SOFC with Transmission Line Model Using Distribution of Relaxation Times (DRT). <i>Journal of the Electrochemical Society</i> , 2020, 167, 114504.	2.9	44
11	Studies on Ionic Conductivity of $\text{Sr}^{2+}$ -Doped $\text{CeP}_2\text{O}_7$ Electrolyte in Humid Atmosphere. <i>Journal of Physical Chemistry C</i> , 2013, 117, 2653-2661.	3.1	43
12	Determination of partial conductivities and computational analysis of the theoretical power density of $\text{BaZr}_{0.1}\text{Ce}_{0.7}\text{Y}_{0.1}\text{Yb}_{0.1}\text{O}_{3-\delta}$ (BZCYYb1711) electrolyte under various PCFC conditions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21321-21328.	10.3	43
13	Pyro-Synthesis of Functional Nanocrystals. <i>Scientific Reports</i> , 2012, 2, 946.	3.3	42
14	Effect of oxygen vacancies on electrical conductivity of $\text{La}_{0.5}\text{Sr}_{0.5}\text{FeO}_{3-\delta}$ from first-principles calculations. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4784-4789.	10.3	41
15	Synergistic enhancement in the sensing performance of a mixed-potential $\text{NH}_3$ sensor using $\text{SnO}_2@\text{CuFe}_2\text{O}_4$ sensing electrode. <i>Sensors and Actuators B: Chemical</i> , 2020, 308, 127748.	7.8	40
16	Effect of humidification on the performance of intermediate-temperature proton conducting ceramic fuel cells with ceramic composite cathodes. <i>Journal of Power Sources</i> , 2013, 232, 224-233.	7.8	37
17	Robust $\text{NdBa}_{0.5}\text{Sr}_{0.5}\text{Co}_{1.5}\text{Fe}_{0.5}\text{O}_{5+\delta}$ 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.	7.8	37
18	One step infiltration induced multi-cation oxide nanocatalyst for load proof SOFC application. <i>Applied Catalysis B: Environmental</i> , 2020, 267, 118374.	20.2	37

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19	An Enhanced High-Rate Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> -Ni <sub>2</sub> P Nanocomposite Cathode with Stable Lifetime for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 35235-35242.	8.0	35
20	Investigations on Electrochemical Performance of a Proton-Conducting Ceramic-Electrolyte Fuel Cell with La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3</sub> Cathode. Journal of the Electrochemical Society, 2015, 162, F547-F554.	2.9	34
21	Water as a hole-predatory instrument to create metal nanoparticles on triple-conducting oxides. Energy and Environmental Science, 2022, 15, 1097-1105.	30.8	33
22	Electrochemical hydrogen charge and discharge properties of La <sub>0.1</sub> Sr <sub>0.9</sub> Co <sub>1-<math>\gamma</math></sub> Fe <sub><math>\gamma</math></sub> O <sub>3</sub> (y= 0, 0.2, 1) electrodes in alkaline electrolyte solution. Electrochimica Acta, 2013, 102, 393-399.	5.2	31
23	Steam/CO <sub>2</sub> Co-Electrolysis Performance of Reversible Solid Oxide Cell with La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> -Gd <sub>0.1</sub> Ce <sub>0.9</sub> Zr <sub>0.9</sub> O <sub>3-<math>\delta</math></sub> Electrode. Journal of the Electrochemical Society, 2015, 162, F54-F59.		
