

# Harry L Tuller

## List of Publications by Year in descending order

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146  
papers

7,809  
citations

66234

42  
h-index

51492

86  
g-index

151  
all docs

151  
docs citations

151  
times ranked

9111  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ionic conduction in nanocrystalline materials. <i>Solid State Ionics</i> , 2000, 131, 143-157.	1.3	637
2	Magneto-ionic control of interfacial magnetism. <i>Nature Materials</i> , 2015, 14, 174-181.	13.3	444
3	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> , 2016, 138, 13431-13437.	6.6	352
4	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> , 2013, 23, 2357-2367.	7.8	328
5	Understanding Chemical Expansion in Non-Stoichiometric Oxides: Ceria and Zirconia Case Studies. <i>Advanced Functional Materials</i> , 2012, 22, 1958-1965.	7.8	305
6	Point Defects in Oxides: Tailoring Materials Through Defect Engineering. <i>Annual Review of Materials Research</i> , 2011, 41, 369-398.	4.3	302
7	Advances and new directions in gas-sensing devices. <i>Acta Materialia</i> , 2013, 61, 974-1000.	3.8	282
8	Investigation of surface Sr segregation in model thin film solid oxide fuel cell perovskite electrodes. <i>Energy and Environmental Science</i> , 2012, 5, 5370-5378.	15.6	258
9	The Role of Hierarchical Morphologies in the Superior Gas Sensing Performance of Cu-Based Chemiresistors. <i>Advanced Functional Materials</i> , 2013, 23, 1759-1766.	7.8	255
10	Solid State Ionics: Roots, Status, and Future Prospects. <i>Journal of the American Ceramic Society</i> , 2002, 85, 1654-1680.	1.9	228
11	Mesoporous WO <sub>3</sub> Nanofibers with Protein-Templated Nanoscale Catalysts for Detection of Trace Biomarkers in Exhaled Breath. <i>ACS Nano</i> , 2016, 10, 5891-5899.	7.3	211
12	Impact of Sr segregation on the electronic structure and oxygen reduction activity of SrTi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3</sub> surfaces. <i>Energy and Environmental Science</i> , 2012, 5, 7979.	15.6	179
13	Magneto-ionic control of magnetism using a solid-state proton pump. <i>Nature Materials</i> , 2019, 18, 35-41.	13.3	176
14	Electrospun Polyaniline Fibers as Highly Sensitive Room Temperature Chemiresistive Sensors for Ammonia and Nitrogen Dioxide Gases. <i>Advanced Functional Materials</i> , 2014, 24, 4005-4014.	7.8	170
15	A New Model Describing Solid Oxide Fuel Cell Cathode Kinetics: Model Thin Film SrTi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3</sub> Mixed Conducting Oxides—a Case Study. <i>Advanced Energy Materials</i> , 2011, 1, 1184-1191.	10.2	151
16	Coaxial electrospinning of WO <sub>3</sub> nanotubes functionalized with bio-inspired Pd catalysts and their superior hydrogen sensing performance. <i>Nanoscale</i> , 2016, 8, 9159-9166.	2.8	139
17	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> , 2011, 13, 10165.	1.3	138
18	Defect Structure and Electrical Properties of Single-Crystal Ba <sub>0.03</sub> Sr <sub>0.97</sub> TiO <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , 1988, 71, 201-205.	1.9	130

