

Rishi Raj

List of Publications by Year in descending order

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papers

22,661
citations

6613

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442
times ranked

10144
citing authors

#	ARTICLE	IF	CITATIONS
1	Inâ€flash immersionâ€andâ€quench of yttriaâ€stabilized zirconia into liquid nitrogen yields an electronic conductor. Journal of the American Ceramic Society, 2022, 105, 1635-1639.	3.8	6
2	Higher conductivity of non-stoichiometric lithium lanthanum zirconate ceramics made by reactive flash synthesis. MRS Communications, 2022, 12, 201-205.	1.8	2
3	On the catalytic effect of zirconia on flash sintering of alumina. Journal of the American Ceramic Society, 2022, 105, 3746-3752.	3.8	4
4	Influence of flash sintering on phase transformation and conductivity of hydroxyapatite. Ceramics International, 2021, 47, 9125-9131.	4.8	17
5	Thin coatings of hafnium abate oxidative recession of SiC fibers. Journal of the American Ceramic Society, 2021, 104, 1210-1215.	3.8	2
6	Precipitous weakening of quartz at the α - β phase inversion. Journal of the American Ceramic Society, 2021, 104, 23-26.	3.8	6
7	Tunable chemistry at the interface and self-healing towards improving structural properties of carbon fiber laminates: a critical review. Nanoscale Advances, 2021, 3, 5745-5776.	4.6	9
8	Flash sintering of yttriaâ€stabilized zirconia powders coated with nanoscale films of alumina by atomic layer deposition. Journal of the American Ceramic Society, 2021, 104, 2472-2482.	3.8	2
9	Current constriction of Li-ion transport across lithium metalâ€ceramic electrolyte interface: Imaged with X-ray Tomography. MRS Communications, 2021, 11, 283-287.	1.8	6
10	Frenkel pairs cause elastic softening in zirconia: theory and experiments. New Journal of Physics, 2021, 23, 053013.	2.9	8
11	Development of a processing map for safe flash sintering of gadoliniumâ€doped ceria. Journal of the American Ceramic Society, 2021, 104, 4316-4328.	3.8	20
12	Influence of temperature and ASR on the critical current density in lithium-metalâ€ceramic cells. MRS Communications, 2021, 11, 483-488.	1.8	2
13	Phase evolution during reactive flash sintering of $\text{Li}_{6.25}\text{Al}_{0.25}\text{La}_3\text{Zr}_{20}\text{O}_{12}$ starting from a chemically prepared powder. Journal of the European Ceramic Society, 2021, 41, 4552-4557.	5.7	30
14	Stack Pressure and Critical Current Density in Li-metal Cells: The Role of Mechanical Deformation. Acta Materialia, 2021, 215, 117076.	7.9	13
15	On the Arrhenius-like behavior of conductivity during flash sintering of 3 mol% yttria stabilized zirconia ceramics. Scripta Materialia, 2021, 203, 114093.	5.2	11
16	Flash sintering: A new frontier in defect physics and materials science. MRS Bulletin, 2021, 46, 36-43.	3.5	25
17	Nucleation of voids at second phase particles at lithiumâ€ceramic interface degrades cell performance. MRS Communications, 2021, 11, 879.	1.8	0
18	Reactive flash sintering of the complex oxide $\text{Li}_{0.5}\text{La}_{0.5}\text{TiO}_3$ starting from an amorphous precursor powder. Scripta Materialia, 2020, 176, 78-82.	5.2	35

