

Vladislav Kharton

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6554500/vladislav-kharton-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

343
papers

11,734
citations

56
h-index

90
g-index

371
ext. papers

12,398
ext. citations

4.2
avg, IF

6.23
L-index

#	Paper	IF	Citations
343	Transport properties of solid oxide electrolyte ceramics: a brief review. <i>Solid State Ionics</i> , 2004 , 174, 135-149	3.49	888
342	Electrode materials and reaction mechanisms in solid oxide fuel cells: a brief review. <i>Journal of Solid State Electrochemistry</i> , 2008 , 12, 1367-1391	2.6	345
341	Ceria-based materials for solid oxide fuel cells. <i>Journal of Materials Science</i> , 2001 , 36, 1105-1117	4.3	342
340	Perovskite-type oxides for high-temperature oxygen separation membranes. <i>Journal of Membrane Science</i> , 1999 , 163, 307-317	9.6	268
339	Ionic transport in oxygen-hyperstoichiometric phases with K ₂ NiF ₄ -type structure. <i>Solid State Ionics</i> , 2001 , 143, 337-353	3.3	197
338	Oxygen ion transport in La ₂ NiO ₄ -based ceramics. <i>Journal of Materials Chemistry</i> , 1999 , 9, 2623-2629		194
337	Research on the electrochemistry of oxygen ion conductors in the former Soviet Union. II. Perovskite-related oxides. <i>Journal of Solid State Electrochemistry</i> , 1999 , 3, 303-326	2.6	173
336	Electrode materials and reaction mechanisms in solid oxide fuel cells: a brief review. <i>Journal of Solid State Electrochemistry</i> , 2008 , 12, 1039-1060	2.6	162
335	Oxygen transport in Ce _{0.8} Gd _{0.2} O ₂ -based composite membranes. <i>Solid State Ionics</i> , 2003 , 160, 247-258	3.3	156
334	Ion/electron transport in strontium ferrites: relationships with structural features and stability. <i>Solid State Sciences</i> , 2004 , 6, 907-913	3.4	142
333	Oxygen Permeability of Ce _{0.8} Gd _{0.2} O ₂ /La _{0.7} Sr _{0.3} MnO ₃ Composite Membranes. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 2814	3.9	139
332	Thermal and chemical induced expansion of La _{0.3} Sr _{0.7} (Fe,Ga)O ₃ ceramics. <i>Journal of the European Ceramic Society</i> , 2003 , 23, 1417-1426	6	131
331	Chemically Induced Expansion of La ₂ NiO ₄ -Based Materials. <i>Chemistry of Materials</i> , 2007 , 19, 2027-2033	3.6	109
330	Electrode materials and reaction mechanisms in solid oxide fuel cells: a brief review. III. Recent trends and selected methodological aspects. <i>Journal of Solid State Electrochemistry</i> , 2011 , 15, 1007-1040	2.6	105
329	Mixed conductivity and electrochemical behavior of (La _{0.75} Sr _{0.25}) _{0.95} Cr _{0.5} Mn _{0.5} O ₃ . <i>Solid State Ionics</i> , 2007 , 178, 101-113	3.3	103
328	Surface-limited oxygen transport and electrode properties of La ₂ Ni _{0.8} Cu _{0.2} O ₄ . <i>Solid State Ionics</i> , 2004 , 166, 327-337	3.3	102
327	Oxygen Nonstoichiometry, Conductivity, and Seebeck Coefficient of La _{0.3} Sr _{0.7} Fe _{1-x} Ga _x O _{2.65+x} Perovskites. <i>Journal of Solid State Chemistry</i> , 2002 , 167, 203-213	3.3	101

326	Materials of high-temperature electrochemical oxygen membranes. <i>Journal of Membrane Science</i> , 1996 , 111, 149-157	9.6	97
325	The effect of cobalt oxide sintering aid on electronic transport in Ce _{0.80} Gd _{0.20} O ₂ -electrolyte. <i>Electrochimica Acta</i> , 2003 , 48, 1023-1029	6.7	96
324	Oxygen ionic and electronic transport in apatite-type La ₁₀ (Si,Al) ₆ O ₂₆ . <i>Journal of Solid State Chemistry</i> , 2005 , 178, 2050-2061	3.3	96
323	Ceramic Microstructure and Oxygen Permeability of SrCo (Fe , M) O ₃ (M = Cu or Cr) Perovskite Membranes. <i>Journal of the Electrochemical Society</i> , 1998 , 145, 1363-1373	3.9	92
322	The stability and mixed conductivity in La and Fe doped SrTiO ₃ in the search for potential SOFC anode materials. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1831-1835	6	91
321	Oxygen Ionic and Electronic Transport in Apatite-Type Solid Electrolytes. <i>Journal of the Electrochemical Society</i> , 2004 , 151, A1236	3.9	89
320	Transport properties and stability of Ni-containing mixed conductors with perovskite- and K ₂ NiF ₄ -type structure. <i>Journal of Solid State Chemistry</i> , 2004 , 177, 26-37	3.3	88
319	Research on the electrochemistry of oxygen ion conductors in the former Soviet Union. I. ZrO ₂ -based ceramic materials. <i>Journal of Solid State Electrochemistry</i> , 1999 , 3, 61-81	2.6	88
318	Oxide Ion Conduction in Solid Solutions Ln _{1-x} Sr _x CoO ₃ - (Ln = La, Pr, Nd). <i>Journal of Solid State Chemistry</i> , 1995 , 120, 128-136	3.3	86
317	Oxygen Nonstoichiometry, Mixed Conductivity, and Mössbauer Spectra of Ln _{0.5} A _{0.5} FeO ₃ (Ln = La, Sm, A = Sr, Ba): Effects of Cation Size. <i>Chemistry of Materials</i> , 2008 , 20, 6457-6467	9.6	85
316	Spin-state ordering and magnetic structures in the cobaltites YBaCo ₂ O _{5+δ} (δ = 0.50 and 0.44). <i>Physical Review B</i> , 2007 , 75,	3.3	82
315	Ionic conductivity of La(Sr)Ga(Mg,M)O ₃ (M=Ti, Cr, Fe, Co, Ni): effects of transition metal dopants. <i>Solid State Ionics</i> , 2000 , 132, 119-130	3.3	82
314	Mixed electronic and ionic conductivity of LaCo(M)O ₃ (M=Ga, Cr, Fe or Ni). Oxygen transport in perovskites LaCoO ₃ LaGaO ₃ . <i>Solid State Ionics</i> , 1997 , 104, 67-78	3.3	80
313	Oxygen permeation through Sr(Ln)CoO ₃ (Ln=La,Nd,Sm,Gd) ceramic membranes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1998 , 52, 105-116	3.1	80
312	Aluminosilicate-based sealants for SOFCs and other electrochemical applications – A brief review. <i>Journal of Power Sources</i> , 2013 , 242, 486-502	8.9	78
311	Interfacial effects in electrochemical cells for oxygen ionic conduction measurements I. The e.m.f. method. <i>Solid State Ionics</i> , 2001 , 140, 381-394	3.3	77
310	Perovskite-like system (Sr,Ln)(Fe,Ga)O ₃ – structure and ionic transport under oxidizing conditions. <i>Solid State Ionics</i> , 2002 , 150, 229-243	3.3	76
309	P-Type Electronic Transport in Ce _{0.8} Gd _{0.2} O ₂ – The Effect of Transition Metal Oxide Sintering Aids 2002 , 9, 199-207		76

