

# Ji Haeng Yu

## List of Publications by Year in descending order

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57  
papers

1,734  
citations

331670

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289244

40  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1828  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conductivity Transitions of $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_{3-\delta}$ and $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ in $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_{2-\delta}$ Matrix for Dual-Phase Oxygen Transport Membranes. <i>Crystals</i> , 2021, 11, 712.	2.2	2
2	Two-step sintering technique for enhancing mechanical and oxygen permeation properties of dual-phase oxygen transport membranes. <i>Journal of the European Ceramic Society</i> , 2021, 41, 4884-4895.	5.7	8
3	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
4	Design and analysis of SOFC stack with different types of external manifolds. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 29143-29154.	7.1	11
5	Effects of Nb and Sn co-doping on the structure and properties of $\text{SrCo}_{3-x}\text{O}_{10}$ oxygen transport membranes. <i>Journal of Asian Ceramic Societies</i> , 2020, 8, 519-527.	2.3	3
6	Prediction of Material Properties of Ceramic Composite Material by Porous Structure and Porosity Using the Finite Element Method. <i>International Journal of Precision Engineering and Manufacturing</i> , 2019, 20, 805-814.	2.2	6
7	Novel strategy for improving the oxygen permeability of zirconia-based dual-phase membranes. <i>Energy and Environmental Science</i> , 2019, 12, 1358-1368.	30.8	19
8	Optimal sintering temperature for $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_{2-\delta}$ - $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ composites evaluated through their microstructural, mechanical and elastic properties. <i>Ceramics International</i> , 2019, 45, 1460-1463.	4.8	6
9	Performance and stability of $(\text{ZrO}_2)_{0.89}(\text{Y}_2\text{O}_3)_{0.01}(\text{Sc}_2\text{O}_3)_{0.10}$ - $\text{LaCr}_{0.85}\text{Cu}_{0.10}\text{Ni}_{0.05}\text{O}_{3-\delta}$ oxygen transport membranes under conditions relevant for oxy-fuel combustion. <i>Journal of Membrane Science</i> , 2018, 552, 115-123.	8.2	17
10	Rietveld refinement and estimation of residual stress in GDC/LSCF oxygen transport membrane ceramic composites. <i>Ceramics International</i> , 2018, 44, 10293-10298.	4.8	22
11	Structural and Electrochemical Properties of Dense Ytria-Doped Barium Zirconate Prepared by Solid-State Reactive Sintering. <i>Energies</i> , 2018, 11, 3083.	3.1	26
12	Efficacy of $\text{Ag-CuO}$ Filler Tape for the Reactive Air Brazing of Ceramic-Metal Joints. <i>Journal of the Korean Ceramic Society</i> , 2018, 55, 492-497.	2.3	12
13	Guidelines for selecting coating materials for a high oxygen permeation flux in a fluorite-rich dual-phase membrane. <i>Journal of Membrane Science</i> , 2017, 535, 200-207.	8.2	17
14	Elucidation of the Oxygen Surface Kinetics in a Coated Dual-Phase Membrane for Enhancing Oxygen Permeation Flux. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19917-19924.	8.0	24
15	Mechanical properties of LSCF ( $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ )-GDC ( $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_{2-\delta}$ ) for oxygen transport membranes. <i>Ceramics International</i> , 2017, 43, 1916-1921.	4.8	17
16	Crucial role of a nickel substrate in $\text{Co}_3\text{O}_4$ pseudocapacitor directly grown on nickel and its electrochemical properties. <i>Journal of Alloys and Compounds</i> , 2016, 676, 407-413.	5.5	10
17	Unraveling Crystal Structure and Transport Properties of Fast Ion Conducting $\text{SrCo}_{0.9}\text{Nb}_{0.1}\text{O}_{3-\delta}$ . <i>Journal of Physical Chemistry C</i> , 2016, 120, 22248-22256.	3.1	16
18	A new strategy for enhancing the thermo-mechanical and chemical stability of dual-phase mixed ionic electronic conductor oxygen membranes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13549-13554.	10.3	20

