Eric D Wachsman

List of Publications by Year
in descending order

222 papers	16,793 citations	29994 54 h-index	16127 124 g-index
225 all docs	225 docs citations	225 times ranked	11099 citing authors

#	Article	IF	Citations
1	Lowering the Temperature of Solid Oxide Fuel Cells. Science, 2011, 334, 935-939.	6.0	2,034
2	Negating interfacial impedance in garnet-based solid-state Li metal batteries. Nature Materials, 2017, 16, 572-579.	13.3	1,583
3	Flexible, solid-state, ion-conducting membrane with 3D garnet nanofiber networks for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7094-7099.	3.3	769
4	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. Chemical Reviews, 2020, 120, 4257-4300.	23.0	655
5	Toward garnet electrolyteâ€"based Li metal batteries: An ultrathin, highly effective, artificial solid-state electrolyte/metallic Li interface. Science Advances, 2017, 3, e1601659.	4.7	647
6	Conformal, Nanoscale ZnO Surface Modification of Garnet-Based Solid-State Electrolyte for Lithium Metal Anodes. Nano Letters, 2017, 17, 565-571.	4.5	556
7	Transition from Superlithiophobicity to Superlithiophilicity of Garnet Solid-State Electrolyte. Journal of the American Chemical Society, 2016, 138, 12258-12262.	6.6	548
8	Reducing Interfacial Resistance between Garnetâ€Structured Solidâ€State Electrolyte and Liâ€Metal Anode by a Germanium Layer. Advanced Materials, 2017, 29, 1606042.	11.1	512
9	Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metalâ€"sulfur batteries. Energy and Environmental Science, 2017, 10, 1568-1575.	15.6	499
10	Role of solid oxidefuel cells in a balanced energy strategy. Energy and Environmental Science, 2012, 5, 5498-5509.	15.6	272
11	Continuous plating/stripping behavior of solid-state lithium metal anode in a 3D ion-conductive framework. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3770-3775.	3.3	250
12	Garnet Solid Electrolyte Protected Li-Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18809-18815.	4.0	247
13	3Dâ€Printing Electrolytes for Solidâ€State Batteries. Advanced Materials, 2018, 30, e1707132.	11.1	236
14	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. Materials Today, 2019, 22, 50-57.	8.3	233
15	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. ACS Energy Letters, 0, , 1399-1404.	8.8	228
16	Transient Behavior of the Metal Interface in Lithium Metalâ€"Garnet Batteries. Angewandte Chemie - International Edition, 2017, 56, 14942-14947.	7.2	227
17	Higher conductivity Sm3+ and Nd3+ co-doped ceria-based electrolyte materials. Solid State Ionics, 2008, 178, 1890-1897.	1.3	191
18	Mechanism of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O₃ cathode degradation. Journal of Materials Research, 2012, 27, 1992-1999.	1.2	189

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19	Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. Advanced Energy Materials, 2018, 8, 1701963.	10.2	186
20	Three-Dimensional, Solid-State Mixed Electronâ€“Ion Conductive Framework for Lithium Metal Anode. Nano Letters, 2018, 18, 3926-3933.	4.5	175
21	Crystal Structureâ€“Ionic Conductivity Relationships in Doped Ceria Systems. Journal of the American Ceramic Society, 2009, 92, 2674-2681.	1.9	172
22	In Situ Neutron Depth Profiling of Lithium Metalâ€“Garnet Interfaces for Solid State Batteries. Journal of the American Chemical Society, 2017, 139, 14257-14264.	6.6	154
23	Structural Stability and Conductivity of Phaseâ€Stabilized Cubic Bismuth Oxides. Journal of the American Ceramic Society, 1999, 82, 3057-3064.	1.9	144