24	Sensing Performance of a YSZ-Based Electrochemical NO <sub>2</sub> Sensor Using Nanocomposite Electrodes. Journal of the Electrochemical Society, 2019, 166, B799-B804.	2.9	31
25	Enhancing Gas Response Characteristics of Mixed Metal Oxide Gas Sensors. Journal of the Korean Ceramic Society, 2018, 55, 1-20.	2.3	31
26	PdO-doped BaZr <sub>0.8</sub> Y <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> electrolyte for intermediate-temperature protonic ceramic fuel cells. Acta Materialia, 2014, 66, 273-283.	7.9	30
27	Surface decorated spinel-oxide electrodes for mixed-potential ammonia sensor: Performance and DRT analysis. Journal of Hazardous Materials, 2020, 396, 122601.	12.4	30
28	Structural, thermal and mechanical properties of aluminum nitride ceramics with CeO <sub>2</sub> as a sintering aid. Ceramics International, 2016, 42, 11519-11524.	4.8	29
29	Influence of sintering temperature on the physical, electrochemical and sensing properties of $\text{In}_x\text{Fe}_{2-x}\text{O}_3\text{-SnO}_2$ nanocomposite sensing electrode for a mixed-potential type NO <sub>x</sub> sensor. Ceramics International, 2019, 45, 2309-2318.	4.8	29
30	Structural and electrical properties of novel phosphate based composite electrolyte for low-temperature fuel cells. Composites Part B: Engineering, 2020, 202, 108405.	12.0	29
31	Highly conductive barium zirconate-based carbonate composite electrolytes for intermediate temperature-protonic ceramic fuel cells. Journal of Alloys and Compounds, 2014, 585, 103-110.	5.5	27
32	Electrical and physical properties of composite BaZr <sub>0.85</sub> Y <sub>0.15</sub> O <sub>3-<math>\delta</math></sub> -Nd <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2-<math>\delta</math></sub> electrolytes for intermediate temperature-solid oxide fuel cells. Journal of Power Sources, 2016, 336, 437-446.	7.8	27
33	Degradation analysis of anode-supported intermediate temperature-solid oxide fuel cells under various failure modes. Journal of Power Sources, 2015, 276, 120-132.	7.8	26
34	Electrical Behavior of CeP <sub>2</sub> O <sub>7</sub> Electrolyte for the Application in Low-Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2012, 159, F819-F825.	2.9	25
35	La <sub>2</sub> NiO <sub>4+<math>\delta</math></sub> as oxygen electrode in reversible solid oxide cells. Ceramics International, 2015, 41, 6448-6454.	4.8	25
36	Triple perovskite structured Nd <sub>1.5</sub> Ba <sub>1.5</sub> CoFeMnO <sub>9+<math>\delta</math></sub> oxygen electrode materials for highly efficient and stable reversible protonic ceramic cells. Journal of Power Sources, 2021, 510, 230409.	7.8	24

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37	Addition effects of erbia-stabilized bismuth oxide on ceria-based carbonate composite electrolytes for intermediate temperature- $\hat{\sim}$ solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 16823-16834.	7.1	23
38	Investigation of Oxygen Reduction Reaction on $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\hat{\sim}}$ Electrode by Electrochemical Impedance Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2015, 162, F728-F735.	2.9	22
39	Anchoring of $\text{Ni}_{12}\text{P}_5$ Microbricks in Nitrogen- and Phosphorus-Enriched Carbon Frameworks: Engineering Bifunctional Active Sites for Efficient Water-Splitting Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1182-1194.	6.7	22
40	Fabrication of Thin-Film $\text{SrCe}_{0.9}\text{Eu}_{0.1}\text{O}_{3-\hat{\sim}}$ Hydrogen Separation Membranes on $\text{Ni-SrCeO}_3$ Porous Tubular Supports. <i>Journal of the American Ceramic Society</i> , 2009, 92, 1849-1852.	3.8	21
