Olivier Guillon

List of Publications by Citations

282 papers	6,063 citations	37 h-index	65 g-index
302 ext. papers	7,522 ext. citations	5.2 avg, IF	6.37 L-index

#	Paper	IF	Citations
282	Field-Assisted Sintering Technology/Spark Plasma Sintering: Mechanisms, Materials, and Technology Developments. *Advanced Engineering Materials*, **2014**, 16, 830-849	3.5	675
281	Li7La3Zr2O12 Interface Modification for Li Dendrite Prevention. *ACS Applied Materials & Interfaces*, **2016**, 8, 10617-26	9.5	489
280	Constrained sintering: A delicate balance of scales. *Journal of the European Ceramic Society*, **2008**, 28, 1451-1466	6	154
279	Scandium-Substituted Na3Zr2(SiO4)2(PO4) Prepared by a Solution-Assisted Solid-State Reaction Method as Sodium-Ion Conductors. *Chemistry of Materials*, **2016**, 28, 4821-4828	9.6	146
278	Direct comparison between hot pressing and electric field-assisted sintering of submicron alumina. *Acta Materialia*, **2009**, 57, 5454-5465	8.4	132
277	About the Compatibility between High Voltage Spinel Cathode Materials and Solid Oxide Electrolytes as a Function of Temperature. *ACS Applied Materials & Interfaces*, **2016**, 8, 26842-26850	9.5	122
276	Flash Sintering of Nanocrystalline Zinc Oxide and its Influence on Microstructure and Defect Formation. *Journal of the American Ceramic Society*, **2014**, 97, 1728-1735	3.8	110
275	Radio frequency magnetron sputtering of Li7La3Zr2O12 thin films for solid-state batteries. *Journal of Power Sources*, **2016**, 307, 684-689	8.9	85
274	A garnet structure-based all-solid-state Li battery without interface modification: resolving incompatibility issues on positive electrodes. *Sustainable Energy and Fuels*, **2019**, 3, 280-291	5.8	81
273	Anisotropic constitutive laws for sintering bodies. *Acta Materialia*, **2006**, 54, 111-118	8.4	81
272	New promising NASICON material as solid electrolyte for sodium-ion batteries: Correlation between composition, crystal structure and ionic conductivity of Na3 + xSc2SixP3 □xO12. *Solid State Ionics*, **2016**, 293, 18-26	3.3	74
271	Stress-induced anisotropy of sintering alumina: Discrete element modelling and experiments. *Acta Materialia*, **2007**, 55, 5187-5199	8.4	74
270	Single-source-precursor synthesis of dense SiC/HfC(x)N(1-x)-based ultrahigh-temperature ceramic nanocomposites. *Nanoscale*, **2014**, 6, 13678-89	7.7	72
269	Effect of Electrical Field/Current on Sintering of Fully Stabilized Zirconia. *Journal of the American Ceramic Society*, **2012**, 95, 75-78	3.8	71
268	Molten salt shielded synthesis of oxidation prone materials in air. *Nature Materials*, **2019**, 18, 465-470	27	69
267	Unveiling the mechanisms of cold sintering of ZnO at 250□C by varying applied stress and characterizing grain boundaries by Kelvin Probe Force Microscopy. *Acta Materialia*, **2018**, 144, 116-128	8.4	68
266	Ion-conducting ceramic membrane reactors for high-temperature applications. *Journal of Membrane Science*, **2017**, 543, 79-97	9.6	67

265	Correlation of splat morphologies with porosity and residual stress in plasma-sprayed YSZ coatings. *Surface and Coatings Technology*, **2017**, 318, 157-169	4.4	62
264	Anisotropic Microstructural Development During the Constrained Sintering of Dip-Coated Alumina Thin Films. *Journal of the American Ceramic Society*, **2007**, 90, 1394-1400	3.8	60
263	High Capacity Garnet-Based All-Solid-State Lithium Batteries: Fabrication and 3D-Microstructure Resolved Modeling. *ACS Applied Materials & Interfaces*, **2018**, 10, 22329-22339	9.5	55
262	Na3Zr2(SiO4)2(PO4) prepared by a solution-assisted solid state reaction. *Solid State Ionics*, **2017**, 302, 83-91	3.3	53
261	Development of YSZ Thermal Barrier Coatings Using Axial Suspension Plasma Spraying. *Coatings*, **2017**, 7, 120	2.9	53
