

# Harry L Tuller

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

138  
papers

6,311  
citations

42  
h-index

78  
g-index

151  
ext. papers

7,073  
ext. citations

9.3  
avg, IF

6.24  
L-index

#	Paper	IF	Citations
138	Perspective on the Relationship between the Acidity of Perovskite Oxides and Their Oxygen Surface Exchange Kinetics. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 991-997	9.6	1
137	Silica: ubiquitous poison of metal oxide interfaces. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 2618-2636	13	3
136	Modulation and Modeling of Three-Dimensional Nanowire Assemblies Targeting Gas Sensors with High Response and Reliability (Adv. Funct. Mater. 10/2022). <i>Advanced Functional Materials</i> , <b>2022</b> , 32, 2270065	15.6	
135	The Influence of Cr-Additives on the Polarization Resistance of Praseodymium-Doped Ceria Cathodes for Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , <b>2022</b> , 169, 044530	3.9	1
134	Thin-film chemical expansion of ceria based solid solutions: laser vibrometry study. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>2021</b> ,	3.1	1
133	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection (Adv. Mater. 44/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170350	24	
132	Impact of Oxygen Non-Stoichiometry on Near-Ambient Temperature Ionic Mobility in Polaronic Mixed-Ionic-Electronic Conducting Thin Films. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2005640	15.6	0
131	Active Tuning of Optical Constants in the Visible-UV: Praseodymium-Doped Ceria Model Mixed Ionic-Electronic Conductor. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2001934	8.1	2
130	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection. <i>Advanced Materials</i> , <b>2021</b> , 33, e2105199	24	4
129	Role of Adsorbate Coverage on the Oxygen Dissociation Rate on Sr-Doped LaMnO <sub>3</sub> Surfaces in the Presence of H <sub>2</sub> O and CO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2020</b> , 32, 5483-5492	9.6	3
128	Dynamic Current-Voltage Analysis of Oxygen Vacancy Mobility in Praseodymium-Doped Ceria over Wide Temperature Limits. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1907402	15.6	5
127	Constructing a pathway for mixed ion and electron transfer reactions for O <sub>2</sub> incorporation in Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2-x</sub> . <i>Nature Catalysis</i> , <b>2020</b> , 3, 116-124	36.5	22
126	Acidity of surface-infiltrated binary oxides as a sensitive descriptor of oxygen exchange kinetics in mixed conducting oxides. <i>Nature Catalysis</i> , <b>2020</b> , 3, 913-920	36.5	17
125	In Situ Method Correlating Raman Vibrational Characteristics to Chemical Expansion via Oxygen Nonstoichiometry of Perovskite Thin Films. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902493	24	16
124	Stabilizing Coexisting n-Type Electronic and Oxide Ion Conductivities in Donor-Doped BaTi <sub>3</sub> -Based Oxides under Oxidizing Conditions: Roles of Oxygen Disorder and Electronic Structure. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2713-2722	9.6	7
123	Tailoring Nonstoichiometry and Mixed Ionic Electronic Conductivity in PrCeO/SrTiO Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 34841-34853	9.5	4
122	Hydration of gadolinium oxide (GdOx) and its effect on voltage-induced Co oxidation in a Pt/Co/GdOx/Au heterostructure. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	15

