

Fumihiro Wakai

List of Publications by Year in Descending Order

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

205
papers

4,161
citations

33
h-index

57
g-index

210
ext. papers

4,443
ext. citations

4.4
avg, IF

5.35
L-index

#	Paper	IF	Citations
205	Numerical analysis of point-sharp indentation-load relaxation simulated using the finite-element method to characterize the power-law creep deformation of a visco-elastoplastic solid. <i>International Journal of Solids and Structures</i> , 2022 , 238, 111417	3.1	
204	Morphology of subsurface cracks in glass-ceramics induced by Vickers indentation observed by synchrotron X-ray multiscale tomography.. <i>Scientific Reports</i> , 2022 , 12, 6994	4.9	4
203	Domain coarsening in viscous sintering as a result of topological pore evolution. <i>Journal of the European Ceramic Society</i> , 2021 , 42, 729-729	6	1
202	Microstructural evolution of electrodes in sintering of multi-layer ceramic capacitors (MLCC) observed by synchrotron X-ray nano-CT. <i>Acta Materialia</i> , 2021 , 206, 116605	8.4	7
201	Mechanics of shape evolution of particle aggregates in viscous sintering. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 797-810	6	
200	Anisotropic microstructural evolution and coarsening in free sintering and constrained sintering of metal film by using FIB-SEM tomography. <i>Acta Materialia</i> , 2021 , 215, 117087	8.4	1
199	Low temperature heat capacity measurements of Si_3N_4 and Si_3N_4 : Determination of the equilibrium phase boundary between Si_3N_4 and Si_3N_4 . <i>Journal of the European Ceramic Society</i> , 2020 , 40, 6309-6315	6	2
198	Viscous Poisson's ratio, bulk and shear viscosity during electrical field assisted sintering of polycrystalline ceria. <i>Scripta Materialia</i> , 2020 , 178, 240-243	5.6	8
197	3D multiscale-imaging of processing-induced defects formed during sintering of hierarchical powder packings. <i>Scientific Reports</i> , 2019 , 9, 11595	4.9	14
196	Effect of the friction between a point-sharp indenter and an indented elastoplastic solid on the load and depth sensing indentation. <i>Materials Today: Proceedings</i> , 2019 , 16, 119-123	1.4	
195	Sintering mechanics of ceramics: a short review. <i>Materials Today: Proceedings</i> , 2019 , 16, 4-13	1.4	2
194	Determination of sintering stress and bulk viscosity from sinter-forging and X-ray microtomography methods: a Review. <i>Materials Today: Proceedings</i> , 2019 , 16, 42-48	1.4	1
193	Thermal expansion and P-V-T equation of state of cubic silicon nitride. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 3627-3633	6	6
192	Micromechanics of formation and shrinkage of a closed pore in sintering by coupled grain boundary/surface diffusion. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 2952-2959	6	2
191	A model of crack healing of glass by viscous flow at elevated temperatures. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 1373-1378	3.8	3
190	Microstructure Design for Oxide/Non-oxide Ceramics for Structural Applications 2019 , 135-144		
189	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. <i>Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2019 , 66, 604-610	0.2	