- 308 Electron hole conduction in Pr-doped Ce(Gd)O₂ by faradaic efficiency and emf measurements. *Electrochimica Acta*, **2001**, 46, 2879-2889 6.7 76
- 307 Research on the electrochemistry of oxygen ion conductors in the former Soviet Union. *Journal of Solid State Electrochemistry*, **2000**, 4, 243-266 2.6 75
- 306 Surface modification of La_{0.3}Sr_{0.7}CoO₃ ceramic membranes. *Journal of Membrane Science*, **2002**, 195, 277-287 9.6 74
- 305 Oxygen permeability of LaFe_{1-x}Ni_xO₃ solid solutions. *Materials Research Bulletin*, **1999**, 34, 1311-1317 5.1 74
- 304 Research on the electrochemistry of oxygen ion conductors in the former Soviet Union. *Journal of Solid State Electrochemistry*, **2001**, 5, 160-187 2.6 73
- 303 Processing, stability and oxygen permeability of Sr(Fe, Al)O₃-based ceramic membranes. *Journal of Membrane Science*, **2005**, 252, 215-225 9.6 71
- 302 Oxygen nonstoichiometry in (M = Cu, Co) under oxidizing conditions. *Solid State Sciences*, **2005**, 7, 1353-1362 3.6 71
- 301 Ionic conductivity of brownmillerite-type calcium ferrite under oxidizing conditions. *Solid State Ionics*, **2006**, 177, 2923-2930 3.3 69
- 300 The effect of Cr₂O₃ addition on crystallization and properties of La₂O₃-containing diopside glass-ceramics. *Acta Materialia*, **2008**, 56, 3065-3076 8.4 68
- 299 Mixed conductivity and stability of A-site-deficient Sr(Fe,Ti)O₃ perovskites. *Journal of Solid State Electrochemistry*, **2002**, 7, 30-36 2.6 68
- 298 Stability and mixed ionic-electronic conductivity of (Sr,La)(Ti,Fe)O₃ perovskites. *Solid State Ionics*, **2003**, 156, 45-57 3.3 67
- 297 Mixed ionic-electronic conductors: effects of ceramic microstructure on transport properties. *Current Opinion in Solid State and Materials Science*, **2002**, 6, 261-269 12 67
- 296 Oxygen permeability, stability and electrochemical behavior of (Pr₂NiO_{4+δ})₂-based materials. *Journal of Electroceramics*, **2007**, 18, 205-218 1.5 66
- 295 Transport properties and thermal expansion of Ti-substituted La_{1-x}Sr_xFeO₃ (x=0.5-0.7). *Solid State Sciences*, **2005**, 7, 355-365 3.4 66
- 294 Mixed electronic and ionic conductivity of LaCo(M)O₃ (M=Ga, Cr, Fe or Ni): IV. Effect of preparation method on oxygen transport in LaCoO₃. *Solid State Ionics*, **2000**, 138, 135-148 3.3 65
- 293 Transport Properties and Thermal Expansion of Sr_{0.97}Ti_{1-x}Fe_xO₃ (x=0.2-0.8). *Journal of Solid State Chemistry*, **2001**, 156, 437-444 3.3 64
- 292 High-temperature electrical transport in La_{0.3}Sr_{0.7}Fe_{1-x}Ga_xO₃ (x = 0-0.5). *Journal of Materials Chemistry*, **2001**, 11, 1201-1208 64
- 291 Mixed conductivity, oxygen permeability and redox behavior of K₂NiF₄-type La₂Ni_{0.9}Fe_{0.1}O_{4+δ}. *Journal of Solid State Chemistry*, **2008**, 181, 1425-1433 3.3 59

290	Processing, microstructure and properties of LaCoO ₃ ceramics. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 2301-2309	6	59
289	Oxygen permeability of perovskites in the system SrCoO _{3-x} /SrTiO ₃ . <i>Solid State Ionics</i> , 1997 , 96, 141-151	3.3	56
288	Oxygen permeability and Faradaic efficiency of Ce _{0.8} Gd _{0.2} O ₂ /La _{0.7} Sr _{0.3} MnO ₃ composites. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1763-1767	6	56
287	Surface enhanced oxygen permeation in CaTi _{1-x} Fe _x O ₃ ceramic membranes. <i>Journal of Membrane Science</i> , 2004 , 236, 73-80	9.6	55
286	Transitions between P21, P63(3A), and P6322 modifications of SrAl ₂ O ₄ by in situ high-temperature X-ray and neutron diffraction. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 3535-3544	3.3	54
285	Oxygen permeability, thermal expansion and mixed conductivity of Gd _x Ce _{0.8-x} Pr _{0.2} O ₂ (x=0, 0.15, 0.2). <i>Journal of Solid State Chemistry</i> , 2006 , 179, 3347-3356	3.3	54
284	Ionic and electronic transport in stabilized La ₂ Mo ₂ O ₉ electrolytes. <i>Electrochimica Acta</i> , 2004 , 49, 3517-3524	3.3	54
283	p-Type electronic conductivity, oxygen permeability and stability of La ₂ Ni _{0.9} Co _{0.1} O ₄ . <i>Journal of Materials Chemistry</i> , 2003 , 13, 1136-1144		54
282	Methane oxidation over Fe-, Co-, Ni- and V-containing mixed conductors. <i>Solid State Ionics</i> , 2005 , 176, 781-791	3.3	53
281	Optimization of La ₂ O ₃ -containing diopside based glass-ceramic sealants for fuel cell applications. <i>Journal of Power Sources</i> , 2009 , 189, 1032-1043	8.9	52
280	Electrochemical behavior of mixed-conducting oxide cathodes in contact with apatite-type La ₁₀ Si ₅ AlO _{26.5} electrolyte. <i>Electrochimica Acta</i> , 2007 , 52, 4428-4435	6.7	52
279	Transport properties and electrochemical activity of YBa(Co,Fe) ₄ O ₇ cathodes. <i>Solid State Ionics</i> , 2006 , 177, 1823-1826	3.3	52
278	Oxygen ionic transport in SrFe _{1-x} Al _x O ₃ and Sr _{1-x} CaxFe _{0.5} Al _{0.5} O ₃ ceramics. <i>Journal of the European Ceramic Society</i> , 2005 , 25, 489-499	6	52
277	Oxygen ionic conductivity of Ti-containing strontium ferrite. <i>Solid State Ionics</i> , 2000 , 133, 57-65	3.3	52
276	Stability and oxygen transport properties of Pr ₂ NiO ₄ +δ ceramics. <i>Journal of the European Ceramic Society</i> , 2007 , 27, 4269-4272	6	51
275	Effects of firing conditions and addition of Co on bulk and grain boundary properties of CGO. <i>Solid State Ionics</i> , 2005 , 176, 2799-2805	3.3	51
274	Oxygen transport in La ₂ NiO ₄ +δ Assessment of surface limitations and multilayer membrane architectures. <i>Solid State Ionics</i> , 2009 , 180, 812-816	3.3	48
273	Oxygen nonstoichiometry, thermal expansion and high-temperature electrical properties of layered NdBaCo ₂ O ₅ +δ and SmBaCo ₂ O ₅ +δ. <i>Materials Research Bulletin</i> , 2010 , 45, 1288-1292	5.1	48

272	Electron-hole transport in $(\text{La}_{0.9}\text{Sr}_{0.1})_{0.98}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-\delta}$ electrolyte: effects of ceramic microstructure. <i>Electrochimica Acta</i> , 2003 , 48, 1817-1828	6.7	48
271	High-temperature transport and electrochemical properties of $\text{YBaCo}_4\text{O}_{7+x}$. <i>Journal of Solid State Electrochemistry</i> , 2005 , 9, 547-557	2.6	48
270	High oxygen permeability in fluorite-type $\text{Ce}_{0.8}\text{Pr}_{0.2}\text{O}_{2-x}$ via the use of sintering aids. <i>Journal of Membrane Science</i> , 2007 , 299, 1-7	9.6	47
269	Ionic and p-type electronic transport in zircon-type $\text{Ce}_{1-x}\text{AxVO}_4$ ($\text{A} = \text{Ca}, \text{Sr}$). <i>Journal of Materials Chemistry</i> , 2002 , 12, 3738-3745		47
268	Oxygen permeability of mixed-conducting composite membranes: effects of phase interaction. <i>Journal of Solid State Electrochemistry</i> , 2006 , 10, 28-40	2.6	46
267	Oxygen ionic and electronic conductivity of $\text{La}_{0.3}\text{Sr}_{0.7}\text{Fe}(\text{Al})\text{O}_{3-\delta}$ perovskites. <i>Solid State Sciences</i> , 2004 , 6, 357-366	3.4	45
266	Phase interaction and oxygen transport in $\text{La}_{0.8}\text{Sr}_{0.2}\text{Fe}_{0.8}\text{Co}_{0.2}\text{O}_{3-\delta}$ / $(\text{La}_{0.9}\text{Sr}_{0.1})_{0.98}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-\delta}$ composites. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 2631-2639	6	45
265	Ionic and electronic conductivities, stability and thermal expansion of $\text{La}_{10-x}(\text{Si},\text{Al})_6\text{O}_{26-\delta}$ solid electrolytes. <i>Solid State Ionics</i> , 2006 , 177, 1725-1728	3.3	43
264	Oxygen ionic and electronic transport in apatite ceramics. <i>Journal of the European Ceramic Society</i> , 2005 , 25, 2583-2586	6	43
263	Phase formation and iron oxidation states in $\text{SrFe}(\text{Al})\text{O}_{3-\delta}$ perovskites. <i>Materials Letters</i> , 2005 , 59, 1644-1648	3.4	43
262	Oxygen Permeability and Ionic Conductivity of Perovskite-Related $\text{La}_{0.3}\text{Sr}_{0.7}\text{Fe}(\text{Ga})\text{O}_{3-\delta}$. <i>Journal of the Electrochemical Society</i> , 2002 , 149, E125	3.9	43
261	Oxygen nonstoichiometry and mixed conductivity of $\text{SrFe}_{1-x}\text{O}_{3-\delta}$ ($\text{M} = \text{Al}, \text{Ga}$): Effects of B-site doping. <i>Solid State Sciences</i> , 2006 , 8, 476-487	3.4	41
260	Fe^{4+} formation in brownmillerite $\text{CaAl}_{0.5}\text{Fe}_{0.5}\text{O}_{2.5-x}$. <i>Materials Letters</i> , 2003 , 57, 4388-4393	3.3	41
259	Surface-limited ionic transport in perovskites $\text{Sr}_{0.97}(\text{Ti},\text{Fe},\text{Mg})\text{O}_3$. <i>Journal of Materials Chemistry</i> , 2000 , 10, 1161-1169		41
258	B-site substitutions in $\text{LaNb}_{1-x}\text{M}_x\text{O}_4$ materials in the search for potential proton conductors ($\text{M} = \text{Ga}, \text{Ge}, \text{Si}, \text{B}, \text{Ti}, \text{Zr}, \text{P}, \text{Al}$). <i>Journal of Solid State Chemistry</i> , 2011 , 184, 863-870	3.3	39
257	Characterization of mixed-conducting $\text{La}_2\text{Ni}_{0.9}\text{Co}_{0.1}\text{O}_{4+x}$ membranes for dry methane oxidation. <i>Applied Catalysis A: General</i> , 2004 , 261, 25-35	5.1	39
256	Diopside/Ba disilicate glass/ceramic sealants for SOFCs: Enhanced adhesion and thermal stability by Sr for Ca substitution. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 3073-3086	6.7	38
255	Processing and oxygen permeation studies of asymmetric multilayer $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ membranes. <i>Journal of Membrane Science</i> , 2011 , 380, 68-80	9.6	38