260	Electric Field-Assisted Sintering in Comparison with the Hot Pressing of Yttria-Stabilized Zirconia. *Journal of the American Ceramic Society*, **2011**, 94, 24-31	3.8	51
259	A Novel Sol□Gel Method for Large-Scale Production of Nanopowders: Preparation of Li1.5Al0.5Ti1.5(PO4)3 as an Example. *Journal of the American Ceramic Society*, **2016**, 99, 410-414	3.8	50
258	Models of size-dependent nanoparticle melting tested on gold. *Journal of Materials Science*, **2014**, 49, 7915-7932	4.3	49
257	Manipulation of matter by electric and magnetic fields: Toward novel synthesis and processing routes of inorganic materials. *Materials Today*, **2018**, 21, 527-536	21.8	46
256	High-Temperature Creep Behavior of Dense SiOC-Based Ceramic Nanocomposites: Microstructural and Phase Composition Effects. *Journal of the American Ceramic Society*, **2013**, 96, 272-280	3.8	46
255	Tensile fracture of soft and hard PZT. *International Journal of Fracture*, **2002**, 117, 235-246	2.3	45
254	Constrained sintering of glass films: Microstructure evolution assessed through synchrotron computed microtomography. *Acta Materialia*, **2011**, 59, 6228-6238	8.4	44
253	Influence of thickness on the constrained sintering of alumina films. *Journal of the European Ceramic Society*, **2007**, 27, 2623-2627	6	44
252	Cathode-electrolyte material interactions during manufacturing of inorganic solid-state lithium batteries. *Journal of Electroceramics*, **2017**, 38, 197-206	1.5	42
251	FAST/SPS sintering of nanocrystalline zinc oxide□Part II: Abnormal grain growth, texture and grain anisotropy. *Journal of the European Ceramic Society*, **2016**, 36, 1221-1232	6	40
250	Constrained Sintering of Alumina Thin Films: Comparison Between Experiment and Modeling. *Journal of the American Ceramic Society*, **2007**, 90, 1733-1737	3.8	40
249	Comparison of solid oxide fuel cell (SOFC) electrolyte materials for operation at 500 □C. *Solid State Ionics*, **2020**, 344, 115138	3.3	40
248	Effect of Electric Field/Current on Liquid Phase Sintering. *Journal of the American Ceramic Society*, **2015**, 98, 2018-2027	3.8	39

247	FAST/SPS sintering of nanocrystalline zinc oxide Part I: Enhanced densification and formation of hydrogen-related defects in presence of adsorbed water. *Journal of the European Ceramic Society*, **2016**, 36, 1207-1220	6	38
246	Influence of Microstructure and Surface Activation of Dual-Phase Membrane Ce0.8Gd0.2O2 CoCo2O4 on Oxygen Permeation. *Journal of the American Ceramic Society*, **2016**, 99, 349-355	3.8	38
245	Electronic conductivity in gadolinium doped ceria under direct current as a trigger for flash sintering. *Scripta Materialia*, **2020**, 179, 55-60	5.6	37
244	Hydrogen separation through tailored dual phase membranes with nominal composition BaCeEuO:CeYO at intermediate temperatures. *Scientific Reports*, **2016**, 6, 34773	4.9	37
243	Post-test characterization of a solid oxide fuel cell stack operated for more than 30,000 hours: The cell. *Journal of Power Sources*, **2018**, 374, 69-76	8.9	37
242	Investigation of the resistance of open-column-structured PS-PVD TBCs to erosive and high-temperature corrosive attack. *Surface and Coatings Technology*, **2017**, 324, 222-235	4.4	34
241	Low Temperature Sintering of Nanocrystalline Zinc Oxide: Effect of Heating Rate Achieved by Field Assisted Sintering/Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2012**, 95, 2451-2457	3.8	34
240	On the role of Debye temperature in the onset of flash in three oxides. *Scripta Materialia*, **2019**, 170, 81-84	5.6	33
239	True Young modulus of Pb(Zr,Ti)O3 films measured by nanoindentation. *Applied Physics Letters*, **2004**, 85, 5185-5187	3.4	33
238	Current-rate flash sintering of gadolinium doped ceria: Microstructure and Defect generation. *Acta Materialia*, **2020**, 189, 145-153	8.4	32
