

# Gregory E Hilmas

## List of Publications by Year in descending order

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162  
papers

11,559  
citations

31949

53  
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30058

103  
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166  
all docs

166  
docs citations

166  
times ranked

4410  
citing authors

#	ARTICLE	IF	CITATIONS
1	Refractory Diborides of Zirconium and Hafnium. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1347-1364.	1.9	1,711
2	High-strength Zirconium Diboride-Based Ceramics. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1170-1172.	1.9	725
3	Ultra-high temperature ceramics: Materials for extreme environments. <i>Scripta Materialia</i> , 2017, 129, 94-99.	2.6	551
4	Evolution of structure during the oxidation of zirconium diboride-silicon carbide in air up to 1500°C. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2495-2501.	2.8	339
5	Pressureless Densification of Zirconium Diboride with Boron Carbide Additions. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1544-1550.	1.9	299
6	Influence of silicon carbide particle size on the microstructure and mechanical properties of zirconium diboride-silicon carbide ceramics. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2077-2083.	2.8	283
7	Pressureless Sintering of Zirconium Diboride. <i>Journal of the American Ceramic Society</i> , 2006, 89, 450-456.	1.9	278
8	Thermophysical Properties of $ZrB_2$ and $ZrB_2-SiC$ Ceramics. <i>Journal of the American Ceramic Society</i> , 2008, 91, 1405-1411.	1.9	278
9	Effect of hot pressing time and temperature on the microstructure and mechanical properties of $ZrB_2-SiC$ . <i>Journal of Materials Science</i> , 2007, 42, 2735-2744.	1.7	239
10	Oxidation of ultra-high temperature transition metal diboride ceramics. <i>International Materials Reviews</i> , 2012, 57, 61-72.	9.4	201
11	Pressureless Sintering of Zirconium Diboride: Particle Size and Additive Effects. <i>Journal of the American Ceramic Society</i> , 2008, 91, 1398-1404.	1.9	187
12	Mechanical properties of bioactive glass (13-93) scaffolds fabricated by robotic deposition for structural bone repair. <i>Acta Biomaterialia</i> , 2013, 9, 7025-7034.	4.1	178
13	Thermal shock resistance of $ZrB_2$ and $ZrB_2-30\% SiC$ . <i>Materials Chemistry and Physics</i> , 2008, 112, 140-145.	2.0	169
14	Synthesis of single-phase high-entropy carbide powders. <i>Scripta Materialia</i> , 2019, 162, 90-93.	2.6	162
15	Pressureless Sintering of Zirconium Diboride Using Boron Carbide and Carbon Additions. <i>Journal of the American Ceramic Society</i> , 2007, 90, 3660-3663.	1.9	156
16	Pressureless sintering of carbon-coated zirconium diboride powders. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 459, 167-171.	2.6	152
17	Oxidation of Zirconium Diboride-Silicon Carbide at 1500°C at a Low Partial Pressure of Oxygen. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3240-3245.	1.9	150
18	Pressureless Sintering of $ZrB_2-SiC$ Ceramics. <i>Journal of the American Ceramic Society</i> , 2008, 91, 26-32.	1.9	144