254	Ionic and p-type electronic conduction in LaGa(Mg, Nb)O ₃ perovskites. <i>Solid State Ionics</i> , 2000 , 128, 79-90	3-3	38
253	Mixed electronic and ionic conductivity of LaCo(M)O ₃ (M=Ga, Cr, Fe or Ni).. <i>Solid State Ionics</i> , 1999 , 120, 65-74	3-3	38
252	Enhanced Low-Temperature Proton Conduction in Sr _{0.02} La _{0.98} NbO ₄ by Scheelite Phase Retention. <i>Chemistry of Materials</i> , 2010 , 22, 6673-6683	9.6	37
251	Mixed conductivity, Mössbauer spectra and thermal expansion of (La,Sr)(Fe,Ni)O ₃ perovskites. <i>Solid State Ionics</i> , 2008 , 179, 2170-2180	3-3	37
250	Structures, Phase Transitions, Hydration, and Ionic Conductivity of Ba ₄ Ta ₂ O ₉ . <i>Chemistry of Materials</i> , 2010 , 22, 532-540	9.6	36
249	Transport properties and Mössbauer spectra of Fe-substituted La ₁₀ (Si,Al) ₆ O ₂₆ apatites. <i>Materials Research Bulletin</i> , 2004 , 39, 763-773	5-1	36
248	On the relationships between structure, oxygen stoichiometry and ionic conductivity of CaTi _{1-x} Fe _x O ₃ (x=0.05, 0.20, 0.40, 0.60). <i>Solid State Ionics</i> , 2003 , 156, 371-381	3-3	36
247	Oxygen Ionic and Electronic Transport in LaGa _{1-x} Ni _x O ₃ Perovskites. <i>Journal of Solid State Chemistry</i> , 1999 , 142, 325-335	3-3	36
246	Synthesis, crystal structure and properties of SmBaCo _{2-x} Fe _x O _{5+δ} . <i>Journal of Solid State Chemistry</i> , 2013 , 204, 219-223	3-3	35
245	Electrochemical properties of Pr-doped Ce(Gd)O ₂ . <i>Materials Letters</i> , 2002 , 53, 160-164	3-3	35
244	Oxygen permeability, thermal expansion and stability of SrCo _{0.8} Fe _{0.2} O ₃ /rAl ₂ O ₄ composites. <i>Solid State Ionics</i> , 2007 , 178, 1205-1217	3-3	34
243	Methane oxidation on the surface of mixed-conducting La _{0.3} Sr _{0.7} Co _{0.8} Ga _{0.2} O ₃ . <i>Catalysis Communications</i> , 2004 , 5, 311-316	3-2	34
242	Defect formation in Gd ₃ Fe ₅ O ₁₂ -based garnets: a Mössbauer spectroscopy study. <i>Materials Letters</i> , 2004 , 58, 3432-3436	3-3	34
241	Oxygen ionic transport in Bi ₂ O ₃ -based oxides: The solid solutions Bi ₂ O ₃ /Nb ₂ O ₅ . <i>Journal of Solid State Electrochemistry</i> , 1998 , 2, 146-149	2.6	33
240	Transport properties of sealants for high-temperature electrochemical applications: ROBaO/BiO ₂ (R = Mg, Zn) glass/ceramics. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 3315-3324	6	33
239	Ion and electron conduction in SrFe _{1-x} Sc _x O ₃ . <i>Solid State Ionics</i> , 2006 , 177, 1757-1760	3-3	33
238	Ionic and electronic conductivity of La _{9.83-x} Pr _x Si _{4.5} Fe _{1.5} O ₂₆ apatites. <i>Solid State Ionics</i> , 2004 , 171, 51-59	3-3	33
237	Oxygen nonstoichiometry of Sr(Co,Fe)O ₃ based perovskites I. Coulometric titration of SrCo _{0.85} Fe _{0.10} Cr _{0.05} O ₃ by the two-electrode technique. <i>Solid State Ionics</i> , 2003 , 160, 259-270	3-3	33

- 236 Oxygen permeability of perovskite-type $\text{Sr}_{0.7}\text{Ce}_{0.3}\text{MnO}_3$ *Materials Letters*, **2003**, 57, 3017-3021 3-3 33
- 235 Mixed conductivity, thermal expansion, and oxygen permeability of $\text{Ce}(\text{Pr},\text{Zr})\text{O}$. *Solid State Ionics*, **2005**, 176, 1723-1730 3-3 33
- 234 Physicochemical and Transport Properties of Bicuvox-Based Ceramics **2000**, 4, 233-242 33
- 233 Stability and oxygen ionic conductivity of zircon-type $\text{Ce}_{1-x}\text{A}_x\text{VO}_4$ (A=Ca, Sr). *Journal of Solid State Chemistry*, **2003**, 176, 47-56 3-3 32
- 232 Stability of Bi_2O_3 -based solid electrolytes. *Materials Research Bulletin*, **2000**, 35, 515-520 5-1 32
- 231 Performance of perovskite-related oxide cathodes in contact with lanthanum silicate electrolyte. *Solid State Ionics*, **2009**, 180, 878-885 3-3 31
- 230 Structures, Phase Transitions, Hydration, and Ionic Conductivity of $\text{Ba}_4\text{Nb}_2\text{O}_9$. *Chemistry of Materials*, **2009**, 21, 3853-3864 9.6 31
- 229 Atomic-scale insight into the oxygen ionic transport mechanisms in La_2NiO_4 -based materials. *Computational and Theoretical Chemistry*, **2010**, 946, 57-64 31
- 228 Processing and characterization of $\text{La}_{0.5}\text{Sr}_{0.5}\text{FeO}_3$ -supported $\text{Sr}_{1-x}\text{Fe}(\text{Al})\text{O}_3\text{BrAl}_2\text{O}_4$ composite membranes. *Journal of Membrane Science*, **2006**, 278, 162-172 9.6 31
- 227 Oxygen ion conductors for fuel cells and membranes: selected developments. *Solid State Ionics*, **2006**, 177, 1697-1703 3-3 31
- 226 The role of K_2O on sintering and crystallization of glass powder compacts in the $\text{Li}_2\text{O}-\text{K}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$ system. *Journal of the European Ceramic Society*, **2012**, 32, 2283-2292 6 30
- 225 Oxygen non-stoichiometry and defect thermodynamics in $\text{La}_2\text{Ni}_{0.9}\text{Fe}_{0.1}\text{O}_4$. *Journal of Physics and Chemistry of Solids*, **2007**, 68, 1443-1455 3-9 30
- 224 Diffusion and conductivity properties of cerium niobate. *Solid State Ionics*, **2006**, 177, 2059-2064 3-3 30
- 223 Ionic Transport in $\text{Gd}_{[3]}\text{Fe}_{[5]}\text{O}_{[12]}$ - and $\text{Y}_{[3]}\text{Fe}_{[5]}\text{O}_{[12]}$ -Based Garnets. *Journal of the Electrochemical Society*, **2003**, 150, J33 3-9 30
- 222 Thermomechanical, transport and anodic properties of perovskite-type $(\text{La}_{0.75}\text{Sr}_{0.25})_{0.95}\text{Cr}_{1-x}\text{Fe}_x\text{O}_3$ *Journal of Power Sources*, **2012**, 206, 59-69 8.9 29
- 221 Transport Properties of Fluorite-Type $\text{Ce}_{0.8}\text{Pr}_{0.2}\text{O}_2$ Optimization via the Use of Cobalt Oxide Sintering Aid. *Chemistry of Materials*, **2009**, 21, 381-391 9.6 29
- 220 Oxygen deficiency, vacancy clustering and ionic transport in $(\text{La},\text{Sr})\text{CoO}_3$ *Solid State Ionics*, **2011**, 192, 42-48 3-3 29
- 219 Oxygen permeability and stability of asymmetric multilayer $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_3$ ceramic membranes. *Solid State Ionics*, **2011**, 192, 677-681 3-3 29

