Olivier Guillon

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Fieldâ€Assisted Sintering Technology/Spark Plasma Sintering: Mechanisms, Materials, and Technology Developments. Advanced Engineering Materials, 2014, 16, 830-849.	1.6	923
2	Li ₇ La ₃ Zr ₂ O ₁₂ Interface Modification for Li Dendrite Prevention. ACS Applied Materials & Interfaces, 2016, 8, 10617-10626.	4.0	632
3	Scandium-Substituted Na ₃ Zr ₂ (SiO ₄) ₂ (PO ₄) Prepared by a Solution-Assisted Solid-State Reaction Method as Sodium-Ion Conductors. Chemistry of Materials, 2016. 28. 4821-4828.	3.2	229
4	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.	4.0	193
5	Constrained sintering: A delicate balance of scales. Journal of the European Ceramic Society, 2008, 28, 1451-1466.	2.8	176
6	Direct comparison between hot pressing and electric field-assisted sintering of submicron alumina. Acta Materialia, 2009, 57, 5454-5465.	3.8	154
7	Molten salt shielded synthesis of oxidation prone materials in air. Nature Materials, 2019, 18, 465-470.	13.3	134
8	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.	2.5	133
9	Flash Sintering of Nanocrystalline Zinc Oxide and its Influence on Microstructure and Defect Formation. Journal of the American Ceramic Society, 2014, 97, 1728-1735.	1.9	131
10	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.	3.8	117
11	Single-source-precursor synthesis of dense SiC/HfC _x N _{1â^'x} -based ultrahigh-temperature ceramic nanocomposites. Nanoscale, 2014, 6, 13678-13689.	2.8	110
12	Radio frequency magnetron sputtering of Li7La3Zr2O12 thin films for solid-state batteries. Journal of Power Sources, 2016, 307, 684-689.	4.0	107
13	New promising NASICON material as solid electrolyte for sodium-ion batteries: Correlation between composition, crystal structure and ionic conductivity of Na3+xSc2SixP3â^'xO12. Solid State Ionics, 2016, 293, 18-26.	1.3	102
14	Anisotropic constitutive laws for sintering bodies. Acta Materialia, 2006, 54, 111-118.	3.8	96
15	Ion-conducting ceramic membrane reactors for high-temperature applications. Journal of Membrane Science, 2017, 543, 79-97.	4.1	93
16	Na 3 Zr 2 (SiO 4) 2 (PO 4) prepared by a solution-assisted solid state reaction. Solid State Ionics, 2017, 302, 83-91.	1.3	93
17	High Capacity Garnet-Based All-Solid-State Lithium Batteries: Fabrication and 3D-Microstructure Resolved Modeling. ACS Applied Materials & Interfaces, 2018, 10, 22329-22339.	4.0	91
18	Stress-induced anisotropy of sintering alumina: Discrete element modelling and experiments. Acta Materialia, 2007, 55, 5187-5199.	3.8	87

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19	Comparison of solid oxide fuel cell (SOFC) electrolyte materials for operation at 500â€Â°C. Solid State Ionics, 2020, 344, 115138.	1.3	85
20	Correlation of splat morphologies with porosity and residual stress in plasma-sprayed YSZ coatings. Surface and Coatings Technology, 2017, 318, 157-169.	2.2	83
21	A Novel Sol–Gel Method for Largeâ€Scale Production of Nanopowders: Preparation of Li _{1.5} Al _{0.5} Ti _{1.5} (<scp>PO</scp> ₄) ₃ as an Example. Journal of the American Ceramic Society, 2016, 99, 410-414.	1.9	79
22	Effect of Electrical Field/Current on Sintering of Fully Stabilized Zirconia. Journal of the American Ceramic Society, 2012, 95, 75-78.	1.9	76
23	Development of YSZ Thermal Barrier Coatings Using Axial Suspension Plasma Spraying. Coatings, 2017, 7, 120.	1.2	73
24	Anisotropic Microstructural Development During the Constrained Sintering of Dip-Coated Alumina Thin Films. Journal of the American Ceramic Society, 2007, 90, 1394-1400.	1.9	69
25	Cathode-electrolyte material interactions during manufacturing of inorganic solid-state lithium batteries. Journal of Electroceramics, 2017, 38, 197-206.	0.8	63
26	Manipulation of matter by electric and magnetic fields: Toward novel synthesis and processing routes of inorganic materials. Materials Today, 2018, 21, 527-536.	8.3	63