237	Sintering resistance of advanced plasma-sprayed thermal barrier coatings with strain-tolerant microstructures. *Journal of the European Ceramic Society*, **2018**, 38, 5092-5100	6	32
236	Master sintering curve applied to the Field-Assisted Sintering Technique. *Journal of Materials Science*, **2010**, 45, 5191-5195	4.3	31
235	Preparation and sintering behaviour of La5.4WO12 asymmetric membranes with optimised microstructure for hydrogen separation. *Journal of Membrane Science*, **2015**, 492, 439-451	9.6	29
234	Electric Field-Assisted Sintering and Hot Pressing of Semiconductive Zinc Oxide: A Comparative Study. *Journal of the American Ceramic Society*, **2011**, 94, 2344-2353	3.8	29
233	Constrained Sintering of a Glass Ceramic Composite: I. Asymmetric Laminate. *Journal of the American Ceramic Society*, **2010**, 93, 74-81	3.8	29
232	Fast Na+ Ion Conduction in NASICON-Type Na3.4Sc2(SiO4)0.4(PO4)2.6 Observed by 23Na NMR Relaxometry. *Journal of Physical Chemistry C*, **2017**, 121, 1449-1454	3.8	27
231	Effect of sintering method on the microstructure of pure Cr2AlC MAX phase ceramics. *Journal of the Ceramic Society of Japan*, **2016**, 124, 415-420	1	27
230	Compressive creep of PZT ceramics: experiments and modelling. *Journal of the European Ceramic Society*, **2004**, 24, 2547-2552	6	27

229	Room-temperature all-solid-state sodium batteries with robust ceramic interface between rigid electrolyte and electrode materials. *Nano Energy*, **2019**, 65, 104040	17.1	26
228	Effect of uniaxial load on the sintering behaviour of 45S5 Bioglass® powder compacts. *Journal of the European Ceramic Society*, **2011**, 31, 999-1007	6	26
227	Tensile behavior of PZT in short and open-circuit conditions. *Materials Letters*, **2004**, 58, 986-990	3.3	26
226	Stability of NASICON materials against water and CO 2 uptake. *Solid State Ionics*, **2017**, 302, 102-106	3.3	25
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224	SiC/HfyTa1−yCxN1−x/C ceramic nanocomposites with HfyTa1−yCxN1−x-carbon core–shell nanostructure and the influence of the carbon-shell thickness on electrical properties. *Journal of Materials Chemistry C*, **2018**, 6, 855-864	7.1	25
223	Evaluation of sintering stress from 3-D visualization of microstructure: Case study of glass films sintered by viscous flow and imaged by X-ray microtomography. *Acta Materialia*, **2014**, 66, 54-62	8.4	25
222	Effect of Green-State Processing on the Sintering Stress and Viscosity of Alumina Compacts. *Journal of the American Ceramic Society*, **2007**, 90, 1637-1640	3.8	25
221	Performance of YSZ and Gd2Zr2O7/YSZ double layer thermal barrier coatings in burner rig tests. *Journal of the European Ceramic Society*, **2020**, 40, 480-490	6	25
220	Metal-Supported Solid Oxide Fuel Cells with Exceptionally High Power Density for Range Extender Systems. *Cell Reports Physical Science*, **2020**, 1, 100072	6.1	24
219	Application of Electric Current-Assisted Sintering Techniques for the Processing of Advanced Materials. *Advanced Engineering Materials*, **2020**, 22, 2000051	3.5	24
218	Advanced crystallographic study of the columnar growth of YZS coatings produced by PS-PVD. *Journal of the European Ceramic Society*, **2018**, 38, 2449-2453	6	24
217	Viscosity of LTCC Determined by Discontinuous Sinter-Forging. *International Journal of Applied Ceramic Technology*, **2006**, 3, 437-441	2	24
216	High-Temperature Creep Behavior of SiOC Glass-Ceramics: Influence of Network Carbon Versus Segregated Carbon. *Journal of the American Ceramic Society*, **2014**, 97, 3935-3942	3.8	23
215	High-temperature oxidation and compressive strength of Cr2AlC MAX phase foams with controlled porosity. *Journal of the American Ceramic Society*, **2018**, 101, 542-552	3.8	22
