

# JÃ¼rgen Malzbender

## List of Publications by Year in descending order

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247  
papers

6,215  
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50276

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docs citations

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#	ARTICLE	IF	CITATIONS
1	Oxidation and creep behavior of textured Ti <sub>2</sub> AlC and Ti <sub>3</sub> AlC <sub>2</sub> . Journal of the European Ceramic Society, 2022, 42, 364-375.	5.7	10
2	Effect of texture and grain size on the compressive creep of Ti <sub>3</sub> SiC <sub>2</sub> MAX phase ceramics. Materialia, 2022, 21, 101295.	2.7	1
3	Conductivity, microstructure and mechanical properties of tape-cast LATP with LiF and SiO <sub>2</sub> additives. Journal of Materials Science, 2022, 57, 925-938.	3.7	14
4	Mechanical properties of BaCe <sub>0.65</sub> Zr <sub>0.2</sub> Y <sub>0.15</sub> O <sub>3-δ</sub> -Ce <sub>0.85</sub> Gd <sub>0.15</sub> O <sub>2</sub> - dual-phase proton-conducting material with emphasis on micro-pillar splitting. Journal of the European Ceramic Society, 2022, 42, 3948-3956.	5.7	1
5	Abrasive behavior of M <sub>2</sub> AlX MAX phase materials and its relation to the brittleness index. Ceramics International, 2022, 48, 19501-19506.	4.8	2
6	Strength assessment of Al <sub>2</sub> O <sub>3</sub> and MgAl <sub>2</sub> O <sub>4</sub> using micro- and macro-scale biaxial tests. Journal of Materials Science, 2022, 57, 7481-7490.	3.7	4
7	Mechanical properties and toughening mechanisms of highly textured Ti <sub>3</sub> AlC <sub>2</sub> composite material. Journal of the European Ceramic Society, 2022, 42, 5493-5504.	5.7	2
8	Micro-scale evolution of mechanical properties of glass-ceramic sealant for solid oxide fuel/electrolysis cells. Ceramics International, 2021, 47, 3884-3891.	4.8	4
9	Optimization of sintering conditions for improved microstructural and mechanical properties of dense Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> oxygen transport membranes. Journal of the European Ceramic Society, 2021, 41, 509-516.	5.7	15
10	Mechanical reliability of Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> dual phase membranes synthesized by one-step solid-state reaction. Journal of the American Ceramic Society, 2021, 104, 1814-1830.	3.8	6
11	Influence of Process Parameters on the Aerosol Deposition (AD) of Yttria-Stabilized Zirconia Particles. Journal of Thermal Spray Technology, 2021, 30, 488-502.	3.1	7
12	High temperature compressive creep behavior of BaCe <sub>0.65</sub> Zr <sub>0.2</sub> Y <sub>0.15</sub> O <sub>3-δ</sub> in air and 4% H <sub>2</sub> /Ar. Journal of the American Ceramic Society, 2021, 104, 2730-2740.	3.8	1
13	An acoustic emission analysis of glass-ceramic sealants for solid oxide fuel and electrolysis cells exposed to torsional tests: Room and high-temperature experiments. International Journal of Hydrogen Energy, 2021, 46, 14724-14734.	7.1	3
14	Enhancing oxygen permeation of solid-state reactive sintered Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> composite by optimizing the powder preparation method. Journal of Membrane Science, 2021, 628, 119248.	8.2	15
15	Advanced analysis of flexural test results of sealant for solid oxide cells. International Journal of Applied Ceramic Technology, 2021, 18, 2091.	2.1	0
16	Repair Joining of Glass-Ceramic Sealants for SOC Stacks. ECS Transactions, 2021, 103, 1859-1865.	0.5	0
17	Repair Joining of Glass-Ceramic Sealants for SOC Stacks. ECS Meeting Abstracts, 2021, MA2021-03, 183-183.	0.0	0
18	Fracture behavior of solid electrolyte LATP material based on micro-pillar splitting method. Journal of the European Ceramic Society, 2021, 41, 5240-5247.	5.7	8