27	Electric Field-Assisted Sintering in Comparison with the Hot Pressing of Yttria-Stabilized Zirconia. Journal of the American Ceramic Society, 2011, 94, 24-31.	1.9	58
28	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.	4.0	58
29	Low temperature sintering of fully inorganic all-solid-state batteries – Impact of interfaces on full cell performance. Journal of Power Sources, 2021, 482, 228905.	4.0	58
30	Tensile fracture of soft and hard PZT. International Journal of Fracture, 2002, 117, 235-246.	1.1	56
31	Models of size-dependent nanoparticle melting tested on gold. Journal of Materials Science, 2014, 49, 7915-7932.	1.7	56
32	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.	2.8	56
33	Electronic conductivity in gadolinium doped ceria under direct current as a trigger for flash sintering. Scripta Materialia, 2020, 179, 55-60.	2.6	55
34	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.	2.8	54
35	Sintering resistance of advanced plasma-sprayed thermal barrier coatings with strain-tolerant microstructures. Journal of the European Ceramic Society, 2018, 38, 5092-5100.	2.8	54
36	Current-rate flash sintering of gadolinium doped ceria: Microstructure and Defect generation. Acta Materialia, 2020, 189, 145-153.	3.8	54

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37	High-performance carbon molecular sieve membranes for hydrogen purification and pervaporation dehydration of organic solvents. Journal of Materials Chemistry A, 2019, 7, 7082-7091.	5.2	53
38	Metal-Supported Solid Oxide Fuel Cells with Exceptionally High Power Density for Range Extender Systems. Cell Reports Physical Science, 2020, 1, 100072.	2.8	53
39	Room-temperature all-solid-state sodium batteries with robust ceramic interface between rigid electrolyte and electrode materials. Nano Energy, 2019, 65, 104040.	8.2	52
40	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.	2.8	51
41	Highâ€Temperature Creep Behavior of Dense <scp><scp>SiOC</scp></scp> â€Based Ceramic Nanocomposites: Microstructural and Phase Composition Effects. Journal of the American Ceramic Society, 2013, 96, 272-280.	1.9	50
42	Application of Electric Currentâ€Assisted Sintering Techniques for the Processing of Advanced Materials. Advanced Engineering Materials, 2020, 22, 2000051.	1.6	49
43	Constrained sintering of glass films: Microstructure evolution assessed through synchrotron computed microtomography. Acta Materialia, 2011, 59, 6228-6238.	3.8	48
44	On the role of Debye temperature in the onset of flash in three oxides. Scripta Materialia, 2019, 170, 81-84.	2.6	47
45	Constrained Sintering of Alumina Thin Films: Comparison Between Experiment and Modeling. Journal of the American Ceramic Society, 2007, 90, 1733-1737.	1.9	46
46	Hydrogen separation through tailored dual phase membranes with nominal composition BaCe0.8Eu0.2O3-δ:Ce0.8Y0.2O2-δ at intermediate temperatures. Scientific Reports, 2016, 6, 34773.	1.6	46
47	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.	2.8	46
48	Influence of thickness on the constrained sintering of alumina films. Journal of the European Ceramic Society, 2007, 27, 2623-2627.	2.8	45
49	SiC/Hf _y Ta _{1â^'y} C _x N _{1â^'x} /C ceramic nanocomposites with Hf _y Ta _{1â^'y} C _x N _{1â^'x} -carbon core–shell nanostructure and the influence of the carbon-shell thickness on electrical properties. Journal of Materials	2.7	45
50	Influence of Microstructure and Surface Activation of Dualâ€Phase Membrane Ce _{0.8} Gd _{0.2} O _{2â°î´} –FeCo ₂ O ₄ on Oxygen Permeation. Journal of the American Ceramic Society, 2016, 99, 349-355.	1.9	44
51	Li7La3Zr2O12 solid electrolyte sintered by the ultrafast high-temperature method. Journal of the European Ceramic Society, 2021, 41, 6075-6079.	2.8	42
52	Master sintering curve applied to the Field-Assisted Sintering Technique. Journal of Materials Science, 2010, 45, 5191-5195.	1.7	41