24	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. Materials Today, 2018, 21, 594-601.	8.3	134
25	Effect of total dopant concentration and dopant ratio on conductivity of (DyO1.5) â€“(WO3) â€“(BiO1.5)1â”â”. Acta Materialia, 2010, 58, 355-363.	3.8	129
26	Low-temperature solid-oxide fuel cells. MRS Bulletin, 2014, 39, 773-779.	1.7	127
27	Effect of cure history on the morphology of polyimide: Fluorescence spectroscopy as a method for determining the degree of cure. Polymer, 1988, 29, 1191-1197.	1.8	117
28	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. Energy Storage Materials, 2018, 14, 376-382.	9.5	114
29	High-performance bilayered electrolyte intermediate temperature solid oxide fuel cells. Electrochemistry Communications, 2009, 11, 1504-1507.	2.3	109
30	Improving the ionic conductivity of NASICON through aliovalent cation substitution of Na3Zr2Si2PO12. Ionics, 2015, 21, 3031-3038.	1.2	109
31	Higher ionic conductive ceria-based electrolytes for solid oxide fuel cells. Applied Physics Letters, 2007, 91, .	1.5	108
32	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. Energy Storage Materials, 2018, 15, 458-464.	9.5	108
33	The effect of oxygen vacancy concentration on the elastic modulus of fluorite-structured oxides. Solid State Ionics, 2007, 178, 53-58.	1.3	107
34	Ionic conduction in zirconia films of nanometer thickness. Acta Materialia, 2005, 53, 5161-5166.	3.8	103
35	Dependence of open-circuit potential and power density on electrolyte thickness in solid oxide fuel cells with mixed conducting electrolytes. Journal of Power Sources, 2011, 196, 2445-2451.	4.0	90
36	Rapid Thermal Annealing of Cathode-Garnet Interface toward High-Temperature Solid State Batteries. Nano Letters, 2017, 17, 4917-4923.	4.5	89

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37	Free-Standing Na_{2/3}Fe_{1/2}Mn_{1/2}O₂@Graphene Film for a Sodium-Ion Battery Cathode. ACS Applied Materials & Interfaces, 2014, 6, 4242-4247.	4.0	88
38	Effect of A and B-site cations on surface exchange coefficient for ABO3 perovskite materials. Physical Chemistry Chemical Physics, 2013, 15, 2298.	1.3	84
39	Effect of Crystal Imperfections on Reactivity and Photoreactivity of TiO₂ (Rutile) with Oxygen, Water, and Bacteria. Journal of Physical Chemistry C, 2011, 115, 15711-15738.	1.5	82
40	Effect of oxygen sublattice order on conductivity in highly defective fluorite oxides. Journal of the European Ceramic Society, 2004, 24, 1281-1285.	2.8	80
41	Nanoscale cathode modification for high performance and stable low-temperature solid oxide fuel cells (SOFCs). Nano Energy, 2018, 49, 186-192.	8.2	80
42	Defect chemistry modeling of high-temperature proton-conducting cerates. Solid State Ionics, 2002, 149, 1-10.	1.3	78
43	Performance of La0.1Sr0.9Co0.8Fe0.2O3â^' and La0.1Sr0.9Co0.8Fe0.2O3â^'â€“Ce0.9Gd0.1O2 oxygen electrodes with Ce0.9Gd0.1O2 barrier layer in reversible solid oxide fuel cells. Journal of Power Sources, 2013, 239, 361-373.	4.0	78
44	Role of Point Defects in the Physical Properties of Fluorite Oxides. Journal of the American Ceramic Society, 2006, 89, 3162-3166.	1.9	74
45	Stabilizing the Garnet Solid-Electrolyte/Polysulfide Interface in Liâ€“S Batteries. Chemistry of Materials, 2017, 29, 8037-8041.	3.2	73
46	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood. , 2019, 1, 354-361.		72
