Manfred Martin

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1938524/publications.pdf

Version: 2024-02-01

204 papers 6,326 citations

47006 47 h-index 71 g-index

223 all docs 223 docs citations

times ranked

223

6420 citing authors

#	Article	IF	CITATIONS
1	The Impact of Nanoscale Percolation in Yttriumâ€Doped BaZrO ₃ on the Oxygen Ion and Proton Conductivities: A Density Functional Theory and Kinetic Monte Carlo Study. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	5
2	Kinetic Monte Carlo simulations of ionic conductivity in oxygen ion conductors. Materials Chemistry and Physics, 2021, 257, 123767.	4.0	6
3	Transition between bipolar and abnormal bipolar resistive switching in amorphous oxides with a mobility edge. Scientific Reports, 2021, 11, 14384.	3.3	3
4	Isotopic study of Raman active phonon modes in \hat{l}^2 -Ga $<$ sub $>$ 2 $<$ /sub $>$ 0 $<$ sub $>$ 3 $<$ /sub $>$. Journal of Materials Chemistry C, 2021, 9, 2311-2320.	5 . 5	20
5	Mechanistic origin of the time-dependence of the open-circuit voltage of a galvanic cell involving a ternary or higher compound. Physical Chemistry Chemical Physics, 2021, 23, 15119-15126.	2.8	O
6	Nanoscale percolation in doped BaZrO3 for high proton mobility. Nature Materials, 2020, 19, 338-346.	27.5	73
7	Ab initio and experimental oxygen ion conductivities in Sm-Zr and Gd-Zr co-doped ceria. Solid State lonics, 2020, 355, 115422.	2.7	7
8	A quantitative analysis of two-fold electrical conductivity relaxation behaviour in mixed proton–oxide-ion–electron conductors upon hydration. Physical Chemistry Chemical Physics, 2020, 22, 25032-25041.	2.8	7
9	An innovative approach to design SOFC air electrode materials: high entropy La _{1â^'î} Sr _x (Co,Cr,Fe,Mn,Ni)O _{3â^'î'} (<i>x</i> e> 0, 0.1, 0.2, 0.3) perovskites synthesized by the solâ€"gel method. Journal of Materials Chemistry A, 2020, 8, 24455-24468.	10.3	80
10	Offcut-related step-flow and growth rate enhancement during (100) <b <math="">< i$>$ $\hat{l}^2<$ li> $<$ lb>-Ga2O3 homoepitaxy by metal-exchange catalyzed molecular beam epitaxy (MEXCAT-MBE). Applied Physics Letters, 2020, 117, .	3.3	17
11	The ionic conductivity of Smâ€doped ceria. Journal of the American Ceramic Society, 2020, 103, 3776-3787.	3.8	32
12	Substrate-orientation dependence of \hat{l}^2 -Ga2O3 (100), (010), (001), and (2 \hat{A} -O1) homoepitaxy by indium-mediated metal-exchange catalyzed molecular beam epitaxy (MEXCAT-MBE). APL Materials, 2020, 8, .	5.1	80
13	Infinite dilution in doped ceria and high activation energies. Solid State Communications, 2020, 314-315, 113939.	1.9	2
14	The oxygen ion conductivity of Lu doped ceria. Journal of Physics Condensed Matter, 2020, 32, 265402.	1.8	5
15	Behavior of cation vacancies in single-crystal and in thin-film <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">SrTiO</mml:mi><mml:mn></mml:mn></mml:msub></mml:math> : The importance of strontium vacancies and their defect associates. Physical Review Materials. 2020. 4	2.4	8
16	Coupled Morphological Stability of the Multiple Phase Boundaries: Oxides in an Oxygen Potential Gradient. II. Two Oxide Layers. Metallofizika I Noveishie Tekhnologii, 2020, 42, 317-339.	0.5	0
17	The Effect of Jump Attempt Frequencies on the Ionic Conductivity of Doped Ceria. Journal of Physical Chemistry C, 2019, 123, 19437-19446.	3.1	8
18	Resistive Switching: Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO ₃ Resistive Switching Memories (Adv. Mater. 28/2019). Advanced Materials, 2019, 31, 1970205.	21.0	2

