

Frank Tietz

List of Publications by Year in Descending Order

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

186 papers	8,247 citations	51 h-index	85 g-index
200 ext. papers	9,186 ext. citations	4.6 avg, IF	6.21 L-index

#	Paper	IF	Citations
186	Conductivity, microstructure and mechanical properties of tape-cast LATP with LiF and SiO ₂ additives. <i>Journal of Materials Science</i> , 2022 , 57, 925-938	4.3	2
185	Fabrication of thin sheets of the sodium superionic conductor Na ₅ YSi ₄ O ₁₂ with tape casting. <i>Chemical Engineering Journal</i> , 2022 , 435, 134774	14.7	1
184	A niobium-substituted sodium superionic conductor with conductivity higher than 5.5 mS cm ⁻¹ prepared by solution-assisted solid-state reaction method. <i>Journal of Power Sources</i> , 2022 , 518, 230765	8.9	1
183	Phase-field Determination of NaSICON Materials in the Quaternary System Na-O-P-O-SiO ₂ -ZrO ₂ : The Series Na _{1-x} Zr _x Si _{1-x} P _x O ₁₀ . <i>ChemPhysChem</i> , 2021 , 22, 995-1007	3.2	1
182	A robust, highly reversible, mixed conducting sodium metal anode. <i>Science Bulletin</i> , 2021 , 66, 179-186	10.6	9
181	Ionic Conductivity of Na ₃ V ₂ P ₃ O ₁₂ as a Function of Electrochemical Potential and its Impact on Battery Performance. <i>Batteries and Supercaps</i> , 2021 , 4, 479-484	5.6	5
180	Solid-State Electrolyte Materials for Sodium Batteries: Towards Practical Applications. <i>ChemElectroChem</i> , 2020 , 7, 2693-2713	4.3	27
179	Structure and ion transport of lithium-rich Li _{1+x} Al _x Ti _{2-2x} (PO ₄) ₃ with 0.3. <i>Solid State Ionics</i> , 2020 , 346, 115192	3.3	14
178	Microstructure, ionic conductivity and mechanical properties of tape-cast Li _{1.5} Al _{0.5} Ti _{1.5} P ₃ O ₁₂ electrolyte sheets. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 1975-1982	6	7
177	Na ⁺ ion mobility in Na ₃ +Sc ₂ (SiO ₄)(PO ₄) ₃ [0.1] <i>Solid State Ionics</i> , 2020 , 348, 115277	3.3	3
176	Dendrite-tolerant all-solid-state sodium batteries and an important mechanism of metal self-diffusion. <i>Journal of Power Sources</i> , 2020 , 476, 228666	8.9	10
175	Polyanionic Lattice Modifications Leading to High-Entropy Sodium Ion Conductors: Mathematical Solution of Accessible Compositions. <i>ChemPhysChem</i> , 2020 , 21, 2096-2103	3.2	2
174	Room-temperature all-solid-state sodium batteries with robust ceramic interface between rigid electrolyte and electrode materials. <i>Nano Energy</i> , 2019 , 65, 104040	17.1	26
173	Electrochemical Performance of All-Solid-State Sodium-Ion Model Cells with Crystalline Na _x CoO ₂ Thin-Film Cathodes. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5328-A5332	3.9	9
172	A garnet structure-based all-solid-state Li battery without interface modification: resolving incompatibility issues on positive electrodes. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 280-291	5.8	81
171	Impact of sintering temperature on phase formation, microstructure, crystallinity and ionic conductivity of Li _{1.5} Al _{0.5} Ti _{1.5} (PO ₄) ₃ . <i>Solid State Ionics</i> , 2019 , 338, 144-152	3.3	14
170	Room temperature demonstration of a sodium superionic conductor with grain conductivity in excess of 0.01 S cm ⁻¹ and its primary applications in symmetric battery cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 7766-7776	13	57

169	Sintering of a sodium-based NASICON electrolyte: A comparative study between cold, field assisted and conventional sintering methods. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 2697-2702	6	21
168	Impact of sodium excess on electrical conductivity of Na ₃ Zr ₂ Si ₂ PO ₁₂ + x Na ₂ O ceramics. <i>Solid State Ionics</i> , 2019 , 336, 57-66	3.3	16