214	Initial Attatchment of rMSC and MG-63 Cells on Patterned Bioglass® Substrates. *Advanced Engineering Materials*, **2012**, 14, B38-B44	3.5	22
213	Shape Distortion and Delamination During Constrained Sintering of Ceramic Stripes: Discrete Element Simulations and Experiments. *Journal of the American Ceramic Society*, **2012**, 95, 586-592	3.8	22
212	Sintering of a sodium-based NASICON electrolyte: A comparative study between cold, field assisted and conventional sintering methods. *Journal of the European Ceramic Society*, **2019**, 39, 2697-2702	6	21

211	Microstructure evolution during the co-sintering of Ni/BaTiO3 multilayer ceramic capacitors modeled by discrete element simulations. *Journal of the European Ceramic Society*, **2014**, 34, 3167-3179	6	21
210	Effect of size and homogeneity of rigid inclusions on the sintering of composites. *Scripta Materialia*, **2013**, 69, 327-330	5.6	21
209	Characterization of warpage behaviour of Gd-doped ceria/NiO□yttria stabilized zirconia bi-layer samples for solid oxide fuel cell application. *Journal of Power Sources*, **2008**, 185, 759-764	8.9	21
208	Predicting sintering deformation of ceramic film constrained by rigid substrate using anisotropic constitutive law. *Acta Materialia*, **2010**, 58, 5980-5988	8.4	20
207	Mechanical properties and lifetime predictions of dense SrTi 1-x Fe x O 3-□(x = 0.25, 0.35, 0.5). *Journal of the European Ceramic Society*, **2017**, 37, 2629-2636	6	19
206	Size-Dependent Phase Transformations in Bismuth Oxide Nanoparticles. II. Melting and Stability Diagram. *Journal of Physical Chemistry C*, **2014**, 118, 27020-27027	3.8	19
205	Two step sintering of cubic yttria stabilized zirconia using Field Assisted Sintering Technique/Spark Plasma Sintering. *Journal of the European Ceramic Society*, **2013**, 33, 637-641	6	19
204	A Comparison Between FAST and SPS Apparatuses Based on the Sintering of Oxide Ceramics. *International Journal of Applied Ceramic Technology*, **2011**, 8, 1459-1467	2	19
203	Sintering behavior of columnar thermal barrier coatings deposited by axial suspension plasma spraying (SPS). *Journal of the European Ceramic Society*, **2019**, 39, 482-490	6	19
202	Low temperature sintering of fully inorganic all-solid-state batteries □mpact of interfaces on full cell performance. *Journal of Power Sources*, **2021**, 482, 228905	8.9	19
201	Co and Fe co-doping influence on functional properties of SrTiO3 for use as oxygen transport membranes. *Journal of the European Ceramic Society*, **2018**, 38, 5058-5066	6	18
200	Microstructure□onductivity relationship of Na3Zr2(SiO4)2(PO4) ceramics. *Journal of the American Ceramic Society*, **2019**, 102, 1057-1070	3.8	18
199	Novel Cr2AlC MAX-phase/SiC fiber composites: Synthesis, processing and tribological response. *Journal of the European Ceramic Society*, **2017**, 37, 467-475	6	18
198	Constrained Sintering of a Glass Ceramic Composite: II. Symmetric Laminate. *Journal of the American Ceramic Society*, **2009**, 92, 2900-2906	3.8	18
197	High-pressure field assisted sintering of half-cell for all-solid-state battery. *Materials Letters*, **2019**, 247, 155-158	3.3	17
196	Anomalous coarsening of nanocrystalline zinc oxide particles in humid air. *Journal of Crystal Growth* , **2015**, 419, 69-78	1.6	17
195	Vacuum plasma spraying of functionally graded tungsten/EUROFER97 coatings for fusion applications. *Fusion Engineering and Design*, **2018**, 133, 148-156	1.7	17
194	Microstructural Characterization of Alumina Films During Constrained Sintering. *Journal of the American Ceramic Society*, **2010**, 93, 627-629	3.8	17

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192	High-temperature piezoresistive C / SiOC sensors. *Journal of Sensors and Sensor Systems*, **2015**, 4, 133-136	1.6	17