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19	Processing and properties of $\text{Bi}_{0.98}\text{R}_{0.02}\text{FeO}_3$ ($\text{R}=\text{La, Sm, Y}$) ceramics flash sintered at $\sim 650^\circ\text{C}$ in $\sim 5\text{s}$. Journal of the American Ceramic Society, 2020, 103, 136-144.	3.8	7
20	Transition to electronic conduction at the onset of flash in cubic zirconia. Scripta Materialia, 2020, 174, 29-32.	5.2	30
21	Flash-induced spreading of metals on zirconia. Scripta Materialia, 2020, 176, 73-77.	5.2	8
22	An ingenious fluidic capacitor for complete suppression of thermal fluctuations in two-phase microchannel heat sinks. International Communications in Heat and Mass Transfer, 2020, 110, 104347.	5.6	12
23	Scalable macroscale wettability patterns for pool boiling heat transfer enhancement. Heat and Mass Transfer, 2020, 56, 989-1000.	2.1	10
24	Electric field-assisted flash sintering of $\text{Bi}_2/3\text{Cu}_3\text{Ti}_4\text{O}_{12}$ starting from a multi-phase precursor powder. Journal of the European Ceramic Society, 2020, 40, 4004-4009.	5.7	14
25	Design, fabrication, and performance evaluation of a novel orientation independent and wickless heat spreader. International Journal of Heat and Mass Transfer, 2020, 153, 119572.	4.8	6
26	Droplets on Lubricant-Infused Surfaces: Combination of Constant Mean Curvature Interfaces with Neumann Triangle Boundary Conditions. Langmuir, 2020, 36, 2974-2983.	3.5	11
27	Reactive flash sintering of the entropy-stabilized oxide $\text{Mg}_{0.2}\text{Ni}_{0.2}\text{Co}_{0.2}\text{Cu}_{0.2}\text{Zn}_{0.2}\text{O}$. Scripta Materialia, 2020, 181, 48-52.	5.2	72
28	Current-rate flash sintering of gadolinium doped ceria: Microstructure and Defect generation. Acta Materialia, 2020, 189, 145-153.	7.9	54
29	The flash effect in electronic conductors: The case of amorphous carbon fibers. Scripta Materialia, 2020, 179, 20-24.	5.2	7
30	Electronic conductivity in gadolinium doped ceria under direct current as a trigger for flash sintering. Scripta Materialia, 2020, 179, 55-60.	5.2	55
31	Combined effect of inlet restrictor and nanostructure on two-phase flow performance of parallel microchannel heat sinks. International Journal of Thermal Sciences, 2020, 153, 106339.	4.9	21
32	Reactive flash sintering: MgO and Al_2O_3 transform and sinter into single-phase polycrystals of MgAl_2O_4 . Journal of the American Ceramic Society, 2019, 102, 2294-2303.	3.8	38
33	Al_2O_3 and spinel react into single-phase high-alumina spinel in $\sim 3\text{s}$ during flash sintering. Journal of the American Ceramic Society, 2019, 102, 644-653.	3.8	30
34	Flash sintering of Li-ion conducting ceramic in a few seconds at 850°C . Scripta Materialia, 2019, 172, 1-5.	5.2	26
35	Design, fabrication, and performance evaluation of a novel biomass-gasification-based hot water generation system. Energy, 2019, 185, 148-157.	8.8	6
36	Effect of foamability on pool boiling critical heat flux with nanofluids. Soft Matter, 2019, 15, 5308-5318.	2.7	12

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37	Reactive flash sintering of powders of four constituents into a single phase of a complex oxide in a few seconds below 700Å°C. Journal of the American Ceramic Society, 2019, 102, 6443-6448.	3.8	42
38	Surface-active ionic liquids as potential additive for pool boiling based energy systems. Journal of Molecular Liquids, 2019, 287, 110953.	4.9	18
39	On the role of Debye temperature in the onset of flash in three oxides. Scripta Materialia, 2019, 170, 81-84.	5.2	47
40	In-situ acoustic detection of critical heat flux for controlling thermal runaway in boiling systems. International Journal of Heat and Mass Transfer, 2019, 138, 135-143.	4.8	18
41	Experimental characterization and modeling of critical heat flux with subcooled foaming solution. International Journal of Thermal Sciences, 2019, 141, 199-210.	4.9	13
42	Aqueous Ionic Liquid Solution based Two-phase Thermal Management for Adverse Gravity Applications. , 2019, , .		0
43	Flash sintering with current rate: A different approach. Journal of the American Ceramic Society, 2019, 102, 823-835.	3.8	54
44	On the onset of fracture as a silicon-based polymer converts into the ceramic phase. Journal of the American Ceramic Society, 2019, 102, 924-929.	3.8	15
45	Influence of flash sintering on the ionic conductivity of 8 mol% yttria stabilized zirconia. Journal of the European Ceramic Society, 2019, 39, 1352-1358.	5.7	30
46	Thermohydraulic characterization of flow boiling in a nanostructured microchannel heat sink with vapor venting manifold. International Journal of Heat and Mass Transfer, 2019, 130, 1249-1259.	4.8	32
47	Flash sintering of ceramic films: The influence of surface to volume ratio. Journal of the American Ceramic Society, 2019, 102, 3063-3069.	3.8	9
48	Facile Fabrication of Nanostructured Microchannels for Flow Boiling Heat Transfer Enhancement. Heat Transfer Engineering, 2019, 40, 537-548.	1.9	23
49	On the synchronicity of flash sintering and phase transformation. Journal of the American Ceramic Society, 2019, 102, 3110-3116.	3.8	26
50	Aqueous ionic liquid solutions for boiling heat transfer enhancement in the absence of buoyancy induced bubble departure. International Journal of Heat and Mass Transfer, 2018, 122, 354-363.	4.8	24
51	Hotspot Thermal Management via Thin-Film Evaporation—Part I: Experimental Characterization. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 88-98.	2.5	11
52	Phase-pure BiFeO ₃ produced by reaction flash-sintering of Bi ₂ O ₃ and Fe ₂ O ₃ . Journal of Materials Chemistry A, 2018, 6, 5356-5366.	10.3	83
53	AC electric field-induced softening of alkali silicate glasses. Journal of the American Ceramic Society, 2018, 101, 2277-2286.	3.8	6
54	Hotspot Thermal Management via Thin-Film Evaporation—Part II: Modeling. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 99-112.	2.5	7