#	Article	IF	CITATIONS
19	Oxygen diffusion in amorphous and partially crystalline gallium oxide. Physical Chemistry Chemical Physics, 2019, 21, 4268-4275.	2.8	10
20	Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO ₃ Resistive Switching Memories. Advanced Materials, 2019, 31, e1901322.	21.0	38
21	Coordination Numbers in Sm-Doped Ceria Using X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 6333-6339.	3.1	15
22	Bulk and grain boundary Li-diffusion in dense LiMn ₂ O ₄ pellets by means of isotope exchange and ToF-SIMS analysis. Physical Chemistry Chemical Physics, 2019, 21, 26066-26076.	2.8	19
23	Coupled Morphological Stability of the Multiple Phase Boundaries: Oxides in an Oxygen Potential Gradient. I. Single Oxide Layer. Metallofizika I Noveishie Tekhnologii, 2019, 41, 1433-1454.	0.5	1
24	Surface Cation Segregation and Chromium Deposition on the Double-Perovskite Oxide PrBaCo ₂ O _{5+Î} . ACS Applied Materials & Double-Perovskite Oxide PrBaCo _{O<su< td=""><td>8.0</td><td>57</td></su<>}}	8.0	57
25	Understanding the ionic conductivity maximum in doped ceria: trapping and blocking. Physical Chemistry Chemical Physics, 2018, 20, 14291-14321.	2.8	116
26	$\mbox{\sc i} \mbox{\sc Ab initio} \mbox{\sc i} \mbox{\sc i} \sc alculation of the migration free energy of oxygen diffusion in pure and samarium-doped ceria. Physical Review B, 2018, 97, .$	3.2	26
27	Synthesis and microstructure of the (Co,Cr,Fe,Mn,Ni) 3 O 4 high entropy oxide characterized by spinel structure. Materials Letters, 2018, 216, 32-36.	2.6	372
28	On the kinetic decomposition voltage of ternary oxides. Physical Chemistry Chemical Physics, 2018, 20, 2396-2402.	2.8	3
29	Atomistic Investigation of the Schottky Contact Conductance Limits at SrTiO3 based Resistive Switching Devices. , $2018, \ldots$		2
30	Surface Tuning of Solid Oxide Fuel Cell Cathode by Atomic Layer Deposition. Advanced Energy Materials, 2018, 8, 1802506.	19.5	48
31	A Theoretical and Experimental View on the Temperature Dependence of the Electronic Conduction through a Schottky Barrier in a Resistively Switching SrTiO ₃ â€Based Memory Cell. Advanced Electronic Materials, 2018, 4, 1800062.	5.1	31
32	Influence of defect interactions on the free energy of reduction in pure and doped ceria. Journal of Materials Chemistry A, 2017, 5, 9241-9249.	10.3	22
33	Ab initio calculation of the attempt frequency of oxygen diffusion in pure and samarium doped ceria. Physical Chemistry Chemical Physics, 2017, 19, 9957-9973.	2.8	58
34	Entropies of defect association in ceria from first principles. Physical Chemistry Chemical Physics, 2017, 19, 29625-29628.	2.8	3
35	Deuterium Markers in CdS and Zn(O,S) Buffer Layers Deposited by Solution Growth for Cu(In,Ga)Se ₂ Thinâ€Film Solar Cells. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700288.	2.4	0
36	Fabrication of a resistive switching gallium oxide thin film with a tailored gallium valence state and oxygen deficiency by rf cosputtering process. RSC Advances, 2016, 6, 8964-8970.	3.6	24