191	Synthesis of Ti3SiC2 MAX phase powder by a molten salt shielded synthesis (MS3) method in air. *Journal of the European Ceramic Society*, **2019**, 39, 3651-3659	6	16
190	Impact of sodium excess on electrical conductivity of Na3Zr2Si2PO12 + x Na2O ceramics. *Solid State Ionics*, **2019**, 336, 57-66	3.3	16
189	Systematic Investigation on the Influence of Spray Parameters on the Mechanical Properties of Atmospheric Plasma-Sprayed YSZ Coatings. *Journal of Thermal Spray Technology*, **2018**, 27, 566-580	2.5	16
188	Aging of atmospherically plasma sprayed chromium evaporation barriers. *Surface and Coatings Technology*, **2016**, 291, 115-122	4.4	16
187	Solid state transitions of Bi2O3 nanoparticles. *Journal of Materials Research*, **2014**, 29, 1383-1392	2.5	16
186	Effect of AC field on uniaxial viscosity and sintering stress of ceria. *Acta Materialia*, **2020**, 182, 77-86	8.4	16
185	Solvent Co-intercalation into Few-layered TiCT MXenes in Lithium Ion Batteries Induced by Acidic or Basic Post-treatment. *ACS Nano*, **2021**, 15, 3295-3308	16.7	16
184	High-Performance Metal-Supported Solid Oxide Fuel Cells by Advanced Cathode Processing. *Journal of the Electrochemical Society*, **2017**, 164, F1375-F1384	3.9	15
183	Architecture designs for extending thermal cycling lifetime of suspension plasma sprayed thermal barrier coatings. *Ceramics International*, **2019**, 45, 18471-18479	5.1	15
182	Investigation on growth mechanisms of columnar structured YSZ coatings in Plasma Spray-Physical Vapor Deposition (PS-PVD). *Journal of the European Ceramic Society*, **2019**, 39, 3129-3138	6	15
181	Synthesis and characterization of equimolar Al/Y-substituted NASICON solid solution Na1+2x+yAlxYxZr2−xSiyP3−yO12. *Solid State Ionics*, **2018**, 319, 13-21	3.3	15
180	Determination of the size of representative volume element for viscous sintering. *Journal of the Ceramic Society of Japan*, **2016**, 124, 421-425	1	15
179	Enhanced oxidation resistance of ZrB2/SiC composite through in situ reaction of gadolinium oxide in patterned surface cavities. *Journal of the European Ceramic Society*, **2014**, 34, 4157-4166	6	15
178	Uniaxial viscosity of gadolinium-doped ceria determined by discontinuous sinter forging. *Journal of the European Ceramic Society*, **2007**, 27, 3127-3133	6	15
177	Experimental methodology to study tribological aspects of deep drawing – application to aluminium alloy sheets and tool coatings. *Tribology International*, **2001**, 34, 757-766	4.9	15
176	Utilization of Bio-Syngas in Solid Oxide Fuel Cell Stacks: Effect of Hydrocarbon Reforming. *Journal of the Electrochemical Society*, **2019**, 166, F137-F143	3.9	14

175	Arrhenius Behavior of the Bulk Na-Ion Conductivity in NaSc(PO) Single Crystals Observed by Microcontact Impedance Spectroscopy. *Chemistry of Materials*, **2018**, 30, 1776-1781	9.6	14
174	Reactions of garnet-based solid-state lithium electrolytes with water A depth-resolved study. *Solid State Ionics*, **2018**, 320, 259-265	3.3	14
173	Interaction of a ceria-based anode functional layer with a stabilized zirconia electrolyte: Considerations from a materials perspective. *Journal of the American Ceramic Society*, **2018**, 101, 739-748	3.8	14
172	Near Net Shaping of Monolithic and Composite MAX Phases by Injection Molding. *Journal of the American Ceramic Society*, **2016**, 99, 3210-3213	3.8	14
171	Constrained sintering of BaLa4Ti4O15 thick films: Pore and grain anisotropy. *Journal of the European Ceramic Society*, **2013**, 33, 1801-1808	6	14
170	Functional properties of La0.99X0.01Nb0.99Al0.01O4 and La0.99X0.01Nb0.99Ti0.01O4 proton conductors where X is an alkaline earth cation. *Journal of the European Ceramic Society*, **2015**, 35, 1239-1253	6	14
169	Time-of-flight secondary ion mass spectrometry study of lithium intercalation process in LiCoO2 thin film. *Journal of Power Sources*, **2016**, 321, 241-247	8.9	14