218	Electrical behavior of aluminosilicate glass-ceramic sealants and their interaction with metallic solid oxide fuel cell interconnects. <i>Journal of Power Sources</i> , 2010 , 195, 522-526	8.9	29
217	Oxygen permeability, electronic conductivity and stability of La _{0.3} Sr _{0.7} CoO ₃ -based perovskites. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006 , 134, 80-88	3.1	29
216	Lanthanum substituted CeNbO ₄ +scheelites: mixed conductivity and structure at elevated temperatures. <i>Journal of Materials Chemistry</i> , 2006 , 16, 3503		29
215	Direct oxidation of dry methane on nanocrystalline Ce _{0.8} Gd _{0.2} O ₂ -Pt anodes. <i>Catalysis Communications</i> , 2003 , 4, 477-483	3.2	29
214	Thermal and mechanical stability of lanthanide-containing glass-ceramic sealants for solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 1834-1846	13	28
213	A (3 + 3)-dimensional "hypercubic" oxide-ionic conductor: type II Bi ₂ O ₃ -Nb ₂ O ₅ . <i>Journal of the American Chemical Society</i> , 2013 , 135, 6477-84	16.4	28
212	Mössbauer spectroscopy analysis of ⁵⁷ Fe-doped YBaCo ₄ O ₇ +Effects of oxygen intercalation. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 640-643	3.3	28
211	The defect chemistry of Ce(Pr, Zr)O ₂ . <i>Journal of Solid State Chemistry</i> , 2006 , 179, 1469-1477	3.3	28
210	Transport properties and structural stability of tetragonal CeNbO ₄ . <i>Solid State Ionics</i> , 2006 , 177, 1015-1020	3.9	28
209	Transport properties and thermal expansion of La ₂ Mo ₂ O ₉ -based solid electrolytes. <i>Materials Research Bulletin</i> , 2005 , 40, 361-371	5.1	28
208	Oxygen permeability and thermal expansion of SrCo (Ti)O ₃ perovskites. <i>Materials Chemistry and Physics</i> , 1998 , 53, 6-12	4.4	27
207	Oxygen Nonstoichiometry and Ionic Conductivity of Sr ₃ Fe _{2-x} Sc _x O ₇ . <i>Chemistry of Materials</i> , 2007 , 19, 3980-3987	9.6	27
206	Oxygen ionic conduction in brownmillerite CaAl _{0.5} Fe _{0.5} O _{2.5} . <i>Materials Research Bulletin</i> , 2003 , 38, 773-782	5.1	27
205	Mixed conducting components of solid oxide fuel cell anodes. <i>Journal of the European Ceramic Society</i> , 2005 , 25, 2623-2626	6	27
204	Oxygen Diffusion in, and Thermal Expansion of, SrTiO ₃ and CaTiO ₃ -Based Materials. <i>Defect and Diffusion Forum</i> , 2000 , 186-187, 119-136	0.7	27
203	Oxygen permeability of La ₂ Cu(Co)O ₄ solid solutions. <i>Solid State Ionics</i> , 1999 , 120, 281-288	3.3	27
202	Study of melilite based glasses and glass-ceramics nucleated by Bi ₂ O ₃ for functional applications. <i>RSC Advances</i> , 2012 , 2, 10955	3.7	26
201	Electrical Properties and Dimensional Stability of Ce-Doped SrTiO ₃ for Solid Oxide Fuel Cell Applications. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 2993-3000	3.8	26

182	Oxygen nonstoichiometry, Mössbauer spectra and mixed conductivity of Pr _{0.5} Sr _{0.5} FeO ₃ <i>Journal of Physics and Chemistry of Solids</i> , 2007 , 68, 355-366	3.9	21
181	Effect of BaO Addition on Crystallization, Microstructure, and Properties of Diopside-La-Tschermak Clinopyroxene-Based Glass-Ceramics. <i>Journal of the American Ceramic Society</i> , 2007 , 90, 2236-2244	3.8	21
180	Oxygen transport in ferrite-based ceramic membranes: Effects of alumina sintering aid. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 3695-3704	6	21
179	Oxygen vacancy formation and ionic transport in Sr ₄ Fe ₆ O ₁₃ <i>Journal of Solid State Electrochemistry</i> , 2002 , 6, 217-224	2.6	21
178	Structural characterization of mixed conducting perovskites La(Ga,M)O ₃ (M=Mn, Fe, Co, Ni). <i>Materials Research Bulletin</i> , 2003 , 38, 185-193	5.1	21
177	Development of bilayer glass-ceramic SOFC sealants via optimizing the chemical composition of glasses—review. <i>Journal of Solid State Electrochemistry</i> , 2015 , 19, 2899-2916	2.6	20
176	Polymer Gel Templating Synthesis of Nanocrystalline Oxide Anodes. <i>Chemistry of Materials</i> , 2005 , 17, 5124-5129	9.6	20
175	Defect formation and transport in SrFe _{1-x} Al _x O ₃ <i>Ionics</i> , 2004 , 10, 378-384	2.7	20
174	Structure and electronic conductivity of Bi _{2-x} La _x V _{0.9} Cu _{0.1} O _{5.5} <i>Materials Chemistry and Physics</i> , 2003 , 77, 552-558	4.4	20
173	Oxygen nonstoichiometry and electron-hole transport in La ₂ Ni _{0.9} Co _{0.1} O _{4+?} . <i>Solid State Ionics</i> , 2005 , 176, 179-188	3.3	20
172	Oxygen ionic transport in A-site-deficient perovskites La(Pb)FeO ₃ . <i>Materials Research Bulletin</i> , 1998 , 33, 1087-1093	5.1	19
171	Methane oxidation by lattice oxygen of CeNbO ₄ . <i>Catalysis Communications</i> , 2007 , 8, 335-339	3.2	19
170	Performance of tubular SrFe(Al)O ₃ /Al ₂ O ₄ composite membranes in CO ₂ - and CH ₄ -containing atmospheres. <i>Journal of Membrane Science</i> , 2008 , 319, 141-148	9.6	19
169	Defect interactions in La _{0.3} Sr _{0.7} Fe(M?)O ₃ (M?=Al, Ga) perovskites: Atomistic simulations and analysis of p(O ₂)-T-diagrams. <i>Solid State Ionics</i> , 2006 , 177, 457-470	3.3	19
168	Oxygen-ionic conductivity of perovskite-type La _{1-x} Sr _x Ga _{1-y} Mg _y M _{0.2} O ₃ (M=Fe, Co, Ni). <i>Materials Chemistry and Physics</i> , 2003 , 82, 684-690	4.4	19
167	Crystal structure, conductivity and reversible water uptake of new layered potassium antimonates K _x L _{(1+x)/3} Sb _{(2-x)/3} O ₂ (L=Ni ²⁺ , Mg ²⁺ , Co ²⁺). <i>Journal of Solid State Chemistry</i> , 2005 , 178, 172-179	3.3	19
166	Stability, oxygen permeability and chemical expansion of Sr(Fe,Al)O ₃ and Sr(Co,Fe)O ₃ based membranes. <i>Solid State Ionics</i> , 2011 , 192, 259-268	3.3	18
165	Low-temperature behavior of YBaCo ₂ O _{5.5} : Coexistence of two spin-state ordered phases. <i>Physical Review B</i> , 2008 , 77,	3.3	18