121	On the Theoretical and Experimental Control of Defect Chemistry and Electrical and Photoelectrochemical Properties of Hematite Nanostructures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 2031-2041	9.5	23
120	Magneto-ionic control of magnetism using a solid-state proton pump. <i>Nature Materials</i> , <b>2019</b> , 18, 35-41	27	112
119	The interplay and impact of strain and defect association on the conductivity of rare-earth substituted ceria. <i>Acta Materialia</i> , <b>2019</b> , 166, 447-458	8.4	25
118	Mixed conductivity and oxygen surface exchange kinetics of lanthanum-praseodymium doped cerium dioxide. <i>Solid State Ionics</i> , <b>2019</b> , 331, 96-101	3.3	5
117	Atomic Resolution Imaging of Nanoscale Chemical Expansion in PrCeO during In Situ Heating. <i>ACS Nano</i> , <b>2018</b> , 12, 1359-1372	16.7	5
116	Electro-chemo-mechanical studies of perovskite-structured mixed ionic-electronic conducting SrSn <sub>1-x</sub> FexO <sub>3-x/2</sub> Part III: Thermal and chemical expansion. <i>Journal of Electroceramics</i> , <b>2018</b> , 40, 332-337	1.5	3
115	Surface Defect Chemistry and Electronic Structure of Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> Revealed in Operando. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2600-2606	9.6	14
114	Electro-chemo-mechanical studies of perovskite-structured mixed ionic-electronic conducting SrSn <sub>1-x</sub> FexO <sub>3-x/2</sub> Part II: Electrical conductivity and cathode performance. <i>Journal of Electroceramics</i> , <b>2018</b> , 40, 57-64	1.5	3
113	Thin-film nano-thermogravimetry applied to praseodymium-cerium oxide films at high temperatures. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 213502	3.4	8
112	Measuring ionic mobility in mixed-ionic-electronic-conducting nano-dimensioned thin films at near ambient temperatures. <i>Solid State Ionics</i> , <b>2018</b> , 319, 291-295	3.3	5
111	Electrochemically Triggered Metal-Insulator Transition between VO <sub>2</sub> and V <sub>2</sub> O <sub>5</sub> . <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1803024	15.6	25
110	Electro-chemo-mechanical studies of perovskite-structured mixed ionic-electronic conducting SrSn <sub>1-x</sub> FexO <sub>3-x/2</sub> Part I: Defect chemistry. <i>Journal of Electroceramics</i> , <b>2017</b> , 38, 74-80	1.5	5
109	Magnetism and Faraday Rotation in Oxygen-Deficient Polycrystalline and Single-Crystal Iron-Substituted Strontium Titanate. <i>Physical Review Applied</i> , <b>2017</b> , 7,	4.3	10
108	Solar to fuels conversion technologies: a perspective. <i>Materials for Renewable and Sustainable Energy</i> , <b>2017</b> , 6, 3	4.7	74
107	Defect Chemistry of Pr Doped Ceria Thin Films Investigated by in Situ Optical and Impedance Measurements. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 1999-2007	9.6	24
106	Role of grain size on redox induced compositional stresses in Pr doped ceria thin films. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 12206-12220	3.6	4
105	Dynamic chemical expansion of thin-film non-stoichiometric oxides at extreme temperatures. <i>Nature Materials</i> , <b>2017</b> , 16, 749-754	27	32
104	Tunable Oxygen Diffusion and Electronic Conduction in SrTiO <sub>3</sub> by Dislocation-Induced Space Charge Fields. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1700243	15.6	47