167	Prospects of production technologies and manufacturing costs of oxide-based all-solid-state lithium batteries. <i>Energy and Environmental Science</i> , 2019 , 12, 1818-1833	35.4	63
166	Microstructure-conductivity relationship of Na ₃ Zr ₂ (SiO ₄) ₂ (PO ₄) ceramics. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 1057-1070	3.8	18
165	Micromechanical assessment of Al/Y-substituted NASICON solid electrolytes. <i>Ceramics International</i> , 2019 , 45, 21308-21314	5.1	9
164	Sc-substituted Nasicon solid electrolyte for an all-solid-state Na _x CoO ₂ /Nasicon/Na sodium model battery with stable electrochemical performance. <i>Journal of Power Sources</i> , 2019 , 409, 86-93	8.9	27
163	Interfaces in solid-state sodium-ion batteries: NaCoO ₂ thin films on solid electrolyte substrates. <i>Electrochimica Acta</i> , 2018 , 268, 226-233	6.7	13
162	Arrhenius Behavior of the Bulk Na-Ion Conductivity in NaSc(PO) Single Crystals Observed by Microcontact Impedance Spectroscopy. <i>Chemistry of Materials</i> , 2018 , 30, 1776-1781	9.6	14
161	Synthesis and characterization of equimolar Al/Y-substituted NASICON solid solution Na _{1+2x+y} Al _x Y _x Zr _{2-2x-2y} Si _y P _{3-3y} O ₁₂ . <i>Solid State Ionics</i> , 2018 , 319, 13-21	3.3	15
160	Structural and transport properties of lithium-conducting NASICON materials. <i>Journal of Power Sources</i> , 2018 , 391, 1-9	8.9	41
159	Bulk and grain-boundary ionic conductivity in sodium zirconophosphosilicate Na ₃ Zr ₂ (SiO ₄) ₂ PO ₄ (NASICON). <i>Chemical Physics Letters</i> , 2018 , 701, 147-150	2.5	20
158	Compatibility study of oxide and olivine cathode materials with lithium aluminum titanium phosphate. <i>Ionics</i> , 2018 , 24, 1001-1006	2.7	21
157	Coefficients of Thermal Expansion of Al- and Y-Substituted NaSICON Solid Solution Na _{3+2x} Al _x Y _x Zr _{2-2x-2y} Si _y PO ₁₂ . <i>Batteries</i> , 2018 , 4, 33	5.7	10
156	In-operando photoelectron spectroscopy for batteries: Set-up using pristine thin film cathode and first results on NaCoO. <i>Review of Scientific Instruments</i> , 2018 , 89, 073104	1.7	19
155	Fast Na ion transport triggered by rapid ion exchange on local length scales. <i>Scientific Reports</i> , 2018 , 8, 11970	4.9	16
154	Characterization and Optimization of La _{0.97} Ni _{0.5} Co _{0.5} O ₃ Based Air-Electrodes for Solid Oxide Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 2784-2792	6.1	4
153	The influence of water on the electrical conductivity of aluminum-substituted lithium titanium phosphates. <i>Solid State Ionics</i> , 2018 , 321, 83-90	3.3	28
152	Stability of NASICON materials against water and CO ₂ uptake. <i>Solid State Ionics</i> , 2017 , 302, 102-106	3.3	25

151	Structure and Vibrational Dynamics of NASICON-Type $\text{LiTi}_2(\text{PO}_4)_3$. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 3697-3706	3.8	29
150	Investigation of crystal structure and ionic transport in a scandium-based NASICON material by neutron powder diffraction. <i>Solid State Sciences</i> , 2017 , 67, 30-36	3.4	10
149	Fast Na^+ Ion Conduction in NASICON-Type $\text{Na}_{3.4}\text{Sc}_2(\text{SiO}_4)_0.4(\text{PO}_4)_2.6$ Observed by ^{23}Na NMR Relaxometry. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 1449-1454	3.8	27
148	A Mössbauer spectral study of degradation in $\text{La}_{0.58}\text{Sr}_{0.4}\text{Fe}_{0.5}\text{Co}_{0.5}\text{O}_{3-\delta}$ after long-term operation in solid oxide electrolysis cells. <i>Solid State Ionics</i> , 2017 , 312, 38-43	3.3	12
147	$\text{Na}_3\text{Zr}_2(\text{SiO}_4)_2(\text{PO}_4)$ prepared by a solution-assisted solid state reaction. <i>Solid State Ionics</i> , 2017 , 302, 83-91	3.3	53