47	The evolution of low temperature solid oxide fuel cells. Journal of Materials Research, 2012, 27, 2063-2078.	1.2	70
48	Highly Conductive Li Garnets by a Multielement Doping Strategy. Inorganic Chemistry, 2015, 54, 3600-3607.	1.9	70
49	Effect of composition and microstructure on electrical properties and CO2 stability of donor-doped, proton conducting BaCe1â^'(x+y)ZrxNbyO3. Journal of Materials Chemistry A, 2014, 2, 2363.	5.2	64
50	Hydrogenâ€Permeable Tubular Membrane Reactor: Promoting Conversion and Product Selectivity for Nonâ€Oxidative Activation of Methane over an FeÂ©SiO₂ Catalyst. Angewandte Chemie - International Edition, 2016, 55, 16149-16152.	7.2	64
51	Structural Investigation of Monoclinicâ€Rhombohedral Phase Transition in Na₃Zr₂Si₂PO₁₂ and Doped <scp>NASICON</scp>. Journal of the American Ceramic Society, 2015, 98, 2902-2907.	1.9	62
52	Thermoâ€Chemical Expansion in Strontiumâ€Doped Lanthanum Cobalt Iron Oxide. Journal of the American Ceramic Society, 2010, 93, 4115-4121.	1.9	61
53	Rational Design of Lowerâ€Temperature Solid Oxide Fuel Cell Cathodes via Nanotailoring of Coâ€Assembled Composite Structures. Angewandte Chemie - International Edition, 2014, 53, 13463-13467.	7.2	61
54	Fabrication and Characterization of High-Conductivity Bilayer Electrolytes for Intermediate-Temperature Solid Oxide Fuel Cells. Journal of the American Ceramic Society, 2005, 88, 2402-2408.	1.9	60

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55	Functionally Graded Bismuth Oxide/Zirconia Bilayer Electrolytes for High-Performance Intermediate-Temperature Solid Oxide Fuel Cells (IT-SOFCs). ACS Applied Materials & Interfaces, 2017, 9, 8443-8449.	4.0	58
56	Interfacial modification of La0.80Sr0.20MnO3â^'Î´â€“Er0.4Bi0.6O3 cathodes for high performance lower temperature solid oxide fuel cells. Journal of Power Sources, 2012, 220, 324-330.	4.0	55
57	Gd0.1Ce0.9O1.95/Er0.4Bi1.6O3 bilayered electrolytes fabricated by a simple colloidal route using nano-sized Er0.4Bi1.6O3 powders for high performance low temperature solid oxide fuel cells. Journal of Power Sources, 2012, 205, 122-128.	4.0	55
58	Modeling of Ordered Structures of Phaseâ€Stabilized Cubic Bismuth Oxides. Journal of the American Ceramic Society, 2000, 83, 1964-1968.	1.9	54
59	Proton conduction in acceptor doped SnP2O7. Solid State Ionics, 2011, 183, 26-31.	1.3	54
60	Non-Nernstian planar sensors based on YSZ with a Nb2O5 electrode. Sensors and Actuators B: Chemical, 2008, 129, 591-598.	4.0	53
61	Performance of anode-supported solid oxide fuel cell using novel ceria electrolyte. Journal of Power Sources, 2010, 195, 2131-2135.	4.0	53
62	Transition from perovskite to misfit-layered structure materials: a highly oxygen deficient and stable oxygen electrode catalyst. Energy and Environmental Science, 2021, 14, 2472-2484.	15.6	53
63	Mixed ionic-electronic conductor enabled effective cathode-electrolyte interface in all solid state batteries. Nano Energy, 2018, 50, 393-400.	8.2	52
64	Sensing properties and selectivities of a WO3/YSZ/Pt potentiometric NOx sensor. Sensors and Actuators B: Chemical, 2007, 122, 644-652.	4.0	51
65	Effect of dopant polarizability on oxygen sublattice order in phase-stabilized cubic bismuth oxides. Ionics, 2001, 7, 1-6.	1.2	49
66	Silverâ€“bismuth oxide cathodes for IT-SOFCs; Part I â€” Microstructural instability. Solid State Ionics, 2007, 178, 1242-1247.	1.3	48
67	Hydrogen permeation through thin supported SrCe0.7Zr0.2Eu0.1O3â^'Î´ membranes; dependence of flux on defect equilibria and operating conditions. Journal of Membrane Science, 2011, 381, 126-131.	4.1	48