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19	Failure mechanism and lifetime of various laser-drilled APS-TBC systems under LCF conditions. <i>Engineering Failure Analysis</i> , 2021, 127, 105526.	4.0	6
20	A methodological contribution to failure prediction of glass ceramics sealings in high-temperature solid oxide fuel cell stacks. <i>Journal of Power Sources</i> , 2021, 507, 230301.	7.8	3
21	A combined experimental and modeling study revealing the anisotropic mechanical response of Ti <sub>2</sub> AlN MAX phase. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5872-5881.	5.7	11
22	Salt-templated strategy for well dispersed multi-component composites with morphologies ranging from millimeter to nano-scale. <i>Composites Communications</i> , 2021, 27, 100862.	6.3	1
23	Residual stress and mechanical strength of Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> dual phase oxygen transport membranes. <i>Journal of the European Ceramic Society</i> , 2021, 41, 6539-6547.	5.7	3
24	Finite element optimization of sample geometry for measuring the torsional shear strength of glass/metal joints. <i>Ceramics International</i> , 2020, 46, 4857-4863.	4.8	6
25	Mechanical properties of BaCe <sub>0.65</sub> Zr <sub>0.2</sub> Y <sub>0.15</sub> O <sub>3</sub> - proton-conducting material determined using different nanoindentation methods. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5653-5661.	5.7	12
26	Mechanical and oxidation behavior of textured Ti <sub>2</sub> AlC and Ti <sub>3</sub> AlC <sub>2</sub> MAX phase materials. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5258-5271.	5.7	49
27	Fabrication and mechanical performance of Ti <sub>2</sub> AlN prepared by FAST/SPS. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4445-4453.	5.7	21
28	Phase and microstructural characterizations for Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> dual phase oxygen transport membranes. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5646-5652.	5.7	14
29	Lifetime estimation of Cr <sub>2</sub> AlC MAX phase foam based on long-term oxidation and fracture mechanisms. <i>Materialia</i> , 2020, 12, 100718.	2.7	2
30	Short SiC fiber/Ti <sub>3</sub> SiC <sub>2</sub> MAX phase composites: Fabrication and creep evaluation. <i>Journal of the American Ceramic Society</i> , 2020, 103, 7072-7081.	3.8	11
31	Compressive creep of SiC whisker/Ti <sub>3</sub> SiC <sub>2</sub> composites at high temperature in air. <i>Journal of the American Ceramic Society</i> , 2020, 103, 5952-5965.	3.8	10
32	Micromechanical Characterization of Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2</sub> -FeCo <sub>2</sub> O <sub>4</sub> Dual Phase Oxygen Transport Membranes. <i>Advanced Engineering Materials</i> , 2020, 22, 1901558.	3.5	7
33	Thermo-Mechanical Stability and Gas-Tightness of Glass-Ceramics Joints for SOFC in the System MgO-BaO/SrO-B <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> . <i>Frontiers in Materials</i> , 2020, 7, .	2.4	11
34	Long-term operation of solid oxide fuel cells and preliminary findings on accelerated testing. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 8955-8964.	7.1	35
35	Microstructure, ionic conductivity and mechanical properties of tape-cast Li <sub>1.5</sub> Al <sub>0.5</sub> Ti <sub>1.5</sub> P <sub>3</sub> O <sub>12</sub> electrolyte sheets. <i>Journal of the European Ceramic Society</i> , 2020, 40, 1975-1982.	5.7	15
36	Fracture toughness of single grains and polycrystalline Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> electrolyte material based on a pillar splitting method. <i>Journal of the European Ceramic Society</i> , 2020, 40, 3057-3064.	5.7	13