53	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.	1.9	41
54	Effect of Electric Field/Current on Liquid Phase Sintering. Journal of the American Ceramic Society, 2015, 98, 2018-2027.	1.9	41

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55	Effect of sintering method on the microstructure of pure Cr ₂ AlC MAX phase ceramics. Journal of the Ceramic Society of Japan, 2016, 124, 415-420.	0.5	40
56	Electric-field-assisted processing of ceramics: Nonthermal effects and related mechanisms. MRS Bulletin, 2021, 46, 52-58.	1.7	40
57	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.	2.2	39
58	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.	2.8	39
59	Preparation and sintering behaviour of La5.4WO12â^ asymmetric membranes with optimised microstructure for hydrogen separation. Journal of Membrane Science, 2015, 492, 439-451.	4.1	38
60	Fast Na ⁺ Ion Conduction in NASICON-Type Na _{3.4} Sc ₂ (SiO ₄) _{0.4} (PO ₄) _{2.6} Observed by ²³ Na NMR Relaxometry. Journal of Physical Chemistry C, 2017, 121, 1449-1454.	1.5	36
61	Thermal cycling performances of multilayered yttriaâ€stabilized zirconia/gadolinium zirconate thermal barrier coatings. Journal of the American Ceramic Society, 2020, 103, 2048-2061.	1.9	36
62	Manufacturing cost model for planar 5 kWel SOFC stacks at Forschungszentrum Jülich. International Journal of Hydrogen Energy, 2020, 45, 8015-8030.	3.8	36
63	Study of LiCoO ₂ /Li ₇ La ₃ Zr ₂ O ₁₂ :Ta Interface Degradation in All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 11288-11299.	4.0	36
64	High-pressure field assisted sintering of half-cell for all-solid-state battery. Materials Letters, 2019, 247, 155-158.	1.3	35
65	Solvent Co-intercalation into Few-layered Ti ₃ C ₂ T <i>_{<i>x</i>}</i> MXenes in Lithium Ion Batteries Induced by Acidic or Basic Post-treatment. ACS Nano, 2021, 15, 3295-3308.	7.3	35
66	True Young modulus of Pb(Zr,Ti)O3 films measured by nanoindentation. Applied Physics Letters, 2004, 85, 5185-5187.	1.5	34
67	Highâ€ŧemperature oxidation and compressive strength of Cr ₂ AlC <scp>MAX</scp> phase foams with controlled porosity. Journal of the American Ceramic Society, 2018, 101, 542-552.	1.9	34
68	Electric Field-Assisted Sintering and Hot Pressing of Semiconductive Zinc Oxide: A Comparative Study. Journal of the American Ceramic Society, 2011, 94, 2344-2353.	1.9	33
69	Novel Cr 2 AlC MAX-phase/SiC fiber composites: Synthesis, processing and tribological response. Journal of the European Ceramic Society, 2017, 37, 467-475.	2.8	33
70	Impact of sodium excess on electrical conductivity of Na3Zr2Si2PO12 + x Na2O ceramics. Solid State Ionics, 2019, 336, 57-66.	1.3	33
71	Resistance of pure and mixed rare earth silicates against calciumâ€magnesiumâ€aluminosilicate (CMAS): A comparative study. Journal of the American Ceramic Society, 2020, 103, 7056-7071.	1.9	33
72	Constrained Sintering of a Glass Ceramic Composite: I. Asymmetric Laminate. Journal of the American Ceramic Society, 2010, 93, 74-81.	1.9	32

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73	Stability of NASICON materials against water and CO 2 uptake. Solid State Ionics, 2017, 302, 102-106.	1.3	32
74	Scalable Synthesis of MAX Phase Precursors toward Titanium-Based MXenes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 26074-26083.	4.0	32
75	A Perspective on Thermally Sprayed Thermal Barrier Coatings: Current Status and Trends. Journal of Thermal Spray Technology, 2022, 31, 685-698.	1.6	32
76	Compressive creep of PZT ceramics: experiments and modelling. Journal of the European Ceramic Society, 2004, 24, 2547-2552.	2.8	31
77	Sintering behavior of columnar thermal barrier coatings deposited by axial suspension plasma spraying (SPS). Journal of the European Ceramic Society, 2019, 39, 482-490.	2.8	31
78	Controlling the lithium proton exchange of LLZO to enable reproducible processing and performance optimization. Journal of Materials Chemistry A, 2021, 9, 4831-4840.	5.2	31
