

Eric D Wachsman

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211
papers

12,579
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h-index

108
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225
ext. papers

14,598
ext. citations

7.2
avg, IF

6.76
L-index

#	Paper	IF	Citations
211	Lowering the temperature of solid oxide fuel cells. <i>Science</i> , 2011 , 334, 935-9	33.3	1627
210	Negating interfacial impedance in garnet-based solid-state Li metal batteries. <i>Nature Materials</i> , 2017 , 16, 572-579	27	1192
209	Flexible, solid-state, ion-conducting membrane with 3D garnet nanofiber networks for lithium batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 7094-9	11.5	593
208	Toward garnet electrolyte-based Li metal batteries: An ultrathin, highly effective, artificial solid-state electrolyte/metallic Li interface. <i>Science Advances</i> , 2017 , 3, e1601659	14.3	482
207	Transition from Superlithiophobicity to Superlithiophilicity of Garnet Solid-State Electrolyte. <i>Journal of the American Chemical Society</i> , 2016 , 138, 12258-62	16.4	424
206	Conformal, Nanoscale ZnO Surface Modification of Garnet-Based Solid-State Electrolyte for Lithium Metal Anodes. <i>Nano Letters</i> , 2017 , 17, 565-571	11.5	416
205	Reducing Interfacial Resistance between Garnet-Structured Solid-State Electrolyte and Li-Metal Anode by a Germanium Layer. <i>Advanced Materials</i> , 2017 , 29, 1606042	24	378
204	Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metal-sulfur batteries. <i>Energy and Environmental Science</i> , 2017 , 10, 1568-1575	35.4	368
203	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. <i>Chemical Reviews</i> , 2020 , 120, 4257-4300	68.1	271
202	Role of solid oxide fuel cells in a balanced energy strategy. <i>Energy and Environmental Science</i> , 2012 , 5, 5498-5509	35.4	241
201	Garnet Solid Electrolyte Protected Li-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18809-18815	9.5	181
200	Continuous plating/stripping behavior of solid-state lithium metal anode in a 3D ion-conductive framework. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3770-3775	11.5	178
199	Mechanism of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ cathode degradation. <i>Journal of Materials Research</i> , 2012 , 27, 1992-1999	2.5	163
198	Transient Behavior of the Metal Interface in Lithium Metal-Garnet Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14942-14947	16.4	160
197	Higher conductivity Sm ³⁺ and Nd ³⁺ co-doped ceria-based electrolyte materials. <i>Solid State Ionics</i> , 2008 , 178, 1890-1897	3.3	157
196	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. <i>Materials Today</i> , 2019 , 22, 50-57	21.8	147
195	3D-Printing Electrolytes for Solid-State Batteries. <i>Advanced Materials</i> , 2018 , 30, e1707132	24	142