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37	Torsional shear strength behavior of advanced glass-ceramic sealants for SOFC/SOEC applications. Journal of the European Ceramic Society, 2020, 40, 4067-4075.	5.7	26
38	Electrochemical and mechanical stability of $\text{Li}_{0.557}\text{TiO}_3$ perovskite electrolyte at various voltages. Journal of the American Ceramic Society, 2019, 102, 1953-1960.	3.8	24
39	Anisotropy of the mechanical properties of $\text{Li}_3\text{AlO}_3\text{Ti}_7(\text{PO}_4)_3$ solid electrolyte material. Journal of Power Sources, 2019, 437, 226940.	7.8	15
40	Micromechanical assessment of Al/Y-substituted NASICON solid electrolytes. Ceramics International, 2019, 45, 21308-21314.	4.8	19
41	Strength of transparent ceramic composites with spinel. Journal of Materials Science, 2019, 54, 14666-14676.	3.7	4
42	High temperature compressive creep of dense and porous $\text{Cr}_2\text{AlC}$ in air. Journal of the European Ceramic Society, 2019, 39, 3660-3667.	5.7	12
43	Influence of sintering temperature on conductivity and mechanical behavior of the solid electrolyte LATP. Ceramics International, 2019, 45, 14697-14703.	4.8	43
44	Mechanical properties, wear resistance and surface damage of glasses and $\text{MgAl}_2\text{O}_4$ spinel ceramic after abrasion and scratch exposure. Ceramics International, 2019, 45, 10765-10775.	4.8	13
45	Microstructure and cyclic oxidation behavior of APS TBC systems drilled with various laser methods. Surface and Coatings Technology, 2019, 378, 125018.	4.8	6
46	An investigation on strength distribution, subcritical crack growth and lifetime of the lithium-ion conductor $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ . Journal of Materials Science, 2019, 54, 5671-5681.	3.7	27
47	Room- and high-temperature torsional shear strength of solid oxide fuel/electrolysis cell sealing material. Ceramics International, 2019, 45, 2219-2225.	4.8	10
48	Sintering behavior of columnar thermal barrier coatings deposited by axial suspension plasma spraying (SPS). Journal of the European Ceramic Society, 2019, 39, 482-490.	5.7	31
49	Room- and high-temperature flexural strength of a stable solid oxide fuel/electrolysis cell sealing material. Ceramics International, 2019, 45, 733-739.	4.8	16
50	Chemical stability in $\text{H}_2\text{S}$ and creep characterization of the mixed protonic conductor $\text{Nd}_{5.5}\text{WO}_{11.25}$ . International Journal of Hydrogen Energy, 2018, 43, 8342-8354.	7.1	12
51	Microstructure and anisotropic mechanical properties of freeze dried $\text{SrTi}_{0.75}\text{Fe}_{0.25}\text{O}_3$ for oxygen transport membrane substrates. Journal of the European Ceramic Society, 2018, 38, 2774-2783.	5.7	5
52	Creep behavior of porous $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ substrate material for oxygen separation application. Journal of the European Ceramic Society, 2018, 38, 1702-1710.	5.7	11
53	Microstructure and properties investigation of garnet structured $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ as electrolyte for all-solid-state batteries. Solid State Ionics, 2018, 321, 126-134.	2.7	32
54	Mechanical properties of the solid electrolyte Al-substituted $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ (LLZO) by utilizing micro-pillar indentation splitting test. Journal of the European Ceramic Society, 2018, 38, 3201-3209.	5.7	54