188	Comparison between sinter forging and X-ray microtomography methods for determining sintering stress and bulk viscosity. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 2053-2058	6	4
187	Influence of binder layer of spray-dried granules on occurrence and evolution of coarse defects in alumina ceramics during sintering. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 1846-1852	6	10
186	Sintering forces acting among particles during sintering by grain-boundary/surface diffusion. <i>Journal of the American Ceramic Society</i> , 2018 , 102, 538	3.8	3
185	Transformation Toughening by Fracture-Induced Amorphization in Nanopolycrystalline Stishovite. <i>Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu</i> , 2018 , 28, 170-176	0	
184	Surface tension-pressure superposition principle for anisotropic shrinkage of an ellipsoidal pore in viscous sintering. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 4283-4289	6	7
183	Computation of sintering stress and bulk viscosity from microtomographic images in viscous sintering of glass particles. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 867-875	3.8	14
182	Picosecond amorphization of SiO stishovite under tension. <i>Science Advances</i> , 2017 , 3, e1602339	14.3	11
181	Transparent polycrystalline cubic silicon nitride. <i>Scientific Reports</i> , 2017 , 7, 44755	4.9	36
180	Interface topology for distinguishing stages of sintering. <i>Scientific Reports</i> , 2017 , 7, 11106	4.9	28
179	Evaluation of effects of crack deflection and grain bridging on toughening of nanocrystalline SiO ₂ stishovite. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 5113-5117	6	5
178	Strength and toughness of nanocrystalline SiO ₂ stishovite toughened by fracture-induced amorphization. <i>Acta Materialia</i> , 2017 , 124, 316-324	8.4	6
177	Evaluation of Macroscopic Mechanical Properties from 3-D Visualization of Microstructure in Sintering. <i>Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2017 , 64, 495-500	0.2	
176	Effect of the Elastic Deformation of a Point-Sharp Indenter on Nanoindentation Behavior. <i>Materials</i> , 2017 , 10,	3.5	6
175	Determination of the size of representative volume element for viscous sintering. <i>Journal of the Ceramic Society of Japan</i> , 2016 , 124, 421-425	1	15
174	Coarse pore evolution in dry-pressed alumina ceramics during sintering. <i>Advanced Powder Technology</i> , 2016 , 27, 1006-1012	4.6	23
173	FAST/SPS sintering of nanocrystalline zinc oxide Part II: Abnormal grain growth, texture and grain anisotropy. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 1221-1232	6	40
172	Thermal-Shock Fracture and Damage Resistance Improved by Whisker Reinforcement in Alumina Matrix Composite. <i>International Journal of Applied Ceramic Technology</i> , 2016 , 13, 653-661	2	6
171	Sintering force behind the viscous sintering of two particles. <i>Acta Materialia</i> , 2016 , 109, 292-299	8.4	32

170	Representative indentation yield stress evaluated by behavior of nanoindentations made with a point sharp indenter. <i>Mechanics of Materials</i> , 2016 , 92, 1-7	3.3	4
169	Clarification of the Relationship between the Microscopic Powder Packing and the Macroscopic Shrinkage during Sintering by using 3D Tomography. <i>Hosokawa Powder Technology Foundation ANNUAL REPORT</i> , 2016 , 24, 144-147	0	
168	Hafnia-silicon carbide nanocomposites II: Measurements of the residual stress. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 937-942	6	
167	Large increase in fracture resistance of stishovite with crack extension less than one micrometer. <i>Scientific Reports</i> , 2015 , 5, 10993	4.9	19
166	High-strain-rate superplasticity in nanocrystalline silicon nitride ceramics under compression. <i>Scripta Materialia</i> , 2015 , 103, 22-25	5.6	10
165	Sintering force behind shape evolution by viscous flow. <i>Journal of the European Ceramic Society</i> , 2015 , 35, 1119-1122	6	13
164	Evolution of Microstructure and Intergranular Glass Chemistry in Plastically Deformed Nanocrystalline Si ₃ N ₄ Ceramics. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 178-185	3.8	2
163	Effects of Atmospheric Composition on the Molecular Structure of Synthesized Silicon Oxycarbides. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 3373-3380	3.8	19
162	Representative indentation elastic modulus evaluated by unloading of nanoindentation made with a point sharp indenter. <i>Mechanics of Materials</i> , 2015 , 83, 66-71	3.3	6
161	Fracture-induced amorphization of polycrystalline SiO ₂ stishovite: a potential platform for toughening in ceramics. <i>Scientific Reports</i> , 2014 , 4, 6558	4.9	18
160	New processing method for tungsten carbide nano-crystalline particles and nano structural carbon via polyacrylonitrile gasification. <i>Journal of the Ceramic Society of Japan</i> , 2014 , 122, 570-573	1	1
159	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. <i>Acta Materialia</i> , 2014 , 66, 54-62	8.4	25
158	Development of Superplastic Ceramics 2013 , 765-771		
157	Toughening enhanced at elevated temperatures in an alumina/zirconia dual-phase matrix composite reinforced with silicon carbide whiskers. <i>Journal of the European Ceramic Society</i> , 2013 , 33, 3157-3163	6	12
156	Multifunctional porous titanium oxide coating with apatite forming ability and photocatalytic activity on a titanium substrate formed by plasma electrolytic oxidation. <i>Materials Science and Engineering C</i> , 2013 , 33, 4871-5	8.3	32
155	Transparent nanocrystalline bulk alumina obtained at 7.7GPa and 800°C. <i>Scripta Materialia</i> , 2013 , 69, 362-365	5.6	45
154	Thermal barrier coating made of porous zirconium oxide on a nickel-based single crystal superalloy formed by plasma electrolytic oxidation. <i>Surface and Coatings Technology</i> , 2013 , 223, 47-51	4.4	18
153	Tensor virial equation of evolving surfaces in sintering of aggregates of particles by diffusion. <i>Acta Materialia</i> , 2013 , 61, 4103-4112	8.4	6