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55	Continuous flash sintering. Journal of the American Ceramic Society, 2018, 101, 1432-1440.	3.8	25
56	Measurement of O and Ti atom displacements in TiO ₂ during flash sintering experiments. Journal of the American Ceramic Society, 2018, 101, 1811-1817.	3.8	54
57	Generation of Frenkel defects above the Debye temperature by proliferation of phonons near the Brillouin zone edge. New Journal of Physics, 2018, 20, 093013.	2.9	45
58	Biomass-gasification-based atmospheric water harvesting in India. Energy, 2018, 165, 610-621.	8.8	40
59	Surfactant aided bubble departure during pool boiling. International Journal of Thermal Sciences, 2018, 131, 105-113.	4.9	48
60	Wettability-independent critical heat flux during boiling crisis in foaming solutions. International Journal of Heat and Mass Transfer, 2018, 126, 567-579.	4.8	38
61	Current limit diagrams for dendrite formation in solid-state electrolytes for Li-ion batteries. Journal of Power Sources, 2017, 343, 119-126.	7.8	161
62	The onset of the flash transition in single crystals of cubic zirconia as a function of electric field and temperature. Scripta Materialia, 2017, 134, 123-127.	5.2	54
63	Flash sintering of a three-phase alumina, spinel, and yttria-stabilized zirconia composite. Journal of the American Ceramic Society, 2017, 100, 3262-3268.	3.8	37
64	Droplets on Microdecorated Surfaces: Evolution of the Polygonal Contact Line. Langmuir, 2017, 33, 4854-4862.	3.5	19
65	Spline Based Shape Prediction and Analysis of Uniformly Rotating Sessile and Pendant Droplets. Langmuir, 2017, 33, 5603-5612.	3.5	10
66	Dynamic Roughness Ratio-Based Framework for Modeling Mixed Mode of Droplet Evaporation. Langmuir, 2017, 33, 7191-7201.	3.5	19
67	Stress-rupture measurements of cast magnesium strengthened by in-situ production of ceramic particles. Journal of Magnesium and Alloys, 2017, 5, 225-230.	11.9	13
68	Flash transition as a possible origin for low open circuit voltage in thin film solid oxide fuel cells. Journal of Power Sources, 2017, 359, 48-51.	7.8	6
69	Flash sintering of highly insulating nanostructured phase-pure BiFeO ₃ . Journal of the American Ceramic Society, 2017, 100, 3365-3369.	3.8	58
70	Processing, microstructural evolution and strength properties of in-situ magnesium matrix composites containing nano-sized polymer derived SiCNO particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 685, 429-438.	5.6	53
71	In-situ measurements of lattice expansion related to defect generation during flash sintering. Journal of the American Ceramic Society, 2017, 100, 4965-4970.	3.8	76
72	Thin-film evaporation from micropillar wicks in ambient environment. , 2017, , .		1