103	Universality of electron mobility in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> and bulk SrTiO <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2017</b> , 111, 092106	3.4	9
102	Exceptional High-Performance of Pt-Based Bimetallic Catalysts for Exclusive Detection of Exhaled Biomarkers. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700737	24	84
101	Heterogeneous Sensitization of Metal-Organic Framework Driven Metal@Metal Oxide Complex Catalysts on an Oxide Nanofiber Scaffold Toward Superior Gas Sensors. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 13431-13437	16.4	268
100	Oxygen diffusion and surface exchange in the mixed conducting oxides SrTiFeO. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 29495-29505	3.6	36
99	Operando reduction of elastic modulus in (Pr, Ce)O <sub>2</sub> thin films. <i>Acta Materialia</i> , <b>2016</b> , 105, 16-24	8.4	22
98	Coaxial electrospinning of WO <sub>3</sub> nanotubes functionalized with bio-inspired Pd catalysts and their superior hydrogen sensing performance. <i>Nanoscale</i> , <b>2016</b> , 8, 9159-66	7.7	120
97	Protein-Encapsulated Catalysts: WO <sub>3</sub> Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates (Small 7/2016). <i>Small</i> , <b>2016</b> , 12, 964-964	11	1
96	WO <sub>3</sub> Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates. <i>Small</i> , <b>2016</b> , 12, 911-20	11	62
95	CeO <sub>2</sub> Nanorods and Nanocubes: Impact of Nanoparticle Shape on Dilatometry and Electrical Properties. <i>Journal of the American Ceramic Society</i> , <b>2016</b> , 99, 2415-2421	3.8	3
94	Praseodymium Cuprate Thin Film Cathodes for Intermediate Temperature Solid Oxide Fuel Cells: Roles of Doping, Orientation, and Crystal Structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 34295-34302	9.5	70
93	Mesoporous WO <sub>3</sub> Nanofibers with Protein-Templated Nanoscale Catalysts for Detection of Trace Biomarkers in Exhaled Breath. <i>ACS Nano</i> , <b>2016</b> , 10, 5891-9	16.7	173
92	In situ dilatometric and impedance spectroscopic study of core-shell like structures: insights into the exceptional catalytic activity of nanocrystalline Cu-doped CeO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 8369-8379	13	11
91	Editorial for JECR special issue on defects & relaxation processes in crystalline and amorphous solids. <i>Journal of Electroceramics</i> , <b>2015</b> , 34, 1-3	1.5	2
90	Vertically aligned nanocomposite La <sub>0.8</sub> Sr <sub>0.2</sub> CoO <sub>3</sub> /(La <sub>0.5</sub> Sr <sub>0.5</sub> ) <sub>2</sub> CoO <sub>4</sub> cathodes [electronic structure, surface chemistry and oxygen reduction kinetics. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 207-219	13	60
89	Magneto-ionic control of interfacial magnetism. <i>Nature Materials</i> , <b>2015</b> , 14, 174-81	27	365
88	The Direct Measurement of Ionic Piezoresistance. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1730, 7		
87	A Three Component Self-Assembled Epitaxial Nanocomposite Thin Film. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 3091-3100	15.6	17
86	Electrospun Polyaniline Fibers as Highly Sensitive Room Temperature Chemiresistive Sensors for Ammonia and Nitrogen Dioxide Gases. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4005-4014	15.6	127

85	Engineering a Robust Photovoltaic Device with Quantum Dots and Bacteriorhodopsin. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 16710-16717	3.8	44
84	Investigation of Nonstoichiometry in Oxide Thin Films by Simultaneous in Situ Optical Absorption and Chemical Capacitance Measurements: Pr-Doped Ceria, a Case Study. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 1374-1379	9.6	37
83	Voltage-Controlled Nonstoichiometry in Oxide Thin Films: Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> Case Study. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 7638-7644	15.6	28
82	Nonstoichiometry in Oxide Thin Films Operating under Anodic Conditions: A Chemical Capacitance Study of the Praseodymium-Cerium Oxide System. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 6622-6627	9.6	28
81	In Situ Electrical Characterization of Anatase TiO <sub>2</sub> Quantum Dots. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4952-4958	15.6	11
80	Electrical conductivity relaxation measurements: Application of low thermal mass heater stick. <i>Solid State Ionics</i> , <b>2014</b> , 262, 914-917	3.3	3
79	Ridge waveguide using highly oriented BaTiO <sub>3</sub> thin films for electro-optic application Peer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society. View all notes. <i>Journal of Asian Ceramic Societies</i> , <b>2014</b> , 2, 231-234	2.4	11
78	Electrical Conduction in Nanostructured Ceramics <b>2014</b> , 697-727		
77	Thermal conductivity control by oxygen defect concentration modification in reducible oxides: The case of Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> thin films. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 061911	3.4	15
76	Scalable Oxygen-Ion Transport Kinetics in Metal-Oxide Films: Impact of Thermally Induced Lattice Compaction in Acceptor Doped Ceria Films. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1562-1574	15.6	55
75	On the redox origin of surface trapping in AlGa <sub>N</sub> /Ga <sub>N</sub> high electron mobility transistors. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 124506	2.5	20
74	The Role of Hierarchical Morphologies in the Superior Gas Sensing Performance of CuO-Based Chemiresistors. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 1759-1766	15.6	218
73	Electrical Conduction in Ceramics: Toward Improved Defect Interpretation. <i>Geophysical Monograph Series</i> , <b>2013</b> , 47-68	1.1	8
72	Fuel Cells: Electronic Activation of Cathode Superlattices at Elevated Temperatures [Source of Markedly Accelerated Oxygen Reduction Kinetics (Adv. Energy Mater. 9/2013)]. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1110-1110	21.8	
71	Non-stoichiometry in Oxide Thin Films: A Chemical Capacitance Study of the Praseodymium-Cerium Oxide System. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 2168-2174	15.6	49
70	Sensors: Thin-Wall Assembled SnO <sub>2</sub> Fibers Functionalized by Catalytic Pt Nanoparticles and their Superior Exhaled-Breath-Sensing Properties for the Diagnosis of Diabetes (Adv. Funct. Mater. 19/2013). <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 2342-2342	15.6	6
69	Advances and new directions in gas-sensing devices. <i>Acta Materialia</i> , <b>2013</b> , 61, 974-1000	8.4	232
68	Electronic Activation of Cathode Superlattices at Elevated Temperatures [Source of Markedly Accelerated Oxygen Reduction Kinetics. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1221-1229	21.8	74