146	Phase relations of NASICON materials and compilation of the quaternary phase diagram $\text{Na}_2\text{O}-\text{P}_2\text{O}_5-\text{SiO}_2-\text{ZrO}_2$. <i>AIMS Materials Science</i> , 2017 , 4, 1305-1318	1.9	5
145	Atomic layer deposition and high-resolution electron microscopy characterization of nickel nanoparticles for catalyst applications. <i>Surface and Coatings Technology</i> , 2016 , 307, 428-435	4.4	6
144	A single crystal X-ray and powder neutron diffraction study on NASICON-type $\text{Li}_{1+x}\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$ ($0 \leq x \leq 0.5$) crystals: Implications on ionic conductivity. <i>Solid State Sciences</i> , 2016 , 60, 99-107	3.4	34
143	A Novel Sol-Gel Method for Large-Scale Production of Nanopowders: Preparation of $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ti}_{1.5}(\text{PO}_4)_3$ as an Example. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 410-414	3.8	50
142	New promising NASICON material as solid electrolyte for sodium-ion batteries: Correlation between composition, crystal structure and ionic conductivity of $\text{Na}_3 + x\text{Sc}_2\text{SixP}_3\text{O}_{12}$. <i>Solid State Ionics</i> , 2016 , 293, 18-26	3.3	74
141	Scandium-Substituted $\text{Na}_3\text{Zr}_2(\text{SiO}_4)_2(\text{PO}_4)$ Prepared by a Solution-Assisted Solid-State Reaction Method as Sodium-Ion Conductors. <i>Chemistry of Materials</i> , 2016 , 28, 4821-4828	9.6	146
140	A Simple Approach towards High-Performance Perovskite-Based Bifunctional Oxygen Electrocatalysts. <i>ChemElectroChem</i> , 2016 , 3, 138-143	4.3	33
139	Material properties of perovskites in the quasi-ternary system $\text{LaFeO}_3\text{--LaCoO}_3\text{--LaNiO}_3$. <i>Journal of Solid State Chemistry</i> , 2016 , 237, 183-191	3.3	11
138	Interconnects 2016 , 195-254		14
137	A microcontact impedance study on NASICON-type $\text{Li}_{1+x}\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$ ($0 \leq x \leq 0.5$) single crystals. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1506-1513	13	74
136	Perovskite-based bifunctional electrocatalysts for oxygen evolution and oxygen reduction in alkaline electrolytes. <i>Electrochimica Acta</i> , 2016 , 208, 25-32	6.7	53
135	Solid-State NMR Investigations on the Structure and Dynamics of the Ionic Conductor $\text{Li}_{1+x}\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$ ($0.0 \leq x \leq 1.0$). <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8436-8442	3.8	31
134	Post-test analysis of electrode-supported solid oxide electrolyser cells. <i>Ionics</i> , 2015 , 21, 1039-1043	2.7	15

133	High conductivity of mixed phase Al-substituted Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Journal of Electroceramics</i> , 2015 , 35, 25-32	1.5	41
132	Crystal structure and high-temperature properties of the Ruddlesden-Popper phases Sr ₃ Y _x (Fe _{1.25} Ni _{0.75})O ₇ (O _{0.75}). <i>Journal of Solid State Chemistry</i> , 2015 , 227, 45-54	3.3	9
131	Separating bulk from grain boundary Li ion conductivity in the sol-gel prepared solid electrolyte Li _{1.5} Al _{0.5} Ti _{1.5} (PO ₄) ₃ . <i>Journal of Materials Chemistry A</i> , 2015 , 3, 21343-21350	13	101
130	Systematic Parameter Study on the Influence of Humidification and Current Density on SOEC Degradation. <i>ECS Transactions</i> , 2015 , 68, 3553-3561	1	8
129	Modified strontium titanates: from defect chemistry to SOFC anodes. <i>RSC Advances</i> , 2015 , 5, 1168-1180	3.7	65
128	Very fast bulk Li ion diffusivity in crystalline Li _{1.5} Al _{0.5} Ti _{1.5} (PO ₄) ₃ as seen using NMR relaxometry. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 32115-21	3.6	59
127	Microstructural comparison of solid oxide electrolyser cells operated for 6100h and 9000h. <i>Journal of Power Sources</i> , 2015 , 275, 901-911	8.9	73