3

#	Article	IF	CITATIONS
37	Oxygen transport in undoped and doped mayenite. Solid State Ionics, 2016, 284, 25-27.	2.7	18
38	Association of defects in doped non-stoichiometric ceria from first principles. Physical Chemistry Chemical Physics, 2016, 18, 3804-3811.	2.8	35
39	Radiotracer diffusion of 114mln in Cu(In,Ga)Se2 thin films. Thin Solid Films, 2015, 592, 118-123.	1.8	4
40	Oxygen Diffusion in Mayenite. Journal of Physical Chemistry C, 2015, 119, 9721-9727.	3.1	32
41	Microstructural comparison of solid oxide electrolyser cells operated for 6100Âh and 9000Âh. Journal of Power Sources, 2015, 275, 901-911.	7.8	98
42	Oxygen diffusion in single crystal barium titanate. Physical Chemistry Chemical Physics, 2015, 17, 12587-12597.	2.8	57
43	Investigation on structural aspects of ZnO nano-crystal using radio-active ion beam and PAC. Nuclear Instruments & Methods in Physics Research B, 2015, 362, 103-109.	1.4	1
44	Electrotransport-induced unmixing and decomposition of ternary oxides. Journal of Applied Physics, 2015, 117, .	2.5	6
45	Comment on "How to interpret Onsager cross terms in mixed ionic electronic conductors―by l. Riess, Phys. Chem. Chem. Phys., 2014,16, 22513. Physical Chemistry Chemical Physics, 2015, 17, 11103-11106.	2.8	2
46	Chemical relaxation experiments on mixed conducting oxides with large stoichiometry deviations. Solid State Ionics, 2015, 280, 66-73.	2.7	22
47	Amorphous and highly nonstoichiometric titania (TiOx) thin films close to metal-like conductivity. Journal of Materials Chemistry A, 2014, 2, 6631.	10.3	54
48	Unexpected thermoelectric behavior and immiscibility of the allegedly complete solid solutionSr(Ru1–xTix)O3. Physical Review B, 2014, 89, .	3.2	7
49	A combined DFT + U and Monte Carlo study on rare earth doped ceria. Physical Chemistry Chemical Physics, 2014, 16, 9974.	2.8	111
50	Bulk mixed ion electron conduction in amorphous gallium oxide causes memristive behaviour. Nature Communications, 2014, 5, 3473.	12.8	119
51	In-situ structural investigation of non-stoichiometric HfO2-x films using quick-scanning extended X-ray absorption fine structure. Thin Solid Films, 2013, 539, 60-64.	1.8	5
52	Ab Initio Calculation of the Defect Structure of Ceria. ECS Transactions, 2013, 57, 2405-2410.	0.5	8
53	1H-NMR measurements of proton mobility in nano-crystalline YSZ. Physical Chemistry Chemical Physics, 2013, 15, 19825.	2.8	16
54	Entropies of defect formation in ceria from first principles. Physical Chemistry Chemical Physics, 2013, 15, 15935.	2.8	48

#	Article	IF	CITATIONS
55	Experimental demonstration of the path- and time-dependence of open-circuit voltage of galvanic cells involving a multinary compound under multiple chemical potential gradients. Solid State Ionics, 2013, 235, 22-31.	2.7	6
56	<i>Ab initio</i> analysis of the defect structure of ceria. Physical Review B, 2013, 87, .	3.2	125
57	CO ₂ -Tolerant and Cobalt-Free SrFe _{0.8} Nb _{0.2} O _{3â^δ} Perovskite Membrane for Oxygen Separation. Chemistry of Materials, 2013, 25, 815-817.	6.7	61
58	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi>β</mml:mi> -Ga <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:mrow </mml:msub>O<mml:math< td=""><td>3.2</td><td>123</td></mml:math<></mml:math 	3.2	123
59	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msub><mml:mrow />xmml: Oxygen Isotope Transport Properties of Yttria-Stabilized Zirconia (YSZ) in O2- and H2O-Containing Atmospheres. Fuel Cells, 2013, 13, n/a-n/a.</mml:mrow </mml:msub>	2.4	11
60	Oxidation Kinetics of Zirconium Examined by In Situ X-ray Diffraction. Journal of the Electrochemical Society, 2013, 160, C136-C141.	2.9	12
61	Mechanisms of Reactions in the Solid State: (110) Al ₂ O ₃ + (001) ZnO Interfacial Reaction. Journal of Physical Chemistry C, 2012, 116, 980-986.	3.1	8
62	Phase Stability and Oxygen Nonstoichiometry of Highly Oxygen-Deficient Perovskite-Type Oxides: A Case Study of (Ba,Sr)(Co,Fe)O _{3â^î^(} . Chemistry of Materials, 2012, 24, 269-274.	6.7	83
63	Diffusion of La and Mn in Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3â^î^(} polycrystalline ceramics. Energy and Environmental Science, 2012, 5, 5803-5813.	30.8	34
64	A concerted migration mechanism of mixed oxide ion and electron conduction in reduced ceria studied by first-principles density functional theory. Physical Chemistry Chemical Physics, 2012, 14, 6079.	2.8	55
65	Oxygen ion conductivity of doped ceria: A Kinetic Monte Carlo study. Solid State Ionics, 2012, 225, 476-483.	2.7	40
66	Dehydration kinetics of nano-YSZ ceramics monitored by in-situ infrared spectroscopy. Solid State lonics, 2012, 225, 241-244.	2.7	16
67	Oxygen permeation and oxidation states of transition metals in (Fe, Nb)-doped BaCoO3â^Î perovskites. Journal of Membrane Science, 2012, 387-388, 17-23.	8.2	35
68	Largeâ€Scale, Lowâ€Cost Fabrication of Janusâ€Type Emulsifiers by Selective Decoration of Natural Kaolinite Platelets. Angewandte Chemie - International Edition, 2012, 51, 1348-1352.	13.8	56
69	Oxygen Potential Gradient Induced Degradation of Oxides. Journal of the Korean Ceramic Society, 2012, 49, 29-36.	2.3	6
70	Electrochemical activation of molecular nitrogen at the Ir/YSZ interface. Physical Chemistry Chemical Physics, 2011, 13, 3394.	2.8	18
71	Defect chemistry of grain boundaries in proton-conducting solid oxides. Solid State Ionics, 2011, 196, 1-8.	2.7	49
72	Ionic Transport under Chemical Potential Gradients - Kinetic Demixing and Decomposition in Metal Oxides and Scale Growth in High-Temperature Oxidation. Materials Science Forum, 2011, 696, 28-33.	0.3	0

