

# Roger A De Souza

## List of Publications by Year in descending order

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153  
papers

7,754  
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44069

48  
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54911

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163  
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163  
docs citations

163  
times ranked

6484  
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite crystal symmetry and oxygen-ion transport: a molecular-dynamics study of perovskite. Journal of Materials Chemistry A, 2022, 10, 2388-2397.	10.3	8
2	Surface potentials of acceptor- and donor-doped CeO <sub>2</sub> thin films and their relation to oxygen surface exchange. Physical Chemistry Chemical Physics, 2022, 24, 1072-1080.	2.8	7
3	Introduction to the special issue in honour of Prof. John Kilner's 75th birthday. Journal of Materials Chemistry A, 2022, 10, 2149-2151.	10.3	0
4	Quantitative Determination of Native Point-Defect Concentrations at the ppm Level in Un-doped BaSnO <sub>3</sub> Thin Films. Advanced Functional Materials, 2022, 32, .	14.9	6
5	Oxygen Diffusion in Platinum Electrodes: A Molecular Dynamics Study of the Role of Extended Defects. Advanced Materials Interfaces, 2022, 9, .	3.7	7
6	Hydration Entropy and Enthalpy of a Perovskite Oxide from Oxygen Tracer Diffusion Experiments. Journal of Physical Chemistry Letters, 2022, 13, 4133-4138.	4.6	3
7	Recipes for superior ionic conductivities in thin-film ceria-based electrolytes. Physical Chemistry Chemical Physics, 2022, 24, 12926-12936.	2.8	3
8	Electrochemical methods for determining ionic charge in solids. Nature Materials, 2021, 20, 443-446.	27.5	7
9	Kinetic Study of the Interdiffusion of Fluorine and Oxygen in the Perovskite-Type Barium Ferrate System BaFeO <sub>2.5-x</sub> F <sub>2+x</sub> . Journal of Physical Chemistry C, 2021, 125, 2287-2298.	3.1	3
10	The importance of singly charged oxygen vacancies for electrical conduction in monoclinic HfO <sub>2</sub> . Journal of Applied Physics, 2021, 129, .	2.5	8
11	Metadynamics simulations of strontium-vacancy diffusion in $\text{SrTiO}_3$ . Physical Review Materials, 2021, 5, .	2.4	3
12	B-site cation inter-diffusion in yttrium substituted barium zirconate. Journal of Materials Chemistry A, 2021, 9, 21142-21150.	10.3	5
13	A Critical Examination of the Mott-Schottky Model of Grain-Boundary Space-Charge Layers in Oxide-Ion Conductors. Journal of the Electrochemical Society, 2021, 168, 056504.	2.9	12
14	Fast grain-boundary diffusion paths in ionic solids: Space-charge layers versus interfacial core. Journal of the American Ceramic Society, 2021, 104, 5946-5954.	3.8	2
15	Transport properties of dislocations in SrTiO <sub>3</sub> and other perovskites. Current Opinion in Solid State and Materials Science, 2021, 25, 100923.	11.5	15
16	Faster Diffusion of Oxygen Along Dislocations in (La,Sr)MnO <sub>3+<math>\delta</math></sub> Is a Space-Charge Phenomenon. Advanced Functional Materials, 2021, 31, 2105647.	14.9	12
17	Electric-field-assisted processing of ceramics: Nonthermal effects and related mechanisms. MRS Bulletin, 2021, 46, 52-58.	3.5	40
18	High oxide-ion conductivity in acceptor-doped Bi-based perovskites at modest doping levels. Physical Chemistry Chemical Physics, 2021, 23, 11327-11333.	2.8	6