126	Survey of the transport properties of sodium superionic conductor materials for use in sodium batteries. <i>Journal of Power Sources</i> , 2015 , 273, 1056-1064	8.9	155
125	Microstructural variations and their influence on the performance of solid oxide fuel cells based on yttrium-substituted strontium titanate ceramic anodes. <i>Journal of Power Sources</i> , 2015 , 279, 678-685	8.9	14
124	Neutron Diffraction Analysis of NASICON-type Li _{1+x} Al _x Ti ₂ P ₃ O ₁₂ . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014 , 640, 3070-3073	1.3	18
123	Activation of oxygen evolving perovskites for oxygen reduction by functionalization with Fe-N(x)/C groups. <i>Chemical Communications</i> , 2014 , 50, 14760-2	5.8	64
122	Evaluation of perovskites as electrocatalysts for the oxygen evolution reaction. <i>ChemPhysChem</i> , 2014 , 15, 2810-6	3.2	61
121	Towards the fabrication of La _{0.98} Sr _x Co _{0.2} Fe _{0.8} O ₃ perovskite-type oxygen transport membranes. <i>Journal of the European Ceramic Society</i> , 2014 , 34, 3741-3748	6	43
120	Electrochemical performance and stability of electrolyte-supported solid oxide fuel cells based on Y-substituted SrTiO ₃ ceramic anodes. <i>Solid State Ionics</i> , 2014 , 262, 465-468	3.3	11
119	Full Ceramic Fuel Cells Based on Strontium Titanate Anodes, an Approach towards More Robust SOFCs. <i>ECS Transactions</i> , 2013 , 57, 1175-1184	1	10
118	Degradation phenomena in a solid oxide electrolysis cell after 9000h of operation. <i>Journal of Power Sources</i> , 2013 , 223, 129-135	8.9	195
117	Synthesis and Raman micro-spectroscopy investigation of Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Solid State Ionics</i> , 2013 , 230, 77-82	3.3	89
116	Overview on the Julich SOFC Development Status. <i>ECS Transactions</i> , 2013 , 57, 23-33	1	21

115	Magnetron-sputtered cobalt-based protective coatings on ferritic steels for solid oxide fuel cell interconnect applications. <i>Corrosion Science</i> , 2012 , 54, 68-76	6.8	36
114	Comparison of Y and La-substituted SrTiO ₃ as the anode materials for SOFCs. <i>Solid State Ionics</i> , 2012 , 225, 108-112	3.3	32
113	Pulsed Laser Deposition and DC-Sputtering of Yttria Stabilised Zirconia for Solid Oxide Fuel Cell Applications. <i>Ceramic Transactions</i> , 2012 , 117-126	0.1	
112	Properties of tape-cast Y-substituted strontium titanate for planar anode substrates in SOFC applications. <i>Journal of Materials Science</i> , 2011 , 46, 3493-3499	4.3	14
111	Electrochemical performances of solid oxide fuel cells based on Y-substituted SrTiO ₃ ceramic anode materials. <i>Journal of Power Sources</i> , 2011 , 196, 7308-7312	8.9	51
110	Performance analysis of mixed ionic-electronic conducting cathodes in anode supported cells. <i>Journal of Power Sources</i> , 2011 , 196, 7257-7262	8.9	28
109	Electrodeposited cobalt coating on Crofer22APU steels for interconnect applications in solid oxide fuel cells. <i>Solid State Ionics</i> , 2011 , 192, 376-382	3.3	29
108	Nonstoichiometric Y-substituted SrTiO ₃ materials as anodes for solid oxide fuel cells. <i>Solid State Ionics</i> , 2011 , 192, 535-539	3.3	42
107	Mössbauer spectroscopy in the system La _{0.8} Sr _{0.2} (Mn,Fe,Co)O ₃ . <i>Solid State Ionics</i> , 2011 , 192, 552-556	3.3	3
106	Post-Test Characterization of an SOFC Short-Stack after 17,000 Hours of Steady Operation. <i>ECS Transactions</i> , 2011 , 35, 195-206	1	42
105	Nine Thousand Hours of Operation of a Solid Oxide Cell in Steam Electrolysis Mode. <i>Journal of the Electrochemical Society</i> , 2011 , 159, A137-A144	3.9	80
104	Time-Dependent Electrode Performance Changes in Intermediate Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B292	3.9	65