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19	Fabrication and structural characterization of self-supporting electrolyte membranes for a micro solid-oxide fuel cell. <i>Journal of Materials Research</i> , 2004, 19, 2604-2615.	1.2	123
20	Exceptional High-Performance of Pt-Based Bimetallic Catalysts for Exclusive Detection of Exhaled Biomarkers. <i>Advanced Materials</i> , 2017, 29, 1700737.	11.1	113
21	Solar to fuels conversion technologies: a perspective. <i>Materials for Renewable and Sustainable Energy</i> , 2017, 6, 3.	1.5	99
22	Micro-ionics: next generation power sources. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3023.	1.3	93
23	Low-voltage ZnO thin-film transistors with high-k Bi <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> , 2005, 87, 043509.	1.5	92
24	Electronic Activation of Cathode Superlattices at Elevated Temperatures – Source of Markedly Accelerated Oxygen Reduction Kinetics. <i>Advanced Energy Materials</i> , 2013, 3, 1221-1229.	10.2	88
25	Oxygen Tracer Diffusion in La <sub>2-x</sub> Sr <sub>x</sub> CuO <sub>4-y</sub> Single Crystals. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2363-2369.	1.9	80
26	Praseodymium-cerium oxide thin film cathodes: Study of oxygen reduction reaction kinetics. <i>Journal of Electroceramics</i> , 2012, 28, 62-69.	0.8	78
27	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> , 2015, 3, 207-219.	5.2	76
28	WO <sub>3</sub> Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates. <i>Small</i> , 2016, 12, 911-920.	5.2	76
29	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> , 2011, 31, 2351-2356.	2.8	74
30	Iron-Excess Manganese Ferrite: Electrical Conductivity and Cation Distributions. <i>Journal of the American Ceramic Society</i> , 1987, 70, 388-392.	1.9	73
31	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> , 2014, 24, 1562-1574.	7.8	65
32	Tunable Oxygen Diffusion and Electronic Conduction in SrTiO <sub>3</sub> by Dislocation-Induced Space Charge Fields. <i>Advanced Functional Materials</i> , 2017, 27, 1700243.	7.8	64
33	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> , 2006, 88, 072902.	1.5	60
34	Solid State Electrochemical Systems – Opportunities for Nanofabricated or Nanostructured Materials. , 1997, 1, 211-218.		59
35	Non-stoichiometry in Oxide Thin Films: A Chemical Capacitance Study of the Praseodymium-Cerium Oxide System. <i>Advanced Functional Materials</i> , 2013, 23, 2168-2174.	7.8	58
36	Facile synthesis and electrochemical properties of RuO <sub>2</sub> nanofibers with ionically conducting hydrous layer. <i>Journal of Materials Chemistry</i> , 2010, 20, 9172.	6.7	57