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19	Oxygen transport in single-crystal $\text{LaAlO}_3$ substrates. <i>Physical Review Materials</i> , 2021, 5, .		
20	Nonlinear ion mobility at high electric field strengths in the perovskites $\text{SrTiO}_3$ and $\text{CH}_3\text{NH}_3\text{PbBr}_3$ . <i>Physical Review Materials</i> , 2021, 5, .	2.4	9
21	Analyzing the grain boundary resistance of oxide ion conducting electrolytes: Poisson-Cahn vs Poisson-Boltzmann theories. <i>Journal of the American Ceramic Society</i> , 2020, 103, 5-22.	3.8	27
22	The grain boundary resistance of $\text{CeO}_2$ ceramics: A combined microscopy spectroscopy simulation study of a dilute solution. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1755-1764.	3.8	10
23	Fundamentals of electrical conduction in ceramics. , 2020, , 277-320.		2
24	Cation diffusion in polycrystalline thin films of monoclinic $\text{HfO}_2$ deposited by atomic layer deposition. <i>APL Materials</i> , 2020, 8, .	5.1	7
25	Oxygen Surface Exchange and Tracer Diffusion in Differently Oriented Thin Films of Gd-Doped $\text{CeO}_2$ . <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 36768-36777.	8.0	6
26	The Intrinsic Structural Resistance of a Grain Boundary to Transverse Ionic Conduction. <i>ChemElectroChem</i> , 2020, 7, 4718-4723.	3.4	4
27	A quantitative analysis of two-fold electrical conductivity relaxation behaviour in mixed proton oxide-ion electron conductors upon hydration. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 25032-25041.	2.8	7
28	Antiphase Boundaries Constitute Fast Cation Diffusion Paths in $\text{SrTiO}_3$ Memristive Devices. <i>Advanced Functional Materials</i> , 2020, 30, 2004118.	14.9	19
29	The Intrinsic Structural Resistance of a Grain Boundary to Transverse Ionic Conduction. <i>ChemElectroChem</i> , 2020, 7, 4694-4694.	3.4	0
30	The surprisingly high activation barrier for oxygen-vacancy migration in oxygen-excess manganite perovskites. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14329-14339.	2.8	18
31	Grain-boundary diffusion of cations in fluorite-type oxides is faster but not always easier. <i>Acta Materialia</i> , 2020, 195, 383-391.	7.9	23
32	The usefulness of molecular-dynamics simulations in clarifying the activation enthalpy of oxygen-vacancy migration in the perovskite oxide $\text{BaTiO}_3$ . <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5413-5417.	2.8	12
33	Is excess faster than deficient? A molecular-dynamics study of oxygen-interstitial and oxygen-vacancy diffusion in $\text{CeO}_2$ . <i>JPhys Energy</i> , 2020, 2, 024001.	5.3	9
34	Behavior of cation vacancies in single-crystal and in thin-film $\text{SrTiO}_3$ : The importance of strontium vacancies and their defect associates. <i>Physical Review Materials</i> , 2020, 4, .	2.4	8
35	Resistive Switching: Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline $\text{SrTiO}_3$ Resistive Switching Memories ( <i>Adv. Mater.</i> 28/2019). <i>Advanced Materials</i> , 2019, 31, 1970205.	21.0	2
36	The effect of space-charge formation on the grain-boundary energy of an ionic solid. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180430.	3.4	20