- 164 Cellulose-precursor synthesis of nanocrystalline $\text{Ce}_{0.8}\text{Gd}_{0.2}\text{O}_{2-\delta}$ for SOFC anodes. *Journal of Solid State Electrochemistry*, **2004**, 8, 674 2.6 18
- 163 Methane to syngas conversion. *Journal of Power Sources*, **2004**, 130, 77-84 8.9 18
- 162 Stability and Thermal Expansion of Na^+ -Conducting Ceramics **2003**, 11, 179-189 18
- 161 Mössbauer Spectra and Catalytic Behavior of Perovskite-like $\text{SrFe}_{0.7}\text{Al}_{0.3}\text{O}_{3-\delta}$ *Catalysis Letters*, **2005**, 99, 249-255 2.8 18
- 160 Transport properties and thermal expansion of perovskite-like $\text{La}_{0.3}\text{Sr}_{0.7}\text{Fe}(\text{Al},\text{Cr})\text{O}_{3-\delta}$ ceramics. *Journal of the European Ceramic Society*, **2005**, 25, 2603-2607 6 17
- 159 Synthesis, Physicochemical Characterization and Ionic Conductivity of $\text{LaGa}_{0.4}\text{Mg}_{0.2}\text{M}_{0.4}\text{O}_{3-\delta}$ (M = Cr, Mn, Fe, Co) **2001**, 7, 57-66 17
- 158 Simulation of an Oxygen Membrane-Based Gas Turbine Power Plant: Dynamic Regimes with Operational and Material Constraints. *Energy & Fuels*, **2010**, 24, 590-608 4.1 16
- 157 Oxygen transport and stability of asymmetric $\text{SrFe}(\text{Al})\text{O}_{3-\delta}/\text{SrAl}_2\text{O}_4$ composite membranes. *Journal of Membrane Science*, **2007**, 301, 238-244 9.6 16
- 156 Mixed conductivity, stability and thermomechanical properties of Ni-doped $\text{La}(\text{Ga},\text{Mg})\text{O}_{3-\delta}$ *Solid State Ionics*, **2006**, 177, 549-558 3.3 16
- 155 Properties of $\text{CaTi}_{1-x}\text{Fe}_x\text{O}_3$ Ceramic Membranes. *Journal of Electroceramics*, **2004**, 13, 627-636 1.5 16
- 154 Redox behaviour of $\text{Sr}_4\text{Fe}_6\text{O}_{13}$ by Mössbauer spectroscopy and neutron diffraction. *Materials Letters*, **2003**, 57, 3245-3250 3.3 16
- 153 Understanding the Formation of CaAlSiO in Melilite-Based Glass-Ceramics: Combined Diffraction and Spectroscopic Studies. *ACS Omega*, **2017**, 2, 6233-6243 3.9 15
- 152 Electrical, electrochemical, and thermomechanical properties of perovskite-type $(\text{La}_{1-x}\text{Sr}_x)_1\text{Mn}_{0.5}\text{Ti}_{0.5}\text{O}_{3-\delta}$ ($x = 0.15, 0.75, y = 0, 0.05$). *Journal of Solid State Electrochemistry*, **2012**, 16, 2335-2348 2.6 15
- 151 High-temperature electrical properties of magnesiowustite $\text{Mg}_{1-x}\text{Fe}_x\text{O}$ and spinel $\text{Fe}_3\text{O}_4/\text{Mg}_x\text{Cr}_y\text{O}_4$ ceramics. *Solid State Ionics*, **2011**, 192, 252-258 3.3 15
- 150 Oxygen non-stoichiometry of $\text{Ln}_4\text{Ni}_{2.7}\text{Fe}_{0.3}\text{O}_{10}$ (Ln=La, Pr). *Journal of Solid State Chemistry*, **2007**, 180, 1902-1910 3.3 15
- 149 Mixed conductivity of garnet phases based on gadolinium ferrite. *Journal of the European Ceramic Society*, **2004**, 24, 1309-1312 6 15
- 148 Redox behavior and transport properties of $\text{La}_{0.5}\text{Sr}_{0.5}\text{Fe}_{0.4}\text{Ti}_{0.6}\text{O}_{3-\delta}$. *Solid State Ionics*, **2002**, 146, 87-93 3.3 15
- 147 Mechanically-Activated Synthesis and Mixed Conductivity of TbMO_4 (M = Zr, Hf) Ceramics **2003**, 10, 153-164 15

146	Testing tubular solid oxide fuel cells in nonsteady-state conditions. <i>Journal of Power Sources</i> , 1999 , 79, 242-249	8.9	15
145	Functional properties of SOFC anode materials based on LaCrO ₃ , La(Ti,Mn)O ₃ and Sr(Nb,Mn)O ₃ perovskites: A comparative analysis. <i>Solid State Ionics</i> , 2013 , 251, 28-33	3.3	14
144	Simulation of an oxygen membrane-based combined cycle power plant: part-load operation with operational and material constraints. <i>Energy and Environmental Science</i> , 2009 , 2, 1310	35.4	14
143	Mixed Conductivity and Stability of CaFe ₂ O ₄ . <i>Journal of the Electrochemical Society</i> , 2008 , 155, P13	3.9	14
142	High-temperature transport properties, thermal expansion and cathodic performance of Ni-substituted LaSr ₂ Mn ₂ O ₇ . <i>Journal of Solid State Chemistry</i> , 2008 , 181, 3024-3032	3.3	14
141	Neutron powder diffraction study of TbBaCo ₂ FexO ₅ layered oxides. <i>Journal of Solid State Chemistry</i> , 2004 , 177, 2068-2072	3.3	14
140	Oxidation of Dry Methane on the Surface of Oxygen Ion-Conducting Membranes. <i>Catalysis Letters</i> , 2003 , 91, 169-174	2.8	14
139	Oxygen ion conductivity of hexagonal La ₂ W _{1.25} O _{6.75} . <i>Materials Letters</i> , 1999 , 38, 300-304	3.3	14
138	Thermal Expansion, XPS Spectra, and Structural and Electrical Properties of a New BiNiTaO Pyrochlore. <i>Inorganic Chemistry</i> , 2021 , 60, 4924-4934	5.1	14
137	Rh/Al ₂ O ₃ /FeCrAlloy wire mesh composite catalyst for partial oxidation of natural gas. <i>Materials Letters</i> , 2019 , 236, 316-319	3.3	14
136	Analysis of electric properties of ZrO ₂ -Y ₂ O ₃ single crystals using terahertz IR and impedance spectroscopy techniques. <i>Russian Journal of Electrochemistry</i> , 2014 , 50, 690-693	1.2	13
135	Melilite glass/ceramic sealants for solid oxide fuel cells: effects of ZrO ₂ additions assessed by microscopy, diffraction and solid-state NMR. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6471	13	13
134	Methane oxidation over mixed-conducting SrFe(Al)O ₃ -delta-SrAl ₂ O ₄ composite. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 2744-52	3.6	13
133	Kinetics of NiO reduction and morphological changes in composite anodes of solid oxide fuel cells: Estimate using Raman scattering technique. <i>Russian Journal of Electrochemistry</i> , 2016 , 52, 600-605	1.2	13
132	Effect of strontium-to-calcium ratio on the structure, crystallization behavior and functional properties of diopside-based glasses. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 3552-3563	6.7	12
131	Dynamical Instabilities in Electrochemical Processes 2011 , 125-178		12
130	Guidelines for improving resistance to CO ₂ of materials for solid state electrochemical systems. <i>Solid State Ionics</i> , 2011 , 192, 16-20	3.3	12
129	Geometric parameterization of the YBaCo ₄ O ₇ structure type: Implications for stability of the hexagonal form and oxygen uptake. <i>Journal of Solid State Chemistry</i> , 2010 , 183, 2506-2509	3.3	12