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19	Effects of Ni diffusion on the accelerated conductivity degradation of scandia-stabilized zirconia films under a reducing atmosphere. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1835-1839.	5.7	17
20	Effects of Partial Substitution of CeO <sub>2</sub> with M <sub>2</sub> O <sub>3</sub> (M = Yb, Gd, Sm) on Electrical Degradation of Sc <sub>2</sub> O <sub>3</sub> and CeO <sub>2</sub> Co-doped ZrO <sub>2</sub> . <i>Journal of the Korean Ceramic Society</i> , 2016, 53, 500-505.	2.3	5
21	Electrochemical ammonia synthesis from steam and nitrogen using proton conducting yttrium doped barium zirconate electrolyte with silver, platinum, and lanthanum strontium cobalt ferrite electrocatalyst. <i>Journal of Power Sources</i> , 2015, 284, 245-251.	7.8	78
22	Preparation, crystal structure, and oxygen permeability of Pr <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-δ</sub> perovskites. <i>Materials Letters</i> , 2015, 161, 33-36.	2.6	5
23	Enhanced chemical stability and sinterability of refined proton-conducting perovskite: Case study of BaCe <sub>0.5</sub> Zr <sub>0.3</sub> Y <sub>0.2</sub> O <sub>3-δ</sub> . <i>Journal of the European Ceramic Society</i> , 2015, 35, 1855-1863.	5.7	17
24	Moving boundary diffusion problem for hydration kinetics evidenced in non-monotonic conductivity relaxations of proton conducting perovskites. <i>Solid State Ionics</i> , 2015, 272, 60-73.	2.7	10
25	Pinning-down polarization losses and electrode kinetics in cermet-supported LSM solid oxide cells in reversible operation. <i>Solid State Ionics</i> , 2015, 277, 1-10.	2.7	8
26	Enhanced durability of a proton conducting oxide fuel cell with a purified yttrium-doped barium zirconate-cerate electrolyte. <i>Journal of Power Sources</i> , 2015, 278, 320-324.	7.8	20
27	Substantial Oxygen Flux in Dual-Phase Membrane of Ceria and Pure Electronic Conductor by Tailoring the Surface. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 14699-14707.	8.0	34
28	Chemically and thermo-mechanically stable LSM-YSZ segmented oxygen permeable ceramic membrane. <i>Journal of Membrane Science</i> , 2015, 486, 222-228.	8.2	32
29	High-performance solid oxide electrolysis cell based on ScSZ/GDC (scandia-stabilized) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 oxygen electrode. <i>Energy</i> , 2015, 90, 344-350.	8.8	49
30	The effects of NiO addition on the structure and transport properties of proton conducting BaZr <sub>0.8</sub> Y <sub>0.2</sub> O <sub>3-δ</sub> . <i>Journal of Alloys and Compounds</i> , 2015, 621, 263-267.	5.5	43
31	Effect of operating conditions on the performance of solid electrolyte membrane reactor for steam and CO <sub>2</sub> electrolysis. <i>Journal of Membrane Science</i> , 2015, 473, 8-15.	8.2	30
32	Mosaic-shaped cathode for highly durable solid oxide fuel cell under thermal stress. <i>Journal of Power Sources</i> , 2014, 247, 534-538.	7.8	3
33	Novel oxygen transport membranes with tunable segmented structures. <i>Journal of Materials Chemistry A</i> , 2014, 2, 8174-8178.	10.3	15
34	Dramatically Enhanced Oxygen Fluxes in Fluorite-Rich Dual-Phase Membrane by Surface Modification. <i>Chemistry of Materials</i> , 2014, 26, 4387-4394.	6.7	52
35	Sr <sub>0.95</sub> Fe <sub>0.5</sub> Co <sub>0.5</sub> O <sub>3-δ</sub> -Ce <sub>0.9</sub> Gd <sub>0.1</sub> O <sub>2-δ</sub> dual-phase membrane: Oxygen permeability, phase stability, and chemical compatibility. <i>Journal of Membrane Science</i> , 2014, 462, 153-159.	8.2	17
36	Electrochemical Synthesis of Ammonia from Water and Nitrogen using a Pt/GDC/Pt Cell. <i>Korean Chemical Engineering Research</i> , 2014, 52, 58-62.	0.2	16