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37	Iodide-ion conduction in methylammonium lead iodide perovskite: some extraordinary aspects. <i>Chemical Communications</i> , 2019, 55, 1108-1111.	4.1	14
38	Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO <sub>3</sub> Resistive Switching Memories. <i>Advanced Materials</i> , 2019, 31, e1901322.	21.0	38
39	Impact of Surface Roughness on Ion-Surface Interactions Studied with Energetic Carbon Ions 13C+ on Tungsten Surfaces. <i>Condensed Matter</i> , 2019, 4, 29.	1.8	5
40	Concentration and Diffusivity of Oxygen Interstitials in Niobia-Doped Ceria. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6340-6350.	3.1	6
41	Probing vacancy behavior across complex oxide heterointerfaces. <i>Science Advances</i> , 2019, 5, eaau8467.	10.3	21
42	Optimising oxygen diffusion in non-cubic, non-dilute perovskite oxides based on BiFeO <sub>3</sub> . <i>Journal of Materials Chemistry A</i> , 2019, 7, 25274-25278.	10.3	11
43	Grain growth in strontium titanate in electric fields: The impact of space charge on the grain boundary mobility. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3779-3790.	3.8	34
44	Is ReO <sub>3</sub> a mixed ionic-electronic conductor? A DFT study of defect formation and migration in a <i>B</i> <sup>VI</sup> O <sub>3</sub> perovskite-type oxide. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 8008-8015.	2.8	16
45	Atomistic simulations of ion migration in sodium bismuth titanate (NBT) materials: towards superior oxide-ion conductors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9116-9123.	10.3	43
46	SIMS study of oxygen diffusion in monoclinic HfO <sub>2</sub> . <i>Applied Physics Letters</i> , 2018, 112, .	3.3	18
47	Defect mechanisms in BaTiO <sub>3</sub> Bi <sub>2</sub> M <sub>2</sub> O <sub>7</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2018, 101, 2376-2390.	3.8	30
48	The thermodynamics and kinetics of iodine vacancies in the hybrid perovskite methylammonium lead iodide. <i>Energy and Environmental Science</i> , 2018, 11, 3266-3274.	30.8	81
49	The blocking effect of surface dislocations on oxygen tracer diffusion in SrTiO <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15455-15463.	2.8	21
50	Oxygen Exchange Processes between Oxide Memristive Devices and Water Molecules. <i>Advanced Materials</i> , 2018, 30, e1800957.	21.0	57
51	A SIMS study of cation and anion diffusion in tantalum oxide. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 989-996.	2.8	21
52	Field-enhanced route to generating anti-Frenkel pairs in $\text{HfO}_2$ . <i>Physical Review Materials</i> , 2018, 2, .	2.4	12
53	Ion migration in crystalline and amorphous HfO <sub>x</sub> . <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	45
54	Impurity diffusion of Hf and Zr in Gd-doped CeO <sub>2</sub> . <i>Solid State Ionics</i> , 2017, 305, 23-29.	2.7	20

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55	A Space-Charge Treatment of the Increased Concentration of Reactive Species at the Surface of a Ceria Solid Solution. <i>Angewandte Chemie</i> , 2017, 129, 14708-14712.	2.0	5
56	Hydrogen separation by nanocrystalline titanium nitride membranes with high hydride ion conductivity. <i>Nature Energy</i> , 2017, 2, 786-794.	39.5	40
57	A Space-Charge Treatment of the Increased Concentration of Reactive Species at the Surface of a Ceria Solid Solution. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14516-14520.	13.8	27
58	Limits to the rate of oxygen transport in mixed-conducting oxides. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20334-20350.	10.3	51
59	Deuterium Markers in CdS and Zn(O,S) Buffer Layers Deposited by Solution Growth for Cu(In,Ga)Se <sub>2</sub> Thin-Film Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700288.	2.4	0
60	Field-enhanced ion transport in solids: Reexamination with molecular dynamics simulations. <i>Physical Review B</i> , 2016, 94, .	3.2	42
61	Competing descriptions of diffusion profiles with two features: Surface space-charge layer versus fast grain-boundary diffusion. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	15
62	Pulsed laser deposition of SrRuO <sub>3</sub> thin-films: The role of the pulse repetition rate. <i>APL Materials</i> , 2016, 4, .	5.1	21
63	Computational Study of Oxygen Diffusion along <i>a</i> [100] Dislocations in the Perovskite Oxide SrTiO <sub>3</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 12246-12256.	8.0	69
64	Dynamics of the metal-insulator transition of donor-doped $\text{SrTiO}_3$ . <i>Physical Review B</i> , 2016, 94, .	3.2	46
65	Atomistic simulations of symmetrical low-angle [100] (01l) tilt boundaries in SrTiO <sub>3</sub> . <i>Acta Materialia</i> , 2016, 118, 286-295.	7.9	16
66	Space charges and defect concentration profiles at complex oxide interfaces. <i>Physical Review B</i> , 2016, 93, .	3.2	51
67	Oxygen diffusion and surface exchange in the mixed conducting oxides SrTi <sub>1-y</sub> Fe <sub>y</sub> O <sub>3-δ</sub> . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29495-29505.	2.8	43
68	Oxygen transport in undoped and doped mayenite. <i>Solid State Ionics</i> , 2016, 284, 25-27.	2.7	18
69	Oxygen Diffusion in SrTiO <sub>3</sub> and Related Perovskite Oxides. <i>Advanced Functional Materials</i> , 2015, 25, 6326-6342.	14.9	215
70	Oxygen Diffusion in Mayenite. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9721-9727.	3.1	32
71	Computational Study of Cation Diffusion in Ceria. <i>Journal of Physical Chemistry C</i> , 2015, 119, 27307-27315.	3.1	45
72	Understanding Oxygen-Vacancy Migration in the Fluorite Oxide CeO <sub>2</sub> : An Ab Initio Study of Impurity-Anion Migration. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28269-28275.	3.1	27