152	Mechanics of viscous sintering on the micro- and macro-scale. <i>Acta Materialia</i> , 2013 , 61, 239-247	8.4	12
151	High temperature plasticity in yttria stabilised tetragonal zirconia polycrystals (Y-TZP). <i>International Materials Reviews</i> , 2013 , 58, 399-417	16.1	22
150	Effect of CaO Addition on Compressive Deformation of Silicon Nitride Ceramic with Y-Mg-Si-O-N Glassy System. <i>International Journal of Applied Ceramic Technology</i> , 2013 , 10, 756-763	2	3
149	Microstructural Evolution and Anisotropic Shrinkage in Constrained Sintering and Sinter Forging. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 2389-2397	3.8	18
148	Tensor-Virial Equation for Deformation of a Particle in Viscous Sintering. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 2785-2787	3.8	13
147	Three-dimensional computer study of rearrangement during liquid phase sintering. <i>Mathematical and Computer Modelling</i> , 2012 , 55, 1251-1262		5
146	Optical Properties of Afterglow Nanoparticles : , Capped with Polyethylene Glycol. <i>Advances in Optical Technologies</i> , 2012 , 2012, 1-6		10
145	Direct observation of sintering mechanics of a single grain boundary. <i>Acta Materialia</i> , 2012 , 60, 507-516	8.4	9
144	Cation diffusion in yttria-zirconia by molecular dynamics. <i>Solid State Ionics</i> , 2011 , 204-205, 1-6	3.3	23
143	Mechanics of sintering for coupled grain boundary and surface diffusion. <i>Acta Materialia</i> , 2011 , 59, 5379-5387	8.4	59
142	Effect of grain boundary sliding on shear viscosity and viscous Poisson's ratio in macroscopic shrinkage during sintering. <i>Acta Materialia</i> , 2011 , 59, 774-784	8.4	20
141	Preparation of long-afterglow colloidal solution of Sr ₂ MgSi ₂ O ₇ : Eu ²⁺ , Dy ³⁺ by laser ablation in liquid. <i>Applied Surface Science</i> , 2011 , 257, 2170-2175	6.7	37
140	Comment on "Local vs. global approach in the analysis of sintering kinetics" <i>Scripta Materialia</i> , 2010 , 62, 117-119	5.6	2
139	Anisotropic viscosities and shrinkage rates in sintering of particles arranged in a simple orthorhombic structure. <i>Acta Materialia</i> , 2010 , 58, 1921-1929	8.4	30
138	A Microscopic Model of Interface-Reaction-Controlled Sintering of Spherical Particles of Different Phases. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 1663-1671	3.8	10
137	Anisotropic sintering stress for sintering of particles arranged in orthotropic symmetry. <i>Acta Materialia</i> , 2009 , 57, 3955-3964	8.4	51
136	Development of Creep-Resistant Tungsten Carbide Copper Cemented Carbide. <i>Materials Transactions</i> , 2009 , 50, 1250-1254	1.3	6
135	Micro-Mechanical Principle of Sintering in Particle-Scale. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2009 , 56, 611-618	0.2	