68	Role of nanostructures on SOFC performance at reduced temperatures. MRS Bulletin, 2014, 39, 783-791.	1.7	48
69	Bismuth-Ruthenate-Based Cathodes for IT-SOFCs. Journal of the Electrochemical Society, 2005, 152, A787.	1.3	47
70	Stable and high conductivity ceria/bismuth oxide bilayer electrolytes for lower temperature solid oxide fuel cells. Ionics, 2006, 12, 15-20.	1.2	47
71	High temperature SrCe0.9Eu0.1O3â^'Î´ proton conducting membrane reactor for H2 production using the waterâ€“gas shift reaction. Applied Catalysis B: Environmental, 2009, 92, 234-239.	10.8	46
72	Comprehensive quantification of Niâ€“Gd0.1Ce0.9O1.95 anode functional layer microstructures by three-dimensional reconstruction using a FIB/SEM dual beam system. Journal of Power Sources, 2013, 228, 220-228.	4.0	46

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73	Vacancyâ€Ordered Structure of Cubic Bismuth Oxide from Simulation and Crystallographic Analysis. Journal of the American Ceramic Society, 2008, 91, 2349-2356.	1.9	45
74	Highly functional nano-scale stabilized bismuth oxides via reverse strike co-precipitation for solid oxide fuel cells. Journal of Materials Chemistry A, 2013, 1, 6199.	5.2	44
75	Improving microstructural quantification in FIB/SEM nanotomography. Ultramicroscopy, 2018, 184, 24-38.	0.8	44
76	NOx adsorption behavior of LaFeO3 and LaMnO3+Î´ and its influence on potentiometric sensor response. Sensors and Actuators B: Chemical, 2011, 158, 159-170.	4.0	43
77	Effect of ruthenium-loading on the catalytic activity of Ru-NaZSM-5 zeolites for nitrous oxide decomposition. Applied Catalysis B: Environmental, 1995, 6, 21-33.	10.8	42
78	A critical assessment of interatomic potentials for ceria with application to its elastic properties. Solid State Ionics, 2010, 181, 551-556.	1.3	42
79	The effect of La2CuO4 sensing electrode thickness on a potentiometric NOx sensor response. Sensors and Actuators B: Chemical, 2011, 157, 353-360.	4.0	41
80	Highly Li-Stuffed Garnet-Type Li_{7+x}La₃Zr_{2-x}Y_xO₁₂. Journal of the Electrochemical Society, 2013, 160, A1248-A1255.	1.3	40
81	Bimodally integrated anode functional layer for lower temperature solid oxide fuel cells. Journal of Materials Chemistry, 2012, 22, 17113.	6.7	38
82	Continuum-Level Analytical Model for Solid Oxide Fuel Cells with Mixed Conducting Electrolytes. Journal of the Electrochemical Society, 2009, 156, B1030.	1.3	36
83	Microwave-assisted NO reduction by methane over Co-ZSM-5 zeolites. Catalysis Letters, 1999, 57, 187-191.	1.4	35
84	Hydrogen permeation through thin supported SrZr0.2Ce0.8â^'xEuxO3â^'Î´ membranes. Journal of Membrane Science, 2009, 345, 1-4.	4.1	35
85	Dysprosium and Gadolinium Double Doped Bismuth Oxide Electrolytes for Low Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F411-F415.	1.3	35
86	Enhanced long-term stability of bismuth oxide-based electrolytes for operation at 500ÂÂ°C. Ionics, 2010, 16, 97-103.	1.2	34
87	Chromium Poisoning Effects on Surface Exchange Kinetics of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3â^'Î´}. ACS Applied Materials & Interfaces, 2017, 9, 16660-16668.	4.0	34
88	NO2/NO response of Cr2O3- and SnO2-based potentiometric sensors and temperature-programmed reaction evaluation of the sensor elements. Sensors and Actuators B: Chemical, 2007, 123, 915-921.	4.0	33