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73	Complex behaviour of vacancy point-defects in SrRuO <sub>3</sub> thin films. Physical Chemistry Chemical Physics, 2015, 17, 1060-1069.	2.8	23
74	The phase stability of Ca <sub>2</sub> TiO <sub>4</sub> and related Ruddlesden-Popper phases. Journal of Physics and Chemistry of Solids, 2015, 86, 90-94.	4.0	9
75	Atomic structure and chemistry of dislocation cores at low-angle tilt grain boundary in SrTiO <sub>3</sub> bicrystals. Acta Materialia, 2015, 89, 344-351.	7.9	58
76	Oxygen diffusion in single crystal barium titanate. Physical Chemistry Chemical Physics, 2015, 17, 12587-12597.	2.8	57
77	Diffusion of Nd and Mo in lanthanum tungsten oxide. Solid State Ionics, 2015, 274, 128-133.	2.7	5
78	A generalised space-charge theory for extended defects in oxygen-ion conducting electrolytes: from dilute to concentrated solid solutions. Energy and Environmental Science, 2015, 8, 2935-2940.	30.8	84
79	Spectromicroscopic insights for rational design of redox-based memristive devices. Nature Communications, 2015, 6, 8610.	12.8	100
80	Chemical relaxation experiments on mixed conducting oxides with large stoichiometry deviations. Solid State Ionics, 2015, 280, 66-73.	2.7	22
81	A family of oxide ion conductors based on the ferroelectric perovskite Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> . Nature Materials, 2014, 13, 31-35.	27.5	715
82	Do dislocations act as atomic autobahns for oxygen in the perovskite oxide SrTiO <sub>3</sub> ?. Nanoscale, 2014, 6, 12864-12876.	5.6	118
83	A Simulation Study of Oxygen-Vacancy Behavior in Strontium Titanate: Beyond Nearest-Neighbor Interactions. Journal of Physical Chemistry C, 2014, 118, 15185-15192.	3.1	66
84	Finite-size versus interface-proximity effects in thin-film epitaxial SrTiO <sub>3</sub> . Physical Review B, 2014, 89, .	3.1	47
85	Complex diffusion behavior of oxygen in nanocrystalline BaTiO <sub>3</sub> ceramics. Physical Chemistry Chemical Physics, 2014, 16, 2568.	2.8	16
86	Ionic conduction in the SrTiO <sub>3</sub>  YSZ SrTiO <sub>3</sub> heterostructure. Physical Chemistry Chemical Physics, 2013, 15, 4505.	2.8	41
87	Ab Initio Calculation of the Defect Structure of Ceria. ECS Transactions, 2013, 57, 2405-2410.	0.5	8
88	Simulation Studies of the Phase Stability of the Ruddlesden-Popper Phases. Journal of the American Ceramic Society, 2013, 96, 2316-2321.	3.8	14
89	Ab initio analysis of the defect structure of ceria. Physical Review B, 2013, 87, .	3.2	125
90	Activation Volume Tensor for Oxygen-Vacancy Migration in Strained CeO <sub>2</sub> Electrolytes. Physical Review Letters, 2013, 110, 205901.	7.8	55