103	Various Lanthanum Ferrite-Based Cathode Materials With Ni and Cu Substitution for Anode-Supported Solid Oxide Fuel Cells. <i>Journal of Fuel Cell Science and Technology</i> , 2010 , 7,		9
102	Materials and manufacturing technologies for solid oxide fuel cells. <i>Journal of Materials Science</i> , 2010 , 45, 3109-3135	4.3	206
101	Y-substituted SrTiO ₃ /YSZ composites as anode materials for solid oxide fuel cells: Interaction between SYT and YSZ. <i>Journal of Power Sources</i> , 2010 , 195, 1920-1925	8.9	50
100	Anode-supported planar SOFC with high performance and redox stability. <i>Electrochemistry Communications</i> , 2010 , 12, 1326-1328	5.1	54
99	Characterization of Anode-Supported Solid Oxide Fuel Cells With Nd ₂ NiO ₄ Cathodes. <i>Journal of Fuel Cell Science and Technology</i> , 2009 , 6,		4
98	Real-SOFC - A Joint European Effort to Improve SOFC Durability. <i>ECS Transactions</i> , 2009 , 25, 43-56	1	11

97	AC Impedance Characterisation of a La _{0.8} Sr _{0.2} Co _{0.2} Fe _{0.8} O ₃ Electrode. <i>Fuel Cells</i> , 2009 , 9, 852-860	2.9	68
96	Metal/Ceramic Interface Properties and Their Effects on SOFC Development. <i>Fuel Cells</i> , 2009 , 9, 867-872.	2.9	9
95	Development and characterization of a quasi-ternary diagram based on La _{0.8} Sr _{0.2} (Co,Cu,Fe)O ₃ oxides in view of application as a cathode contact material for solid oxide fuel cells. <i>Solid State Ionics</i> , 2009 , 180, 731-737	3.3	15
94	Investigation of the quasi-ternary system LaMnO ₃ –LaCoO ₃ –LaCuO ₃ II: The series LaMn _{0.25} Co _{0.75} Cu _{2x} O ₃ and LaMn _{0.75} Co _{0.25} Cu _{2x} O ₃ <i>Journal of Materials Science</i> , 2009 , 44, 4883-4891	4.3	5
93	Comparative study of perovskites as cathode contact materials between an La _{0.8} Sr _{0.2} FeO ₃ cathode and a Crofer22APU interconnect in solid oxide fuel cells. <i>Journal of Power Sources</i> , 2009 , 188, 148-155	8.9	55
92	Long-Term Study of MIEC Cathodes for Intermediate Temperature Solid Oxide Fuel Cells. <i>ECS Transactions</i> , 2009 , 25, 2381-2390	1	7
91	Advances in Research, Development, and Testing of Single Cells at Forschungszentrum Jülich. <i>Journal of Fuel Cell Science and Technology</i> , 2009 , 6,		13
90	Spinel and Perovskite Protection Layers Between Crofer22APU and La _[sub 0.8] Sr _[sub 0.2] FeO _[sub 3] Cathode Materials for SOFC Interconnects. <i>Journal of the Electrochemical Society</i> , 2009 , 156, B188	3.9	45
89	Characterization of Anode-Supported Solid Oxide Fuel Cells With PSCF Cathode. <i>Journal of Fuel Cell Science and Technology</i> , 2009 , 6,		7
88	Solid Oxide Fuel Cells 2008 , 1-8		2
87	Screening of A-Substitution in the System A _[sub 0.68] Sr _[sub 0.3] Fe _[sub 0.8] Co _[sub 0.2] O _[sub 3] for SOFC Cathodes. <i>Journal of the Electrochemical Society</i> , 2008 , 155, B207	3.9	52
86	MnCo _{1.9} Fe _{0.1} O ₄ spinel protection layer on commercial ferritic steels for interconnect applications in solid oxide fuel cells. <i>Journal of Power Sources</i> , 2008 , 184, 172-179	8.9	81
85	Physical characterization of Y ₂ O ₃ –CeO ₂ –TiO ₂ (YCT) mixed oxides and Ni/YCT cermets as anodes in solid oxide fuel cells. <i>Journal of Materials Science</i> , 2008 , 43, 7057-7065	4.3	6
84	Ceramic-based Anode Materials for Improved Redox Cycling of Solid Oxide Fuel Cells. <i>Fuel Cells</i> , 2008 , 8, 283-293	2.9	80
83	Interface reactions between electrically conductive ceramics and ferritic steel-I. The system Cr _{0.2} Fe _{0.5} Mn/Mn ₂ O ₃ /(La,Ca)(Cr,Co,Cu)O ₃ . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008 , 150, 135-140	3.1	12
82	Influence of sintering conditions on microstructure and electrical conductivity of yttrium-substituted SrTiO ₃ . <i>Journal of the European Ceramic Society</i> , 2008 , 28, 811-820	6	68