89	High-Performance Composite Bi[sub 2]Ru[sub 2]O[sub 7]â€“Bi[sub 1.6]Er[sub 0.4]O[sub 3] Cathodes for Intermediate-Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2008, 155, B135.	1.3	33
90	Isotopic-switching analysis of oxygen reduction in solid oxide fuel cell cathode materials. Solid State Ionics, 2010, 181, 338-347.	1.3	33

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91	Stoichiometry of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">LaFeO</mml:mi><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>(01 surface determined from first-principles and thermodynamic calculations. Physical Review B, 2011, 83, .	1.1	33
92	Effect of Excess Li on the Structural and Electrical Properties of Garnet-Type Li₆La₃Ta_{1.5}Y_{0.5}O₁₂. Journal of the Electrochemical Society, 2015, 162, A1772-A1777.	1.3	33
93	Fabrication of organic-inorganic perovskite thin films for planar solar cells via pulsed laser deposition. AIP Advances, 2016, 6, 015001.	0.6	32
94	Bismuth Ruthenate-Stabilized Bismuth Oxide Composite Cathodes for IT-SOFC. Journal of the Electrochemical Society, 2007, 154, B1088.	1.3	31
95	Feasibility of low temperature solid oxide fuel cells operating on reformed hydrocarbon fuels. Journal of Materials Chemistry, 2012, 22, 22405.	6.7	31
96	Nanointegrated, High-Performing Cobalt-Free Bismuth-Based Composite Cathode for Low-Temperature Solid Oxide Fuel Cells. ACS Applied Materials & Interfaces, 2018, 10, 28635-28643.	4.0	31
97	Computation-guided discovery of coating materials to stabilize the interface between lithium garnet solid electrolyte and high-energy cathodes for all-solid-state lithium batteries. Energy Storage Materials, 2021, 41, 571-580.	9.5	31
98	Temperature-Programmed Reaction and Desorption of the Sensor Elements of a WO[sub 3]âˆ•YSZâˆ•Pt Potentiometric Sensor. Journal of the Electrochemical Society, 2006, 153, H115.	1.3	30
99	Effect of Annealing Temperature and Dopant Concentration on the Conductivity Behavior in (DyO_{1.5})_xâ€“(WO₃)_yâ€“(BiO_{1.5})_{1âˆ’xâˆ’y}. Journal of the American Ceramic Society, 2010, 93, 1384-1391.	1.9	30
100	Stable Mixed-Conducting Bilayer Membranes for Direct Conversion of Methane to Syngas. Journal of the Electrochemical Society, 2002, 149, A242.	1.3	29
101	Effect of La2CuO4 electrode area on potentiometric NOx sensor response and its implications on sensing mechanism. Sensors and Actuators B: Chemical, 2011, 158, 304-312.	4.0	29
102	Amorphous-Carbon-Coated 3D Solid Electrolyte for an Electro-Chemomechanically Stable Lithium Metal Anode in Solid-State Batteries. Nano Letters, 2021, 21, 6163-6170.	4.5	29
103	Silverâ€“bismuth oxide cathodes for IT-SOFCsPart II â€” Improving stability through microstructural control. Solid State Ionics, 2007, 178, 1411-1418.	1.3	28
104	Effect of Electrode Microstructure on the Sensitivity and Response Time of Potentiometric NO_X Sensors. Journal of the American Ceramic Society, 2008, 91, 2024-2031.	1.9	27
105	Reaction Kinetics of Gasâ€“Solid Exchange Using Gas Phase Isotopic Oxygen Exchange. ACS Catalysis, 2016, 6, 6025-6032.	5.5	27
106	Hydrogenâ€Permeable Tubular Membrane Reactor: Promoting Conversion and Product Selectivity for Nonâ€Oxidative Activation of Methane over an FeÂ©SiO₂ Catalyst. Angewandte Chemie, 2016, 128, 16383-16386.	1.6	27
107	Microstructure and Connectivity Quantification of Complex Composite Solid Oxide Fuel Cell Electrode Threeâ€Dimensional Networks. Journal of the American Ceramic Society, 2011, 94, 620-627.	1.9	26