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91	Oxygen Isotope Transport Properties of Ytria-Stabilized Zirconia (YSZ) in O <sub>2</sub> - and H <sub>2</sub> O-Containing Atmospheres. Fuel Cells, 2013, 13, n/a-n/a.	2.4	11
92	Molecular dynamics simulations of oxygen vacancy diffusion in SrTiO <sub>3</sub> . Journal of Physics Condensed Matter, 2012, 24, 485002.	1.8	21
93	Mechanisms of Reactions in the Solid State: (110) Al <sub>2</sub> O <sub>3</sub> + (001) ZnO Interfacial Reaction. Journal of Physical Chemistry C, 2012, 116, 980-986.	3.1	8
94	Phase Stability and Oxygen Nonstoichiometry of Highly Oxygen-Deficient Perovskite-Type Oxides: A Case Study of (Ba,Sr)(Co,Fe)O <sub>3-<math>\delta</math></sub> . Chemistry of Materials, 2012, 24, 269-274.	6.7	83
95	Diffusion of La and Mn in Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> polycrystalline ceramics. Energy and Environmental Science, 2012, 5, 5803-5813.	30.8	34
96	Modifying the barriers for oxygen-vacancy migration in fluorite-structured CeO <sub>2</sub> electrolytes through strain: a computer simulation study. Energy and Environmental Science, 2012, 5, 5445-5453.	30.8	142
97	Dehydration kinetics of nano-YSZ ceramics monitored by in-situ infrared spectroscopy. Solid State Ionics, 2012, 225, 241-244.	2.7	16
98	Behavior of oxygen vacancies in single-crystal SrTiO <sub>3</sub> : Equilibrium distribution and diffusion kinetics. Physical Review B, 2012, 85, .	3.2	176
99	Large Scale, Low Cost Fabrication of Janus Type Emulsifiers by Selective Decoration of Natural Kaolinite Platelets. Angewandte Chemie - International Edition, 2012, 51, 1348-1352.	13.8	56
100	Electrochemical activation of molecular nitrogen at the Ir/YSZ interface. Physical Chemistry Chemical Physics, 2011, 13, 3394.	2.8	18
101	Defect chemistry of grain boundaries in proton-conducting solid oxides. Solid State Ionics, 2011, 196, 1-8.	2.7	49
102	Mechanisms of impurity incorporation during MOVPE growth of m-plane GaN layers on LiAlO <sub>2</sub> . Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2050-2052.	0.8	0
103	Low temperature diffusion and oxygen stoichiometry in lanthanum nickelate. Solid State Ionics, 2010, 181, 386-391.	2.7	79
104	Strongly enhanced incorporation of oxygen into barium titanate based multilayer ceramic capacitors using water vapor. Applied Physics Letters, 2010, 97, .	3.3	25
105	Protonic conductivity of nano-structured yttria-stabilized zirconia: dependence on grain size. Journal of Materials Chemistry, 2010, 20, 990-994.	6.7	59
106	A kinetic study of the decomposition of the cubic perovskite-type oxide Ba <sub>x</sub> Sr <sub>1-x</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> (BSCF) (x = 0.1 and 0.5). Physical Chemistry Chemical Physics, 2010, 12, 10320.	2.8	157
107	Room-temperature protonic conduction in nanocrystalline films of yttria-stabilized zirconia. Journal of Materials Chemistry, 2010, 20, 6235.	6.7	46
108	Grain boundaries in dense nanocrystalline ceria ceramics: exclusive pathways for proton conduction at room temperature. Journal of Materials Chemistry, 2010, 20, 10110.	6.7	57