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37	Defects and transport in $\text{Pr}_{1-x}\text{Ce}_x\text{O}_{2+\delta}$ : Composition trends. <i>Journal of Materials Research</i> , 2012, 27, 2009-2016.	1.2	56
38	Gas sensors: New materials and processing approaches. <i>Journal of Electroceramics</i> , 2006, 17, 1005-1012.	0.8	52
39	Acidity of surface-infiltrated binary oxides as a sensitive descriptor of oxygen exchange kinetics in mixed conducting oxides. <i>Nature Catalysis</i> , 2020, 3, 913-920.	16.1	52
40	ZnO Grain Boundaries: Electrical Activity and Diffusion. , 1999, 4, 33-40.		50
41	Heterogeneously doped nanocrystalline ceria films by grain boundary diffusion: Impact on transport properties. <i>Journal of Electroceramics</i> , 2009, 22, 405-415.	0.8	48
42	Engineering a Robust Photovoltaic Device with Quantum Dots and Bacteriorhodopsin. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16710-16717.	1.5	47
43	Dynamic chemical expansion of thin-film non-stoichiometric oxides at extreme temperatures. <i>Nature Materials</i> , 2017, 16, 749-754.	13.3	46
44	Electrochemically Triggered Metal-Insulator Transition between $\text{VO}_2$ and $\text{V}_2\text{O}_5$ . <i>Advanced Functional Materials</i> , 2018, 28, 1803024.	7.8	46
45	Highly enhanced electrochemical performance of silicon-free platinum-yttria stabilized zirconia interfaces. <i>Journal of Electroceramics</i> , 2009, 22, 428-435.	0.8	45
46	Oxygen diffusion and surface exchange in the mixed conducting oxides $\text{Sr}_{1-y}\text{Fe}_y\text{O}_{3+\delta}$ . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29495-29505.	1.3	43
47	Electrospun $\text{SnO}_2$ nanofiber mats with thermo-compression step for gas sensing applications. <i>Journal of Electroceramics</i> , 2010, 25, 159-167.	0.8	42
48	Investigation of Nonstoichiometry in Oxide Thin Films by Simultaneous <i>in Situ</i> Optical Absorption and Chemical Capacitance Measurements: Pr-Doped Ceria, a Case Study. <i>Chemistry of Materials</i> , 2014, 26, 1374-1379.	3.2	41
49	Constructing a pathway for mixed ion and electron transfer reactions for $\text{O}_2$ incorporation in $\text{Pr}_{0.1}\text{Ce}_{0.9}\text{O}_{2+x}$ . <i>Nature Catalysis</i> , 2020, 3, 116-124.	16.1	40
50	Nonstoichiometry in Oxide Thin Films Operating under Anodic Conditions: A Chemical Capacitance Study of the Praseodymium-Cerium Oxide System. <i>Chemistry of Materials</i> , 2014, 26, 6622-6627.	3.2	39
51	Voltage-Controlled Nonstoichiometry in Oxide Thin Films: $\text{Pr}_{0.1}\text{Ce}_{0.9}\text{O}_{2+\delta}$ Case Study. <i>Advanced Functional Materials</i> , 2014, 24, 7638-7644.	7.8	37
52	Field-induced antiferroelectric-ferroelectric phase transitions in the $\text{Pb}_{0.98}\text{La}_{0.02}(\text{Zr}_{0.70}\text{Hf}_{0.30})_{1-x}\text{Ti}_x\text{O}_3$ system. <i>Journal of Applied Physics</i> , 2000, 87, 1458-1466.	1.1	33
53	Phase Stability and Electrical Conductivity in $\text{Gd}_2\text{Ti}_2\text{O}_7$ - $\text{Gd}_2\text{Mo}_2\text{O}_7$ Solid Solutions. <i>Journal of the American Ceramic Society</i> , 1997, 80, 2278-2284.	1.9	33
54	In Situ Method Correlating Raman Vibrational Characteristics to Chemical Expansion via Oxygen Nonstoichiometry of Perovskite Thin Films. <i>Advanced Materials</i> , 2019, 31, e1902493.	11.1	33

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55	The interplay and impact of strain and defect association on the conductivity of rare-earth substituted ceria. <i>Acta Materialia</i> , 2019, 166, 447-458.	3.8	33
56	Thermogravimetric Analysis and Defect Models of the Oxygen Nonstoichiometry in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_{4-y}$ . <i>Journal of the American Ceramic Society</i> , 1994, 77, 2727-2737.	1.9	31
57	Impact of Moisture and Fluorocarbon Passivation on the Current Collapse of AlGaIn/GaN HEMTs. <i>IEEE Electron Device Letters</i> , 2012, 33, 1378-1380.	2.2	31
58	Fabrication and structural characterization of interdigitated thin film $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ (LSCO) electrodes. <i>Journal of Electroceramics</i> , 2006, 16, 151-157.	0.8	30
59	On the Theoretical and Experimental Control of Defect Chemistry and Electrical and Photoelectrochemical Properties of Hematite Nanostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2031-2041.	4.0	29
60	Low leakage current $\text{MgO}/\text{Bi}_{1.5}\text{Zn}_{1.0}\text{Nb}_{1.5}\text{O}_7$ gate insulator for low voltage ZnO thin film transistors. <i>Applied Physics Letters</i> , 2006, 89, 202908.	1.5	27
61	Defect Chemistry of Pr Doped Ceria Thin Films Investigated by <i>in Situ</i> Optical and Impedance Measurements. <i>Chemistry of Materials</i> , 2017, 29, 1999-2007.	3.2	27
62	Optically derived energy band gap states of Pr in ceria. <i>Solid State Ionics</i> , 2012, 225, 198-200.	1.3	26
63	On the redox origin of surface trapping in AlGaIn/GaN high electron mobility transistors. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	26
64	Nonstoichiometry and Defect Chemistry in Praseodymium-Cerium Oxide. <i>Journal of Electroceramics</i> , 2004, 13, 799-803.	0.8	25
65	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection. <i>Advanced Materials</i> , 2021, 33, e2105199.	11.1	25
66	Operando reduction of elastic modulus in $(\text{Pr}, \text{Ce})\text{O}_{2-x}$ thin films. <i>Acta Materialia</i> , 2016, 105, 16-24.	3.8	24
67	Surface Defect Chemistry and Electronic Structure of $\text{Pr}_{0.1}\text{Ce}_{0.9}\text{O}_{2-x}$ Revealed in Operando. <i>Chemistry of Materials</i> , 2018, 30, 2600-2606.	3.2	24
68	Advanced Sensor Technology Based on Oxide Thin Film MEMS Integration. , 2000, 4, 415-425.		22
69	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> , 2007, 18, 139-147.	0.8	22
70	Ridge waveguide using highly oriented $\text{BaTiO}_3$ thin films for electro-optic application. <i>Journal of Asian Ceramic Societies</i> , 2014, 2, 231-234.	1.0	20
71	A Three Component Self-Assembled Epitaxial Nanocomposite Thin Film. <i>Advanced Functional Materials</i> , 2015, 25, 3091-3100.	7.8	20
72	Hydration of gadolinium oxide ( $\text{Tj ETQqO O O rgBT /Overlock 10 Tf 50 87 Td$ ) $\text{Pt}/\text{Co}$ its effect on voltage-induced Co oxidation in a $\text{Pt}/\text{Co}$ $\text{O}_x$ system. <i>Physical Review Materials</i> , 2019, 3, 034401.	0.9	20