67	Thin-Wall Assembled SnO <sub>2</sub> Fibers Functionalized by Catalytic Pt Nanoparticles and their Superior Exhaled-Breath-Sensing Properties for the Diagnosis of Diabetes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 2357-2367	15.6	276
66	Praseodymium-cerium oxide thin film cathodes: Study of oxygen reduction reaction kinetics. <i>Journal of Electroceramics</i> , <b>2012</b> , 28, 62-69	1.5	70
65	Impact of Moisture and Fluorocarbon Passivation on the Current Collapse of AlGaIn/GaN HEMTs. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1378-1380	4.4	29
64	Investigation of surface Sr segregation in model thin film solid oxide fuel cell perovskite electrodes. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 5370-5378	35.4	207
63	Optically derived energy band gap states of Pr in ceria. <i>Solid State Ionics</i> , <b>2012</b> , 225, 198-200	3.3	24
62	Impact of Sr segregation on the electronic structure and oxygen reduction activity of SrTi <sub>1-x</sub> FexO <sub>3</sub> surfaces. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 7979	35.4	142
61	Understanding Chemical Expansion in Non-Stoichiometric Oxides: Ceria and Zirconia Case Studies. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1958-1965	15.6	250
60	Defects and transport in Pr <sub>x</sub> Ce <sub>1-x</sub> O <sub>2</sub> —Composition trends. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 2009-2016	2.5	50
59	Nano-Structured Materials for Next Generation Fuel Cells and Photoelectrochemical Devices. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1326, 1		0
58	Point Defects in Oxides: Tailoring Materials Through Defect Engineering. <i>Annual Review of Materials Research</i> , <b>2011</b> , 41, 369-398	12.8	249
57	Electrical conductivity and defect equilibria of Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> — <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 10165-73	3.6	125
56	Chemical expansion of nonstoichiometric Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> —Correlation with defect equilibrium model. <i>Journal of the European Ceramic Society</i> , <b>2011</b> , 31, 2351-2356	6	60
55	A New Model Describing Solid Oxide Fuel Cell Cathode Kinetics: Model Thin Film SrTi <sub>1-x</sub> FexO <sub>3</sub> —Mixed Conducting Oxides—Case Study. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 1184-1191	21.8	128
54	Chemical, Electronic and Nanostructure Dynamics on Sr(Ti <sub>1-x</sub> Fex)O <sub>3</sub> Thin-Film Surfaces at High Temperatures. <i>ECS Transactions</i> , <b>2011</b> , 35, 2409-2416	1	4
53	Defect Structure, Charge Transport Mechanisms, and Strain Effects in Sr <sub>4</sub> Fe <sub>6</sub> O <sub>12</sub> —Epitaxial Thin Films. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1452-1461	9.6	10
52	Facile synthesis and electrochemical properties of RuO <sub>2</sub> nanofibers with ionically conducting hydrous layer. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 9172		52
51	Electrospun SnO <sub>2</sub> nanofiber mats with thermo-compression step for gas sensing applications. <i>Journal of Electroceramics</i> , <b>2010</b> , 25, 159-167	1.5	37
50	Heterogeneously doped nanocrystalline ceria films by grain boundary diffusion: Impact on transport properties. <i>Journal of Electroceramics</i> , <b>2009</b> , 22, 405-415	1.5	47