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109	Probing Diffusion Kinetics with Secondary Ion Mass Spectrometry. MRS Bulletin, 2009, 34, 907-914.	3.5	75
110	An atomistic simulation study of oxygen-vacancy migration in perovskite electrolytes based on LaGaO <sub>3</sub> . Monatshefte für Chemie, 2009, 140, 1011-1015.	1.8	25
111	Heterogeneously doped nanocrystalline ceria films by grain boundary diffusion: Impact on transport properties. Journal of Electroceramics, 2009, 22, 405-415.	2.0	48
112	Structural characteristics of a multilayer of silicon rich oxide (SRO) with high Si content prepared by LPCVD. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 263-269.	1.8	10
113	Oxidation states of the transition metal cations in the highly nonstoichiometric perovskite-type oxide Ba <sub>0.1</sub> Sr <sub>0.9</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> . Journal of Materials Chemistry, 2009, 19, 1960.	6.7	52
114	On the conduction pathway for protons in nanocrystalline yttria-stabilized zirconia. Physical Chemistry Chemical Physics, 2009, 11, 3035.	2.8	93
115	The formation of equilibrium space-charge zones at grain boundaries in the perovskite oxide SrTiO <sub>3</sub> . Physical Chemistry Chemical Physics, 2009, 11, 9939.	2.8	191
116	Chemical strengthening of a dental lithium disilicate glass-ceramic material. Journal of Biomedical Materials Research - Part A, 2008, 87A, 582-587.	4.0	28
117	A chemically driven insulator-metal transition in non-stoichiometric and amorphous gallium oxide. Nature Materials, 2008, 7, 391-398.	27.5	166
118	Diffusion of Sr and Zr in BaTiO <sub>3</sub> single crystals. Solid State Sciences, 2008, 10, 725-734.	3.2	57
119	Oxygen-18 surface exchange and diffusion in Li <sub>2</sub> O-deficient single crystalline lithium niobate. Solid State Sciences, 2008, 10, 746-753.	3.2	15
120	Oxygen diffusion in nanocrystalline yttria-stabilized zirconia: the effect of grain boundaries. Physical Chemistry Chemical Physics, 2008, 10, 2067.	2.8	139
121	Using <sup>18</sup> O/ <sup>16</sup> O exchange to probe an equilibrium space-charge layer at the surface of a crystalline oxide: method and application. Physical Chemistry Chemical Physics, 2008, 10, 2356.	2.8	86
122	Equal mobility of constituent cations in BaTiO <sub>3</sub> . Applied Physics Letters, 2008, 92, .	3.3	21
123	Eigenschaften. Nachrichten Aus Der Chemie, 2007, 55, 249-251.	0.0	0
124	Capacitance of single crystal and low-angle tilt bicrystals of Fe-doped SrTiO <sub>3</sub> . Faraday Discussions, 2007, 134, 235-245.	3.2	12
125	Secondary ion mass spectrometry (SIMS) - a powerful tool for studying mass transport over various length scales. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1785-1801.	0.8	30
126	Preparation of nitrogen-doped YSZ thin films by pulsed laser deposition and their characterization. Journal of Materials Science, 2007, 42, 1931-1941.	3.7	19



