Ji Haeng Yu

List of Publications by Year
in descending order

57 papers	1,734 citations	331670 21 h-index	289244 40 g-index
57 all docs	57 docs citations	57 times ranked	1828 citing authors

#	Article	IF	Citations
1	The CO and H2 gas selectivity of CuO-doped SnO2â€“ZnO composite gas sensor. Sensors and Actuators B: Chemical, 2002, 87, 464-470.	7.8	132
2	Selective CO gas detection of CuO- and ZnO-doped SnO2 gas sensor. Sensors and Actuators B: Chemical, 2001, 75, 56-61.	7.8	126
3	Electrical and CO gas sensing properties of ZnOâ€“SnO2 composites. Sensors and Actuators B: Chemical, 1998, 52, 251-256.	7.8	117
4	Microstructural effects on the electrical and mechanical properties of Niâ€“YSZ cermet for SOFC anode. Journal of Power Sources, 2007, 163, 926-932.	7.8	111
5	CO gas sensing properties of ZnOâ€“CuO composite. Sensors and Actuators B: Chemical, 1998, 46, 15-23.	7.8	110
6	Electrochemical ammonia synthesis from steam and nitrogen using proton conducting yttrium doped barium zirconate electrolyte with silver, platinum, and lanthanum strontium cobalt ferrite electrocatalyst. Journal of Power Sources, 2015, 284, 245-251.	7.8	78
7	Polarization mechanism of high temperature electrolysis in a Niâ€“YSZ/YSZ/LSM solid oxide cell by parametric impedance analysis. Solid State Ionics, 2013, 232, 80-96.	2.7	68
8	Electrical and CO gas-sensing properties of ZnO/SnO2 hetero-contact. Sensors and Actuators B: Chemical, 1999, 61, 59-67.	7.8	66
9	Selective CO gas detection of SnO2â€“Zn2SnO4 composite gas sensor. Sensors and Actuators B: Chemical, 2001, 80, 21-27.	7.8	64
10	Dramatically Enhanced Oxygen Fluxes in Fluorite-Rich Dual-Phase Membrane by Surface Modification. Chemistry of Materials, 2014, 26, 4387-4394.	6.7	52
11	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. Energy, 2015, 90, 344-350.	8.8	49
12	Contribution of the surface exchange kinetics to the oxygen transport properties in Gd0.1Ce0.9O2â^Îâ€“La0.6Sr0.4Co0.2Fe0.8O3â^Î´ dual-phase membrane. Solid State Ionics, 2013, 253, 64-69.	2.7	45
13	Three dimensional representations of partial ionic and electronic conductivity based on defect structure analysis of BaZr0.85Y0.15O3â^. Solid State Ionics, 2011, 203, 9-17.	2.7	44
14	The effects of NiO addition on the structure and transport properties of proton conducting BaZr0.8Y0.2O3â^. Journal of Alloys and Compounds, 2015, 621, 263-267.	5.5	43
15	Peculiar Nonmonotonic Water Incorporation in Oxides Detected by Local Inâ€…Situ Optical Absorption Spectroscopy. Angewandte Chemie - International Edition, 2007, 46, 8992-8994.	13.8	41
16	Selective Gas Detection of SnO2-TiO2 Gas Sensors. Journal of Electroceramics, 2004, 13, 707-713.	2.0	37
17	Substantial Oxygen Flux in Dual-Phase Membrane of Ceria and Pure Electronic Conductor by Tailoring the Surface. ACS Applied Materials & Interfaces, 2015, 7, 14699-14707.	8.0	34
18	Chemically and thermo-mechanically stable LSMâ€“YSZ segmented oxygen permeable ceramic membrane. Journal of Membrane Science, 2015, 486, 222-228.	8.2	32