128	Ion Transport and Thermomechanical Properties of SrFe(Al)O ₃ /SrAl ₂ O ₄ Composite Membranes. <i>Journal of the Electrochemical Society</i> , 2006 , 153, J50	3.9	12
127	Transport numbers and oxygen permeability of SrCe(Y)O ₃ -based ceramics under oxidising conditions. <i>Electrochimica Acta</i> , 2006 , 51, 6389-6399	6.7	12
126	Interfacial effects in electrochemical cells for oxygen ionic conduction measurements: III. Transference numbers vs. grain-boundary resistivity. <i>Solid State Ionics</i> , 2004 , 168, 137-151	3.3	12
125	Defect formation, ordering, and transport in SrFe _{1-x} Si _x O ₃ (x = 0.05-0.20). <i>Journal of Solid State Electrochemistry</i> , 2018 , 22, 727-737	2.6	12
124	Grain-boundary states in solid oxide electrolyte ceramics processed using iron oxide sintering aids: a Mössbauer spectroscopy study. <i>Journal of Solid State Electrochemistry</i> , 2017 , 21, 2965-2974	2.6	11
123	Processing and oxygen permeability of asymmetric ferrite-based ceramic membranes. <i>Solid State Ionics</i> , 2008 , 179, 61-65	3.3	11
122	Applicability of emf measurements under external load resistance conditions for ion transport number determination. <i>Journal of Solid State Electrochemistry</i> , 2006 , 10, 96-103	2.6	11
121	Oxygen nonstoichiometry of Bi ₂ V _{0.9} Cu _{0.1} O _{5.5} solid electrolyte by coulometric titration technique. <i>Electrochimica Acta</i> , 2002 , 47, 3957-3964	6.7	11
120	Phase Transformations and Thermal Expansion of Bi- and BiTaO ₄ and the High-Temperature Modification of BiTaO ₄ . <i>Chemistry of Materials</i> , 2020 , 32, 5493-5501	9.6	10
119	Mixed conductivity, thermochemical expansion and electrochemical activity of Fe-substituted (La,Sr)(Cr,Mg)O ₃ for solid oxide fuel cell anodes. <i>Journal of Power Sources</i> , 2014 , 249, 483-496	8.9	10
118	Redox behavior and transport properties of brownmillerite Ca ₂ (Fe,M)O ₅ (M = Mn, Co). <i>Solid State Ionics</i> , 2012 , 225, 206-210	3.3	10
117	Alkali Metal Cation and Proton Conductors: Relationships between Composition, Crystal Structure, and Properties	2.7	10
116	Heterogeneous ceramics formed by grain boundary engineering. <i>Ionics</i> , 2008 , 14, 349-356	2.7	10
115	Methane oxidation over SOFC anodes with nanocrystalline ceria-based phases. <i>Solid State Ionics</i> , 2006 , 177, 2179-2183	3.3	10
114	First observation of the reversible O ₃ -P ₂ phase transition. <i>Materials Research Bulletin</i> , 2006 , 41, 1056-1062	10.6	10
113	Defect formation in LaGa(Mg,Ni)O ₃ : A statistical thermodynamic analysis validated by mixed conductivity and magnetic susceptibility measurements. <i>Physical Review B</i> , 2006 , 74,	3.3	10
112	Ionic Memory Technology	1.3	10
111	Phase separation-promoted ion conduction in SrFe _{0.67} B _{0.33} O ₃ ceramics. <i>Solid State Ionics</i> , 2013 , 244, 17-22	3.3	9

110	Ceria based mixed conductors with adjusted electronic conductivity in the bulk and/or along grain boundaries. <i>Solid State Ionics</i> , 2009 , 180, 896-899	3.3	9
109	Defect Interactions in Sr ₃ La(Fe,Al) ₃ O ₁₀ by Computer Simulations and Mössbauer Spectroscopy. <i>Chemistry of Materials</i> , 2009 , 21, 5072-5078	9.6	9
108	Defect formation and transport in La _{0.95} Ni _{0.5} Ti _{0.5} O ₃ <i>Solid State Sciences</i> , 2006 , 8, 1302-1311	3.4	9
107	Oxygen transport and thermomechanical properties of SrFe(Al)O ₃ -BrAl ₂ O ₄ composites: microstructural effects. <i>Journal of Solid State Electrochemistry</i> , 2006 , 10, 663-673	2.6	9
106	Transport and electrocatalytic properties of La _{0.3} Sr _{0.7} Co _{0.8} Ga _{0.2} O ₃ membranes. <i>Journal of Solid State Electrochemistry</i> , 2005 , 9, 10-20	2.6	9
105	Electrical Conductivity, Thermal Expansion and Electrochemical Properties of Perovskites PrBaFe ₂ Ni _x O ₅ + λ <i>Russian Journal of Electrochemistry</i> , 2018 , 54, 533-540	1.2	9
104	Mathematical modeling and simulation of hydrogen-fueled solid oxide fuel cell system for micro-grid applications - Effect of failure and degradation on transient performance. <i>Energy</i> , 2020 , 202, 117752	7.9	8
103	Phase behavior and mixed ionic-electronic conductivity of Ba ₄ Sb ₂ O ₉ . <i>Solid State Ionics</i> , 2013 , 235, 1-7	3.3	8
102	Oxygen Nonstoichiometry and Ion-Electron Transport in SrFe _{0.9} M _{0.1} O ₃ - λ (M=Cr, Ti, Al). <i>Materials Science Forum</i> , 2006 , 514-516, 382-386	0.4	8
101	Mixed conductivity and electrocatalytic performance of SrFeO ₃ -BrAl ₂ O ₄ composite membranes. <i>Solid State Ionics</i> , 2006 , 177, 2285-2289	3.3	8
100	Phase interaction and oxygen transport in oxide composite materials. <i>Advances in Applied Ceramics</i> , 2004 , 103, 211-218		8
99	Ion transport properties and Seebeck coefficient of Fe-doped La(Sr)Al(Mg)O ₃ <i>Solid State Sciences</i> , 2005 , 7, 257-267	3.4	8
98	Development of oxygen ion conductors: One relevant tendency. <i>Ionics</i> , 2005 , 11, 321-326	2.7	8
97	Ionic transport in SrCo _{0.85} Ti _{0.15} O ₃ ceramics at high oxygen pressures. <i>Materials Research Bulletin</i> , 1999 , 34, 1921-1928	5.1	8
96	Structure and transport properties of La _{0.5} Sr _{0.5} CaxFeO ₃ <i>Solid State Ionics</i> , 2014 , 262, 672-677	3.3	7
95	Magnetic structure of Sr ₂ Fe ₂ O ₅ brownmillerite by single-crystal Mössbauer spectroscopy. <i>Journal of Solid State Chemistry</i> , 2013 , 205, 5-9	3.3	7
94	Mixed conductivity, stability and electrochemical behavior of perovskite-type (Sr _{0.7} Ce _{0.3}) _{1-x} Mn _{1-y} CryO ₃ λ <i>Solid State Ionics</i> , 2008 , 179, 2181-2191	3.3	7
93	EPR spectra and electrical conductivity of perovskite-like BaBi _{1-x} Ln _x O ₃ (Ln=La,Pr). <i>Materials Chemistry and Physics</i> , 2000 , 63, 240-250	4.4	7