81	From powder properties to fuel cell performance – A holistic approach for SOFC cathode development. <i>Solid State Ionics</i> , 2008 , 179, 1509-1515	3.3	104
80	Real-SOFC - A Joint European Effort in Understanding SOFC Degradation. <i>ECS Transactions</i> , 2007 , 7, 67-76		3

79	Solid Oxide Fuel Cell Development at Forschungszentrum Juelich. <i>Fuel Cells</i> , 2007 , 7, 204-210	2.9	41
78	An efficient ceramic-based anode for solid oxide fuel cells. <i>Journal of Power Sources</i> , 2007 , 171, 663-669	8.9	68
77	Materials Development for Advanced Planar Solid Oxide Fuel Cells. <i>International Journal of Applied Ceramic Technology</i> , 2007 , 4, 436-445	2	54
76	Chemical and physical properties of complex perovskites in the $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3\text{--}\text{La}_{0.8}\text{Sr}_{0.2}\text{CuO}_{2.4}\text{--}\text{La}_{0.8}\text{Sr}_{0.2}\text{FeO}_3$ system. <i>Solid State Sciences</i> , 2007 , 9, 706-712	3-4	7
75	Mixed conducting oxides $\text{YxZr}_{1-x}\text{Ti}_y\text{O}_{2-x/2}$ (YZT) and corresponding Ni/YZT cermet as anode materials in an SOFC. <i>Journal of Materials Science</i> , 2007 , 42, 10152-10159	4-3	12
74	Use of SOFC Metallic Interconnect Coated with Spinel Protective Layers using the APS Technology. <i>ECS Transactions</i> , 2007 , 7, 2399-2405	1	30
73	Survey of the quasi-ternary system $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3\text{--}\text{La}_{0.8}\text{Sr}_{0.2}\text{CoO}_3\text{--}\text{La}_{0.8}\text{Sr}_{0.2}\text{FeO}_3$. <i>Progress in Solid State Chemistry</i> , 2007 , 35, 539-543	8	19
72	Comparison of the Power Generating Characteristics of KIST- and FZ-Julich SOFCs. <i>Journal of the Korean Ceramic Society</i> , 2007 , 44, 703-709	2.2	
71	Electrical conductivity and thermal expansion of $\text{La}_{0.8}\text{Sr}_{0.2}(\text{Mn},\text{Fe},\text{Co})\text{O}_{3-\delta}$ perovskites. <i>Solid State Ionics</i> , 2006 , 177, 1753-1756	3-3	67
70	Solid Oxide Fuel Cell Performance under Severe Operating Conditions. <i>Fuel Cells</i> , 2006 , 6, 130-136	2.9	51
69	$\text{La}_{0.4}\text{Sr}_{0.6}\text{Ti}_{1-x}\text{Mn}_x\text{O}_3$ Perovskites as Anode Materials for Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2006 , 153, D74	3-9	126
68	Overview of the Development of Solid Oxide Fuel Cells at Forschungszentrum Juelich. <i>International Journal of Applied Ceramic Technology</i> , 2006 , 3, 470-476	2	33
67	Performance of LSCF cathodes in cell tests. <i>Journal of Power Sources</i> , 2006 , 156, 20-22	8.9	174
66	Ferrite-based perovskites as cathode materials for anode-supported solid oxide fuel cells Part II. Influence of the CGO interlayer. <i>Solid State Ionics</i> , 2006 , 177, 2103-2107	3-3	147
65	Evaluation of Sr- and Mn-substituted LaAlO_3 as potential SOFC anode materials. <i>Solid State Ionics</i> , 2006 , 177, 1059-1069	3-3	33
64	Synthesis and electrical conductivity of Sr- and Mn-substituted LaAlO_3 as a possible SOFC anode material. <i>Solid State Ionics</i> , 2006 , 177, 1819-1822	3-3	10
63	Time-dependent performance of mixed-conducting SOFC cathodes. <i>Solid State Ionics</i> , 2006 , 177, 1965-1968	3-3	134
62	Synthesis and investigations on the stability of $\text{La}_{0.8}\text{Sr}_{0.2}\text{CuO}_{2.4}$ at high temperatures. <i>Solid State Ionics</i> , 2006 , 177, 3205-3210	3-3	11

61	Electrochemical characterization of perovskite-based SOFC cathodes. <i>Journal of Applied Electrochemistry</i> , 2006 , 37, 15-20	2.6	39
60	10 years of materials research for solid oxide fuel cells at forschungszentrum jülich. <i>Journal of Electroceramics</i> , 2006 , 17, 701-707	1.5	27