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19	Effect of operating conditions on the performance of solid electrolyte membrane reactor for steam and CO2 electrolysis. Journal of Membrane Science, 2015, 473, 8-15.	8.2	30
20	Structural and Electrochemical Properties of Dense Yttria-Doped Barium Zirconate Prepared by Solid-State Reactive Sintering. Energies, 2018, 11, 3083.	3.1	26
21	Elucidation of the Oxygen Surface Kinetics in a Coated Dual-Phase Membrane for Enhancing Oxygen Permeation Flux. ACS Applied Materials & Interfaces, 2017, 9, 19917-19924.	8.0	24
22	Rietveld refinement and estimation of residual stress in GDCâ€“LSCF oxygen transport membrane ceramic composites. Ceramics International, 2018, 44, 10293-10298.	4.8	22
23	Enhanced durability of a proton conducting oxide fuel cell with a purified yttrium-doped barium zirconate-cerate electrolyte. Journal of Power Sources, 2015, 278, 320-324.	7.8	20
24	A new strategy for enhancing the thermo-mechanical and chemical stability of dual-phase mixed ionic electronic conductor oxygen membranes. Journal of Materials Chemistry A, 2016, 4, 13549-13554.	10.3	20
25	Novel strategy for improving the oxygen permeability of zirconia-based dual-phase membranes. Energy and Environmental Science, 2019, 12, 1358-1368.	30.8	19
26	Sr0.95Fe0.5Co0.5O3â^'Î´â€“Ce0.9Gd0.1O2â^'Î´ dual-phase membrane: Oxygen permeability, phase stability, and chemical compatibility. Journal of Membrane Science, 2014, 462, 153-159.	8.2	17
27	Enhanced chemical stability and sinterability of refined proton-conducting perovskite: Case study of BaCe0.5Zr0.3Y0.2O3â^'Î´. Journal of the European Ceramic Society, 2015, 35, 1855-1863.	5.7	17
28	Effects of Ni diffusion on the accelerated conductivity degradation of scandia-stabilized zirconia films under a reducing atmosphere. Journal of the European Ceramic Society, 2016, 36, 1835-1839.	5.7	17
29	Guidelines for selecting coating materials for a high oxygen permeation flux in a fluorite-rich dual-phase membrane. Journal of Membrane Science, 2017, 535, 200-207.	8.2	17
30	Mechanical properties of LSCF (La0.6Sr0.4Co0.2Fe0.8O3â^'Î´)â€“GDC (Ce0.9Gd0.1O2â^'Î´) for oxygen transport membranes. Ceramics International, 2017, 43, 1916-1921.	4.8	17
31	Performance and stability of (ZrO 2) 0.89 (Y 2 O 3) 0.01 (Sc 2 O 3) 0.10 -LaCr 0.85 Cu 0.10 Ni 0.05 O 3-Î´ oxygen transport membranes under conditions relevant for oxy-fuel combustion. Journal of Membrane Science, 2018, 552, 115-123.	8.2	17
32	Formation of protonic defects in perovskite-type oxides with redox-active acceptors: case study on Fe-doped SrTiO3. Physical Chemistry Chemical Physics, 2005, 7, 3560.	2.8	16
33	Unraveling Crystal Structure and Transport Properties of Fast Ion Conducting SrCo_{0.9}Nb_{0.1}O_{3â^'Î´}. Journal of Physical Chemistry C, 2016, 120, 22248-22256.	3.1	16
34	Electrochemical Synthesis of Ammonia from Water and Nitrogen using a Pt/GDC/Pt Cell. Korean Chemical Engineering Research, 2014, 52, 58-62.	0.2	16
35	Non-Ohmic Current-Voltage and Impedance Characteristics of Electroadsorptive Zn[sub 2]SnO[sub 4]. Journal of the Electrochemical Society, 2001, 148, G307.	2.9	15
36	The effects of Fe-substitution on the crystal structure and oxygen permeability of PrBaCo2O5+Î´. Materials Letters, 2013, 108, 65-68.	2.6	15