- 134 High-Temperature Compressive Deformation of SiAlON Polycrystals Prepared without Additives. *Key Engineering Materials*, **2008**, 403, 117-120 0.4
- 133 Large-size ultrahigh strength Ni-based bulk metallic glassy matrix composites with enhanced ductility fabricated by spark plasma sintering. *Applied Physics Letters*, **2008**, 92, 121907 3.4 40
- 132 Plasticity of Fe-Oxypnictides Superconductor. *Journal of the Physical Society of Japan*, **2008**, 77, 125-126 1.5
- 131 Enhancement of high-temperature deformation in fine-grained silicon carbide with Al doping. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 148, 261-264 3.1 9
- 130 High-temperature compressive deformation of SiAlON polycrystals containing minimum amount of intergranular glass phase. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 148, 203-206 3.1 9
- 129 Microstructure and properties of ceramic particulate reinforced metallic glassy matrix composites fabricated by spark plasma sintering. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 148, 77-81 3.1 34
- 128 Integrated molding of nanocrystalline tungsten carbide powder with stainless steel. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 148, 145-148 3.1 11
- 127 EVALUATION METHODS FOR PROPERTIES OF NANOSTRUCTURED BODY **2008**, 317-383 2
- 126 Anisotropic shrinkage induced by particle rearrangement in sintering. *Acta Materialia*, **2007**, 55, 4553-4564 3.1 32
- 125 Pore channel closure in sintering of a ring of three spheres. *Journal of the European Ceramic Society*, **2007**, 27, 3365-3370 6 8
- 124 High-temperature deformation of SiAlON nanoceramics without additives. *Scripta Materialia*, **2007**, 56, 871-874 5.6 12
- 123 Interplay between Surface and Grain Boundary in Sintering. *Materials Science Forum*, **2007**, 558-559, 1029-1034 2.1 1034
- 122 Superplastic Flow of Silicon Nitride-Based Nanocomposite at High Strain Rates. *Materials Science Forum*, **2007**, 551-552, 597-600 0.4 1
- 121 Three-Dimensional Simulation of Coarsening and Grain Growth in Sintering. *Materials Science Forum*, **2007**, 539-543, 2359-2364 0.4 1
- 120 Effect of Chemical Composition of Intergranular Glass on Superplastic Deformation of Silicon Nitride. *Key Engineering Materials*, **2006**, 317-318, 399-402 0.4 1
- 119 Bulk Consolidation of Non-Oxide Ceramic Powders Derived from Polymer Precursors. *Key Engineering Materials*, **2006**, 317-318, 15-18 0.4 1
- 118 Deformation Behavior of SiO₂ Doped Nanocrystalline Monoclinic Zirconia at Low Temperatures. *Key Engineering Materials*, **2006**, 317-318, 433-436 0.4 1
- 117 Superplastic Deformation of Silicon Nitride Nanocomposite at High Strain Rates. *Key Engineering Materials*, **2006**, 317-318, 403-406 0.4 1

116	Evaluation of Thermal Stability of Porous Material by Sintering Stress. <i>Key Engineering Materials</i> , 2006 , 317-318, 683-688	0.4	
115	Grain Boundary Dynamics in Ceramics Superplasticity 2006 , 297-314		
114	High-Temperature Deformation of Si-C-N Monoliths Containing Residual Amorphous Phase Derived from Polyvinylsilazane. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 575-579		
113	Influence of Particle Arrangement on Coarsening during Sintering of Three Spherical Particles. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 974-978		6
112	Dedicated to Professor Güter Petzow on the Occasion of his 80th Birthday. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, P1-P2		
111	?????????????????????????????????????. <i>Materia Japan</i> , 2006 , 45, 644-647	0.1	1
110	Modeling and Simulation of Elementary Processes in Ideal Sintering. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 1471-1484	3.8	66
109	Shrinkage and disappearance of a closed pore in the sintering of particle cluster. <i>Acta Materialia</i> , 2006 , 54, 793-805	8.4	27
108	Effect of chemical composition of intergranular glass on superplastic compressive deformation of Silicon nitride. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 1069-1074	6	9
107	Nano-scale Joining and Cutting Technologies Development of Nanocrystalline Ceramics: Application to Superplastic Diffusion Bonding. <i>Yosetsu Gakkai Shi/Journal of the Japan Welding Society</i> , 2006 , 75, 171-174	0.1	
106	Quasi-equilibrium sintering of particle clusters containing Bernal holes. <i>International Journal of Materials Research</i> , 2006 , 97, 670-675	0.5	
105	Indentation Size Effect on the Hardness of Zirconia Polycrystals 2005 , 13-20		
104	Coarsening and grain growth in sintering of two particles of different sizes. <i>Acta Materialia</i> , 2005 , 53, 1361-1371	8.4	74
103	Hardening in Creep of Alumina by Zirconium Segregation at the Grain Boundary. <i>Journal of the American Ceramic Society</i> , 2005 , 80, 2361-2366	3.8	71
102	Compression Deformation Mechanism of Silicon Carbide: I, Fine-Grained Boron- and Carbon-Doped Silicon Carbide Fabricated by Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 2005 , 87, 1919-1926	3.8	12
101	Strengthening and Toughening of Silicon Nitride by Superplastic Deformation. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 713-716	3.8	44
100	Effect of Oxygen Segregation at Grain Boundaries on Deformation of B, C-Doped Silicon Carbides at Elevated Temperatures. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 1558-1563	3.8	7
99	Dynamics of Grain Boundary Networks in Superplasticity. <i>Materials Science Forum</i> , 2004 , 447-448, 49-54	0.4	1