59	Optimisation of processing and microstructural parameters of LSM cathodes to improve the electrochemical performance of anode-supported SOFCs. <i>Journal of Power Sources</i> , 2005 , 141, 216-226	8.9	185
58	Ferrite-based perovskites as cathode materials for anode-supported solid oxide fuel cells. <i>Solid State Ionics</i> , 2005 , 176, 1341-1350	3.3	354
57	Simplified processing of anode-supported thin film planar solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2005 , 25, 463-471	6	82
56	Interfacial properties and structure stability of Ni/Y ₂ O ₃ -ZrO ₂ -TiO ₂ cermet anodes for solid oxide fuel cells. <i>Journal of Materials Science</i> , 2005 , 40, 2471-2475	4.3	28
55	Components manufacturing for solid oxide fuel cells 2005 , 249-259		1
54	Statistical design of experiments for evaluation of Y ₂ SiO ₅ oxides as anode materials in solid oxide fuel cells. <i>Advances in Applied Ceramics</i> , 2004 , 103, 202-210		8
53	Thermal Stability of Lanthanum Zirconate Plasma-Sprayed Coating. <i>Journal of the American Ceramic Society</i> , 2004 , 84, 2086-2090	3.8	215
52	Microstructure and electrical conductivity of LaNi _{0.6} Fe _{0.4} O ₃ prepared by combustion synthesis routes. <i>Materials Research Bulletin</i> , 2004 , 39, 1335-1345	5.1	32
51	Silver incorporation into cathodes for solid oxide fuel cells operating at intermediate temperature. <i>Journal of Solid State Electrochemistry</i> , 2004 , 8, 923-927	2.6	24
50	Partial reduction and re-oxidation of iron-and cobalt-containing perovskites using catalyst characterisation measurements. <i>Solid State Ionics</i> , 2004 , 173, 35-40	3.3	28
49	Physical characterization of Y _{0.25} Zr _{0.60} Ti _{0.15} O _{2.8} and its performance as a Ni/Y _{0.25} Zr _{0.60} Ti _{0.15} O _{2.8} anode cermet in an SOFC. <i>Solid State Ionics</i> , 2004 , 170, 153-158	3.3	19
48	Investigation of the quasi-ternary system LaMnO ₃ –LaCoO ₃ –LaCuO ₃ the series La(Mn _{0.5} Co _{0.5}) _{1-x} Cu _x O ₃ <i>Journal of Solid State Chemistry</i> , 2004 , 177, 745-751	3.3	18
47	Release and uptake of oxygen in mixed-conducting SOFC cathode materials measured by temperature-programmed methods. <i>Ionics</i> , 2003 , 9, 189-194	2.7	5
46	LaNi _{0.6} Fe _{0.4} O ₃ as a cathode contact material for solid oxide fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2003 , 7, 416-420	2.6	48
45	YSZ/MgO composite electrolyte with adjusted thermal expansion coefficient to other SOFC components. <i>Solid State Ionics</i> , 2003 , 164, 27-33	3.3	43
44	Influence of electrode contacts on conductivity measurements of thin YSZ electrolyte films and the impact on solid oxide fuel cells. <i>Solid State Ionics</i> , 2003 , 164, 121-129	3.3	41

43	Oxides of the AMO ₃ and A ₂ MO ₄ -type: structural stability, electrical conductivity and thermal expansion. <i>Solid State Ionics</i> , 2003 , 158, 141-150	3.3	185
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41	Interconnects 2003 , 173-195		10
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38	Components manufacturing for solid oxide fuel cells. <i>Solid State Ionics</i> , 2002 , 152-153, 373-381	3.3	174
37	Oxidation and Resulting Mechanical Properties of Ni/8Y ₂ O ₃ -stabilized Zirconia Anode Substrate for Solid-oxide Fuel Cells. <i>Journal of Materials Research</i> , 2002 , 17, 951-958	2.5	53
36	X-ray Diffraction and Electron Paramagnetic Resonance Investigations of the Fluorite Material Y _{0.25} Ti _{0.15} Zr _{0.6} O _{2-x} . <i>Chemistry of Materials</i> , 2002 , 14, 2252-2257	9.6	15
35	Temperature programmed oxygen desorption of the perovskites series Ln _{0.65} Sr _{0.3} Mn _{0.8} Co _{0.2} O ₃ (Ln=La-Gd). <i>Ionics</i> , 2001 , 7, 101-104	2.7	4