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55	Mechanical characterization of SOFC/SOEC cells. <i>Ceramics International</i> , 2018, 44, 11094-11100.	4.8	14
56	Mechanical and electrochemical properties of cubic and tetragonal Li La <sub>0.557</sub> TiO <sub>3</sub> perovskite oxide electrolytes. <i>Ceramics International</i> , 2018, 44, 1902-1908.	4.8	40
57	Scaling up aqueous processing of A-site deficient strontium titanate for SOFC anode supports. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1663-1672.	5.7	4
58	Investigation of rhombohedral-cubic phase transition of La <sub>0.58</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-δ</sub> using high temperature XRD. <i>Ceramics International</i> , 2018, 44, 2822-2826.	4.8	4
59	Increasing Fracture Toughness and Transmittance of Transparent Ceramics using Functional Low-Thermal Expansion Coatings. <i>Scientific Reports</i> , 2018, 8, 15644.	3.3	9
60	Creep behaviour of dense and porous SrTi <sub>0.75</sub> Fe <sub>0.25</sub> O <sub>3-δ</sub> for oxygen transport membranes and substrates. <i>Journal of the European Ceramic Society</i> , 2018, 38, 5067-5073.	5.7	7
61	Effect of microstructure on electrical and mechanical properties of La <sub>5.4</sub> WO <sub>12-δ</sub> proton conductor. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3527-3538.	5.7	6
62	Mechanical properties and lifetime predictions of dense SrTi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-δ</sub> (x = 0.25, 0.35, 0.5). <i>Journal of the European Ceramic Society</i> , 2017, 37, 2629-2636.	5.7	23
63	Microstructure, mechanical behavior and flow resistance of freeze-cast porous 3YSZ substrates for membrane applications. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3167-3176.	5.7	8
64	Mechanical properties of solid oxide fuel cell glass-ceramic sealants in the system BaO/SrO-MgO-B <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> . <i>Journal of the European Ceramic Society</i> , 2017, 37, 3579-3594.	5.7	48
65	The analysis of torsional shear strength test of sealants for solid oxide fuel cells. <i>Ceramics International</i> , 2017, 43, 12546-12550.	4.8	16
66	Steady state creep of Ni-8YSZ substrates for application in solid oxide fuel and electrolysis cells. <i>Journal of Power Sources</i> , 2017, 360, 1-10.	7.8	20
67	Production and Reliability Oriented SOFC Cell and Stack Design. <i>ECS Transactions</i> , 2017, 78, 2231-2249.	0.5	5
68	SOC Development at Forschungszentrum Jülich. <i>ECS Transactions</i> , 2017, 78, 1791-1804.	0.5	20
69	Post-operational characterization of solid oxide fuel cell stacks. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 11399-11411.	7.1	18
70	Design and optimization of porous ceramic supports for asymmetric ceria-based oxygen transport membranes. <i>Journal of Membrane Science</i> , 2016, 513, 85-94.	8.2	31
71	Fracture toughness of solid oxide fuel cell anode substrates determined by a double-torsion technique. <i>Journal of Power Sources</i> , 2016, 327, 629-637.	7.8	9
72	Thermal shock behaviour of laminated multilayer refractories for steel casting applications reinforced by residual stresses. <i>Ceramics International</i> , 2016, 42, 13562-13571.	4.8	10

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73	Anode-supported Solid Oxide Fuel Cell Achieves 70,000 Hours of Continuous Operation. Energy Technology, 2016, 4, 939-942.	3.8	74
74	Mechanical properties of tape casted Lanthanum Tungstate for membrane substrate application. Ceramics International, 2016, 42, 15177-15182.	4.8	10
75	Elastic properties of freeze-cast La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-δ</sub> . Journal of the European Ceramic Society, 2016, 36, 1651-1657.	5.7	16
76	Room and elevated temperature shear strength of sealants for solid oxide fuel cells. Ceramics International, 2016, 42, 12932-12936.	4.8	20
77	Mechanical properties of porous ITM alloy. International Journal of Hydrogen Energy, 2016, 41, 562-569.	7.1	7
78	Mechanical aspects of ceramic membrane materials. Ceramics International, 2016, 42, 7899-7911.	4.8	35
79	Development and optimization of porosity measurement techniques. Ceramics International, 2016, 42, 2861-2870.	4.8	33
80	Oxygen permeation and creep behavior of Ca <sub>1-x</sub> Sr <sub>x</sub> Ti <sub>0.6</sub> Fe <sub>0.15</sub> Mn <sub>0.25</sub> O <sub>3-δ</sub> (x=0, 0.5) membrane materials. Journal of Membrane Science, 2016, 499, 172-178.	8.2	13
81	Mechanical characterization of micro- and nano-porous alumina. Ceramics International, 2015, 41, 10725-10729.	4.8	13
82	Creep behavior of porous La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-δ</sub> oxygen transport membrane supports. Ceramics International, 2015, 41, 4064-4069.	4.8	22
83	Oxidation studies of anodes layer microstructures in metal supported solid oxide fuel cells. Ceramics International, 2015, 41, 5852-5856.	4.8	4
84	Creep behavior of perovskite-type oxides Ba <sub>0.5</sub> Sr <sub>0.5</sub> (Co <sub>0.8</sub> Fe <sub>0.2</sub> ) <sub>1-x</sub> Zr <sub>x</sub> O <sub>3-δ</sub> . Journal of the European Ceramic Society, 2015, 35, 1841-1846.	5.7	23
85	Damage evolution of a thermal barrier coating system with 3-dimensional periodic interface roughness: Effects of roughness depth, substrate creep strength and pre-oxidation. Surface and Coatings Technology, 2015, 276, 368-373.	4.8	15
86	Solid Oxide Fuel Cell, Stack and System Development Status at Forschungszentrum Jülich. ECS Transactions, 2015, 68, 157-169.	0.5	18
87	SOFC Stack and System Development at Forschungszentrum Jülich. Journal of the Electrochemical Society, 2015, 162, F1199-F1205.	2.9	58
88	Mechanical behavior of silver reinforced glass-ceramic sealants for solid oxide fuel cells. Ceramics International, 2015, 41, 15122-15127.	4.8	15
89	High-temperature compressive creep behaviour of perovskite-type oxides SrTi <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-δ</sub> . Journal of the European Ceramic Society, 2015, 35, 4203-4209.	5.7	9
90	Formation and prevention of fractures in sol-gel-derived thin films. Soft Matter, 2015, 11, 882-888.	2.7	47