98	Fabrication of Nanograined Silicon Carbide by Ultrahigh-Pressure Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 771-773	3.8	49
97	Superplasticity of Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 2916-2918	3.8	56
96	Densification of Precursor-Derived Si-C-N Ceramics by High-Pressure Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 2004 , 85, 1706-1712	3.8	32
95	Deformation of Monoclinic ZrO ₂ Polycrystals and Y ₂ O ₃ -Stabilized Tetragonal ZrO ₂ Polycrystals below the Monoclinic-Tetragonal Transition Temperature. <i>Journal of the American Ceramic Society</i> , 2004 , 85, 2834-2836	3.8	17
94	Detection of Boron Segregation to Grain Boundaries in Silicon Carbide by Spatially Resolved Electron Energy-Loss Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 469-472	3.8	49
93	Superplasticity-like Deformation of Nanocrystalline Monoclinic Zirconia at Elevated Temperatures. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 1122-1125	3.8	15
92	Effect of Amount of Boron Doping on Compression Deformation of Fine-Grained Silicon Carbide at Elevated Temperature. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 1525-1529	3.8	14
91	Sintering forces in equilibrium and non-equilibrium states during sintering of two particles. <i>Science and Technology of Advanced Materials</i> , 2004 , 5, 521-525	7.1	12
90	Methods to calculate sintering stress of porous materials in equilibrium. <i>Acta Materialia</i> , 2004 , 52, 5621-5631	8.3	59
89	Effect of internal stress disturbance on the stress-induced transformation toughening of an alumina/zirconia dual-phase composite. <i>Philosophical Magazine</i> , 2004 , 84, 3741-3754	1.6	4
88	Dynamics of Grain Boundary Network in Ceramics Superplasticity. <i>Journal of the Ceramic Society of Japan</i> , 2004 , 112, 472-476		6
87	Effects of Temperature and Chemical Composition of Intergranular Glass on Dihedral Angle of Glass-Doped 3Y-TZP. <i>Journal of the Ceramic Society of Japan</i> , 2004 , 112, 661-664		
86	Compressive Deformation of Partially Crystallized Amorphous Si-B-C-N Ceramics at Elevated Temperatures. <i>Materials Transactions</i> , 2003 , 44, 226-231	1.3	1
85	Compressive Deformation of Precursor-Derived Si-C-N Ceramics at Elevated Temperatures. <i>Materials Transactions</i> , 2003 , 44, 794-797	1.3	1
84	Equilibrium configuration of particles in sintering under constraint. <i>Acta Materialia</i> , 2003 , 51, 641-652	8.4	43
83	Sintering through surface motion by the difference in mean curvature. <i>Acta Materialia</i> , 2003 , 51, 4013-4024	8.4	41
82	Dynamic Evolution of Grain-Boundary Films in Liquid-Phase-Sintered Ultrafine Silicon Carbide Material. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1753-1760	3.8	19
81	High temperature plastic anisotropy of Y ₂ O ₃ partially stabilized ZrO ₂ single crystals. <i>Journal of the European Ceramic Society</i> , 2002 , 22, 2609-2613	6	13