194	Crystal Structure-Ionic Conductivity Relationships in Doped Ceria Systems. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 2674-2681	3.8	140
193	Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1701963	21.8	125
192	In Situ Neutron Depth Profiling of Lithium Metal-Garnet Interfaces for Solid State Batteries. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14257-14264	16.4	117
191	Structural Stability and Conductivity of Phase-Stabilized Cubic Bismuth Oxides. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 3057-3064	3.8	113
190	Three-Dimensional, Solid-State Mixed Electron-Ion Conductive Framework for Lithium Metal Anode. <i>Nano Letters</i> , 2018 , 18, 3926-3933	11.5	108
189	High-performance bilayered electrolyte intermediate temperature solid oxide fuel cells. <i>Electrochemistry Communications</i> , 2009 , 11, 1504-1507	5.1	102
188	Effect of total dopant concentration and dopant ratio on conductivity of $(\text{DyO}_{1.5})_x(\text{WO}_3)_y(\text{BiO}_{1.5})_{1-x-y}$. <i>Acta Materialia</i> , 2010 , 58, 355-363	8.4	102
187	The effect of oxygen vacancy concentration on the elastic modulus of fluorite-structured oxides. <i>Solid State Ionics</i> , 2007 , 178, 53-58	3.3	99
186	Effect of cure history on the morphology of polyimide: Fluorescence spectroscopy as a method for determining the degree of cure. <i>Polymer</i> , 1988 , 29, 1191-1197	3.9	97
185	Ionic conduction in zirconia films of nanometer thickness. <i>Acta Materialia</i> , 2005 , 53, 5161-5166	8.4	96
184	Low-temperature solid-oxide fuel cells. <i>MRS Bulletin</i> , 2014 , 39, 773-779	3.2	95
183	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. <i>Materials Today</i> , 2018 , 21, 594-601	21.8	93
182	Higher ionic conductive ceria-based electrolytes for solid oxide fuel cells. <i>Applied Physics Letters</i> , 2007 , 91, 144106	3.4	92
181	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 2014 , 1, 1399-1404	14.0	78
180	Free-standing $\text{Na}_{2/3}\text{Fe}_{1/2}\text{Mn}_{1/2}\text{O}_2$ @graphene film for a sodium-ion battery cathode. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 4242-7	9.5	76
179	Effect of Crystal Imperfections on Reactivity and Photoreactivity of TiO_2 (Rutile) with Oxygen, Water, and Bacteria. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 15711-15738	3.8	75
178	Effect of A and B-site cations on surface exchange coefficient for ABO_3 perovskite materials. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2298-308	3.6	74
177	Dependence of open-circuit potential and power density on electrolyte thickness in solid oxide fuel cells with mixed conducting electrolytes. <i>Journal of Power Sources</i> , 2011 , 196, 2445-2451	8.9	74

176	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. <i>Energy Storage Materials</i> , 2018 , 14, 376-382	19.4	73
175	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. <i>Energy Storage Materials</i> , 2018 , 15, 458-464	19.4	73
174	Rapid Thermal Annealing of Cathode-Garnet Interface toward High-Temperature Solid State Batteries. <i>Nano Letters</i> , 2017 , 17, 4917-4923	11.5	72
173	Defect chemistry modeling of high-temperature proton-conducting cerates. <i>Solid State Ionics</i> , 2002 , 149, 1-10	3.3	72
172	Role of Point Defects in the Physical Properties of Fluorite Oxides. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 3162-3166	3.8	69
171	Performance of La _{0.1} Sr _{0.9} Co _{0.8} Fe _{0.2} O ₃ and La _{0.1} Sr _{0.9} Co _{0.8} Fe _{0.2} O ₃ /Ce _{0.9} Gd _{0.1} O ₂ oxygen electrodes with Ce _{0.9} Gd _{0.1} O ₂ barrier layer in reversible solid oxide fuel cells. <i>Journal of Power Sources</i> , 2013 , 239, 361-373	8.9	68
170	Stabilizing the Garnet Solid-Electrolyte/Polysulfide Interface in LiS Batteries. <i>Chemistry of Materials</i> , 2017 , 29, 8037-8041	9.6	67
169	Effect of oxygen sublattice order on conductivity in highly defective fluorite oxides. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 1281-1285	6	66
168	Improving the ionic conductivity of NASICON through aliovalent cation substitution of Na ₃ Zr ₂ Si ₂ PO ₁₂ . <i>Ionics</i> , 2015 , 21, 3031-3038	2.7	60
167	The evolution of low temperature solid oxide fuel cells. <i>Journal of Materials Research</i> , 2012 , 27, 2063-2075	2.8	60
166	Highly conductive Li garnets by a multielement doping strategy. <i>Inorganic Chemistry</i> , 2015 , 54, 3600-7	5.1	57
165	Fabrication and Characterization of High-Conductivity Bilayer Electrolytes for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 2402-2408	3.8	57
164	Thermo-Chemical Expansion in Strontium-Doped Lanthanum Cobalt Iron Oxide. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 4115-4121	3.8	55
163	Rational design of lower-temperature solid oxide fuel cell cathodes via nanotailoring of co-assembled composite structures. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 13463-7	16.4	53
162	Effect of composition and microstructure on electrical properties and CO ₂ stability of donor-doped, proton conducting BaCe _{1-x} (x+y)Zr _x Nb _y O ₃ . <i>Journal of Materials Chemistry A</i> , 2014 , 2, 2363	13	52
161	Interfacial modification of La _{0.80} Sr _{0.20} MnO ₃ /Er _{0.4} Bi _{1.6} O ₃ cathodes for high performance lower temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2012 , 220, 324-330	8.9	51
160	Gd _{0.1} Ce _{0.9} O _{1.95} /Er _{0.4} Bi _{1.6} O ₃ bilayered electrolytes fabricated by a simple colloidal route using nano-sized Er _{0.4} Bi _{1.6} O ₃ powders for high performance low temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2012 , 205, 122-128	8.9	49
159	Non-Nernstian planar sensors based on YSZ with a Nb ₂ O ₅ electrode. <i>Sensors and Actuators B: Chemical</i> , 2008 , 129, 591-598	8.5	49