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73	Two unique measurements related to flash experiments with yttria-stabilized zirconia. Journal of the American Ceramic Society, 2017, 100, 5374-5378.	3.8	43
74	Mechanism of electric field-induced softening (EFIS) of alkali silicate glasses. Journal of Non-Crystalline Solids, 2017, 471, 384-395.	3.1	23
75	Spline Based Modeling of Two-Dimensional Droplets on Rough and Heterogeneous Surfaces. Lecture Notes in Mechanical Engineering, 2017, , 1049-1058.	0.4	0
76	Predicting structural properties of amorphous silicon carbonitride by atomistic simulation. International Journal of Materials and Structural Integrity, 2016, 10, 63.	0.1	1
77	Onset of Nucleate Boiling, Void Fraction, and Liquid Film Thickness. , 2016, , 5-90.		5
78	Analysis of the Power Density at the Onset of Flash Sintering. Journal of the American Ceramic Society, 2016, 99, 3226-3232.	3.8	150
79	Broadening of Diffraction Peak Widths and Temperature Nonuniformity During Flash Experiments. Journal of the American Ceramic Society, 2016, 99, 3429-3434.	3.8	27
80	Experimental Characterization and Modeling of Capillary-Pumped Thin-Film Evaporation From Micropillar Wicks. , 2016, , .		0
81	Surfactants for Bubble Removal against Buoyancy. Scientific Reports, 2016, 6, 19113.	3.3	57
82	Preliminary investigation of hydroxyapatite microstructures prepared by flash sintering. Advances in Applied Ceramics, 2016, 115, 276-281.	1.1	26
83	Additive Manufacturing of Ceramics Enabled by Flash Pyrolysis of Polymer Precursors with Nanoscale Layers. Journal of the American Ceramic Society, 2016, 99, 57-63.	3.8	22
84	Three-dimensional architecture of lithium-anodes made from graphite fibers coated with thin-films of silicon oxycarbide: Design, performance and manufacturability. Journal of Power Sources, 2016, 310, 18-25.	7.8	9
85	Electric field-assisted flash sintering of CaCu ₃ Ti ₄ O ₁₂ : Microstructure characteristics and dielectric properties. Journal of Alloys and Compounds, 2016, 682, 753-758.	5.5	26
86	Hafnia-silicon carbide nanocomposites II: Measurements of the residual stress. Journal of the European Ceramic Society, 2016, 36, 937-942.	5.7	0
87	Beyond flash sintering in 3 mol % yttria stabilized zirconia. Journal of the Ceramic Society of Japan, 2016, 124, 283-288.	1.1	74
88	Microstructure and microchemistry of flash sintered K _{0.5} Na _{0.5} NbO ₃ . Journal of the Ceramic Society of Japan, 2016, 124, 321-328.	1.1	39
89	Electric field-assisted ultrafast synthesis of nanopowders: a novel and cost-efficient approach. RSC Advances, 2016, 6, 107208-107213.	3.6	17
90	Hotspot thermal management via thin-film evaporation. , 2016, , .		2