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37	Properties of Low Temperature Sintering of La <sub>0.8</sub> Sr <sub>0.2</sub> Ga <sub>0.8</sub> Mg <sub>0.2-x</sub> Zn <sub>x</sub> O <sub>2.8</sub> (X = 0.0 - 0.05) Electrolyte. Journal of the Korean Ceramic Society, 2014, 51, 208-217.	2.3	0
38	The effects of Fe-substitution on the crystal structure and oxygen permeability of PrBaCo <sub>2</sub> O <sub>5+δ</sub> . Materials Letters, 2013, 108, 65-68.	2.6	15
39	Polarization mechanism of high temperature electrolysis in a Ni <sup>o</sup> -YSZ/YSZ/LSM solid oxide cell by parametric impedance analysis. Solid State Ionics, 2013, 232, 80-96.	2.7	68
40	Contribution of the surface exchange kinetics to the oxygen transport properties in Gd <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2-δ</sub> /La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-δ</sub> dual-phase membrane. Solid State Ionics, 2013, 253, 64-69.	2.7	45
41	Fabrication and Mechanical Properties of High-strength Porous Supports for High Temperature Oxygen Transport Membrane. Journal of the Korean Ceramic Society, 2013, 50, 423-428.	2.3	3
42	Three dimensional representations of partial ionic and electronic conductivity based on defect structure analysis of BaZr <sub>0.85</sub> Y <sub>0.15</sub> O <sub>3-δ</sub> . Solid State Ionics, 2011, 203, 9-17.	2.7	44
43	Phases transition and oxygen permeating properties of SrFeGa <sub>0.25</sub> O <sub>3-δ</sub> . International Journal of Hydrogen Energy, 2010, 35, 7512-7518.	7.1	3
44	Fe doping effects on phase stability and conductivity of La <sub>0.75</sub> Sr <sub>0.25</sub> Ga <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>3-δ</sub> . Journal of Power Sources, 2009, 193, 593-597.	7.8	7
45	Peculiar Nonmonotonic Water Incorporation in Oxides Detected by Local In <sup>o</sup> -Situ Optical Absorption Spectroscopy. Angewandte Chemie - International Edition, 2007, 46, 8992-8994.	13.8	41
46	Microstructural effects on the electrical and mechanical properties of Ni <sup>o</sup> -YSZ cermet for SOFC anode. Journal of Power Sources, 2007, 163, 926-932.	7.8	111
47	Improvement of the stability of Ni <sup>o</sup> -YSZ anode material for solid oxide fuel cell. Journal of Solid State Electrochemistry, 2007, 11, 1295-1301.	2.5	10
48	Thick-film type oxygen transport membrane: Preparation, oxygen permeation and characterization. Journal of Electroceramics, 2006, 17, 719-722.	2.0	10
49	Formation of protonic defects in perovskite-type oxides with redox-active acceptors: case study on Fe-doped SrTiO <sub>3</sub> . Physical Chemistry Chemical Physics, 2005, 7, 3560.	2.8	16
50	Selective Gas Detection of SnO <sub>2</sub> -TiO <sub>2</sub> Gas Sensors. Journal of Electroceramics, 2004, 13, 707-713.	2.0	37
51	The CO and H <sub>2</sub> gas selectivity of CuO-doped SnO <sub>2</sub> -ZnO composite gas sensor. Sensors and Actuators B: Chemical, 2002, 87, 464-470.	7.8	132
52	Non-Ohmic Current-Voltage and Impedance Characteristics of Electroadsorptive Zn <sub>2</sub> SnO <sub>4</sub> . Journal of the Electrochemical Society, 2001, 148, G307.	2.9	15
53	Selective CO gas detection of CuO- and ZnO-doped SnO <sub>2</sub> gas sensor. Sensors and Actuators B: Chemical, 2001, 75, 56-61.	7.8	126
54	Selective CO gas detection of SnO <sub>2</sub> -Zn <sub>2</sub> SnO <sub>4</sub> composite gas sensor. Sensors and Actuators B: Chemical, 2001, 80, 21-27.	7.8	64

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55	Electrical and CO gas-sensing properties of ZnO/SnO <sub>2</sub> hetero-contact. Sensors and Actuators B: Chemical, 1999, 61, 59-67.	7.8	66
56	CO gas sensing properties of ZnO-CuO composite. Sensors and Actuators B: Chemical, 1998, 46, 15-23.	7.8	110
57	Electrical and CO gas sensing properties of ZnO-SnO <sub>2</sub> composites. Sensors and Actuators B: Chemical, 1998, 52, 251-256.	7.8	117