92	Oxide Ion and Electron Conjugate Diffusion in Perovskite-Like $\text{SrCo}_{1-x}\text{MxO}_3$ [(M=Cr..Cu; x=0..0.5)]. <i>Solid State Phenomena</i> , 1994 , 39-40, 147-152	0.4	7
91	Oxygen intercalation in Ruddlesden-Popper type $\text{Sr}_3\text{LaFe}_3\text{O}_{10}$ <i>Materials Letters</i> , 2018 , 218, 325-328	3.3	6
90	Synthesis and properties of fuel cell anodes based on $(\text{La}_{0.5+x}\text{Sr}_{0.5-x})_1\text{Mn}_{0.5}\text{Ti}_{0.5}\text{O}_3$ [(x = 00.25, y = 00.03)]. <i>Russian Journal of Electrochemistry</i> , 2014 , 50, 730-736	1.2	6
89	Magnetization, Mössbauer and isothermal dilatometric behavior of oxidized $\text{YBa}(\text{Co,Fe})_4\text{O}_{(7+\delta)}$ <i>Dalton Transactions</i> , 2012 , 41, 667-78	4.3	6
88	Silica-scavenging effect in zirconia electrolytes: assessment of lanthanum silicate formation. <i>Ionics</i> , 2006 , 12, 179-184	2.7	6
87	Novel Ni-Doped Bismuth-Magnesium Tantalate Pyrochlores: Structural and Electrical Properties, Thermal Expansion, X-ray Photoelectron Spectroscopy, and Near-Edge X-ray Absorption Fine Structure Spectra. <i>ACS Omega</i> , 2021 , 6, 23262-23273	3.9	6
86	Fuel Cells: Advances and Challenges 179-264		6
85	Oxygen exchange, thermochemical expansion and cathodic behavior of perovskite-like $\text{Sr}_{0.7}\text{Ce}_{0.3}\text{MnO}_3$ <i>Solid State Ionics</i> , 2014 , 262, 349-353	3.3	5
84	Simulation of a mixed-conducting membrane-based gas turbine power plant for CO ₂ capture: system level analysis of operation stability and individual process unit degradation. <i>Journal of Solid State Electrochemistry</i> , 2011 , 15, 329-347	2.6	5
83	Ion-Conducting Nanocrystals: Theory, Methods, and Applications 79-132		5
82	Protective YSZ-based thin films deposited by RF magnetron sputtering. <i>Vacuum</i> , 2009 , 83, 1266-1269	3.7	5
81	Crystal and magnetic structures of $\text{NdBaCo}_2\text{O}_{5+\delta}$ (δ=0.75): A neutron diffraction study. <i>Physical Review B</i> , 2008 , 77,	3.3	5
80	Ionic and electronic transport in $\text{La}_2\text{Ti}_2\text{SiO}_9$ -based materials. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 1259-1271	3.3	5
79	Methane oxidation over nanocrystalline $\text{Ce}_{0.45}\text{Zr}_{0.45}\text{La}_{0.1}\text{O}_{2-\delta}$ /Pt and $\text{Ce}_{0.9}\text{Sm}_{0.1}\text{O}_{2-\delta}$ /Pt anodes. <i>Catalysis Letters</i> , 2006 , 112, 19-26	2.8	5
78	Powder X-ray diffraction study of $\text{LaCo}_{0.5}\text{Ni}_{0.5}\text{O}_3$ and $\text{LaCo}_{0.5}\text{Fe}_{0.5}\text{O}_3$ <i>Powder Diffraction</i> , 2003 , 18, 159-161	1.8	5
77	Crystal structure of rhombohedral $\text{MCd}(\text{NO}_2)_3$ [M = K, Rb, Cs, Tl] from X-ray powder diffraction data. <i>Materials Research Bulletin</i> , 2002 , 37, 735-743	5.1	5
76	Kinetics of phase transformations for constant heating rate occurring close to the thermodynamic transition. <i>Thermochimica Acta</i> , 2005 , 435, 85-91	2.9	5
75	Composition-gradient protective coatings for solid oxide fuel cell interconnectors. <i>Materials Letters</i> , 2019 , 240, 201-204	3.3	5

74	Oxygen Nonstoichiometry and Transport Properties of Mixed-Conducting $\text{Ce}_{0.6}\text{La}_{0.4}\text{Pr}_x\text{O}_2$ <i>Russian Journal of Electrochemistry</i> , 2018 , 54, 486-492	1.2	5
73	Transient system-level performance and thermo-mechanical stress analysis of a solid oxide fuel cell-based power generation plant with a multi-physics approach. <i>Computers and Chemical Engineering</i> , 2020 , 140, 106972	4	4
72	Redox behavior and ionic conductivity of Al-doped $\text{Sr}_3\text{LaFe}_3\text{O}_{10}$ <i>Materials Letters</i> , 2020 , 265, 127425	3.3	4
71	Nonstoichiometry, thermal expansion and oxygen permeability of $\text{SmBaCo}_2\text{-}\delta\text{Cu}_x\text{O}_6$ <i>Solid State Ionics</i> , 2014 , 260, 15-20	3.3	4
70	Sputtered YSZ based protective thin films for SOFCs. <i>Surface Engineering</i> , 2010 , 26, 584-589	2.6	4
69	Oxygen permeability of perovskite-type $\text{BaBi}_{1-x}\text{La}_x\text{O}_3$ <i>Materials Research Bulletin</i> , 1998 , 33, 1027-1033	5.1	4
68	Behavior of (La,Sr)CoO ₃ - and La ₂ NiO ₄ -based ceramic anodes in alkaline media: compositional and microstructural factors. <i>Journal of Solid State Electrochemistry</i> , 2007 , 12, 15-30	2.6	4
67	Oxygen ion transport numbers: assessment of combined measurement methods. <i>Ionics</i> , 2007 , 13, 163-171	2.7	4
66	Crystal structure, local sodium environments and ion dynamics in $\text{Na}_{0.8}\text{Ni}_{0.6}\text{Sb}_{0.4}\text{O}_2$, a new mixed antimonate. <i>Solid State Ionics</i> , 2007 , 178, 1360-1365	3.3	4
65	Ion transport in dual-phase $\text{SrFe}_{1-x}\text{O}_3$ ($x = 0.03$ to 0.10): effects of redox cycling. <i>Journal of Solid State Electrochemistry</i> , 2015 , 19, 841-849	2.6	3
64	High-pressure behavior and equations of state of the cobaltates YBaCo_4O_7 . <i>Journal of Solid State Chemistry</i> , 2012 , 196, 209-216	3.3	3
63	Oxygen Ionic Transport in Brownmillerite-Type $\text{Ca}_2\text{Fe}_2\text{O}_5$ - and Calcium Ferrite-Based Composite Membranes. <i>Solid State Phenomena</i> , 2013 , 200, 286-292	0.4	3
62	Fundamentals, Applications, and Perspectives of Solid-State Electrochemistry: A Synopsis		3
61	Mixed conductivity, thermal expansion and defect chemistry of A-site deficient $\text{LaNi}_{0.5}\text{Ti}_{0.5}\text{O}_3$ <i>Journal of the European Ceramic Society</i> , 2007 , 27, 4279-4282	6	3
60	Redox behavior and transport properties of $\text{La}_{0.5-x}\text{Ce}_x\text{Sr}_{0.5+x}\text{FeO}_3$ and $\text{La}_{0.5-y}\text{Sr}_{0.5+2y}\text{Fe}_{1-y}\text{Nb}_y\text{O}_3$ perovskites. <i>Solid State Sciences</i> , 2007 , 9, 32-42	3.4	3
59	P-Type electronic conduction in CeO_2 - and LaGaO_3 -based solid electrolytes. <i>Ionics</i> , 2002 , 8, 215-222	2.7	3
58	Ionic and electronic transport in perovskite-type $\text{La}(\text{Ga},\text{M})\text{O}_3$ (M=Mg, Cr, Fe, Co, Ni, Nb). <i>Ionics</i> , 1999 , 5, 183-193	2.7	3
57	Spectroscopic characterization of cobalt doped bismuth tantalate pyrochlore. <i>Solid State Sciences</i> , 2022 , 125, 106820	3.4	3

56	Interfacial Effects in Potentiometric Oxygen Sensors: The Role of Transport Properties and Thickness of Solid Electrolyte Ceramics. <i>Sensor Letters</i> , 2008 , 6, 370-380	0.9	3
55	Redox Behavior and Transport Properties of Composites Based on (Fe,Ni) ₃ O ₄ as Anodes of Solid Oxide Fuel Cells. <i>Russian Journal of Electrochemistry</i> , 2018 , 54, 506-513	1.2	3
54	Cu, Mg Codoped Bismuth Tantalate Pyrochlores: Crystal Structure, XPS Spectra, Thermal Expansion, and Electrical Properties.. <i>Inorganic Chemistry</i> , 2022 , 61, 4270-4282	5.1	3
53	The Mixed Electronic and Ionic Conductivity of Perovskite-Like Ba _{1-x} Sr _x Fe _{1-y} Ti _y O ₃ and BaTi _{0.5} Fe _{0.5-x} Ce _x O ₃ Solid Solutions. <i>Russian Journal of Electrochemistry</i> , 2020 , 56, 110-117	1.2	2
52	Transport and Electrochemical Properties of SrFe(Al,Mo)O ₃ . <i>Russian Journal of Electrochemistry</i> , 2018 , 54, 514-526	1.2	2
51	Stability and functional properties of Sr _{0.7} Ce _{0.3} MnO ₃ as cathode material for solid oxide fuel cells. <i>Russian Journal of Electrochemistry</i> , 2014 , 50, 713-718	1.2	2
50	Pronounced impact of atmospheric conditions on Ba ₄ Nb ₂ O ₉ and Ba ₄ Ta ₂ O ₉ . <i>Solid State Ionics</i> , 2012 , 225, 172-175	3.3	2
49	SrO-Containing Diopside Glass-Ceramic Sealants for Solid Oxide Fuel Cells: Mechanical Reliability and Thermal Shock Resistance. <i>Fuel Cells</i> , 2013 , 13, n/a-n/a	2.9	2
48	Surface analysis of mixed-conducting ferrite membranes by the conversion-electron Mössbauer spectroscopy. <i>Journal of Solid State Chemistry</i> , 2011 , 184, 2610-2614	3.3	2
47	Sintering and Oxygen Transport in Ce _{0.8} Pr _{0.2} O ₂ : A Comparative Study of Mn and Co Oxide Additives. <i>Journal of the Electrochemical Society</i> , 2009 , 156, F47	3.9	2
46	High-Temperature Applications of Solid Electrolytes: Fuel Cells, Pumping, and Conversion	397-426	2
45	The Fundamentals and Advances of Solid-State Electrochemistry: Intercalation (Insertion) and Deintercalation (Extraction) in Solid-State Electrodes	133-177	2
44	Oxygen Ion-Conducting Materials	301-334	2
43	Surface states and stability of Fe-containing perovskite electrodes for SOFCs/SOECs by conversion-electron Mössbauer spectroscopy. <i>Electrochemistry Communications</i> , 2011 , 13, 685-688	5.1	2
42	Assessment of stability and protonic conduction in NASICON ceramics. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 3049-3055	6	2
41	Mixed conductivity of gadolinium titanate-based pyrochlore ceramics: The grain boundary effects. <i>Ionics</i> , 2003 , 9, 122-126	2.7	2
40	Regularities of high-temperature oxidation of current collectors of solid oxide fuel cells due to diffusion processes in subsurface regions. <i>Russian Journal of Electrochemistry</i> , 2016 , 52, 678-684	1.2	2
39	Stability, mixed conductivity, and thermomechanical properties of perovskite materials for fuel cell electrodes based on La _{0.5} A _{0.5} Mn _{0.5} Ti _{0.5} O ₃ [A = La, Ba], La _{0.5} Ba _{0.5} Ti _{0.5} Fe _{0.5} O ₃ and (La _{0.5} B _{0.5}) _{0.95} Cr _{0.5} Fe _{0.5} O ₃ [A = Ca, Ba]. <i>Russian Journal of Electrochemistry</i> , 2016 , 52, 628-641	1.2	2