49	Highly enhanced electrochemical performance of silicon-free platinum/zirconia stabilized zirconia interfaces. <i>Journal of Electroceramics</i> , <b>2009</b> , 22, 428-435	1.5	42
48	Micro-ionics: next generation power sources. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 3023-34	3.6	79
47	Investigation of Cathode Behavior of Model Thin Film SrTi <sub>1-x</sub> FexO <sub>3</sub> Mixed Ionic-Electronic Conducting Electrodes. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1126, 1		
46	Defect chemistry of langasite III: Predictions of electrical and gravimetric properties and application to operation of high temperature crystal microbalance. <i>Journal of Electroceramics</i> , <b>2007</b> , 18, 139-147	1.5	19
45	Direct current bias effects on grain boundary Schottky barriers in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> . <i>Applied Physics Letters</i> , <b>2006</b> , 88, 072902	3.4	57
44	Low leakage current stacked MgOBi <sub>1.5</sub> Zn <sub>1.0</sub> Nb <sub>1.5</sub> O <sub>7</sub> gate insulator for low voltage ZnO thin film transistors. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 202908	3.4	24
43	Three dimensional arrays of hollow gadolinia-doped ceria microspheres prepared by r.f. magnetron sputtering employing PMMA microsphere templates. <i>Journal of Electroceramics</i> , <b>2006</b> , 17, 695-699	1.5	12
42	Fabrication and structural characterization of interdigitated thin film La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> (LSCO) electrodes. <i>Journal of Electroceramics</i> , <b>2006</b> , 16, 151-157	1.5	27
41	Gas sensors: New materials and processing approaches. <i>Journal of Electroceramics</i> , <b>2006</b> , 17, 1005-1012	1.5	49
40	Low frequency and microwave performances of Ba <sub>0.6</sub> Sr <sub>0.4</sub> TiO <sub>3</sub> films on atomic layer deposited TiO <sub>2</sub> /high resistivity Si substrates. <i>Journal of Electroceramics</i> , <b>2006</b> , 17, 421-425	1.5	1
39	Phase Stability and Electrical Conductivity in Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> -Gd <sub>2</sub> Mo <sub>2</sub> O <sub>7</sub> Solid Solutions. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 80, 2278-2284	3.8	23
38	Growth of TiO <sub>2</sub> Single Crystals and Bicrystals by the Laser-Heated Floating-Zone Method. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 592-596	3.8	4
37	Defects and Transport in Langasite II: Donor-doped (La <sub>3</sub> Ga <sub>4.75</sub> Nb <sub>0.25</sub> SiO <sub>14</sub> ). <i>Journal of Electroceramics</i> , <b>2005</b> , 15, 193-202	1.5	10
36	Low-voltage ZnO thin-film transistors with high-KBi <sub>1.5</sub> Zn <sub>1.0</sub> Nb <sub>1.5</sub> O <sub>7</sub> gate insulator for transparent and flexible electronics. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 043509	3.4	88
35	Oxide-Ion Transport in Gadolinium Zirconate - Titanates under High Pressure. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 835, K2.10.1		
34	Fabrication and structural characterization of self-supporting electrolyte membranes for a micro solid-oxide fuel cell. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 2604-2615	2.5	111
33	Solid-State Ionics: Roots, Status, and Future Prospects. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 1654-1680	3.8	188
32	Electronic Conductivity and Dielectric Properties of Nanocrystalline CeO <sub>2</sub> Films. <i>Journal of Electroceramics</i> , <b>2004</b> , 13, 129-133	1.5	14