79	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.	3.8	30
80	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.	2.8	30
81	Advanced crystallographic study of the columnar growth of YZS coatings produced by PS-PVD. Journal of the European Ceramic Society, 2018, 38, 2449-2453.	2.8	30
82	Microstructure–conductivity relationship of Na ₃ Zr ₂ (SiO ₄) ₂ (PO ₄) ceramics. Journal of the American Ceramic Society, 2019, 102, 1057-1070.	1.9	30
83	Performance Benchmark of Planar Solid Oxide Cells Based on Material Development and Designs. Energy Technology, 2021, 9, 2001062.	1.8	29
84	Effect of Green-State Processing on the Sintering Stress and Viscosity of Alumina Compacts. Journal of the American Ceramic Society, 2007, 90, 1637-1640.	1.9	28
85	Effect of uniaxial load on the sintering behaviour of 45S5 Bioglass® powder compacts. Journal of the European Ceramic Society, 2011, 31, 999-1007.	2.8	28
86	Tensile behavior of PZT in short and open-circuit conditions. Materials Letters, 2004, 58, 986-990.	1.3	27
87	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.	1.9	27
88	Environmental Barrier Coatings Made by Different Thermal Spray Technologies. Coatings, 2019, 9, 784.	1.2	27
89	Influence of powder characteristics on cold sintering of nano-sized ZnO with density above 99 %. Journal of the European Ceramic Society, 2021, 41, 2648-2662.	2.8	27
90	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.	2.8	26

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91	YAlO3—A Novel Environmental Barrier Coating for Al2O3/Al2O3–Ceramic Matrix Composites. Coatings, 2019, 9, 609.	1.2	26
92	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.	2.8	26
93	Dendrite-tolerant all-solid-state sodium batteries and an important mechanism of metal self-diffusion. Journal of Power Sources, 2020, 476, 228666.	4.0	26
94	Unique performance of thermal barrier coatings made of yttriaâ€stabilized zirconia at extreme temperatures (>1500°C). Journal of the American Ceramic Society, 2021, 104, 463-471.	1.9	26
95	Initial Attatchment of rMSC and MGâ€63 Cells on Patterned Bioglass® Substrates. Advanced Engineering Materials, 2012, 14, B38.	1.6	25
96	Anomalous coarsening of nanocrystalline zinc oxide particles in humid air. Journal of Crystal Growth, 2015, 419, 69-78.	0.7	25
97	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.	2.8	25
98	All-Solid-State Li Batteries with NCM–Garnet-Based Composite Cathodes: The Impact of NCM Composition on Material Compatibility. ACS Applied Energy Materials, 2022, 5, 6913-6926.	2.5	25
99	Viscosity of LTCC Determined by Discontinuous Sinter-Forging. International Journal of Applied Ceramic Technology, 2006, 3, 437-441.	1.1	24
100	Highâ€Temperature Creep Behavior of <scp><scp>SiOC</scp> </scp> Glassâ€Ceramics: Influence of Network Carbon Versus Segregated Carbon. Journal of the American Ceramic Society, 2014, 97, 3935-3942.	1.9	24
101	Size-Dependent Phase Transformations in Bismuth Oxide Nanoparticles. II. Melting and Stability Diagram. Journal of Physical Chemistry C, 2014, 118, 27020-27027.	1.5	24
102	Reactions of garnet-based solid-state lithium electrolytes with water — A depth-resolved study. Solid State Ionics, 2018, 320, 259-265.	1.3	24
103	Vacuum plasma spraying of functionally graded tungsten/EUROFER97 coatings for fusion applications. Fusion Engineering and Design, 2018, 133, 148-156.	1.0	24
104	Recycling Strategies for Ceramic All-Solid-State Batteries—Part I: Study on Possible Treatments in Contrast to Li-Ion Battery Recycling. Metals, 2020, 10, 1523.	1.0	24
105	Electronic Structure Engineering of Honeycomb Layered Cathode Material for Sodiumâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2003399.	10.2	24
106	A New Approach to Stable Cationic and Anionic Redox Activity in O3‣ayered Cathode for Sodium″on Batteries. Advanced Energy Materials, 2021, 11, 2100901.	10.2	24