80	Topological transformation of grains in superplasticity-like deformation. <i>Acta Materialia</i> , 2002 , 50, 1177-1186	8.1	20
79	Molecular Dynamics Simulation of the Grain Growth in Nano-Grained Metallic Polycrystals. <i>Materials Transactions</i> , 2001 , 42, 2266-2269	1.3	5
78	Ultrahigh-temperature deformation of high-purity HIPed Si ₃ N ₄ . <i>Journal of Materials Science</i> , 2001 , 36, 1459-1467	4.3	
77	High temperature plastic deformation of a tetragonal Y ₂ O ₃ -stabilized ZrO ₂ single crystals. <i>Scripta Materialia</i> , 2001 , 44, 2551-2555	5.6	12
76	Statistics of grain disappearance in three-dimensional normal grain growth. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2001 , 81, 517-524		5
75	Topological transformation of grains in three-dimensional normal grain growth. <i>Journal of Materials Research</i> , 2001 , 16, 2136-2142	2.5	29
74	A Molecular Dynamics Study of Large Deformation of Nanocrystalline Materials. <i>Materials Science Forum</i> , 2001 , 357-359, 571-576	0.4	1
73	Three-dimensional microstructural evolution in ideal grain growth—general statistics. <i>Acta Materialia</i> , 2000 , 48, 1297-1311	8.4	162
72	Millennial Special Leading Papers on Ceramics in the 20th Century: the Best of JCSJ Compressive Deformation Properties and Microstructure in the Superplastic Y-TZP. <i>Journal of the Ceramic Society of Japan</i> , 2000 , 108, S101-S106		
71	Movement of Nanocrystalline Grains in Superplasticity. <i>Key Engineering Materials</i> , 1999 , 166, 153-156	0.4	1
70	High Temperature Compressive Deformation Behavior of Superplastic B, C-SiC. <i>Materials Science Forum</i> , 1999 , 304-306, 495-500	0.4	
69	Tensile Ductility of Liquid-Phase Sintered Silicon Carbide at Elevated Temperature. <i>Materials Science Forum</i> , 1999 , 304-306, 507-512	0.4	14
68	High Temperature Deformation of Precursor Derived Si-C-N Ceramics. <i>Materials Science Forum</i> , 1999 , 304-306, 501-506	0.4	3
67	High Temperature Deformation of Precursor-derived Amorphous Si ₃ N ₄ Ceramics. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 2797-2814	6	44
66	Change in stress, stress sensitivity and activation energy during superplastic deformation of silicon nitride. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999 , 268, 141-146	5.3	5
65	Synthesis of Si ₃ N ₄ Bulk Ceramics with Various Chemical Compositions from Polycarbosilane. <i>Journal of the American Ceramic Society</i> , 1999 , 82, 2337-2341	3.8	24
64	Fabrication of polycarbosilane-derived SiC bulk ceramics by carbothermic reduction. <i>Scripta Materialia</i> , 1999 , 12, 175-178		7
63	Ceramics superplasticity. <i>Current Opinion in Solid State and Materials Science</i> , 1999 , 4, 461-465	12	35

62	Ceramics Superplasticity. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 601, 163		
61	Segregation and Local Structure at Grain Boundaries in SiO ₂ -Doped Tetragonal ZrO ₂ Polycrystalline Materials. <i>Journal of Materials Synthesis and Processing</i> , 1998 , 6, 393-399		6
60	Geometrical Microstructural Development in Superplastic Silicon Nitride with Rod-Shaped Grains. <i>Journal of the American Ceramic Society</i> , 1998 , 81, 3221-3227	3.8	26
59	Indentation cracks in superplastically deformed silicon nitride consisting of strongly aligned rod-shaped grains. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 244, 161-167	5.3	1
58	Microstructures and Mechanical Properties of Anisotropic Silicon Nitride Produced by Superplastic Deformation. <i>Key Engineering Materials</i> , 1998 , 161-163, 555-558	0.4	1
57	Deformation Conditions of SiAlON to Achieve Large Superplastic Elongation. <i>Journal of the Ceramic Society of Japan</i> , 1998 , 106, 1040-1042		5
56	Superplastic forging of silicon nitride ceramics with anisotropic microstructure control. <i>Journal of Materials Science Letters</i> , 1997 , 17, 45-47		9
55	Particle size, shape and orientation distributions: A general spheroid problem and application to deformed Si ₃ N ₄ microstructures. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1996 , 74, 215-228		8
54	Molecular Dynamics Simulation of the Model Grain Boundary Structure of Polycrystalline Materials. <i>Molecular Simulation</i> , 1996 , 18, 179-192	2	8
53	Ceramics superplasticity: Deformation mechanisms and microstructures. <i>Materials Characterization</i> , 1996 , 37, 331-341	3.9	17
52	High temperature deformation of silicon nitride ceramics with different microstructures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 206, 45-48	5.3	19
51	Crack formation and oxidation in superplastically deformed Si ₃ N ₄ . <i>Journal of Materials Science</i> , 1996 , 31, 5499-5504	4.3	2
50	Improved creep resistance of Si ₃ N ₄ /SiC nanocomposites fabricated from amorphous Si-C-N precursor powder. <i>Journal of Materials Science Letters</i> , 1996 , 15, 505-507		18
49	Superplasticity in Si ₃ N ₄ Associated with Rod-like Grain Alignment. <i>Materials Science Forum</i> , 1996 , 243-245, 115-124	0.4	
48	Amorphous Grain Boundary in Superplastic Ceramics. <i>Materials Science Forum</i> , 1996 , 243-245, 337-344	0.4	3
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