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91	Additive Manufacturing of SiCN Ceramic Matrix for SiC Fiber Composites by Flash Pyrolysis of Nanoscale Polymer Films. Journal of the American Ceramic Society, 2016, 99, 1855-1858.	3.8	14
92	Design of micropillar wicks for thin-film evaporation. International Journal of Heat and Mass Transfer, 2016, 101, 280-294.	4.8	116
93	The Change of X-ray Diffraction Peak Width During <i>in situ</i> Conventional Sintering of Nanoscale Powders. Journal of the American Ceramic Society, 2016, 99, 765-768.	3.8	11
94	Visualization of the Evaporating Liquid-Vapor Interface in Micropillar Arrays. Journal of Heat Transfer, 2016, 138, .	2.1	3
95	Correlations between conductivity, electroluminescence and flash sintering. Scripta Materialia, 2016, 118, 1-4.	5.2	41
96	Dynamic Evolution of the Evaporating Liquid-Vapor Interface in Micropillar Arrays. Langmuir, 2016, 32, 519-526.	3.5	29
97	Electric field induced texture in titania during experiments related to flash sintering. Journal of the European Ceramic Society, 2016, 36, 257-261.	5.7	43
98	Phase transformation in the alumina-titania system during flash sintering experiments. Journal of the European Ceramic Society, 2016, 36, 733-739.	5.7	64
99	EXTREME HOTSPOT HEAT FLUX THERMAL MANAGEMENT VIA THIN-FILM EVAPORATION FROM MICROSTRUCTURED SURFACES. , 2016, , .		0
100	On the thermodynamically stable amorphous phase of polymer-derived silicon oxycarbide. Scientific Reports, 2015, 5, 14550.	3.3	18
101	Optimization of Biporous Micropillar Array for Enhanced Heat Transfer Performance. , 2015, , .		5
102	Electric field-induced softening of alkali silicate glasses. Applied Physics Letters, 2015, 107, .	3.3	46
103	Temperature Distributions During Flash Sintering of 8% Yttria-Stabilized Zirconia. Journal of the American Ceramic Society, 2015, 98, 3525-3528.	3.8	33
104	Semiconductive Behavior of Polymer-Derived SiCN Ceramics for Hydrogen Sensing. Journal of the American Ceramic Society, 2015, 98, 1052-1055.	3.8	23
105	Low-Wear High-Friction Behavior of Copper Matrix Composites Dispersed With an In Situ Polymer Derived Ceramic. Journal of Tribology, 2015, 137, .	1.9	4
106	Emergence and Extinction of a New Phase During On-Off Experiments Related to Flash Sintering of 3YSZ . Journal of the American Ceramic Society, 2015, 98, 1493-1497.	3.8	91
107	A novel in-situ polymer derived nano ceramic MMC by friction stir processing. Materials and Design, 2015, 85, 626-634.	7.0	47
108	Electroluminescence and the measurement of temperature during Stage III of flash sintering experiments. Journal of the European Ceramic Society, 2015, 35, 3195-3199.	5.7	112

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109	Si<scp>OCN</scp> Functionalized Carbon Nanotube Gas Sensors for Elevated Temperature Applications. Journal of the American Ceramic Society, 2015, 98, 1142-1149.	3.8	16
110	Bubble Nucleation During Oxidation of SiC. Journal of the American Ceramic Society, 2015, 98, 2579-2586.	3.8	19
111	Evaluation of high temperature resistance of white Siâ€“Oâ€“C(â€“H) ceramics in an inert atmosphere. Journal of Non-Crystalline Solids, 2015, 410, 106-111.	3.1	5
112	<i>Ab initio</i> and <scp>FTIR</scp> Studies of <scp>HfSiCNO</scp> Processed from the Polymer Route. Journal of the American Ceramic Society, 2014, 97, 742-749.	3.8	14
113	Reversible elastic deformation of functionalized sp ² carbon at pressures of up to 33â€“GPa. Applied Physics Letters, 2014, 105, 141901.	3.3	0
114	Electric Fields Obviate Constrained Sintering. Journal of the American Ceramic Society, 2014, 97, 3103-3109.	3.8	32
115	Polymer-Derived In-Situ Metal Matrix Composites Created by Direct Injection of a Liquid Polymer into Molten Magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 551-554.	2.2	19
116	Oxidation, mechanical and thermal properties of hafniaâ€“silicon carbide nanocomposites. Journal of the European Ceramic Society, 2014, 34, 1783-1790.	5.7	14
117	Field assisted sintering of ceramic constituted by alumina and yttria stabilized zirconia. Journal of the European Ceramic Society, 2014, 34, 2435-2442.	5.7	85
118	Dramatic influence of interface chemical potentials on the oxidation of silicon and carbon based compounds. Journal of the European Ceramic Society, 2014, 34, 1035-1039.	5.7	1
119	Diffusive relaxation of Li in particles of silicon oxycarbide measured byÂ galvanostatic titrations. Journal of Power Sources, 2014, 249, 219-230.	7.8	13
120	Framework water capacity and infiltration pressure of MFI zeolites. Microporous and Mesoporous Materials, 2014, 190, 84-91.	4.4	20
121	Interfacially engineered liquid-phase-sintered Cuâ€“In composite solders for thermal interface material applications. Journal of Materials Science, 2014, 49, 7844-7854.	3.7	14
122	Nanoporous evaporative device for advanced electronics thermal management. , 2014, , .		19
123	A First Report of Photoemission in Experiments Related to Flash Sintering. Journal of the American Ceramic Society, 2014, 97, 2427-2430.	3.8	71
124	High-resolution liquid patterns via three-dimensional droplet shape control. Nature Communications, 2014, 5, 4975.	12.8	85
125	Flash sintering as a nucleation phenomenon and a model thereof. Journal of the European Ceramic Society, 2014, 34, 4063-4067.	5.7	144
126	Densification behaviour and microstructural development in undoped yttria prepared by flash-sintering. Journal of the European Ceramic Society, 2014, 34, 991-1000.	5.7	159