#	Article	lF	CITATIONS
73	Pressure effects and grain growth kinetics in the consolidation of nanostructured fully stabilized zirconia by pulsed electric current sintering. Acta Materialia, 2010, 58, 5022-5030.	7.9	75
74	Modified polyol-mediated synthesis and consolidation of Gd-doped ceria nanoparticles. Solid State lonics, 2010, 181, 372-378.	2.7	7
75	On the ammonolysis of Ga2O3: An XRD, neutron diffraction and XAS investigation of the oxygen-rich part of the system Ga2O3–GaN. Journal of Solid State Chemistry, 2010, 183, 532-541.	2.9	19
76	Strongly enhanced incorporation of oxygen into barium titanate based multilayer ceramic capacitors using water vapor. Applied Physics Letters, 2010, 97, .	3.3	25
77	Protonic conductivity of nano-structured yttria-stabilized zirconia: dependence on grain size. Journal of Materials Chemistry, 2010, 20, 990-994.	6.7	59
78	On the path-dependence of the open-cell voltage of a galvanic cell involving a ternary or multinary compound with multiple mobile ionic species under multiple chemical potential gradients. Physical Chemistry Chemical Physics, 2010, 12, 14699.	2.8	17
79	A kinetic study of the decomposition of the cubic perovskite-type oxide BaxSr1â^'xCo0.8Fe0.2O3â^'Î^ (BSCF) (x = 0.1 and 0.5). Physical Chemistry Chemical Physics, 2010, 12, 10320.	2.8	157
80	Room-temperature protonic conduction in nanocrystalline films of yttria-stabilized zirconia. Journal of Materials Chemistry, 2010, 20, 6235.	6.7	46
81	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
82	Probing Diffusion Kinetics with Secondary Ion Mass Spectrometry. MRS Bulletin, 2009, 34, 907-914.	3. 5	75
83	Physical Chemistry of Solids – The Science behind Materials Engineering: Concepts, Models, Methods. Zeitschrift Fur Physikalische Chemie, 2009, 223, 1239-1258.	2.8	1
84	Solid-State Ionics in the 21st Century: Current Status and Future Prospects. MRS Bulletin, 2009, 34, 900-906.	3.5	13
85	An atomistic simulation study of oxygen-vacancy migration in perovskite electrolytes based on LaGaO3. Monatshefte Für Chemie, 2009, 140, 1011-1015.	1.8	25
86	Heterogeneously doped nanocrystalline ceria films by grain boundary diffusion: Impact on transport properties. Journal of Electroceramics, 2009, 22, 405-415.	2.0	48
87	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
88	First-principles study on defect chemistry and migration of oxide ions in ceria doped with rare-earth cations. Physical Chemistry Chemical Physics, 2009, 11, 3241.	2.8	224
89	B-Site cation diffusivity of Mn and Cr in perovskite-type LaMnO3 with cation-deficit nonstoichiometry. Physical Chemistry Chemical Physics, 2009, 11, 3063.	2.8	50
90	Oxide nitrides: From oxides to solids with mobile nitrogen ions. Progress in Solid State Chemistry, 2009, 37, 81-131.	7.2	66