158	Nanoscale cathode modification for high performance and stable low-temperature solid oxide fuel cells (SOFCs). <i>Nano Energy</i> , 2018 , 49, 186-192	17.1	48
157	Performance of anode-supported solid oxide fuel cell using novel ceria electrolyte. <i>Journal of Power Sources</i> , 2010 , 195, 2131-2135	8.9	48
156	Sensing properties and selectivities of a WO ₃ /YSZ/Pt potentiometric NO _x sensor. <i>Sensors and Actuators B: Chemical</i> , 2007 , 122, 644-652	8.5	48
155	Hydrogen-Permeable Tubular Membrane Reactor: Promoting Conversion and Product Selectivity for Non-Oxidative Activation of Methane over an Fe ²⁺ SiO Catalyst. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 16149-16152	16.4	47
154	Bismuth-Ruthenate-Based Cathodes for IT-SOFCs. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A7873-9	3.9	46
153	Silver-Bismuth oxide cathodes for IT-SOFCs; Part I [Microstructural instability. <i>Solid State Ionics</i> , 2007 , 178, 1242-1247	3.3	45
152	Stable and high conductivity ceria/bismuth oxide bilayer electrolytes for lower temperature solid oxide fuel cells. <i>Ionics</i> , 2006 , 12, 15-20	2.7	43
151	Modeling of Ordered Structures of Phase-Stabilized Cubic Bismuth Oxides. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 1964-1968	3.8	43
150	Functionally Graded Bismuth Oxide/Zirconia Bilayer Electrolytes for High-Performance Intermediate-Temperature Solid Oxide Fuel Cells (IT-SOFCs). <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8443-8449	9.5	42
149	Hydrogen permeation through thin supported SrCe _{0.7} Zr _{0.2} Eu _{0.1} O ₃ membranes; dependence of flux on defect equilibria and operating conditions. <i>Journal of Membrane Science</i> , 2011 , 381, 126-131	9.6	42
148	Proton conduction in acceptor doped SnP ₂ O ₇ . <i>Solid State Ionics</i> , 2011 , 183, 26-31	3.3	42
147	Highly functional nano-scale stabilized bismuth oxides via reverse strike co-precipitation for solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6199	13	40
146	Mixed ionic-electronic conductor enabled effective cathode-electrolyte interface in all solid state batteries. <i>Nano Energy</i> , 2018 , 50, 393-400	17.1	40
145	Comprehensive quantification of Ni _{0.1} d _{0.1} Ce _{0.9} O _{1.95} anode functional layer microstructures by three-dimensional reconstruction using a FIB/SEM dual beam system. <i>Journal of Power Sources</i> , 2013 , 228, 220-228	8.9	39
144	High temperature SrCe _{0.9} Eu _{0.1} O ₃ proton conducting membrane reactor for H ₂ production using the water-gas shift reaction. <i>Applied Catalysis B: Environmental</i> , 2009 , 92, 234-239	21.8	39
143	NO _x adsorption behavior of LaFeO ₃ and LaMnO ₃ and its influence on potentiometric sensor response. <i>Sensors and Actuators B: Chemical</i> , 2011 , 158, 159-170	8.5	39
142	A critical assessment of interatomic potentials for ceria with application to its elastic properties. <i>Solid State Ionics</i> , 2010 , 181, 551-556	3.3	39
141	Effect of ruthenium-loading on the catalytic activity of Ru-NaZSM-5 zeolites for nitrous oxide decomposition. <i>Applied Catalysis B: Environmental</i> , 1995 , 6, 21-33	21.8	39