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127	The Effect of Electric Field on Sintering and Electrical Conductivity of Titania. Journal of the American Ceramic Society, 2014, 97, 527-534.	3.8	151
128	Effect of Hydrophilic Defects on Water Transport in MFI Zeolites. Langmuir, 2014, 30, 6446-6453.	3.5	53
129	Field-assisted sintering of undoped BaTiO ₃ : Microstructure evolution and dielectric permittivity. Journal of the European Ceramic Society, 2014, 34, 3655-3660.	5.7	131
130	Polygonal Droplets on Microstructured Surfaces. Journal of Heat Transfer, 2014, 136, .	2.1	0
131	A Novel In Situ Method for Producing a Dispersion of a Ceramic Phase into Copper That Remains Stable at 0.9T M. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4734-4742.	2.2	22
132	Can Die Configuration Influence Field-Assisted Sintering of Oxides in the SPS Process?. Journal of the American Ceramic Society, 2013, 96, 3697-3700.	3.8	6
133	Non-wetting droplets on hot superhydrophilic surfaces. Nature Communications, 2013, 4, 2518.	12.8	129
134	Extreme-rate capable and highly stable SiCO-TiO ₂ hybrids for Li ion battery anodes. Chemical Communications, 2013, 49, 9657.	4.1	11
135	Experiment and modeling of microstructured capillary wicks for thermal management of electronics. , 2013, , .		6
136	The role of non-stoichiometric defects in radiation damage evolution of SrTiO ₃ . Journal of Materials Chemistry A, 2013, 1, 9235.	10.3	11
137	Flash Sintering of Anode-Electrolyte Multilayers for SOFC Applications. Journal of the American Ceramic Society, 2013, 96, 1352-1354.	3.8	47
138	Oxidation process of white Si-O-C(H) ceramics with various hydrogen contents. Scripta Materialia, 2013, 69, 602-605.	5.2	25
139	Wettability of Graphene. Nano Letters, 2013, 13, 1509-1515.	9.1	400
140	Pyrolysis of Titanicene Molecular Layer Deposition Films as Precursors for Conducting TiO ₂ /Carbon Composite Films. Journal of Physical Chemistry C, 2013, 117, 17442-17450.	3.1	50
141	Impedance Spectroscopy and Dielectric Properties of Flash Versus Conventionally Sintered Yttria-Doped Zirconia Electroceramics Viewed at the Microstructural Level. Journal of the American Ceramic Society, 2013, 96, 3760-3767.	3.8	84
142	Limits to the Stability of the Amorphous Nature of Polymer-Derived HfSiCNO Compounds. Journal of the American Ceramic Society, 2013, 96, 2117-2123.	3.8	17
143	Influence of the Field and the Current Limit on Flash Sintering at Isothermal Furnace Temperatures. Journal of the American Ceramic Society, 2013, 96, 2754-2758.	3.8	203
144	Oxidation of Polymer-Derived HfSiCNO up to 1600°C. Journal of the American Ceramic Society, 2013, 96, 1278-1284.	3.8	24