38	Time degradation of electronic and ionic transport in perovskite-like $\text{La}_{0.5}\text{Ca}_{0.5}\text{FeO}_3$ <i>Materials Letters</i> , 2019 , 239, 167-171	3.3	2
37	Electronic structure of Mn-doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$: An XPS, ESR and NEXAFS study. <i>Ceramics International</i> , 2021 , 47, 9923-9932	5.1	2
36	Advances in the Theoretical Description of Solid-Electrolyte Solution Interfaces 73-124		2
35	Electrochemical Behavior of (Fe,Ni)O _x -Based Anodes for Solid-Oxide Fuel Cells in Methane-Containing Atmospheres. <i>Russian Journal of Electrochemistry</i> , 2020 , 56, 147-155	1.2	1
34	Stability and Functional Properties of Fluorite-Like $\text{Ce}_{0.6-x}\text{La}_{0.4}\text{Pr}_x\text{O}_2$ Bas Electrode Components for Solid Oxide Fuel Cells. <i>Russian Journal of Electrochemistry</i> , 2020 , 56, 139-146	1.2	1
33	Local Structure Adaptations and Oxide Ionic Conductivity in the Type III Stability Region of $(1-x)\text{Bi}_2\text{O}_3\text{-}x\text{Nb}_2\text{O}_5$. <i>Chemistry of Materials</i> , 2018 , 30, 3387-3394	9.6	1
32	Oxygen- and Hydrogen-Permeable Dense Ceramic Membranes 2011 , 467-500		1
31	Electrochemistry of Electronically Conducting Polymers 365-396		1
30	Electrochemical Sensors: Fundamentals, Key Materials, and Applications 427-491		1
29	Superionic Materials: Structural Aspects 15-41		1
28	Solid-State Electrochemical Reactions of Electroactive Microparticles and Nanoparticles in a Liquid Electrolyte Environment 179-226		1
27	Properties of the Solid Solutions $\text{Bi}_2\text{Cu}(\text{Ni})\text{O}_4$ <i>Materials Research Bulletin</i> , 1998 , 33, 89-93	5.1	1
26	Defect Formation in $\text{La}_2\text{Ni}(\text{M})\text{O}_4$ (M= Co, Cu): Modelling and Coulometric Titration Study. <i>Materials Science Forum</i> , 2006 , 514-516, 397-401	0.4	1
25	Oxygen Evolution on Perovskite-Type Cobaltite Anodes: An Assessment of Materials Science-Related Aspects. <i>Materials Science Forum</i> , 2006 , 514-516, 377-381	0.4	1
24	Defect formation and transport in mixed-conducting $\text{La}_{0.90}\text{Sr}_{0.10}\text{Al}_{0.85}\text{FexMg}_{0.15}\text{O}_3$ <i>Journal of Physics and Chemistry of Solids</i> , 2006 , 67, 1882-1887	3.9	1
23	Mixed conductivity of zircon-type $\text{Ce}_{1-x}\text{AxVO}_4$ (A=Ca, Sr). <i>Ionics</i> , 2003 , 9, 231-237	2.7	1
22	Materials Science Aspects Relevant for High-Temperature Electrochemistry 415-465		1
21	Ionic conductivity and thermal expansion of anion-deficient $\text{Sr}_{11}\text{Mo}_4\text{O}_{23}$ perovskite. <i>Journal of Solid State Electrochemistry</i> , 2020 , 24, 2943-2951	2.6	1

20	Electrodes for High-Temperature Electrochemical Cells: Novel Materials and Recent Trends	265-329	1
19	Nanostructured Electrodes for Lithium Ion Batteries	383-413	1
18	Redox behavior of acceptor-doped $\text{La}(\text{Al},\text{Fe})\text{O}_3$	<i>Journal of Alloys and Compounds</i> , 2006 , 413, 244-250	5.7 0
17	Thermal expansion and electrical properties of Fe-doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics.	<i>Materials Chemistry and Physics</i> , 2021 , 258, 123996	4.4 0
16	Composite Solid Electrolytes	31-71	0
15	Mixed Ionic-Electronic Conductivity of the Fluorite-Type $\text{Ce}_{1-x}\text{La}_x\text{Pr}_y\text{O}_2$ Solid Solutions under Reducing Conditions.	<i>Russian Journal of Electrochemistry</i> , 2022 , 58, 122-130	1.2 0
14	Electrophysical and thermomechanical properties of perovskites $\text{La}_{0.5}\text{A}_{0.5}\text{Mn}_{0.5}\text{Ti}_{0.5}\text{O}_3$ (A = Ca, Sr, Ba) used as fuel cell anodes: the effect of radius of alkali-earth cation.	<i>Russian Journal of Electrochemistry</i> , 2016 , 52, 622-627	1.2
13	Reference Electrodes for Solid-Electrolyte Devices	2013 , 243-278	
12	Polymer and Hybrid Materials: Electrochemistry and Applications	335-363	
11	Conducting Solids: In the Search for Multivalent Cation Transport	279-300	
10	Interfacial Phenomena in Mixed Conducting Membranes: Surface Oxygen Exchange- and Microstructure-Related Factors	2011 , 501-539	
9	Mixed Conductivity of Ce- and Nb-Substituted $(\text{La}, \text{Sr})\text{FeO}_3$	<i>Materials Science Forum</i> , 2006 , 514-516, 402-406	0.4
8	Electrocatalytic Behavior of Perovskite-Related Cobaltites and Nickelates in Alkaline Media.	<i>Materials Science Forum</i> , 2006 , 514-516, 1391-1395	0.4
7	Characterization of $(\text{La}_{0.9}\text{Sr}_{0.1})_{0.95}\text{Cr}_{0.85}\text{Mg}_{0.10}\text{Ni}_{0.05}\text{O}_3$ Ceramics for Perovskite Related Membrane Reactor	2007 , 215	
6	Transport Properties and Thermal Expansion of $\text{SrCe}(\text{Y})\text{O}_3$ Ceramics.	<i>Materials Science Forum</i> , 2006 , 514-516, 387-391	0.4
5	Effects of some technological factors on the properties of current-carrying films.	<i>Glass and Ceramics (English Translation of Steklo I Keramika)</i> , 1993 , 50, 231-233	0.6
4	Cellulose-Precursor Synthesis of Electrocatalytically Active Components of SOFCs and Mixed-Conducting Membrane Reactors	2005 , 223-229	
3	Transport properties of solid oxide electrolyte ceramics	2005 , 189-213	

- 2 Ionic transport in (La,Sr)CoO₃- δ ceramics. *Journal of Solid State Electrochemistry*, **2021**, 25, 2777 2.6
- 1 Progress and challenges in solid-state electrochemical research: selected aspects. *Journal of Solid State Electrochemistry*, **2020**, 24, 2097-2098 2.6