168	Microstructure and phase evolution of atmospheric plasma sprayed Mn-Co-Fe oxide protection layers for solid oxide fuel cells. *Journal of the European Ceramic Society*, **2019**, 39, 449-460	6	14
167	Coupling SOFCs to biomass gasification The influence of phenol on cell degradation in simulated bio-syngas. Part II Post-test analysis. *International Journal of Hydrogen Energy*, **2018**, 43, 20911-20920	6.7	14
166	Enhancing the performance of high-voltage LiCoMnO4 spinel electrodes by fluorination. *Journal of Power Sources*, **2017**, 341, 122-129	8.9	13
165	Lanthanum tungstate membranes for H2 extraction and CO2 utilization: Fabrication strategies based on sequential tape casting and plasma-spray physical vapor deposition. *Separation and Purification Technology*, **2019**, 219, 100-112	8.3	13
164	Improved compaction of ZnO nano-powder triggered by the presence of acetate and its effect on sintering. *Science and Technology of Advanced Materials*, **2015**, 16, 025008	7.1	13
163	Constrained sintering of alumina stripe patterns on rigid substrates: Effect of stripe geometry. *Journal of the European Ceramic Society*, **2013**, 33, 3221-3230	6	13
162	Effect of the Substrate on the Constrained Sintering of BaLa4Ti4O15 Thick Films. *Journal of the American Ceramic Society*, **2012**, 95, 3781-3787	3.8	13
161	Superior cyclic life of thermal barrier coatings with advanced bond coats on single-crystal superalloys. *Surface and Coatings Technology*, **2019**, 361, 150-158	4.4	13
160	Phase and microstructural characterizations for Ce0.8Gd0.2O2--FeCo2O4 dual phase oxygen transport membranes. *Journal of the European Ceramic Society*, **2020**, 40, 5646-5652	6	12
159	Manufacturing cost model for planar 5 kWel SOFC stacks at Forschungszentrum Jlich. *International Journal of Hydrogen Energy*, **2020**, 45, 8015-8030	6.7	12
158	Thermal cycling performances of multilayered yttria-stabilized zirconia/gadolinium zirconate thermal barrier coatings. *Journal of the American Ceramic Society*, **2020**, 103, 2048-2061	3.8	12

157	Effect of Internal Current Flow During the Sintering of Zirconium Diboride by Field Assisted Sintering Technology. *Journal of the American Ceramic Society*, **2016**, 99, 35-42	3.8	12
156	Environmental Barrier Coatings Made by Different Thermal Spray Technologies. *Coatings*, **2019**, 9, 784	2.9	12
155	Optimization of sintering conditions for improved microstructural and mechanical properties of dense Ce0.8Gd0.2O2-δ–FeCo2O4 oxygen transport membranes. *Journal of the European Ceramic Society*, **2021**, 41, 509-516	6	12
154	Challenges regarding thin film deposition of garnet electrolytes for all-solid-state lithium batteries with high energy density. *Ionics*, **2018**, 24, 2199-2208	2.7	12
153	Electric-field-assisted processing of ceramics: Nonthermal effects and related mechanisms. *MRS Bulletin*, **2021**, 46, 52-58	3.2	12
152	Dual-Phase Cathodes for Metal-Supported Solid Oxide Fuel Cells: Processing, Performance, Durability. *Journal of the Electrochemical Society*, **2019**, 166, F506-F510	3.9	11
151	Effects of Feedstock Decomposition and Evaporation on the Composition of Suspension Plasma-Sprayed Coatings. *Journal of Thermal Spray Technology*, **2015**, 24, 1187-1194	2.5	11
150	Increased Shape Stability and Porosity of Highly Porous Injection-Molded Titanium Parts. *Advanced Engineering Materials*, **2015**, 17, 1579-1587	3.5	11
149	Resistance of pure and mixed rare earth silicates against calcium-magnesium-aluminosilicate (CMAS): A comparative study. *Journal of the American Ceramic Society*, **2020**, 103, 7056-7071	3.8	11
148	Enhancing efficiency of field assisted sintering by advanced thermal insulation. *Journal of Materials Processing Technology*, **2018**, 262, 326-339	5.3	11