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127	A universal empirical expression for the isotope surface exchange coefficients ( $k^*$ ) of acceptor-doped perovskite and fluorite oxides. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 890.	2.8	121
128	Electrochemical Incorporation of Nitrogen into a Zirconia Solid Electrolyte. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, F23.	2.2	13
129	Determining oxygen isotope profiles in oxides with Time-of-Flight SIMS. <i>Solid State Ionics</i> , 2005, 176, 1465-1471.	2.7	127
130	Oxygen exchange and diffusion measurements: The importance of extracting the correct initial and boundary conditions. <i>Solid State Ionics</i> , 2005, 176, 1915-1920.	2.7	76
131	Comparative studies of microstructure and impedance of small-angle symmetrical and asymmetrical grain boundaries in SrTiO <sub>3</sub> . <i>Acta Materialia</i> , 2005, 53, 5007-5015.	7.9	49
132	Dopant substitution and oxygen migration in the complex perovskite oxide Ba <sub>3</sub> CaNb <sub>2</sub> O <sub>9</sub> : A computational study. <i>Journal of Solid State Chemistry</i> , 2005, 178, 1959-1967.	2.9	16
133	Comment on Atomic-scale model of the grain boundary potential in perovskite oxides. <i>Physical Review B</i> , 2005, 72, .	3.2	4
134	Electrical resistance of low-angle tilt grain boundaries in acceptor-doped SrTiO <sub>3</sub> as a function of misorientation angle. <i>Journal of Applied Physics</i> , 2005, 97, 053502.	2.5	63
135	Electrical and Structural Characterization of a Low-Angle Tilt Grain Boundary in Iron-Doped Strontium Titanate. <i>Journal of the American Ceramic Society</i> , 2003, 86, 922-928.	3.8	103
136	SrTiO <sub>3</sub> : A Model Electroceramic. <i>International Journal of Materials Research</i> , 2003, 94, 218-225.	0.8	65
137	A computational study of cation defects in LaGaO <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 740-748.	2.8	62
138	Surface Kinetics of Oxygen Incorporation into SrTiO <sub>3</sub> . <i>Journal of the Electrochemical Society</i> , 2002, 149, J19.	2.9	68
139	Optically Tuning the Rate of Stoichiometry Changes: Surface-Controlled Oxygen Incorporation into Oxides under UV Irradiation. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2126-2129.	13.8	48
140	Optically Tuning the Rate of Stoichiometry Changes: Surface-Controlled Oxygen Incorporation into Oxides under UV Irradiation. , 2001, 40, 2126.		2
141	Optically Tuning the Rate of Stoichiometry Changes: Surface-Controlled Oxygen Incorporation into Oxides under UV Irradiation. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2126-2129.	13.8	8
142	Optically Tuning the Rate of Stoichiometry Changes: Surface-Controlled Oxygen Incorporation into Oxides under UV Irradiation. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2126-2129.	13.8	0
143	A SIMS study of oxygen tracer diffusion and surface exchange in La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3</sub> + $\delta$ . <i>Materials Letters</i> , 2000, 43, 43-52.	2.6	192
144	Oxygen transport in La <sub>1-x</sub> Sr <sub>x</sub> Mn <sub>1-y</sub> Co <sub>y</sub> O <sub>3</sub> $\pm\delta$ perovskites. <i>Solid State Ionics</i> , 1999, 126, 153-161.	2.7	242

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145	Formation and migration of cation defects in the perovskite oxide LaMnO <sub>3</sub> . Journal of Materials Chemistry, 1999, 9, 1621-1627.	6.7	144
146	Oxygen transport in La <sub>1-x</sub> Sr <sub>x</sub> Mn <sub>1-y</sub> Co <sub>y</sub> O <sub>3±δ</sub> perovskites Part I. Oxygen tracer diffusion. Solid State Ionics, 1998, 106, 175-187.	2.7	406
147	Surface oxygen exchange of LaSrCoO. Solid State Ionics, 1997, 96, 1-7.	2.7	95
148	The application of secondary ion mass spectrometry (SIMS) to the study of high temperature proton conductors (HTPC). Solid State Ionics, 1997, 97, 409-419.	2.7	45
149	The kinetics of oxygen transport in 9.5 mol % single crystal yttria stabilised zirconia. Solid State Ionics, 1997, 100, 1-10.	2.7	261
150	Surface exchange of oxygen in mixed conducting perovskite oxides. Solid State Ionics, 1996, 86-88, 703-709.	2.7	197
151	A SIMS study of hydrogen in acceptor-doped perovskite oxides. Solid State Ionics, 1995, 77, 180-184.	2.7	20
152	Secondary-ion-mass-spectroscopy study of oxygen tracer diffusion in ac-axis-oriented YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> film. Physical Review B, 1995, 51, 8498-8502.	3.2	28
153	Grain Size Effect in the Electrical Properties of Nanostructured Functional Oxides through Pressure Modification of the Spark Plasma Sintering Method. Key Engineering Materials, 0, 484, 107-116.	0.4	7