41	Ionic Conductivity of $\text{Gd}^{3+}$ -Doped Cerium Pyrophosphate Electrolytes with Core-Shell Structure. <i>Journal of the Electrochemical Society</i> , 2014, 161, F464-F472.	2.9	20
42	Effect of MnO doping in tetravalent metal pyrophosphate ( $\text{MP}_2\text{O}_7$ ; M=Ce, Sn, Zr) electrolytes. <i>Ceramics International</i> , 2016, 42, 2983-2989.	4.8	20
43	Investigations on Defect Equilibrium, Thermodynamic Quantities, and Transport Properties of $\text{La}_{0.5}\text{Sr}_{0.5}\text{FeO}_{3-\hat{\sim}}$ . <i>Journal of the Electrochemical Society</i> , 2019, 166, F180-F189.	2.9	20
44	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.	7.8	20
45	A thermodynamically stable $\text{La}_2\text{NiO}_4/\text{Gd}_{0.1}\text{Ce}_{0.9}\text{O}_{1.95}$ bilayer oxygen transport membrane in membrane-assisted water splitting for hydrogen production. <i>Ceramics International</i> , 2013, 39, 3893-3899.	4.8	19
46	Study of Hydration/Dehydration Kinetics of SOFC Cathode Material $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\hat{\sim}}$ by Electrical Conductivity Relaxation Technique. <i>Journal of the Electrochemical Society</i> , 2013, 160, F764-F768.	2.9	19
47	Synthesis of Proton-Conducting, In-Doped $\text{SnP}_{[2]}\text{O}_{[7]}$ Core-Shell-Structured Nanoparticles by Coprecipitation. <i>Journal of the Electrochemical Society</i> , 2009, 156, E23.	2.9	18
48	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	18
49	Effectiveness of Protonic Conduction in $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\hat{\sim}}$ Cathode in Intermediate Temperature Proton-Conducting Ceramic-Electrolyte Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2014, 161, F754-F760.	2.9	18
50	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	17
51	Electrical conductivity of $\text{M}^{2+}$ -doped (M = Mg, Ca, Sr, Ba) cerium pyrophosphate-based composite electrolytes for low-temperature proton conducting electrolyte fuel cells. <i>Journal of Alloys and Compounds</i> , 2013, 578, 279-285.	5.5	17
52	Effects of electronic probe $\hat{\sim}$ TM's architecture on the sensing performance of mixed-potential based NOX sensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 426-436.	7.8	17
53	The role of surface lattice defects of $\text{CeO}_2$ nanoparticles as a scavenging redox catalyst in polymer electrolyte membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 26023-26034.	10.3	17
54	Transport properties of $\text{BaCe}_{0.85}\text{Y}_{0.15}\text{O}_{3-\hat{\sim}}$ at closed-cycle refrigerator temperature. <i>Ceramics International</i> , 2009, 35, 1769-1773.	4.8	16

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55	Ionic conductivity of Mn <sup>2+</sup> doped dense tin pyrophosphate electrolytes synthesized by a new co-precipitation method. <i>Journal of the European Ceramic Society</i> , 2014, 34, 2967-2976.	5.7	16
56	Mixed proton&#x2014;electron conducting properties of Yb doped strontium cerate. <i>Journal of Materials Science</i> , 2007, 42, 6177-6182.	3.7	15
57	Hydrogen separation by dual functional cermet membranes with self-repairing capability against the damage by H <sub>2</sub> S. <i>Journal of Membrane Science</i> , 2013, 428, 46-51.	8.2	15
58	Charge and Mass Transport Properties of BaCe <sub>0.45</sub> Zr <sub>0.4</sub> Y <sub>0.15</sub> O <sub>3-<math>\delta</math></sub> . <i>Journal of the Electrochemical Society</i> , 2014, 161, F710-F716.	2.9	15
59	Fast ionic conduction in tetravalent metal pyrophosphate-alkali carbonate composites: New potential electrolytes for intermediate-temperature fuel cells. <i>Journal of Power Sources</i> , 2017, 345, 176-181.	7.8	15
