

Maria Balaguer

List of Publications by Year in descending order

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430874

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times ranked

1059
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on dual-phase oxygen transport membranes: from fundamentals to commercial deployment. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2152-2195.	10.3	31
2	Evaluation of Er Doped CeO ₂ - λ as Oxygen Transport Membrane. <i>Membranes</i> , 2022, 12, 172.	3.0	2
3	Boosting methane partial oxidation on ceria through exsolution of robust Ru nanoparticles. <i>Materials Advances</i> , 2021, 2, 2924-2934.	5.4	15
4	Electric and magnetic properties of lanthanum barium cobaltite. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1809-1818.	3.8	12
5	Structure and water uptake in BaLnCo ₂ O ₆ λ (Ln =La, Pr, Nd, Sm, Gd, Tb and Dy). <i>Acta Materialia</i> , 2020, 199, 297-310.	7.9	18
6	In Situ Raman Characterization of SOFC Materials in Operational Conditions: A Doped Ceria Study. <i>Membranes</i> , 2020, 10, 148.	3.0	5
7	Hydrogen production via microwave-induced water splitting at low temperature. <i>Nature Energy</i> , 2020, 5, 910-919.	39.5	89
8	High-Temperature Structural and Electrical Properties of BaLnCo ₂ O ₆ Perovskites. <i>Materials</i> , 2020, 13, 4044.	2.9	15
9	Progress in Ce _{0.8} Gd _{0.2} O ₂ λ protective layers for improving the CO ₂ stability of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ λ O ₂ -transport membranes. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3747-3752.	4.9	5
10	Improving the performance of oxygen transport membranes in simulated oxy-fuel power plant conditions by catalytic surface enhancement. <i>Journal of Membrane Science</i> , 2019, 580, 307-315.	8.2	9
11	Creep behavior of porous La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ - λ substrate material for oxygen separation application. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1702-1710.	5.7	11
12	Dual-phase membrane based on LaCo _{0.2} Ni _{0.4} Fe _{0.4} O ₃ λ -x-Ce _{0.8} Gd _{0.2} O ₂ λ -x composition for oxygen permeation under CO ₂ /SO ₂ -rich gas environments. <i>Journal of Membrane Science</i> , 2018, 548, 117-124.	8.2	26
13	Characterization and Optimization of La _{0.97} Ni _{0.5} Co _{0.5} O ₃ λ -Based Air-Electrodes for Solid Oxide Cells. <i>ACS Applied Energy Materials</i> , 2018, 1, 2784-2792.	5.1	7
14	Mixed Ionic-Electronic Conduction in NiFe ₂ O ₄ - λ -Ce _{0.8} Gd _{0.2} O ₂ λ -x Nanocomposite Thin Films for Oxygen Separation. <i>ChemSusChem</i> , 2018, 11, 2818-2827.	6.8	11
15	Catalyst Screening for Oxidative Coupling of Methane Integrated in Membrane Reactors. <i>Frontiers in Materials</i> , 2018, 5, .	2.4	24
16	Comparison of freeze-dried and tape-cast support microstructure on high-flux oxygen transport membrane performance. <i>Journal of Membrane Science</i> , 2018, 564, 218-226.	8.2	29
17	Catalytic Oxide-Ion Conducting Materials for Surface Activation of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ - λ Membranes. <i>ChemistrySelect</i> , 2017, 2, 2949-2955.	1.5	5
18	Tailoring Electrocatalytic Properties of Solid Oxide Fuel Cell Composite Cathodes Based on (La _{0.8} Sr _{0.2}) _{0.95} MnO ₃ λ and Doped Cerias Ce _{1-x} Ln _x O ₂ λ (Ln=Gd, La, Er, Pr, Tb and x=0.1-0.2). <i>Fuel Cells</i> , 2017, 17, 100-107.	2.4	7