#	Article	IF	Citations
91	Thermodynamics, structure and kinetics in the system Ga–O–N. Progress in Solid State Chemistry, 2009, 37, 132-152.	7.2	33
92	Oxidation states of the transition metal cations in the highly nonstoichiometric perovskite-type oxide Ba0.1Sr0.9Co0.8Fe0.2O3â~δ. Journal of Materials Chemistry, 2009, 19, 1960.	6.7	52
93	An in situ XAS investigation of the kinetics of the ammonolysis of Ga2O3 and the oxidation of GaN. Physical Chemistry Chemical Physics, 2009, 11, 3127.	2.8	29
94	On the conduction pathway for protons in nanocrystalline yttria-stabilized zirconia. Physical Chemistry Chemical Physics, 2009, 11, 3035.	2.8	93
95	Physical chemistry of solids—the science behind materials engineering. Physical Chemistry Chemical Physics, 2009, 11, 3010.	2.8	33
96	Chemical strengthening of a dental lithium disilicate glass–ceramic material. Journal of Biomedical Materials Research - Part A, 2008, 87A, 582-587.	4.0	28
97	Unprecedented Roomâ€∓emperature Electrical Power Generation Using Nanoscale Fluoriteâ€Structured Oxide Electrolytes. Advanced Materials, 2008, 20, 556-559.	21.0	105
98	A chemically driven insulator–metal transition in non-stoichiometric and amorphous gallium oxide. Nature Materials, 2008, 7, 391-398.	27.5	166
99	Diffusion of Sr and Zr in BaTiO3 single crystals. Solid State Sciences, 2008, 10, 725-734.	3.2	57
100	Oxygen-18 surface exchange and diffusion in Li2O-deficient single crystalline lithium niobate. Solid State Sciences, 2008, 10, 746-753.	3.2	15
101	Critical behavior of CoO and NiO from specific heat, thermal conductivity, and thermal diffusivity measurements. Physical Review B, 2008, 77, .	3.2	41
102	Oxygen diffusion in nanocrystalline yttria-stabilized zirconia: the effect of grain boundaries. Physical Chemistry Chemical Physics, 2008, 10, 2067.	2.8	139
103	Using 180/160 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
104	Equal mobility of constituent cations in BaTiO3. Applied Physics Letters, 2008, 92, .	3.3	21
105	Analysis of the demixing of yttria-stabilized zirconia in an electric field for different diffusion mechanisms. Philosophical Magazine, 2007, 87, 1447-1463.	1.6	1
106	Collective and Tracer Diffusion via a Defect Cluster in LSGM. Defect and Diffusion Forum, 2007, 263, 81-86.	0.4	8
107	<i>In Situ</i> Investigations on the Oxidation of Metals. Zeitschrift Fur Physikalische Chemie, 2007, 221, 1499-1508.	2.8	4
108	Heterogeneously catalysed partial oxidation of acrolein to acrylic acidâ€"structure, function and dynamics of the Vâ€"Moâ€"W mixed oxides. Physical Chemistry Chemical Physics, 2007, 9, 3577-3589.	2.8	72

#	Article	IF	Citations
109	Secondary ion mass spectrometry (SIMS) $\hat{a} \in ``a powerful tool for studying mass transport over various length scales. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1785-1801.$	0.8	30
110	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
111	Stability and defect structure of spinels Li1Â+Âx Mn2Ââ^'Âx O4Ââ^'ÂÎ': I. In situ investigations on the stability field of the spinel phase. Journal of Materials Science, 2007, 42, 1955-1964.	3.7	15
112	Foreword: Nonstoichiometric Compounds. Journal of Materials Science, 2007, 42, 1865-1865.	3.7	0
113	On the ionic conductivity of strongly acceptor doped, fluorite-type oxygen ion conductors. Journal of Electroceramics, 2006, 17, 765-773.	2.0	26
114	Vaporization and Diffusion Studies on the Stability of Doped Lanthanum Gallates. Fuel Cells, 2006, 6, 270-283.	2.4	3
115	Correlation effects for cation diffusion via vacancy-pairs in fluorite-related oxides. Philosophical Magazine, 2006, 86, 3559-3567.	1.6	2
116	Contribution to the Theory of Demixing of Yttrium in Yttria-Stabilized-Zirconia in an Electric Field. Advances in Science and Technology, 2006, 46, 42.	0.2	O
117	Electrochemical Incorporation of Nitrogen into a Zirconia Solid Electrolyte. Electrochemical and Solid-State Letters, 2006, 9, F23.	2.2	13
118	Cation Diffusion and Demixing in Yttria Stabilized Zirconia: Comparison of Assumptions of Constant Electric Field and Constant Current. Defect and Diffusion Forum, 2006, 258-260, 247-252.	0.4	O
119	lonic conductivity of undoped BaTiO with electron transfer suppressed. Solid State Ionics, 2005, 176, 929-935.	2.7	7
120	Determining oxygen isotope profiles in oxides with Time-of-Flight SIMS. Solid State Ionics, 2005, 176, 1465-1471.	2.7	127
121	Characterization of Moâ€"Vâ€"W Mixed Oxide Catalysts by ex situ and in situ X-Ray Absorption Spectroscopy ChemInform, 2005, 36, no.	0.0	0
122	Characterization of Mo-V-W Mixed Oxide Catalysts byex situ andin situ X-Ray Absorption Spectroscopy. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2005, 631, 1289-1296.	1.2	22
123	The Influence of Cation and Vacancy Distributions on the Ionic Conductivity of Acceptor Doped Oxygen Ion Conductors. Zeitschrift Fur Physikalische Chemie, 2005, 219, 105-122.	2.8	8
124	Formation of spinel-type gallium oxynitrides: a density-functional study of binary and ternary phases in the system Ga–O–N. Journal of Materials Chemistry, 2005, 15, 3296.	6.7	56
125	Diffusion in Oxides. , 2005, , 209-247.		12
126	Thermodynamic and kinetic influences on the morphology of moving interfaces during solid state reactions. International Journal of Materials Research, 2004, 95, 247-251.	0.8	2