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73	Photo-enhanced ionic conductivity across grain boundaries in polycrystalline ceramics. <i>Nature Materials</i> , 2022, 21, 438-444.	13.3	19
74	Thermodynamics of molten Li-Sn alloys. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1988, 19, 637-644.	1.4	18
75	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-<math>\delta</math></sub> thin films. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	17
76	Magnetism and Faraday Rotation in Oxygen-Deficient Polycrystalline and Single-Crystal Iron-Substituted Strontium Titanate. <i>Physical Review Applied</i> , 2017, 7, .	1.5	16
77	In situ phase equilibria determination of a manganese ferrite by electrical means. <i>Journal of Materials Research</i> , 1988, 3, 552-556.	1.2	15
78	Electrical Properties and Phase Stability of a Zinc Ferrite. <i>Journal of the American Ceramic Society</i> , 1990, 73, 258-262.	1.9	15
79	Electronic Conductivity and Dielectric Properties of Nanocrystalline CeO <sub>2</sub> Films. <i>Journal of Electroceramics</i> , 2004, 13, 129-133.	0.8	15
80	In Situ Electrical Characterization of Anatase TiO <sub>2</sub> Quantum Dots. <i>Advanced Functional Materials</i> , 2014, 24, 4952-4958.	7.8	14
81	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. , 2001, 7, 113-120.		13
82	Electrical Conduction in Ceramics: Toward Improved Defect Interpretation. <i>Geophysical Monograph Series</i> , 0, , 47-68.	0.1	13
83	Stabilizing Coexisting n-Type Electronic and Oxide Ion Conductivities in Donor-Doped Ba <sup>2+</sup> In-Based Oxides under Oxidizing Conditions: Roles of Oxygen Disorder and Electronic Structure. <i>Chemistry of Materials</i> , 2019, 31, 2713-2722.	3.2	13
84	Three dimensional arrays of hollow gadolinia-doped ceria microspheres prepared by r.f. magnetron sputtering employing PMMA microsphere templates. <i>Journal of Electroceramics</i> , 2006, 17, 695-699.	0.8	12
85	Defect Structure, Charge Transport Mechanisms, and Strain Effects in Sr <sub>4</sub> Fe <sub>6</sub> O <sub>12</sub> + $\delta$ Epitaxial Thin Films. <i>Chemistry of Materials</i> , 2010, 22, 1452-1461.	3.2	12
86	Universality of electron mobility in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> and bulk SrTiO <sub>3</sub> . <i>Applied Physics Letters</i> , 2017, 111, .	1.5	12
87	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> , 2005, 15, 193-202.	0.8	11
88	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> , 2015, 3, 8369-8379.	5.2	11
89	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> , 2016, 8, 34295-34302.	4.0	11
90	Perspective on the Relationship between the Acidity of Perovskite Oxides and Their Oxygen Surface Exchange Kinetics. <i>Chemistry of Materials</i> , 2022, 34, 991-997.	3.2	11