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19	Oxygen permeation and stability of $\text{CaTi}_{0.73}\text{Fe}_{0.18}\text{Mg}_{0.09}\text{O}_{3-\delta}$ oxygen-transport membrane. <i>Journal of Membrane Science</i> , 2017, 524, 56-63.	8.2	13
20	Influence of Microstructure and Surface Activation of Dual-Phase Membrane $\text{Ce}_{0.8}\text{Gd}_{0.2}\text{O}_{2-\delta}$ on Oxygen Permeation. <i>Journal of the American Ceramic Society</i> , 2016, 99, 349-355.	3.8	44
21	Optimization of SOFC Composite Cathodes Based on LSM and Doped Cerias $\text{Ce}_{0.8}\text{Ln}_{0.2}\text{O}_{2-\delta}$ (Ln = Gd, Er, Tb). <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2016, 1, 0784314.	2.9	2
22	Hydrogen separation through tailored dual phase membranes with nominal composition $\text{BaCe}_{0.8}\text{Eu}_{0.2}\text{O}_{3-\delta}:\text{Ce}_{0.8}\text{Y}_{0.2}\text{O}_{2-\delta}$ at intermediate temperatures. <i>Scientific Reports</i> , 2016, 6, 34773.	3.3	46
23	Elastic properties of freeze-cast $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1651-1657.	5.7	16
24	Dual-Phase Oxygen Transport Membranes for Stable Operation in Environments Containing Carbon Dioxide and Sulfur Dioxide. <i>ChemSusChem</i> , 2015, 8, 4242-4249.	6.8	40
25	Oxygen transport membranes in a biomass/coal combined strategy for reducing CO ₂ emissions: Permeation study of selected membranes under different CO ₂ -rich atmospheres. <i>Catalysis Today</i> , 2015, 257, 221-228.	4.4	20
26	Enhanced Oxygen Separation through Robust Freeze-Cast Bilayered Dual-Phase Membranes. <i>ChemSusChem</i> , 2014, 7, 2554-2561.	6.8	52
27	Catalytic surface promotion of highly active $\text{La}_{0.85}\text{Sr}_{0.15}\text{Cr}_{0.8}\text{Ni}_{0.2}\text{O}_{3-\delta}$ anodes for $\text{La}_{5.6}\text{WO}_{11.4}$ -based proton conducting fuel cells. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 203-207.	20.2	12
28	Particular Transport Properties of $\text{NiFe}_{2}\text{O}_{4}$ Thin Films at High Temperatures. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24266-24273.	3.1	53
29	Engineering microstructure and redox properties in the mixed conductor $\text{Ce}_{0.9}\text{Pr}_{0.1}\text{O}_{2-\delta} + \text{Co}$ 2 mol%. <i>Dalton Transactions</i> , 2014, 43, 4305-4312.	3.3	22
30	Development and understanding of $\text{La}_{0.85}\text{Sr}_{0.15}\text{Cr}_{1-x}\text{Ni}_x\text{O}_{3-\delta}$ anodes for $\text{La}_{5.6}\text{WO}_{11.4}$ -based Proton Conducting Solid Oxide Fuel Cells. <i>Journal of Power Sources</i> , 2014, 258, 98-107.	7.8	9
31	Bulk transport and oxygen surface exchange of the mixed ionic-electronic conductor $\text{Ce}_{1-x}\text{Tb}_x\text{O}_{2-\delta}$ (x = 0.1, 0.2, 0.5). <i>Journal of Materials Chemistry A</i> , 2013, 1, 10234.	10.3	40
32	High performance anodes with tailored catalytic properties for $\text{La}_{5.6}\text{WO}_{11.4}$ -based proton conducting fuel cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3004.	10.3	15
33	SOFC composite cathodes based on LSM and co-doped cerias ($\text{Ce}_{0.8}\text{Gd}_{0.1}\text{O}_{2-\delta}$, X = Gd, Cr, Mg, Bi, Ce). <i>Journal of Power Sources</i> , 2013, 223, 214-220.	7.8	48
34	Fast Oxygen Separation Through SO_2 - and CO_2 -Stable Dual-Phase Membrane Based on $\text{NiFe}_{2}\text{O}_{4}$ - $\text{Ce}_{0.8}\text{Tb}_{0.2}\text{O}_{2-\delta}$. <i>Chemistry of Materials</i> , 2013, 25, 4986-4993.	6.7	79
35	Rare Earth-doped Ceria Catalysts for ODHE Reaction in a Catalytic Modified MIEC Membrane Reactor. <i>ChemCatChem</i> , 2012, 4, 2102-2111.	3.7	24
36	Mixed Proton-Electron Conducting Chromite Electrocatalysts as Anode Materials for LWO-Based Solid Oxide Fuel Cells. <i>ChemSusChem</i> , 2012, 5, 2155-2158.	6.8	17

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37	Structural-Transport Properties Relationships on $Ce_{1-x}Ln_xO_{2-x}$ System (Ln = Gd, La, Tb, Pr, Eu, Er, Yb.) <i>TJ</i> 10.1007/s1084314	1.0	78
38	Study of the Transport Properties of the Mixed Ionic Electronic Conductor $Ce_{1-x}Tb_xO_{2-x}$ + Co ($x = 0.1, 0.2$) and Evaluation As Oxygen-Transport Membrane. <i>Chemistry of Materials</i> , 2011, 23, 2333-2343.	6.7	66
39	Quenching of porous silicon photoluminescence by molecular oxygen and dependence of this phenomenon on storing media and method of preparation of pSi photosensitizer. <i>Journal of Nanoparticle Research</i> , 2010, 12, 2907-2917.	1.9	16
40	Porous Silicon for Photosensitized Formation of Singlet Oxygen in Water and in Simulated Body Fluid: Two Methods of Modification by Undecylenic Acid. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3455-3461.	0.9	2
41	Influence of preparation and storage conditions on photoluminescence of porous silicon powder with embedded Si nanocrystals. <i>Journal of Nanoparticle Research</i> , 2008, 10, 1241-1249.	1.9	7
42	Durability and photophysical properties of surfactant-covered porous silicon particles in aqueous suspensions. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 2585-2588.	1.8	10
43	Nano Suspension of Porous Silicon in Water: Two Methods of Material Preparation and Modification by Surfactants. <i>ECS Transactions</i> , 2007, 6, 63-70.	0.5	2