140	The effect of La ₂ CuO ₄ sensing electrode thickness on a potentiometric NO _x sensor response. <i>Sensors and Actuators B: Chemical</i> , 2011 , 157, 353-360	8.5	37
139	Effect of dopant polarizability on oxygen sublattice order in phase-stabilized cubic bismuth oxides. <i>Ionics</i> , 2001 , 7, 1-6	2.7	37
138	Structural Investigation of Monoclinic-Rhombohedral Phase Transition in Na ₃ Zr ₂ Si ₂ PO ₁₂ and Doped NASICON. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 2902-2907	3.8	36
137	Vacancy-Ordered Structure of Cubic Bismuth Oxide from Simulation and Crystallographic Analysis. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 2349-2356	3.8	36
136	Role of nanostructures on SOFC performance at reduced temperatures. <i>MRS Bulletin</i> , 2014 , 39, 783-791	3.2	35
135	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood 2019 , 1, 354-361		34
134	Highly Li-Stuffed Garnet-Type Li _{7+x} La ₃ Zr _{2-x} Y _x O ₁₂ . <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1248-A1255	3.9	34
133	Bimodally integrated anode functional layer for lower temperature solid oxide fuel cells. <i>Journal of Materials Chemistry</i> , 2012 , 22, 17113		33
132	Continuum-Level Analytical Model for Solid Oxide Fuel Cells with Mixed Conducting Electrolytes. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B1030	3.9	31
131	Hydrogen permeation through thin supported SrZr _{0.2} Ce _{0.8} Eu _x O ₃ membranes. <i>Journal of Membrane Science</i> , 2009 , 345, 1-4	9.6	31
130	NO ₂ /NO response of Cr ₂ O ₃ - and SnO ₂ -based potentiometric sensors and temperature-programmed reaction evaluation of the sensor elements. <i>Sensors and Actuators B: Chemical</i> , 2007 , 123, 915-921	8.5	31
129	High-Performance Composite Bi ₂ Ru ₂ O ₇ Bi _{1.6} Er _{0.4} O ₃ Cathodes for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2008 , 155, B135	3.9	30
128	Stoichiometry of the LaFeO ₃ (010) surface determined from first-principles and thermodynamic calculations. <i>Physical Review B</i> , 2011 , 83,	3.3	29
127	Isotopic-switching analysis of oxygen reduction in solid oxide fuel cell cathode materials. <i>Solid State Ionics</i> , 2010 , 181, 338-347	3.3	29
126	Improving microstructural quantification in FIB/SEM nanotomography. <i>Ultramicroscopy</i> , 2018 , 184, 24-38	3.1	29
125	Feasibility of low temperature solid oxide fuel cells operating on reformed hydrocarbon fuels. <i>Journal of Materials Chemistry</i> , 2012 , 22, 22405		28
124	Silver-Bismuth oxide cathodes for IT-SOFCs Part II Improving stability through microstructural control. <i>Solid State Ionics</i> , 2007 , 178, 1411-1418	3.3	27
123	Bismuth Ruthenate-Stabilized Bismuth Oxide Composite Cathodes for IT-SOFC. <i>Journal of the Electrochemical Society</i> , 2007 , 154, B1088	3.9	27