107	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.	4.0	23
108	Constrained Sintering of a Glass Ceramic Composite: II. Symmetric Laminate. Journal of the American Ceramic Society, 2009, 92, 2900-2906.	1.9	23

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109	Effect of size and homogeneity of rigid inclusions on the sintering of composites. Scripta Materialia, 2013, 69, 327-330.	2.6	23
110	Solid state transitions of Bi ₂ O ₃ nanoparticles. Journal of Materials Research, 2014, 29, 1383-1392.	1.2	23
111	Aging of atmospherically plasma sprayed chromium evaporation barriers. Surface and Coatings Technology, 2016, 291, 115-122.	2.2	23
112	Mechanical properties and lifetime predictions of dense SrTi 1-x Fe x O 3-δ (x = 0.25, 0.35, 0.5). Journal of the European Ceramic Society, 2017, 37, 2629-2636.	2.8	23
113	Superior cyclic life of thermal barrier coatings with advanced bond coats on single-crystal superalloys. Surface and Coatings Technology, 2019, 361, 150-158.	2.2	23
114	Synthesis, sintering, and effect of surface roughness on oxidation of submicron Ti ₂ AlC ceramics. Journal of the American Ceramic Society, 2021, 104, 1669-1688.	1.9	23
115	Predicting sintering deformation of ceramic film constrained by rigid substrate using anisotropic constitutive law. Acta Materialia, 2010, 58, 5980-5988.	3.8	22
116	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.	2.8	22
117	Determination of the size of representative volume element for viscous sintering. Journal of the Ceramic Society of Japan, 2016, 124, 421-425.	0.5	22
118	Interaction of a ceriaâ€based anode functional layer with a stabilized zirconia electrolyte: Considerations from a materials perspective. Journal of the American Ceramic Society, 2018, 101, 739-748.	1.9	22
119	Effect of AC field on uniaxial viscosity and sintering stress of ceria. Acta Materialia, 2020, 182, 77-86.	3.8	22
120	Boron in Ni-Rich NCM811 Cathode Material: Impact on Atomic and Microscale Properties. ACS Applied Energy Materials, 2022, 5, 524-538.	2.5	22
121	A Comparison Between FAST and SPS Apparatuses Based on the Sintering of Oxide Ceramics. International Journal of Applied Ceramic Technology, 2011, 8, 1459-1467.	1.1	21
122	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.	3.8	21
123	Utilization of Bio-Syngas in Solid Oxide Fuel Cell Stacks: Effect of Hydrocarbon Reforming. Journal of the Electrochemical Society, 2019, 166, F137-F143.	1.3	21
124	Ceramics for electrochemical storage. , 2020, , 549-709.		21
125	Mechanism for breakaway oxidation of the Ti2AlC MAX phase. Acta Materialia, 2021, 215, 117025.	3.8	21
126	High-temperature piezoresistive C / SiOC sensors. Journal of Sensors and Sensor Systems, 2015, 4, 133-136.	0.6	21

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127	Ultra-fast high-temperature sintering of strontium titanate. Acta Materialia, 2022, 231, 117918.	3.8	21
128	Effect of Anisotropic Microstructure on the Viscous Properties of an LTCC Material. Journal of the American Ceramic Society, 2007, 90, 071019062949005-???.	1.9	20
129	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.	2.8	20
130	Enhancing the performance of high-voltage LiCoMnO4 spinel electrodes by fluorination. Journal of Power Sources, 2017, 341, 122-129.	4.0	20
131	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.	1.6	20
132	Synthesis and characterization of equimolar Al/Y-substituted NASICON solid solution Na1+2x+yAlxYxZr2â^2xSiyP3â^2yO12. Solid State Ionics, 2018, 319, 13-21.	1.3	20
133	Development of a processing map for safe flash sintering of gadoliniumâ€doped ceria. Journal of the American Ceramic Society, 2021, 104, 4316-4328.	1.9	20
134	Enhancing efficiency of field assisted sintering by advanced thermal insulation. Journal of Materials Processing Technology, 2018, 262, 326-339.	3.1	19