#	Article	IF	Citations
127	Modeling of cation diffusion in oxygen ion conductors using molecular dynamics. Solid State Ionics, 2004, 175, 823-827.	2.7	72
128	X-Ray Absorption and X-Ray Diffraction Studies on Molybdenum Doped Vanadium Pentoxide ChemInform, 2004, 35, no.	0.0	0
129	Phase diagram study in the La2O3–Ga2O3–MgO–SrO system in air. Solid State Ionics, 2004, 166, 343-350.	. 2.7	32
130	Reactivity of solids studied by in situ XAS and XRD. Solid State Ionics, 2004, 172, 357-363.	2.7	21
131	Trapping during hopping conduction of electronic defects: A conductivity model for doped transition metal oxides. Physical Chemistry Chemical Physics, 2004, 6, 3627-3632.	2.8	5
132	Kinetics of Oxidation Processes in the System Co/Ga Studied by in situ X-Ray Diffraction ChemInform, 2003, 34, no.	0.0	0
133	Materials in thermodynamic potential gradients. Journal of Chemical Thermodynamics, 2003, 35, 1291-1308.	2.0	55
134	Grain boundary ionic conductivity of yttrium stabilized zirconia as a function of silica content and grain size. Solid State Ionics, 2003, 161, 67-79.	2.7	128
135	Kinetics of Oxidation Processes in the System Co/Ga studied byin situ X-Ray Diffraction. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2003, 629, 1688-1700.	1.2	7
136	Cation tracer diffusion of 138La,84Sr and 25Mg in polycrystalline La0.9Sr0.1Ga0.9Mg0.1O2.9. Physical Chemistry Chemical Physics, 2003, 5, 2308-2313.	2.8	56
137	Complex oxides: defect chemistry, transport and chemical reaction. Physical Chemistry Chemical Physics, 2003, 5, 1.	2.8	O
138	Thermodynamic investigations of Sr- and Mg-doped lanthanum gallate by Knudsen effusion mass spectrometry and defect chemical analysis. Physical Chemistry Chemical Physics, 2003, 5, 3042.	2.8	4
139	Cation self-diffusion of [sup 44]Ca, [sup 88]Y, and [sup 96]Zr in single-crystalline calcia- and yttria-doped zirconia. Journal of Applied Physics, 2003, 94, 7547.	2.5	107
140	X-Ray absorption and X-ray diffraction studies on molybdenum doped vanadium pentoxide. Physical Chemistry Chemical Physics, 2003, 5, 4317-4324.	2.8	24
141	Electrochemical Copper Deposition in Etched Ion Track Membranes. Journal of the Electrochemical Society, 2003, 150, C189.	2.9	64
142	Materials in thermodynamic potential gradients. Pure and Applied Chemistry, 2003, 75, 889-903.	1.9	22
143	High-temperature oxidation of CoGa: Influence of the crystallographic orientation on the oxidation rate. Journal of Materials Research, 2002, 17, 2489-2498.	2.6	15
144	Thermodynamic and Cation Diffusion Studies of Perovskites on the Basis of LaGaO3 and Implications for SOFC. Materialwissenschaft Und Werkstofftechnik, 2002, 33, 355-362.	0.9	13