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37	Novel oxygen transport membranes with tunable segmented structures. Journal of Materials Chemistry A, 2014, 2, 8174-8178.	10.3	15
38	Efficacy of Agâ€“CuO Filler Tape for the Reactive Air Brazing of Ceramicâ€“Metal Joints. Journal of the Korean Ceramic Society, 2018, 55, 492-497.	2.3	12
39	Design and analysis of SOFC stack with different types of external manifolds. International Journal of Hydrogen Energy, 2020, 45, 29143-29154.	7.1	11
40	Thick-film type oxygen transport membrane: Preparation, oxygen permeation and characterization. Journal of Electroceramics, 2006, 17, 719-722.	2.0	10
41	Improvement of the stability of NiOâ€“YSZ anode material for solid oxide fuel cell. Journal of Solid State Electrochemistry, 2007, 11, 1295-1301.	2.5	10
42	Moving boundary diffusion problem for hydration kinetics evidenced in non-monotonic conductivity relaxations of proton conducting perovskites. Solid State Ionics, 2015, 272, 60-73.	2.7	10
43	Crucial role of a nickel substrate in Co3O4 pseudocapacitor directly grown on nickel and its electrochemical properties. Journal of Alloys and Compounds, 2016, 676, 407-413.	5.5	10
44	Pinning-down polarization losses and electrode kinetics in cermet-supported LSM solid oxide cells in reversible operation. Solid State Ionics, 2015, 277, 1-10.	2.7	8
45	Two-step sintering technique for enhancing mechanical and oxygen permeation properties of dual-phase oxygen transport membranes. Journal of the European Ceramic Society, 2021, 41, 4884-4895.	5.7	8
46	Fe doping effects on phase stability and conductivity of La0.75Sr0.25Ga0.8Mg0.2O3â^'Î´. Journal of Power Sources, 2009, 193, 593-597.	7.8	7
47	Role of surface exchange kinetics in coated zirconia dual-phase membrane with high oxygen permeability. Journal of Membrane Science, 2020, 597, 117620.	8.2	7
48	Prediction of Material Properties of Ceramic Composite Material by Porous Structure and Porosity Using the Finite Element Method. International Journal of Precision Engineering and Manufacturing, 2019, 20, 805-814.	2.2	6
49	Optimal sintering temperature for Ce0.9Gd0.1O2â^'Î´â€“La0.6Sr0.4Co0.2Fe0.8O3â€“Î´ composites evaluated through their microstructural, mechanical and elastic properties. Ceramics International, 2019, 45, 1460-1463.	4.8	6
50	Preparation, crystal structure, and oxygen permeability of Pr 0.5 Sr 0.5 Co 1â^'x Fe x O 3â^'Î´ perovskites. Materials Letters, 2015, 161, 33-36.	2.6	5
51	Effects of Partial Substitution of CeO2 with M2O3 (M = Yb, Gd, Sm) on Electrical Degradation of Sc2O3 and CeO2 Co-doped ZrO2. Journal of the Korean Ceramic Society, 2016, 53, 500-505.	2.3	5
52	Phases transition and oxygen permeating properties of SrFeGa0.25O3-Î´. International Journal of Hydrogen Energy, 2010, 35, 7512-7518.	7.1	3
53	Mosaic-shaped cathode for highly durable solid oxide fuel cell under thermal stress. Journal of Power Sources, 2014, 247, 534-538.	7.8	3
54	Effects of Nb and Sn co-doping on the structure and properties of SrCoO_{3-Î´} oxygen transport membranes. Journal of Asian Ceramic Societies, 2020, 8, 519-527.	2.3	3

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55	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
56	Conductivity Transitions of La0.7Sr0.3MnO3Â±Î´ and La0.6Sr0.4Co0.2Fe0.8O3â¯Î´ in Ce0.9Gd0.1O2â¯Î´ Matrix for Dual-Phase Oxygen Transport Membranes. Crystals, 2021, 11, 712.	2.2	2
57	Properties of Low Temperature Sintering of La0.8Sr0.2Ga0.8Mg0.2-xZnxO2.8(X = 0.0 - 0.05) Electrolyte. Journal of the Korean Ceramic Society, 2014, 51, 208-217.	2.3	0