135	Sintering forces acting among particles during sintering by grainâ€boundary/surface diffusion. Journal of the American Ceramic Society, 2019, 102, 538-547.	1.9	19
136	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.	3.9	19
137	Bulk and grain boundary Li-diffusion in dense LiMn ₂ O ₄ pellets by means of isotope exchange and ToF-SIMS analysis. Physical Chemistry Chemical Physics, 2019, 21, 26066-26076.	1.3	19
138	Modelling electro-chemical induced stresses in all-solid-state batteries: Anisotropy effects in cathodes and cell design optimisation. Journal of Power Sources, 2021, 489, 229430.	4.0	19
139	Experimental methodology to study tribological aspects of deep drawing — application to aluminium alloy sheets and tool coatings. Tribology International, 2001, 34, 757-766.	3.0	18
140	Sintering behavior of an ultrafine alumina powder shaped by pressure filtration and dry pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3807-3812.	2.6	18
141	Architecture designs for extending thermal cycling lifetime of suspension plasma sprayed thermal barrier coatings. Ceramics International, 2019, 45, 18471-18479.	2.3	18
142	Exsolution of Embedded Nanoparticles in Defect Engineered Perovskite Layers. ACS Nano, 2021, 15, 4546-4560.	7.3	18
143	Origin of Structural Phase Transitions in Ni-Rich Li _{<i>x</i>} Ni _{0.8} Co _{0.1} Mn _{0.1} O ₂ with Lithiation/Delithiation: A First-Principles Study. ACS Sustainable Chemistry and Engineering, 2021, 9, 7437-7446	3.2	18
144	Microstructural Characterization of Alumina Films During Constrained Sintering. Journal of the American Ceramic Society, 2010, 93, 627-629.	1.9	17

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145	Time-of-flight secondary ion mass spectrometry study of lithium intercalation process in LiCoO2 thin film. Journal of Power Sources, 2016, 321, 241-247.	4.0	17
146	Free standing dual phase cathode tapes – scalable fabrication and microstructure optimization of garnet-based ceramic cathodes. Journal of Materials Chemistry A, 2022, 10, 2320-2326.	5.2	17
147	Uniaxial viscosity of gadolinium-doped ceria determined by discontinuous sinter forging. Journal of the European Ceramic Society, 2007, 27, 3127-3133.	2.8	16
148	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.	2.8	16
149	Functional properties of La0.99X0.01Nb0.99Al0.01O4â [~] î [^] and La0.99X0.01Nb0.99Ti0.01O4â [^] î [^] proton conductors where X is an alkaline earth cation. Journal of the European Ceramic Society, 2015, 35, 1239-1253.	2.8	16
150	Near Net Shaping of Monolithic and Composite <scp>MAX</scp> Phases by Injection Molding. Journal of the American Ceramic Society, 2016, 99, 3210-3213.	1.9	16
151	Arrhenius Behavior of the Bulk Na-Ion Conductivity in Na ₃ Sc ₂ (PO ₄) ₃ Single Crystals Observed by Microcontact Impedance Spectroscopy. Chemistry of Materials, 2018, 30, 1776-1781.	3.2	16
152	Mechanical properties of cold sintered ZnO investigated by nanoindentation and micro-pillar testing. Journal of the European Ceramic Society, 2022, 42, 512-524.	2.8	16
153	Polymer–Ceramic Composite Cathode with Enhanced Storage Capacity Manufactured by Field-Assisted Sintering and Infiltration. ACS Applied Energy Materials, 2021, 4, 10428-10432.	2.5	16
154	Constrained sintering of BaLa4Ti4O15 thick films: Pore and grain anisotropy. Journal of the European Ceramic Society, 2013, 33, 1801-1808.	2.8	15
155	High-Performance Metal-Supported Solid Oxide Fuel Cells by Advanced Cathode Processing. Journal of the Electrochemical Society, 2017, 164, F1375-F1384.	1.3	15
156	Challenges regarding thin film deposition of garnet electrolytes for all-solid-state lithium batteries with high energy density. Ionics, 2018, 24, 2199-2208.	1.2	15
157	Microstructure, ionic conductivity and mechanical properties of tape-cast Li1.5Al0.5Ti1.5P3O12 electrolyte sheets. Journal of the European Ceramic Society, 2020, 40, 1975-1982.	2.8	15
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