#	Article	IF	CITATIONS
145	Life and achievements of Carl Wagner, 100th birthday. Solid State Ionics, 2002, 152-153, 15-17.	2.7	2
146	Quantitative elaboration of the defect structure of iron doped nickel oxide (Ni0.955Fe0.045)1ââ,¬â€œÃŽÂ´O by in situ X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2001, 3, 4806-4810.	2.8	9
147	High-temperature in situ X-ray absorption studies on the iron valence in iron-doped nickel oxide (Ni1â^Fe)1â^O. Solid State Ionics, 2001, 141-142, 289-293.	2.7	7
148	Unmixing of a mixed oxide (A,B)O in an electric field: numerical solution of the time evolution of the unmixing process. Solid State Ionics, 2001, 144, 241-248.	2.7	7
149	Y and Zr Tracer Diffusion in Yttria-Stabilized Zirconia at Temperatures between 1250K and 2000K. Key Engineering Materials, 2001, 206-213, 601-604.	0.4	9
150	Preparation and characterisation of La1â^'xSrxGa1â^'yMgyO3â^'(x+y)/2 for the investigation of cation diffusion processes. Solid State Ionics, 2000, 135, 549-555.	2.7	42
151	In situ investigations on the oxidation of the ordered intermetallic compound Co0.6Ga0.4. Solid State lonics, 2000, 136-137, 971-977.	2.7	3
152	Self- and impurity cation diffusion in manganese–zinc-ferrite, Mn1â^â^2Tn Fe2+O4. Journal of Physics and Chemistry of Solids, 2000, 61, 1597-1605.	4.0	15
153	X-ray absorption investigation on the ternary system lithium manganese oxide. Solid State Ionics, 2000, 135, 267-272.	2.7	6
154	Electrotransport and demixing in oxides. Solid State Ionics, 2000, 136-137, 331-337.	2.7	50
155	In situ XRD study of the phase transition of nanocrystalline maghemite (γ-Fe2O3) to hematite (α-Fe2O3). Solid State Ionics, 2000, 136-137, 1235-1240.	2.7	96
156	Steady State Demixing of Homovalent Oxide Solid Solutions in an Electrical Potential Gradient. Electrochemistry, 2000, 68, 478-481.	1.4	5
157	A Chernia-Type Electrotransport Experiment in Magnetite, Fe ₃₋ <i>_Î</i> O ₄ . Electrochemistry, 2000, 68, 482-485.	1.4	6
158	Demixing of mixed oxide (A,B)O in an oxygen potential gradient: numerical solution of the time evolution of the demixing process. Solid State Ionics, 1999, 123, 75-85.	2.7	19
159	A quantitativein situFeK-XAFS study (T> 1270â€K) on the oxidation degree of iron in (Mg1â-'xFex)1â-'ÎO. Journal of Synchrotron Radiation, 1999, 6, 489-491.	2.4	7
160	On the observation of intrinsic defects in (Co1-xInx)1-Î'O by PAC., 1999, 120/121, 439-443.		1
161	An Extended In Situ Cuâ^'K XAFS and XRD Study on the Site Preference and Valence of Copper Ions in (Mg1-xCux)O. Journal of Physical Chemistry B, 1999, 103, 4797-4802.	2.6	17
162	High temperature point defect equilibria in ironâ€doped MgO: An <i>in situ</i> Feâ€K XAFS study on the valence and site distribution of iron in (Mg _{1â€x} Fe _x)O. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 1747-1759.	0.9	24

#	Article	IF	Citations
163	Site preference of iron ions in α-alumina: An Fe-K XAFS study on specimens prepared by a combined self-propagating chemical combustion and sintering technique. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3381-3384.	1.7	0
164	Cation Tracer Diffusion and Electrotransport in Semiconducting Cobaltous Oxide Co1–ÎO. Zeitschrift Fur Physikalische Chemie, 1998, 207, 1-19.	2.8	11
165	A Four-Frequency Conductivity Model for Transition Metal Oxides. Defect and Diffusion Forum, 1997, 143-147, 1259-1264.	0.4	O
166	Tracer Diffusion and Electrotransport in Indium-Doped Cobaltous Oxide {Co _{1-x} In _x } _{1-1´} O. Defect and Diffusion Forum, 1997, 143-147, 1683-1688.	0.4	3
167	Monte Carlo simulations of pattern formation at solid/solid interfaces. Faraday Discussions, 1997, 106, 291-306.	3.2	4
168	The electrical conductivity of CoO: Experimental results and a new conductivity model. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 176-184.	0.9	15
169	Morphological stability of the phase boundaries of a binary oxide in a simultaneous oxygen potential and temperature gradient. Solid State Ionics, 1997, 95, 17-22.	2.7	4
170	DEXAFS $\hat{a} \in \mathbb{C}$ a new technique to investigate the kinetics of high temperature solid state reactions in situ. Solid State Ionics, 1997, 95, 61-64.	2.7	8
171	Kinetic demixing of (Co,Ni)O in an electric field. Solid State Ionics, 1997, 101-103, 475-478.	2.7	6
172	Influence of impurity and dopant ions on the electrotransport properties in oxides. Solid State Ionics, 1997, 101-103, 403-409.	2.7	1
173	Simultaneous X-ray absorption fine-structure spectroscopy (XAFS) and differential scanning calorimetry (DSC). Chemical Communications, 1996, , 1755-1756.	4.1	16
174	Festkörperchemie 1995. Nachrichten Aus Der Chemie, 1996, 44, 139-146.	0.0	0
175	Instability of Moving Interfaces between Ionic Crystals KCI/AgCl. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 1-6.	0.9	8
176	Stability of Diffusion Profiles in quasi-binary Solid Solutions (Ag, Na)Cl. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 7-13.	0.9	5
177	In situ XAS-study on transition metal doped metal oxides. Physica B: Condensed Matter, 1995, 208-209, 321-322.	2.7	3
178	Diffuse neutron-scattering study of the defect structure of Fe1â^ÎO. Physica B: Condensed Matter, 1995, 213-214, 570-572.	2.7	3
179	Solid state reactions and morphology. Solid State Ionics, 1995, 75, 219-228.	2.7	17
180	Defect structure of ferrous oxideFe1â^'xO. Physical Review B, 1995, 51, 15771-15788.	3.2	27