60	High temperature polymer electrolyte membrane fuel cells with Polybenzimidazole-Ce <sub>0.9</sub> Gd <sub>0.1</sub> P <sub>2</sub> O <sub>7</sub> and polybenzimidazole-Ce <sub>0.9</sub> Gd <sub>0.1</sub> P <sub>2</sub> O <sub>7</sub> -graphite oxide composite electrolytes. <i>Journal of Power Sources</i> , 2018, 401, 149-157.	7.8	15
61	Conductivity Relaxation in Mixed Perovskite-Type Oxide Ba <sub>3</sub> Ca <sub>1.18</sub> Nb <sub>1.82</sub> O <sub>8.73</sub> upon Oxidation/Reduction and Hydration/Dehydration. <i>Journal of the Electrochemical Society</i> , 2013, 160, F623-F628.	2.9	14
62	Mn <sup>2+</sup> -Doped CeP <sub>2</sub> O <sub>7</sub> Composite Electrolytes for Application in Low Temperature Proton-Conducting Ceramic Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2014, 161, F133-F138.	2.9	14
63	Dependence of H <sub>2</sub> /CO <sub>2</sub> Co-Electrolysis Performance of SOEC on Microstructural and Thermodynamic Parameters. <i>Journal of the Electrochemical Society</i> , 2016, 163, F728-F736.	2.9	14
64	Hydration of Proton-conducting BaCe <sub>0.9</sub> Y <sub>0.1</sub> O <sub>3-<math>\delta</math></sub> by Decoupled Mass Transport. <i>Scientific Reports</i> , 2017, 7, 486.	3.3	13
65	Correlation between defect structure and electrochemical properties of mixed conducting La <sub>0.1</sub> Sr <sub>0.9</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> . <i>Acta Materialia</i> , 2014, 65, 373-382.	7.9	12
66	Enhanced mixed potential NO <sub>x</sub> gas response performance of surface modified and NiO nanoparticles infiltrated solid-state electrochemical-based NiO-YSZ composite sensing electrodes. <i>Sensors and Actuators B: Chemical</i> , 2018, 262, 664-677.	7.8	12
67	Thermodynamic Quantities and Defect Chemical Properties of La <sub>0.8</sub> Sr <sub>0.2</sub> FeO <sub>3-<math>\delta</math></sub> . <i>Journal of the Electrochemical Society</i> , 2018, 165, F641-F651.	2.9	12
68	A Facile Combustion Synthesis Route for Performance Enhancement of La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> (LSCF6428) as a Robust Cathode Material for IT-SOFC. <i>Journal of the Korean Ceramic Society</i> , 2019, 56, 497-505.	2.3	12
69	Preparation of Asymmetric Tubular Oxygen Separation Membrane with Oxygen Permeable Pr <sub>2</sub> Ni <sub>0.75</sub> Cu <sub>0.25</sub> Ga <sub>0.05</sub> O <sub>4+<math>\delta</math></sub> . <i>International Journal of Applied Ceramic Technology</i> , 2011, 8, 800-808.	2.1	11
70	Oxygen excess nonstoichiometry and thermodynamic quantities of La <sub>2</sub> NiO <sub>4-<math>\delta</math></sub> . <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 785-793.	2.5	11
71	Dense composite electrolytes of Gd <sup>3+</sup> -doped cerium phosphates for low-temperature proton-conducting ceramic-electrolyte fuel cells. <i>Ceramics International</i> , 2015, 41, 4814-4821.	4.8	11
72	A chemically and mechanically stable dual-phase membrane with high oxygen permeation flux. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23884-23893.	10.3	11

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73	Oxygen Non-Stoichiometry and Thermal-Chemical Expansion of $\text{Ce}_{0.8}\text{Y}_{0.2}\text{O}_{1.9}$ Electrolytes by Neutron Diffraction. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1208-1214.	3.8	10
74	Charge and mass transport properties of $\text{La}_2\text{Ni}_{0.95}\text{Al}_{0.05}\text{O}_{4.025}$ . <i>Journal of Alloys and Compounds</i> , 2014, 589, 572-578.	5.5	10
75	Fabrication of Dense Cerium Pyrophosphate-Polystyrene Composite for Application as Low-Temperature Proton-Conducting Electrolytes. <i>Journal of the Electrochemical Society</i> , 2015, 162, F1159-F1164.	2.9	10