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145	Chemical Potential-Based Analysis for the Oxidation Kinetics of Si and SiC Single Crystals. Journal of the American Ceramic Society, 2013, 96, 2926-2934.	3.8	6
146	A Langmuir-Kinetic Model for CVD Growth from Chemical Precursors. Chemical Vapor Deposition, 2013, 19, 260-266.	1.3	3
147	Capillary-Limited Evaporation From Well-Defined Microstructured Surfaces. , 2013, , .		2
148	Grain Boundary Resistivity of Yttria-Stabilized Zirconia at 1400°C. Journal of Ceramics, 2013, 2013, 1-4.	0.9	4
149	PDCs functionalized carbon nanostructure for gas sensing application. , 2012, , .		0
150	On the Scaling of Pool Boiling Heat Flux With Gravity and Heater Size. Journal of Heat Transfer, 2012, 134, .	2.1	24
151	Pool Boiling Heat Transfer on the International Space Station: Experimental Results and Model Verification. Journal of Heat Transfer, 2012, 134, .	2.1	48
152	Evaporation-Induced Cassie Droplets on Superhydrophilic Microstructured Surfaces. , 2012, , .		1
153	Unified Model for Contact Angle Hysteresis on Heterogeneous and Superhydrophobic Surfaces. Langmuir, 2012, 28, 15777-15788.	3.5	127
154	Flash Sintering of Nanograin Zirconia: Field Assisted Sintering and Superplasticity. Journal of the American Ceramic Society, 2012, 95, 138-146.	3.8	95
155	Contact line behavior for a highly wetting fluid under superheated conditions. International Journal of Heat and Mass Transfer, 2012, 55, 2664-2675.	4.8	64
156	Defect Structure of Flash Sintered Strontium Titanate. Journal of the American Ceramic Society, 2012, 95, 2531-2536.	3.8	148
157	Joule heating during flash-sintering. Journal of the European Ceramic Society, 2012, 32, 2293-2301.	5.7	419
158	Particle size effects in flash sintering. Journal of the European Ceramic Society, 2012, 32, 3129-3136.	5.7	109
159	Boiling in variable gravity under the action of an electric field: results of parabolic flight experiments. Journal of Physics: Conference Series, 2011, 327, 012039.	0.4	11
160	Surface Diffusion-Controlled Neck Growth Kinetics in Early Stage Sintering of Zirconia, with and without Applied DC Electrical Field. Journal of the American Ceramic Society, 2011, 94, 391-395.	3.8	50
161	Flash Sintering of Cubic Yttria-Stabilized Zirconia at 750°C for Possible Use in SOFC Manufacturing. Journal of the American Ceramic Society, 2011, 94, 316-319.	3.8	218
162	Influence of Externally Imposed and Internally Generated Electrical Fields on Grain Growth, Diffusional Creep, Sintering and Related Phenomena in Ceramics. Journal of the American Ceramic Society, 2011, 94, 1941-1965.	3.8	267

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163	Surface Energy of Sol Gelâ€Derived Silicon Oxycarbide Glasses. Journal of the American Ceramic Society, 2011, 94, 4523-4533.	3.8	22
164	Field assisted and flash sintering of alumina and its relationship to conductivity and MgO-doping. Journal of the European Ceramic Society, 2011, 31, 2827-2837.	5.7	310
165	Liquid phase sintered Cuâ€In composite solders for thermal interface material and interconnect applications. Journal of Materials Science, 2011, 46, 7012-7025.	3.7	17
166	Ultrahigh figure-of-merit for hydrogen generation from sodium borohydride using ternary metal catalysts. Journal of Power Sources, 2011, 196, 69-75.	7.8	22
167	Superefficient thin film multilayer catalyst for generating hydrogen from sodium borohydride. Journal of Power Sources, 2011, 196, 741-746.	7.8	16
168	Cyclic stability and C-rate performance of amorphous silicon and carbon based anodes for electrochemical storage of lithium. Journal of Power Sources, 2011, 196, 2179-2186.	7.8	107
169	Flash-sintering of Co ₂ MnO ₄ spinel for solid oxide fuel cell applications. Journal of Power Sources, 2011, 196, 2061-2065.	7.8	181
170	C-rate performance of silicon oxycarbide anodes for Li ⁺ batteries enhanced by carbon nanotubes. Journal of Power Sources, 2011, 196, 2875-2878.	7.8	27
171	Silicon-oxycarbide based thin film anodes for lithium ion batteries. Journal of Power Sources, 2011, 196, 5945-5950.	7.8	52
172	Gravity Scaling Parameter for Pool Boiling Heat Transfer. Journal of Heat Transfer, 2010, 132, .	2.1	26
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