31	Praseodymium-Cerium Oxide as a Surface-Effect Gas Sensor. <i>Journal of Electroceramics</i> , <b>2004</b> , 13, 771-774	1.5	1
30	Thin Film Praseodymium-Cerium Oxide Langasite-Based Microbalance Gas Sensor. <i>Journal of Electroceramics</i> , <b>2004</b> , 13, 775-778	1.5	1
29	Nonstoichiometry and Defect Chemistry in Praseodymium-Cerium Oxide. <i>Journal of Electroceramics</i> , <b>2004</b> , 13, 799-803	1.5	23
28	Electrical Conductivity in Praseodymium-Cerium Oxide. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 756, 1		2
27	The Electrical and Defect Properties of Bi <sub>3</sub> Zn <sub>2</sub> Sb <sub>3</sub> O <sub>14</sub> Pyrochlore: A Grain-Boundary Phase in ZnO-Based Varistors <b>2001</b> , 7, 113-120		8
26	Investigation of Pt/Si/CeO <sub>2</sub> /Pt MOS Device Structure by Impedance Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 699, 511		
25	Ionic conduction in nanocrystalline materials. <i>Solid State Ionics</i> , <b>2000</b> , 131, 143-157	3.3	541
24	Advanced Sensor Technology Based on Oxide Thin Film/MEMS Integration <b>2000</b> , 4, 415-425		17
23	Field-induced antiferroelectric/ferroelectric phase transitions in the Pb <sub>0.98</sub> La <sub>0.02</sub> (Zr <sub>0.70</sub> Hf <sub>0.30</sub> ) <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> system. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 1458-1466	2.5	30
22	ZnO Grain Boundaries: Electrical Activity and Diffusion <b>1999</b> , 4, 33-40		43
21	New Mixed Conductors Based on Doped Layered Perovskites. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 548, 533		
20	Solid State Electrochemical Systems/Opportunities for Nanofabricated or Nanostructured Materials <b>1997</b> , 1, 211-218		52
19	Rietveld X-ray Powder Profile Analysis and Electrical Conductivity of Fast Ion Conducting Gd <sub>2</sub> (Ti <sub>1-y</sub> Sny) <sub>2</sub> O <sub>7</sub> Solid Solutions. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 453, 567		1
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15	Electrical Properties of Donor and Acceptor Doped Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 369, 703		1
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12	Oxygen Diffusion in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_{4-y}$ . <i>Materials Research Society Symposia Proceedings</i> , <b>1990</b> , 209, 795		
11	Electrical Properties and Phase Stability of a Zinc Ferrite. <i>Journal of the American Ceramic Society</i> , <b>1990</b> , 73, 258-262	3.8	10
10	Nonstoichiometry and Mixed Conduction in $\text{Ta}_2\text{O}_5$ . <i>Journal of the American Ceramic Society</i> , <b>1990</b> , 73, 1700-1704	3.8	4
9	The Transport Properties and Defect Chemistry of $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ . <i>Materials Research Society Symposia Proceedings</i> , <b>1989</b> , 169, 65		4
8	Defect Structure and Electrical Properties of Single-Crystal $\text{Ba}_{0.03}\text{Sr}_{0.97}\text{TiO}_3$ . <i>Journal of the American Ceramic Society</i> , <b>1988</b> , 71, 201-205	3.8	112
7	Thermodynamics of molten Li-Sn alloys. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1988</b> , 19, 637-644		17
6	In situ phase equilibria determination of a manganese ferrite by electrical means. <i>Journal of Materials Research</i> , <b>1988</b> , 3, 552-556	2.5	14
5	Iron-Excess Manganese Ferrite: Electrical Conductivity and Cation Distributions. <i>Journal of the American Ceramic Society</i> , <b>1987</b> , 70, 388-392	3.8	59
4	Micro Fuel Cells		2
3	Modulation and Modeling of Three-Dimensional Nanowire Assemblies Targeting Gas Sensors with High Response and Reliability. <i>Advanced Functional Materials</i> , 2108891	15.6	2
2	Nanosession: New Technologies for Scanning Probes		143-153
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