76	Effect of partial substitution of $\text{Sn}^{4+}$ by $\text{M}^{4+}$ (M=Si, Ti, and Ce) on sinterability and ionic conductivity of $\text{SnP}_2\text{O}_7$ . <i>Ceramics International</i> , 2015, 41, 3339-3343.	4.8	10
77	Evaluation of the effects of nanocatalyst infiltration on the SOFC performance and electrode reaction kinetics using the transmission line model. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23473-23487.	10.3	10
78	Impact of $\text{CeO}_2$ Nanoparticle Morphology: Radical Scavenging within the Polymer Electrolyte Membrane Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2021, 168, 114521.	2.9	10
79	Partial Conductivities and Chemical Diffusivities of Multi-Ion Transporting $\text{BaZr}_{1-x}\text{Ce}_{0.85-x}\text{Y}_{0.15}\text{O}_{3-\delta}$ ( $x = 0, 0.2, 0.4$ and $0.6$ ). <i>Journal of the Electrochemical Society</i> , 2014, 161, F991-F1001.	2.9	9
80	Fabrication of dense $\text{Ce}_{0.9}\text{Mg}_{0.1}\text{P}_2\text{O}_7$ - $\text{PmOn}$ composites by microwave heating for application as electrolyte in intermediate-temperature fuel cells. <i>Ceramics International</i> , 2018, 44, 6170-6175.	4.8	9
81	The Electrochemical Properties of Nanocrystalline $\text{Gd}_{0.1}\text{Ce}_{0.9}\text{O}_{1.95}$ Infiltrated Solid Oxide Co-Electrolysis Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, F132-F141.	2.9	9
82	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.	7.8	9
83	A stable and active three-dimensional carbon based trimetallic electrocatalyst for efficient overall wastewater splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30762-30779.	7.1	9
84	Design of tin polyphosphate for hydrogen evolution reaction and supercapacitor applications. <i>Journal of the Korean Ceramic Society</i> , 2021, 58, 688-699.	2.3	9
85	Polyol Synthesis of Pd/Ag Alloy Nanocrystalline. <i>Journal of the Electrochemical Society</i> , 2010, 157, E107.	2.9	8
86	Surface exchange kinetics and chemical diffusivities of $\text{BaZr}_{0.2}\text{Ce}_{0.65}\text{Y}_{0.15}\text{O}_{3-\delta}$ by electrical conductivity relaxation. <i>Journal of Alloys and Compounds</i> , 2014, 610, 301-307.	5.5	8
87	Oxygen permeation through dense $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ perovskite membranes: Catalytic effect of porous $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ layers. <i>Ceramics International</i> , 2015, 41, 7446-7452.	4.8	8
88	Spatial Distribution of Oxygen Chemical Potential under Potential Gradients and Theoretical Maximum Power Density with 8YSZ Electrolyte. <i>Scientific Reports</i> , 2016, 6, 18804.	3.3	8
89	Unraveling the problem associated with multi-cation oxide formation using urea based infiltration techniques for SOFC application. <i>Journal of Alloys and Compounds</i> , 2021, 852, 157037.	5.5	8
90	Measurement of Partial Conductivity of 8YSZ by Hebb-Wagner Polarization Method. <i>Journal of the Korean Ceramic Society</i> , 2015, 52, 299-303.	2.3	8



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91	Design of Novel transition metal based multiphase stannate: An efficient electrocatalyst for oxygen evolution reaction. <i>Materials Chemistry and Physics</i> , 2022, 279, 125613.	4.0	8
92	Non-galvanic Hydrogen Production Using High Steam Pressure Gradients. <i>Chemistry Letters</i> , 2006, 35, 1068-1069.	1.3	7
93	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.	7.1	7
94	Study of electrochemical hydrogen charge/discharge properties of FePO <sub>4</sub> for application as negative electrodes in hydrogen batteries. <i>Ceramics International</i> , 2013, 39, 6559-6568.	4.8	7