34	High-temperature superconductor materials for contact layers in solid oxide fuel cells: I. Sintering behavior and physical properties at operating temperatures. <i>Acta Materialia</i> , 2001 , 49, 803-810	8.4	27
33	Preparation and characterization of Ln _{0.8} Sr _{0.2} Fe _{0.8} Co _{0.2} O _{3-δ} (Ln=La, Pr, Nd, Sm, Eu, Gd). <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1769-1773	6	49
32	DC Sputtering of yttria-stabilised zirconia films for solid oxide fuel cell applications. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1843-1846	6	44
31	Structure Property Relationships of Ni/YSZ and Ni/(YSZ+TiO ₂) Cermets. <i>Fuel Cells</i> , 2001 , 1, 243-248	2.9	39
30	Impedance Studies on Chromite-Titanate Porous Electrodes under Reducing Conditions. <i>Fuel Cells</i> , 2001 , 1, 256-264	2.9	41
29	High-temperature superconductor materials for contact layers in solid oxide fuel cells: II. Chemical properties at operating temperatures. <i>Acta Materialia</i> , 2001 , 49, 1987-1992	8.4	8
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27	New Developments in Stack Technology for Anode Substrate Based SOFC. <i>ECS Proceedings Volumes</i> , 2001 , 2001-16, 111-119		10
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24	Evaluation of LaBr _{0.7} CoBr _{0.3} perovskites for solid oxide fuel cells and gas separation membranes. <i>Solid State Ionics</i> , 2000 , 135, 719-725	3.3	329
23	Evaluation of commercial nickel oxide powders for components in solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2000 , 20, 1023-1034	6	64
22	Correlation between thermal expansion and oxide ion transport in mixed conducting perovskite-type oxides for SOFC cathodes. <i>Solid State Ionics</i> , 2000 , 138, 79-90	3.3	482
21	Manufacturing of NiO/NiTiO ₃ porous substrates and the role of zirconia impurities during sintering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999 , 68, 35-41	3.1	23
20	Thermal expansion of SOFC materials. <i>Ionics</i> , 1999 , 5, 129-139	2.7	249
19	Structural evolution of Sc-containing zirconia electrolytes. <i>Solid State Ionics</i> , 1997 , 100, 289-295	3.3	53
18	Impedance spectroscopy on Na ⁺ /Ho ³⁺ - γ -Al ₂ O ₃ crystals. <i>Solid State Ionics</i> , 1995 , 78, 35-40	3.3	14
17	Optical and magnetic investigations of Na ⁺ /Pr ³⁺ - γ -Al ₂ O ₃ . <i>Journal of Alloys and Compounds</i> , 1995 , 225, 152-155	5.7	1
16	Optical spectroscopy of praseodymium-exchanged Na ⁺ β -alumina crystals. <i>Solid State Ionics</i> , 1994 , 70-71, 488-492	3.3	2
15	Luminescence of Pr ³⁺ ions in sodium β -Al ₂ O ₃ crystals. <i>Journal of Luminescence</i> , 1994 , 60-61, 216-219	3.8	6
14	Investigations on lanthanide-ion-exchanged β - and γ -alumina. <i>Journal of Alloys and Compounds</i> , 1993 , 192, 78-80	5.7	8
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12	Crystal structure of neodymium-ion-exchanged β -alumina. <i>Journal of Solid State Chemistry</i> , 1992 , 100, 255-261	3.3	8
11	Analytical investigations of β -Al ₂ O ₃ and γ -Al ₂ O ₃ crystals. <i>Journal of Crystal Growth</i> , 1992 , 118, 314-318	1.6	16
10	Lanthanide ion exchange in sodium- β -alumina. <i>Solid State Ionics</i> , 1991 , 46, 331-335	3.3	17
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5	Fast Na Ion Transport Triggered By Rapid Ion Exchange on Local Length Scales. <i>SSRN Electronic Journal</i> ,	1	1
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2	Reducing Degradation Effects in SOFC Stacks Manufactured at Forschungszentrum Jülich <i>Approaches and Results</i> 65-77		2
1	Recent Advances in Stabilization of Sodium Metal Anode in Contact with Organic Liquid and Solid-State Electrolytes. <i>Energy Technology</i> , 2200149	3.5	0