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91	Mechanical properties of pure and doped cerium oxide. Journal of the European Ceramic Society, 2015, 35, 1539-1547.	5.7	19
92	Mechanical characterization of ceramics by means of a 3D defect analysis. Ceramics International, 2015, 41, 2411-2417.	4.8	12
93	Strength and elastic modulus of lanthanum strontium cobalt ferrite membrane materials. Ceramics International, 2015, 41, 1355-1360.	4.8	10
94	Effect of support material creep on the delamination failure of air plasma sprayed thermal barrier coatings. Surface and Coatings Technology, 2014, 259, 543-550.	4.8	2
95	Sequential Tape Casting of Anode-supported Solid Oxide Fuel Cells. Fuel Cells, 2014, 14, 96-106.	2.4	52
96	Molecular dynamics study on the nature of ferroelasticity and piezoconductivity of lanthanum cobaltite. Solid State Ionics, 2014, 262, 504-507.	2.7	3
97	A simple methodology to visualize crack propagation for ceramic materials. Journal of Materials Science, 2014, 49, 403-406.	3.7	2
98	Mechanical properties of porous MgO substrates for membrane applications. Journal of the European Ceramic Society, 2014, 34, 2519-2524.	5.7	16
99	Ex-service analysis of membrane tubes after the operation in a demonstrator unit. Journal of Membrane Science, 2014, 462, 69-74.	8.2	8
100	The effect of an oxygen partial pressure gradient on the mechanical behavior of perovskite membrane materials. Journal of the European Ceramic Society, 2014, 34, 1777-1782.	5.7	9
101	Electrical Conductivity of $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ under Uniaxial Compression at Elevated Temperatures. Journal of the Electrochemical Society, 2014, 161, F3001-F3004.	2.9	2
102	Strontium surface segregation in $La_{0.58}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-\delta}$ annealed under compression. Solid State Ionics, 2014, 268, 1-6.	2.7	26
103	Review of mechanical characterization methods for ceramics used in energy technologies. Ceramics International, 2014, 40, 15371-15380.	4.8	32
104	Transitions of $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ and $La_{0.58}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-\delta}$ . Materials Letters, 2014, 132, 295-297.	2.6	33
105	Stability aspects of porous $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ . Ceramics International, 2014, 40, 7395-7399.	4.8	8
106	Steady-state creep of porous and an extended analysis on the creep of dense BSCFZ perovskite. Journal of Membrane Science, 2014, 456, 134-138.	8.2	12
107	Fracture and creep of glass-ceramic solid oxide fuel cell sealant materials. Journal of Power Sources, 2014, 246, 574-580.	7.8	33
108	Comparison of thermo-mechanical characteristics of non-doped and 3mol% B-site Zr-doped $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ . Ceramics International, 2014, 40, 1843-1850.	4.8	14