95	Comparative study of an experimental Portland cement and ProRoot MTA by electrochemical impedance spectroscopy. <i>Ceramics International</i> , 2014, 40, 1741-1746.	4.8	7
96	Electrical Behavior and Stability of K <sub>2</sub> HPO <sub>4</sub> -KH <sub>5</sub> (PO <sub>4</sub> ) <sub>2</sub> -Ce <sub>0.9</sub> Gd <sub>0.1</sub> P <sub>2</sub> Electrolytes for Intermediate Temperature Proton-Conducting Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, F225-F229.	2.9	7
97	Role of surface exchange kinetics in coated zirconia dual-phase membrane with high oxygen permeability. <i>Journal of Membrane Science</i> , 2020, 597, 117620.	8.2	7
98	Investigation on Hydration Process and Biocompatibility of Calcium Silicate-Based Experimental Portland Cements. <i>Journal of the Korean Ceramic Society</i> , 2019, 56, 403-411.	2.3	7
99	Novel Design of Dual Functional Hydrogen Separation Membranes. <i>Chemistry Letters</i> , 2009, 38, 344-345.	1.3	6
100	Oxygen Nonstoichiometry and Thermodynamic Quantities of La <sub>2</sub> Ni <sub>0.95</sub> Al <sub>x</sub> (x=0.05) Journal of the American Ceramic Society, 2014, 97, 1489-1496.	3.8	6
101	An in-situ gas chromatography investigation into the suppression of oxygen gas evolution by coated amorphous cobalt-phosphate nanoparticles on oxide electrode. <i>Scientific Reports</i> , 2016, 6, 23394.	3.3	6
102	Energetically-favorable distribution of oxygen vacancies and metal atoms in perovskite BaCe <sub>0.85</sub> Y <sub>0.15</sub> O <sub>2.925</sub> solid solutions using a genetic algorithm and lattice statics. <i>Computational Materials Science</i> , 2019, 170, 109184.	3.0	6
103	Sintering and electrical behavior of ZrP <sub>2</sub> O <sub>7</sub> -CeP <sub>2</sub> O <sub>7</sub> solid solutions Zr <sub>1-x</sub> Ce <sub>x</sub> P <sub>2</sub> O <sub>7</sub> ; x=0.2 and (Zr <sub>0.92</sub> Y <sub>0.08</sub> ) <sub>1-y</sub> Ce <sub>y</sub> P <sub>2</sub> O <sub>7</sub> ; y=0.1 for application as electrolyte in intermediate temperature fuel cells. <i>Ionics</i> , 2019, 25, 155-162.	3.4	6
104	Influence of different parameters on total fluoride concentration evaluation in ex-situ chemical degradation of nafion based membrane. <i>Korean Journal of Chemical Engineering</i> , 2021, 38, 2057-2063.	2.7	6
105	Role of Different Oxide to Fuel Ratios in Solution Combustion Synthesis of SnO <sub>2</sub> Nanoparticles. <i>Journal of the Korean Ceramic Society</i> , 2016, 53, 122-127.	2.3	6
106	Enhanced Crystalline and Magnetic Properties of Co-Doped TiO <sub>2</sub> Films Grown by Ultraviolet-Assisted Pulsed Laser Deposition. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, C4.	2.2	5
107	Growth of SiC nanocables on SiO <sub>2</sub> films derived by gaseous composition control using Ti. <i>Journal of Crystal Growth</i> , 2005, 281, 556-562.	1.5	5
108	Synthesis and characterization of MnO-doped titanium pyrophosphates (Ti <sub>1-x</sub> Mn <sub>x</sub> P <sub>2</sub> O <sub>7</sub> ; x=0.2) for intermediate-temperature proton-conducting ceramic-electrolyte fuel cells. <i>Ionics</i> , 2017, 23, 1675-1684.	2.4	5

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110	A new solution phase synthesis of cerium(IV) pyrophosphate compounds of different morphologies using cerium(III) precursor. <i>Journal of Alloys and Compounds</i> , 2019, 793, 686-694.	5.5	5
111	Defect chemistry of highly defective $\text{La}_{0.1}\text{Sr}_{0.9}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ by considering oxygen interstitials: Effect of hole degeneracy. <i>Solid State Ionics</i> , 2020, 347, 115251.	2.7	5
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