108	Long-Term Cr Poisoning Effect on LSCF-GDC Composite Cathodes Sintered at Different Temperatures. Journal of the Electrochemical Society, 2016, 163, F1091-F1099.	1.3	26

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109	Oxygen Dissociation Kinetics of Concurrent Heterogeneous Reactions on Metal Oxides. ACS Catalysis, 2017, 7, 5766-5772.	5.5	26
110	Applicability of Bi[sub 2]Ru[sub 2]O[sub 7] Pyrochlore Electrodes for ESB and BIMEVOX Electrolytes. Journal of the Electrochemical Society, 2006, 153, A2232.	1.3	25
111	Effect of ionic polarizability on oxygen diffusion in Î´-Bi2O3 from atomistic simulation. Ionics, 2010, 16, 297-303.	1.2	25
112	Effect of nanocomposite Auâ€“YSZ electrodes on potentiometric sensor response to NO and CO. Sensors and Actuators B: Chemical, 2013, 181, 312-318.	4.0	25
113	Durability of (La0.8Sr0.2)0.95MnO3-Î´-(Er0.2Bi0.8)2O3 composite cathodes for low temperature SOFCs. Journal of Power Sources, 2017, 360, 391-398.	4.0	25
114	Liquidsâ€toâ€Power Using Lowâ€Temperature Solid Oxide Fuel Cells. Energy Technology, 2019, 7, 20-32.	1.8	25
115	Probing the Mechanical Properties of a Doped Li₇La₃Zr₂O₁₂ Garnet Thin Electrolyte for Solid-State Batteries. ACS Applied Materials & Interfaces, 2020, 12, 24693-24700.	4.0	24
116	Triple perovskite structured Nd1.5Ba1.5CoFeMnO9â€™ oxygen electrode materials for highly efficient and stable reversible protonic ceramic cells. Journal of Power Sources, 2021, 510, 230409.	4.0	24
117	Influence of Adsorption and Catalytic Reaction on Sensing Properties of a Potentiometric La[sub 2]CuO[sub 4]â€•YSZâ€•Pt Sensor. Journal of the Electrochemical Society, 2007, 154, J190.	1.3	23
118	Mechanistic Understanding of Cr Poisoning on La0.6Sr0.4Co0.2Fe0.8O3-Î´ (LSCF). ECS Transactions, 2009, 25, 2871-2879.	0.3	23
119	Stannate-Based Ceramic Oxide as Anode Materials for Oxide-Ion Conducting Low-Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F1198-F1205.	1.3	23
120	Pb[sub 2]Ru[sub 2]O[sub 6.5] as a Low-Temperature Cathode for Bismuth Oxide Electrolytes. Journal of the Electrochemical Society, 2005, 152, A2300.	1.3	22
121	Schottky barrier formed by network of screw dislocations in SrTiO3. Applied Physics Letters, 2005, 87, 162105.	1.5	22
122	Direct current bias studies on (Bi2O3)0.8(Er2O3)0.2 electrolyte and Agâ€“(Bi2O3)0.8(Er2O3)0.2 cermet electrode. Solid State Ionics, 2006, 177, 677-685.	1.3	22
123	Characterization of Lanthanum Zirconate Formation at the Aâ€Siteâ€Deficient Strontiumâ€Doped Lanthanum Manganite Cathode/Yttriumâ€Stabilized Zirconia Electrolyte Interface of Solid Oxide Fuel Cells. Journal of the American Ceramic Society, 2008, 91, 2670-2675.	1.9	22
124	Electrochemical Stability of Garnet-Type Li₇La_{2.75}Ca_{0.25}Zr_{1.75}Nb_{0.25}O₁₂Âwith and without Atomic Layer Deposited-Al₂O₃Âunder CO₂ and Humidity. Journal of the Electrochemical Society, 2019, 166, A1844-A1852.	1.3	22
125	The Effects of Constriction Factor and Geometric Tortuosity on Liâ€Ion Transport in Porous Solidâ€State Liâ€Ion Electrolytes. Advanced Functional Materials, 2020, 30, 1910362.	7.8	22
126	Lower Temperature Electrolytic Reduction of CO[sub 2] to O[sub 2] and CO with High-Conductivity Solid Oxide Bilayer Electrolytes. Journal of the Electrochemical Society, 2005, 152, A1654.	1.3	21

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127	Fabrication of Thinâ€Film SrCe_{0.9}Eu_{0.1}O_{3â^Î´} Hydrogen Separation Membranes on Niâ€“SrCeO₃ Porous Tubular Supports. Journal of the American Ceramic Society, 2009, 92, 1849-1852.	1.9	21