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109	Thermomechanical properties of Y-substituted SrTiO <sub>3</sub> used as re-oxidation stable anode substrate material. <i>Journal of the European Ceramic Society</i> , 2014, 34, 3749-3754.	5.7	9
110	Influence of phase transformations on mechanical properties of novel ceramics for solid oxide fuel cell anode applications. <i>Ceramics International</i> , 2014, 40, 13179-13189.	4.8	2
111	Mechanical behaviour of Br <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> under uniaxial compression. <i>Scripta Materialia</i> , 2013, 69, 278-281.	5.2	13
112	Strength enhancement of transparent spinel ceramics. <i>Materials Letters</i> , 2013, 107, 364-366.	2.6	6
113	Oxygen-Ion Transfer between YSZ/YSZ and YSZ/LSCF under Mechanical Contact Stress. <i>ECS Transactions</i> , 2013, 58, 275-281.	0.5	1
114	Full Ceramic Fuel Cells Based on Strontium Titanate Anodes, an Approach towards More Robust SOFCs. <i>ECS Transactions</i> , 2013, 57, 1175-1184.	0.5	10
115	Strength degradation and failure limits of dense and porous ceramic membrane materials. <i>Journal of the European Ceramic Society</i> , 2013, 33, 2689-2698.	5.7	53
116	Porous Fe <sub>21</sub> Cr <sub>7</sub> Al <sub>1</sub> Mo <sub>0.5</sub> Y metal supports for oxygen transport membranes: Thermo-mechanical properties, sintering and corrosion behaviour. <i>Solid State Ionics</i> , 2013, 242, 33-44.	2.7	26
117	Elevated temperature effects on the mechanical properties of solid oxide fuel cell sealing materials. <i>Journal of Power Sources</i> , 2013, 239, 500-504.	7.8	18
118	Electrical conductivity of La <sub>0.58</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> during ferroelastic deformation under uniaxial compressive loading. <i>Solid State Ionics</i> , 2013, 233, 67-72.	2.7	9
119	Fracture mechanism of scandia-doped zirconia. <i>Acta Materialia</i> , 2013, 61, 3082-3089.	7.9	7
120	Creep behaviour of membrane and substrate materials for oxygen separation units. <i>Journal of the European Ceramic Society</i> , 2013, 33, 1841-1848.	5.7	37
121	Mechanical properties of zirconia composite ceramics. <i>Ceramics International</i> , 2013, 39, 7595-7603.	4.8	41
122	Damage and Failure of Silver Based Ceramic/Metal Joints for SOFC Stacks. <i>Fuel Cells</i> , 2013, 13, 578-583.	2.4	16
123	Recent results in solid oxide fuel cell technology development. <i>Journal of Power Sources</i> , 2013, 241, 477-485.	7.8	115
124	Grain size effect on the mechanical properties of transparent spinel ceramics. <i>Journal of the European Ceramic Society</i> , 2013, 33, 749-757.	5.7	66
125	Ferroelastic deformation of La <sub>0.58</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> under uniaxial compressive loading. <i>Journal of the European Ceramic Society</i> , 2013, 33, 805-812.	5.7	61
126	Residual Stress Assessment for Thin 8YSZ Electrolytes Using Focused Ion Beam Milling and Digital Image Correlation. <i>Fuel Cells</i> , 2013, 13, 1076-1079.	2.4	2



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127	Mechanical Characteristics of Electrolytes Assessed with Resonant Ultrasound Spectroscopy. Fuel Cells, 2013, 13, 542-548.	2.4	4
128	Overview on the Ä¼lich SOFC Development Status. ECS Transactions, 2013, 57, 23-33.	0.5	24
129	On nucleation and growth mechanisms of EBPVD zirconia films on porous NiO-ZrO <sub>2</sub> substrate. , 2012, , .		0
130	Status of Solid Oxide Fuel Cell Development at Forschungszentrum Ä¼lich. Procedia Engineering, 2012, 44, 407-408.	1.2	5
131	Direct observation of ferroelastic domain effects in LSCF perovskites. Solid State Ionics, 2012, 228, 32-36.	2.7	33
132	Fracture resistance of atmospheric plasma sprayed thermal barrier coatings. Surface and Coatings Technology, 2012, 209, 97-102.	4.8	11
133	Controlled Crack Propagation Experiments with a Novel Alumina-Based Refractory. Advanced Engineering Materials, 2012, 14, 248-254.	3.5	18
134	Micro- and macro-mechanical testing of transparent MgAl <sub>2</sub> O <sub>4</sub> spinel. Journal of Materials Science, 2012, 47, 4821-4826.	3.7	27
135	Creep behavior and its correlation with defect chemistry of La <sub>0.58</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> . Acta Materialia, 2012, 60, 2479-2484.	7.9	31
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