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91	Thin-film nano-thermogravimetry applied to praseodymium-cerium oxide films at high temperatures. Applied Physics Letters, 2018, 112, .	1.5	10
92	Dynamic Current-Voltage Analysis of Oxygen Vacancy Mobility in Praseodymium-Doped Ceria over Wide Temperature Limits. Advanced Functional Materials, 2020, 30, 1907402.	7.8	9
93	Silica: ubiquitous poison of metal oxide interfaces. Journal of Materials Chemistry A, 2022, 10, 2618-2636.	5.2	9
94	Oxygen Nonstoichiometry and Defects in Mn-Doped Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7+x</sub> . Journal of the American Ceramic Society, 1996, 79, 3078-3082.	1.9	8
95	Atomic Resolution Imaging of Nanoscale Chemical Expansion in Pr <sub>x</sub> Ce <sub>1-x</sub> O <sub>2</sub> during In Situ Heating. ACS Nano, 2018, 12, 1359-1372.	7.3	8
96	Tailoring Nonstoichiometry and Mixed Ionic Electronic Conductivity in Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> /SrTiO <sub>3</sub> Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 34841-34853.	4.0	7
97	Thin-film chemical expansion of ceria based solid solutions: laser vibrometry study. Zeitschrift Fur Physikalische Chemie, 2022, 236, 1013-1053.	1.4	7
98	Strain-Dependent Surface Defect Equilibria of Mixed Ionic-Electronic Conducting Perovskites. Chemistry of Materials, 2022, 34, 5138-5150.	3.2	7
99	Growth of TiO <sub>2</sub> Single Crystals and Bicrystals by the Laser-Heated Floating-Zone Method. Journal of the American Ceramic Society, 1998, 81, 592-596.	1.9	6
100	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.)	2.0	6
101	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. Journal of Electroceramics, 2017, 38, 74-80.	0.8	6
102	Role of grain size on redox induced compositional stresses in Pr doped ceria thin films. Physical Chemistry Chemical Physics, 2017, 19, 12206-12220.	1.3	6
103	Mixed conductivity and oxygen surface exchange kinetics of lanthanum-praseodymium doped cerium dioxide. Solid State Ionics, 2019, 331, 96-101.	1.3	6
104	Active Tuning of Optical Constants in the Visible-UV: Praseodymium-Doped Ceria—a Model Mixed Ionic-Electronic Conductor. Advanced Optical Materials, 2021, 9, 2001934.	3.6	6
105	Modulation and Modeling of Three-Dimensional Nanowire Assemblies Targeting Gas Sensors with High Response and Reliability. Advanced Functional Materials, 2022, 32, 2108891.	7.8	6
106	The Transport Properties and Defect Chemistry of La <sub>2</sub> XSrXCuO <sub>4-<math>\delta</math></sub> . Materials Research Society Symposia Proceedings, 1989, 169, 65.	0.1	5
107	Nonstoichiometry and Mixed Conduction in alpha-Ta <sub>2</sub> O <sub>5</sub> . Journal of the American Ceramic Society, 1990, 73, 1700-1704.	1.9	5
108	Chemical, Electronic and Nanostructure Dynamics on Sr(Ti <sub>1-x</sub> Fex)O <sub>3</sub> Thin-Film Surfaces at High Temperatures. ECS Transactions, 2011, 35, 2409-2416.	0.3	5