128	Structural stability and conductivity of cubic (WO3)x - (Dy2O3)y-(Bi2O3)1â^'xâ^'y. Ionics, 2002, 8, 210-214.	1.2	20
129	Novel Y_{2â^'x}Pr_xRu₂O₇ (x=0â€“2) Pyrochlore Oxides Prepared Using a Soft Chemistry Route and their Electrical Properties. Journal of the American Ceramic Society, 2010, 93, 1970-1977.	1.9	19
130	Assessing Substitution Effects on Surface Chemistry by in Situ Ambient Pressure X-ray Photoelectron Spectroscopy on Perovskite Thin Films, BaCe_xZr_{0.9â€“x}Y_{0.1}O_{2.95} (x = 0;) Tj ETQq0 0 0 rgBT /Overloc	4.0	19
131	Highly Sensitive/Selective Miniature Potentiometric Carbon Monoxide Gas Sensors with Titaniaâ€Based Sensing Elements. Journal of the American Ceramic Society, 2010, 93, 1062-1068.	1.9	18
132	Stabilization Mechanisms of LaFeO3 (010) Surfaces Determined with First Principles Calculations. Journal of the American Ceramic Society, 2011, 94, 1931-1939.	1.9	18
133	Effect of Ni-Gd0.1Ce0.9O1.95Anode Functional Layer Composition on Performance of Lower Temperature SOFCs. Journal of the Electrochemical Society, 2012, 159, F187-F193.	1.3	18
134	SrCe0.7Zr0.2Eu0.1O3-based hydrogen transport water gas shift reactor. International Journal of Hydrogen Energy, 2012, 37, 16006-16012.	3.8	18
135	Carbon dioxide reforming of methane in a SrCe0.7Zr0.2Eu0.1O3â^' proton conducting membrane reactor. International Journal of Hydrogen Energy, 2012, 37, 19125-19132.	3.8	18
136	Enhanced oxygen reduction reaction with nano-scale pyrochlore bismuth ruthenate via cost-effective wet-chemical synthesis. RSC Advances, 2013, 3, 19866.	1.7	18
137	Solid Oxide Fuel Cell Commercialization, Research, and Challenges. Electrochemical Society Interface, 2009, 18, 38-43.	0.3	18
138	Structure of Î´-Bi2O3 from density functional theory: A systematic crystallographic analysis. Journal of Solid State Chemistry, 2009, 182, 1222-1228.	1.4	17
139	Titaniaâ€Based Miniature Potentiometric Carbon Monoxide Gas Sensors with High Sensitivity. Journal of the American Ceramic Society, 2010, 93, 742-749.	1.9	17
140	Development of a new ceria/yttria-ceria double-doped bismuth oxide bilayer electrolyte low-temperature SOFC with higher stability. Ionics, 2019, 25, 3153-3164.	1.2	17
141	Investigation on Sr0.2Na0.8Nb1â^'xVxO3 (x=0.1, 0.2, 0.3) as new ceramic anode materials for low-temperature solid oxide fuel cells. Journal of Power Sources, 2017, 347, 277-282.	4.0	16
142	Direct observation of enhanced water and carbon dioxide reactivity on multivalent metal oxides and their composites. Energy and Environmental Science, 2017, 10, 919-923.	15.6	16
143	Dual utilization of greenhouse gases to produce C2+ hydrocarbons and syngas in a hydrogen-permeable membrane reactor. Journal of Membrane Science, 2020, 595, 117557.	4.1	16
144	La2CuO4 sensing electrode configuration influence on sensitivity and selectivity for a multifunctional potentiometric gas sensor. Sensors and Actuators B: Chemical, 2011, 160, 957-963.	4.0	15

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145	Direct Observation of Oxygen Dissociation on Nonâ€Stoichiometric Metal Oxide Catalysts. Angewandte Chemie - International Edition, 2016, 55, 15268-15271.	7.2	15
146	Stability of SrCe[sub 1â^'x]Zr[sub x]O[sub 3â^'Î´] under Water Gas Shift Reaction Conditions. Journal of the Electrochemical Society, 2010, 157, B383.	1.3	14
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