122	Effect of La ₂ CuO ₄ electrode area on potentiometric NO _x sensor response and its implications on sensing mechanism. <i>Sensors and Actuators B: Chemical</i> , 2011 , 158, 304-312	8.5	26
121	Temperature-Programmed Reaction and Desorption of the Sensor Elements of a WO ₃ /SnO ₂ /Pt Potentiometric Sensor. <i>Journal of the Electrochemical Society</i> , 2006 , 153, H115	3.9	26
120	Microwave-assisted NO reduction by methane over Co-ZSM-5 zeolites. <i>Catalysis Letters</i> , 1999 , 57, 187-191	26	
119	Stable Mixed-Conducting Bilayer Membranes for Direct Conversion of Methane to Syngas. <i>Journal of the Electrochemical Society</i> , 2002 , 149, A242	3.9	25
118	Fabrication of organic-inorganic perovskite thin films for planar solar cells via pulsed laser deposition. <i>AIP Advances</i> , 2016 , 6, 015001	1.5	25
117	Chromium Poisoning Effects on Surface Exchange Kinetics of LaSrCoFeO. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 16660-16668	9.5	24
116	Effect of Annealing Temperature and Dopant Concentration on the Conductivity Behavior in (Dy _{0.15}) _x (WO ₃) _y (Bi _{0.15}) _{1-x-y} . <i>Journal of the American Ceramic Society</i> , 2010 , 93, 1384	3.8	24
115	Nanointegrated, High-Performing Cobalt-Free Bismuth-Based Composite Cathode for Low-Temperature Solid Oxide Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 28635-28643	9.5	23
114	Effect of Excess Li on the Structural and Electrical Properties of Garnet-Type Li ₆ La ₃ Ta _{1.5} Y _{0.5} O ₁₂ . <i>Journal of the Electrochemical Society</i> , 2015 , 162, A1772-A1777	3.9	22
113	Microstructure and Connectivity Quantification of Complex Composite Solid Oxide Fuel Cell Electrode Three-Dimensional Networks. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 620-627	3.8	22
112	Effect of Electrode Microstructure on the Sensitivity and Response Time of Potentiometric NO _x Sensors. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 2024-2031	3.8	22
111	Stannate-Based Ceramic Oxide as Anode Materials for Oxide-Ion Conducting Low-Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F1198-F1205	3.9	22
110	Hydrogen-Permeable Tubular Membrane Reactor: Promoting Conversion and Product Selectivity for Non-Oxidative Activation of Methane over an Fe/SiO ₂ Catalyst. <i>Angewandte Chemie</i> , 2016 , 128, 16383-16386	3.6	21
109	Mechanistic Understanding of Cr Poisoning on La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} (LSCF). <i>ECS Transactions</i> , 2009 , 25, 2871-2879	1	21
108	Influence of Adsorption and Catalytic Reaction on Sensing Properties of a Potentiometric La ₂ CuO ₄ /SnO ₂ /Pt Sensor. <i>Journal of the Electrochemical Society</i> , 2007 , 154, J190	3.9	21
107	Pb ₂ Ru ₂ O _{6.5} as a Low-Temperature Cathode for Bismuth Oxide Electrolytes. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A2300	3.9	21
106	Schottky barrier formed by network of screw dislocations in SrTiO ₃ . <i>Applied Physics Letters</i> , 2005 , 87, 162105	3.4	21
105	Effect of nanocomposite Au/SnO ₂ electrodes on potentiometric sensor response to NO _x and CO. <i>Sensors and Actuators B: Chemical</i> , 2013 , 181, 312-318	8.5	20