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109	Electrical conductivity relaxation measurements: Application of low thermal mass heater stick. Solid State Ionics, 2014, 262, 914-917.	1.3	5
110	Measuring ionic mobility in mixed-ionic-electronic-conducting nano-dimensioned thin films at near ambient temperatures. Solid State Ionics, 2018, 319, 291-295.	1.3	5
111	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> . Chemistry of Materials, 2020, 32, 5483-5492.	3.2	5
112	CeO <sub>2</sub> Nanorods and Nanocubes: Impact of Nanoparticle Shape on Dilatometry and Electrical Properties. Journal of the American Ceramic Society, 2016, 99, 2415-2421.	1.9	4
113	Temporal and spatial tuning of optical constants in praseodymium doped ceria by electrochemical means. Nanophotonics, 2022, 11, 3943-3952.	2.9	4
114	Electrical Conductivity in Praseodymium-Cerium Oxide. Materials Research Society Symposia Proceedings, 2002, 756, 1.	0.1	3
115	Electro-chemo-mechanical studies of perovskite-structured mixed ionic-electronic conducting SrSn <sub>1-x</sub> FexO <sub>3-x/2+<math>\delta</math></sub> Part III: Thermal and chemical expansion. Journal of Electroceramics, 2018, 40, 332-337.	0.8	3
116	Electro-chemo-mechanical studies of perovskite-structured mixed ionic-electronic conducting SrSn <sub>1-x</sub> FexO <sub>3-x/2+<math>\delta</math></sub> part II: Electrical conductivity and cathode performance. Journal of Electroceramics, 2018, 40, 57-64.	0.8	3
117	The Influence of Cr-Additives on the Polarization Resistance of Praseodymium-Doped Ceria Cathodes for Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2022, 169, 044530.	1.3	3
118	The Oxygen Defect Chemistry of La <sub>2-<math>x</math></sub> Sr <sub><math>x</math></sub> CuO <sub>4-<math>x/2+<math>\delta</math></math></sub> . Materials Research Society Symposia Proceedings, 1990, 209, 867.	0.1	2
119	Micro Fuel Cells. , 0, , 51-80.		2
120	Editorial for JECR special issue on defects & relaxation processes in crystalline and amorphous solids. Journal of Electroceramics, 2015, 34, 1-3.	0.8	2
121	Impact of Oxygen Non-stoichiometry on Near-Ambient Temperature Ionic Mobility in Polaronic Mixed-Ionic-Electronic Conducting Thin Films. Advanced Functional Materials, 2021, 31, 2005640.	7.8	2
122	Electrical Properties of Donor and Acceptor Doped Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . Materials Research Society Symposia Proceedings, 1994, 369, 703.	0.1	1
123	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. Materials Research Society Symposia Proceedings, 1996, 453, 567.	0.1	1
124	Praseodymium-Cerium Oxide as a Surface-Effect Gas Sensor. Journal of Electroceramics, 2004, 13, 771-774.	0.8	1
125	Thin Film Praseodymium-Cerium Oxide Langasite-Based Microbalance Gas Sensor. Journal of Electroceramics, 2004, 13, 775-778.	0.8	1
126	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. Journal of Electroceramics, 2006, 17, 421-425.	0.8	1



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127	Nano-Structured Materials for Next Generation Fuel Cells and Photoelectrochemical Devices. Materials Research Society Symposia Proceedings, 2011, 1326, 1.	0.1	1
128	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). Small, 2016, 12, 964-964.	5.2	1
129	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection (Adv. Mater. 44/2021). Advanced Materials, 2021, 33, 2170350.	11.1	1
130	Oxygen Diffusion in La <sub>2-x</sub> Sr <sub>x</sub> Co <sub>4-y</sub> Y. Materials Research Society Symposia Proceedings, 1990, 209, 795.	0.1	0
131	Electrical Conductivity in (Gd <sub>1-x</sub> Cax) <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> ± $\delta$ Pyrochlore System. Materials Research Society Symposia Proceedings, 1994, 369, 371.	0.1	0
132	New Mixed Conductors Based on Doped Layered Perovskites. Materials Research Society Symposia Proceedings, 1998, 548, 533.	0.1	0
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145	Photo-Enhanced Grain Boundary Ionic Conductivity in Gadolinium Doped Ceria. ECS Meeting Abstracts, 2020, MA2020-02, 2647-2647.	0.0	0
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