#	Article	IF	CITATIONS
181	Interface Stability during Reactions. Materials Science Forum, 1994, 155-156, 429-444.	0.3	2
182	Experimental evidence of the interference between ionic and electronic flows in an oxide with prevailing electronic conduction. Solid State Ionics, 1994, 67, 317-322.	2.7	40
183	Demixing of doped oxides: influence of defect interactions. Solid State Ionics, 1994, 72, 67-71.	2.7	25
184	Diffuse neutron scattering of iron-doped nickel oxide. Solid State Ionics, 1994, 72, 72-75.	2.7	12
185	Electrotransport in ionic crystals: II. A dynamical model. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1994, 98, 665-673.	0.9	9
186	Electrotransport in ionic crystals: I. Application of liquid electrolyte theory. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1994, 98, 655-664.	0.9	20
187	Tracer diffusion and defect structure in Ga-doped CoO. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1993, 68, 747-765.	0.6	17
188	Inâ€situ Study of the Defect Structure of Wýstite Fe _{1â€x} O by Diffuse Elastic Neutron Scattering. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 1541-1544.	0.9	11
189	Monte Carlo simulation of surface structures during oxide reduction. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 240-247.	2.6	8
190	Transport and degradation in transition metal oxides in chemical potential gradients. Materials Science and Engineering Reports, 1991, 7, 1-86.	5 . 8	25
191	Electron wind effect in semiconducting cobalt oxide. Radiation Effects and Defects in Solids, 1991, 119-121, 735-740.	1.2	7
192	Magnetite (Fe ₃ O ₄) in an Oxygen Potential Gradient: Chemical Diffusion, Tracer Diffusion, and Phase Boundary Reaction. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1990, 94, 721-726.	0.9	7
193	Cross Effect Between Electronic and Ionic Flows in Semiconducting Transition Metal Oxides. Zeitschrift Fur Physikalische Chemie, 1990, 168, 129-142.	2.8	34
194	Tracer diffusion in oxides in an oxygen potential gradient. Solid State Ionics, 1989, 32-33, 807-816.	2.7	0
195	Demixing in Trivalent Doped Transition Metal Oxides Exposed to an Oxygen Potential Gradient. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1989, 93, 1271-1275.	0.9	4
196	The Source Solution for Diffusion with a Linearly Position Dependent Diffusion Coefficient. Zeitschrift Fur Physikalische Chemie, 1989, 162, 245-253.	2.8	5
197	Impurity diffusion of iron in cobalt oxide. Solid State Ionics, 1988, 28-30, 1230-1234.	2.7	4
198	Impurity Diffusion in a Chemical Potential Gradient (I): Theoretical Results. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1987, 91, 772-779.	0.9	4

#	Article	IF	CITATIONS
199	Impurity Diffusion in a Chemical Potential Gradient (II): Iron Tracer Diffusion in Cobalt Oxide in an Oxygen Potential Gradient. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1987, 91, 779-785.	0.9	11
200	Tracer diffusion in chemical potential gradients. Solid State Ionics, 1986, 20, 75-80.	2.7	19
201	Cobaltous Oxide in an Oxygen Potential Gradient: Morphological Stability of the Phase Boundaries. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 124-130.	0.9	50
202	On the morphological changes on CoO-surfaces during vacancy relaxation processes (Is DIGM) Tj ETQq0 0 0 rgBT	Overlock	10 Tf 50 62
203	Diffusion Kinetics Analysis of Cation Diffusion in YSZ and LSGM. Defect and Diffusion Forum, 0, 273-276, 445-454.	0.4	0
204	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