147	Simulation of the effect of the porous support on flux through an asymmetric oxygen transport membrane. *Journal of Membrane Science*, **2017**, 524, 334-343	9.6	11
146	High-temperature chip calorimeter with atmosphere control. *Thermochimica Acta*, **2011**, 522, 77-85	2.9	11
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144	Electronic Structure Engineering of Honeycomb Layered Cathode Material for Sodium-Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2003399	21.8	11
143	Controlling the lithium proton exchange of LLZO to enable reproducible processing and performance optimization. *Journal of Materials Chemistry A*, **2021**, 9, 4831-4840	13	11
142	Investigation of crystal structure and ionic transport in a scandium-based NASICON material by neutron powder diffraction. *Solid State Sciences*, **2017**, 67, 30-36	3.4	10
141	Coefficients of Thermal Expansion of Al- and Y-Substituted NaSICON Solid Solution Na3+2xAlxYxZr2−xSi2PO12. *Batteries*, **2018**, 4, 33	5.7	10
140	A TEM Investigation of Columnar-Structured Thermal Barrier Coatings Deposited by Plasma Spray-Physical Vapor Deposition (PS-PVD). *Plasma Chemistry and Plasma Processing*, **2018**, 38, 791-802	3.6	10

139	New considerations about the fracture mode of PZT ceramics. *Journal of the European Ceramic Society*, **2005**, 25, 2421-2424	6	10
138	Ceramics for electrochemical storage **2020**, 549-709		10
137	Dendrite-tolerant all-solid-state sodium batteries and an important mechanism of metal self-diffusion. *Journal of Power Sources*, **2020**, 476, 228666	8.9	10
136	Calcium-Iron Oxide as Energy Storage Medium in Rechargeable Oxide Batteries. *Journal of the American Ceramic Society*, **2016**, 99, 4083-4092	3.8	10
135	Bulk and grain boundary Li-diffusion in dense LiMnO pellets by means of isotope exchange and ToF-SIMS analysis. *Physical Chemistry Chemical Physics*, **2019**, 21, 26066-26076	3.6	10
134	Li7La3Zr2O12 solid electrolyte sintered by the ultrafast high-temperature method. *Journal of the European Ceramic Society*, **2021**, 41, 6075-6079	6	10
133	Effect of Carbon Nanotubes on Thermoelectric Properties in Zn0.98Al0.02O. *Journal of Electronic Materials*, **2016**, 45, 1459-1463	1.9	9
132	In-situ synchrotron x-ray transmission microscopy of the sintering of multilayers. *Applied Physics Letters*, **2013**, 102, 223107	3.4	9
131	Piezo rotary and axial vibrator (PRAV) characterization of a fresh coating during its drying. *Rheologica Acta*, **2011**, 50, 221-229	2.3	9
130	Field-Assisted Sintering/Spark Plasma Sintering of Gadolinium-Doped Ceria with Controlled Re-oxidation for Crack Prevention. *Materials*, **2020**, 13,	3.5	9
129	Field-assisted/spark plasma sintering behavior of CNT-reinforced zirconia composites: A comparative study between model and experiments. *Journal of the European Ceramic Society*, **2015**, 35, 4241-4249	6	8
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127	Capacitance Enhancement of Doped Barium Titanate Dielectrics and Multilayer Ceramic Capacitors by a Post-Sintering Thermo-Mechanical Treatment. *Journal of the American Ceramic Society*, **2012**, 95, 2277-2281	3.8	8
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125	Synchrotron x-ray nano-tomography characterization of the sintering of multilayered systems. *Applied Physics Letters*, **2012**, 100, 263107	3.4	8
124	Effect of drying conditions on patterned ceramic films processed by soft micromolding. *Journal of the Ceramic Society of Japan*, **2010**, 118, 321-325	1	8
123	Viscous Poisson ratio, bulk and shear viscosity during electrical field assisted sintering of polycrystalline ceria. *Scripta Materialia*, **2020**, 178, 240-243	5.6	8
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