104	Enhanced long-term stability of bismuth oxide-based electrolytes for operation at 500 °C. <i>Ionics</i> , 2010 , 16, 97-103	2.7	20
103	Characterization of Lanthanum Zirconate Formation at the A-Site-Deficient Strontium-Doped Lanthanum Manganite Cathode/Yttrium-Stabilized Zirconia Electrolyte Interface of Solid Oxide Fuel Cells. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 2670-2675	3.8	20
102	Long-Term Cr Poisoning Effect on LSCF-GDC Composite Cathodes Sintered at Different Temperatures. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F1091-F1099	3.9	19
101	Oxygen Dissociation Kinetics of Concurrent Heterogeneous Reactions on Metal Oxides. <i>ACS Catalysis</i> , 2017 , 7, 5766-5772	13.1	19
100	Fabrication of Thin-Film SrCe _{0.9} Eu _{0.1} O ₃ Hydrogen Separation Membranes on Ni ₈ BrCeO ₃ Porous Tubular Supports. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 1849-1852	3.8	19
99	Effect of ionic polarizability on oxygen diffusion in Bi ₂ O ₃ from atomistic simulation. <i>Ionics</i> , 2010 , 16, 297-303	2.7	19
98	Applicability of Bi ₂ Ru ₂ O ₇ Pyrochlore Electrodes for ESB and BIMEVOX Electrolytes. <i>Journal of the Electrochemical Society</i> , 2006 , 153, A2232	3.9	19
97	Direct current bias studies on (Bi ₂ O ₃) _{0.8} (Er ₂ O ₃) _{0.2} electrolyte and Ag(Bi ₂ O ₃) _{0.8} (Er ₂ O ₃) _{0.2} cermet electrode. <i>Solid State Ionics</i> , 2006 , 177, 677-685	3.3	19
96	Structural stability and conductivity of cubic (WO ₃) _x - (Dy ₂ O ₃) _y - (Bi ₂ O ₃) _{1-x-y} . <i>Ionics</i> , 2002 , 8, 210-214	2.7	19
95	Reaction Kinetics of Gas/Solid Exchange Using Gas Phase Isotopic Oxygen Exchange. <i>ACS Catalysis</i> , 2016 , 6, 6025-6032	13.1	19
94	Electrochemical Stability of Garnet-Type Li ₇ La _{2.75} Ca _{0.25} Zr _{1.75} Nb _{0.25} O ₁₂ with and without Atomic Layer Deposited-Al ₂ O ₃ under CO ₂ and Humidity. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1844-A1852	3.9	18
93	Dysprosium and Gadolinium Double Doped Bismuth Oxide Electrolytes for Low Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F411-F415	3.9	18
92	SrCe _{0.7} Zr _{0.2} Eu _{0.1} O ₃ -based hydrogen transport water gas shift reactor. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 16006-16012	6.7	18
91	Durability of (La _{0.8} Sr _{0.2}) _{0.95} MnO ₃ -(Er _{0.2} Bi _{0.8}) ₂ O ₃ composite cathodes for low temperature SOFCs. <i>Journal of Power Sources</i> , 2017 , 360, 391-398	8.9	17
90	Effect of Ni-Gd _{0.1} Ce _{0.9} O _{1.95} Anode Functional Layer Composition on Performance of Lower Temperature SOFCs. <i>Journal of the Electrochemical Society</i> , 2012 , 159, F187-F193	3.9	17
89	Solid Oxide Fuel Cell Commercialization, Research, and Challenges. <i>Electrochemical Society Interface</i> , 2009 , 18, 38-43	3.6	17
88	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	16
87	Liquids-to-Power Using Low-Temperature Solid Oxide Fuel Cells. <i>Energy Technology</i> , 2019 , 7, 20-32	3.5	15

86	Lower Temperature Electrolytic Reduction of CO ₂ to O ₂ and CO with High-Conductivity Solid Oxide Bilayer Electrolytes. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A1654	3.9	15
85	Investigation on Sr _{0.2} Na _{0.8} Nb _{1-x} V _x O ₃ (x=0.1, 0.2, 0.3) as new ceramic anode materials for low-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2017 , 347, 277-282	8.9	14
84	Direct observation of enhanced water and carbon dioxide reactivity on multivalent metal oxides and their composites. <i>Energy and Environmental Science</i> , 2017 , 10, 919-923	35.4	14
83	Enhanced oxygen reduction reaction with nano-scale pyrochlore bismuth ruthenate via cost-effective wet-chemical synthesis. <i>RSC Advances</i> , 2013 , 3, 19866	3.7	14
82	Carbon dioxide reforming of methane in a SrCe _{0.7} Zr _{0.2} Eu _{0.1} O ₃ proton conducting membrane reactor. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 19125-19132	6.7	14
81	Novel Y _{2-x} Pr _x Ru ₂ O ₇ (x=0-1) Pyrochlore Oxides Prepared Using a Soft Chemistry Route and their Electrical Properties. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 1970	3.8	14
80	Stability of SrCe _{1-x} Zr _x O ₃ under Water Gas Shift Reaction Conditions. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B383	3.9	14
79	Structure of Bi ₂ O ₃ from density functional theory: A systematic crystallographic analysis. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 1222-1228	3.3	14
78	Stabilization Mechanisms of LaFeO ₃ (010) Surfaces Determined with First Principles Calculations. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 1931-1939	3.8	13
77	La ₂ CuO ₄ sensing electrode configuration influence on sensitivity and selectivity for a multifunctional potentiometric gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2011 , 160, 957-963	8.5	13
76	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	13
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