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19	Hot Pressing of Tantalum Carbide With and Without Sintering Additives. Journal of the American Ceramic Society, 2007, 90, 393-401.	1.9	138
20	Pressureless sintering of carbon nanotube $\alpha$ -Al <sub>2</sub> O <sub>3</sub> composites. Journal of the European Ceramic Society, 2010, 30, 1373-1380.	2.8	134
21	Low $\alpha$ temperature sintering of single $\alpha$ phase, high $\alpha$ entropy carbide ceramics. Journal of the American Ceramic Society, 2019, 102, 7217-7224.	1.9	128
22	Strength of Zirconium Diboride to 2300 $\alpha$ C. Journal of the American Ceramic Society, 2013, 96, 47-50.	1.9	123
23	Mechanical behavior of zirconium diboride $\alpha$ -silicon carbide $\alpha$ -boron carbide ceramics up to 2200 $\alpha$ C. Journal of the European Ceramic Society, 2015, 35, 463-476.	2.8	123
24	Fabrication of 13-93 bioactive glass scaffolds for bone tissue engineering using indirect selective laser sintering. Biofabrication, 2011, 3, 025004.	3.7	122
25	Low-Temperature Densification of Zirconium Diboride Ceramics by Reactive Hot Pressing. Journal of the American Ceramic Society, 2006, 89, 3638-3645.	1.9	117
26	Synthesis, densification, and mechanical properties of TaB <sub>2</sub> . Materials Letters, 2008, 62, 4251-4253.	1.3	116
27	Fabrication and properties of reactively hot pressed ZrB <sub>2</sub> $\alpha$ -SiC ceramics. Journal of the European Ceramic Society, 2007, 27, 2729-2736.	2.8	109
28	Densification and mechanical properties of TaC-based ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 501, 37-43.	2.6	109
29	Mechanical vs. electrical failure mechanisms in high voltage, high energy density multilayer ceramic capacitors. Journal of Materials Science, 2007, 42, 5613-5619.	1.7	108
30	Improved Oxidation Resistance of Zirconium Diboride by Tungsten Carbide Additions. Journal of the American Ceramic Society, 2008, 91, 3530-3535.	1.9	101
31	Mechanical properties of sintered ZrB <sub>2</sub> $\alpha$ -SiC ceramics. Journal of the European Ceramic Society, 2011, 31, 893-901.	2.8	99
32	Mechanical behavior of zirconium diboride $\alpha$ -silicon carbide ceramics at elevated temperature in air. Journal of the European Ceramic Society, 2013, 33, 2889-2899.	2.8	92
33	Reactive hot pressing of zirconium diboride. Journal of the European Ceramic Society, 2009, 29, 3401-3408.	2.8	90
34	A novel freeform extrusion fabrication process for producing solid ceramic components with uniform layered radiation drying. Additive Manufacturing, 2017, 15, 102-112.	1.7	88
35	Densification, Mechanical Properties, and Oxidation Resistance of TaC $\alpha$ -TaB <sub>2</sub> Ceramics. Journal of the American Ceramic Society, 2008, 91, 4129-4132.	1.9	86
36	Effect of material, process parameters, and simulated body fluids on mechanical properties of 13-93 bioactive glass porous constructs made by selective laser sintering. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 14-24.	1.5	84

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37	A Novel Approach to Developing Biomimetic (‘‘Nacre-Like’’) Metal-Compliant-Phase (Nickel-Alumina) Ceramics through Coextrusion. <i>Advanced Materials</i> , 2016, 28, 10061-10067.	11.1	83
38	Temperature Jump Phenomenon During Plasmatron Testing of ZrB <sub>2</sub> -SiC Ultrahigh-Temperature Ceramics. <i>Journal of Thermophysics and Heat Transfer</i> , 2012, 26, 559-572.	0.9	70
39	Microwave sintering of a ZrB <sub>2</sub> -B <sub>4</sub> C particulate ceramic composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 449-453.	3.8	69
40	Microstructure and mechanical characterization of Zr-Mo cermet produced by hot isostatic pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 497, 79-86.	2.6	68
41	Enhanced densification and mechanical properties of ZrB <sub>2</sub> -SiC processed by a preceramic polymer coating route. <i>Scripta Materialia</i> , 2008, 59, 123-126.	2.6	68
42	Additive manufacturing and mechanical characterization of high density fully stabilized zirconia. <i>Ceramics International</i> , 2017, 43, 6082-6088.	2.3	67
43	Thermal Properties of (Zr, <sub>TM</sub> )B <sub>2</sub> Solid Solutions with <sub>TM</sub> =Hf, Nb, W, Ti, and Y. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1552-1558.	1.9	63
44	Freeze-form extrusion fabrication of functionally graded materials. <i>CIRP Annals - Manufacturing Technology</i> , 2012, 61, 223-226.	1.7	62
45	Processing of dense high-entropy boride ceramics. <i>Journal of the European Ceramic Society</i> , 2020, 40, 3815-3823.	2.8	62
46	Freeze-form extrusion fabrication of ceramic parts. <i>Virtual and Physical Prototyping</i> , 2006, 1, 93-100.	5.3	61
47	Two-step synthesis process for high-entropy diboride powders. <i>Journal of the American Ceramic Society</i> , 2020, 103, 724-730.	1.9	59
48	Aqueous-based freeze-form extrusion fabrication of alumina components. <i>Rapid Prototyping Journal</i> , 2009, 15, 88-95.	1.6	58
49	Ultra-High Temperature Mechanical Properties of a Zirconium Diboride-Zirconium Carbide Ceramic. <i>Journal of the American Ceramic Society</i> , 2016, 99, 597-603.	1.9	58
50	Oxidation of Zirconium Diboride with Tungsten Carbide Additions. <i>Journal of the American Ceramic Society</i> , 2011, 94, 1198-1205.	1.9	57
51	Zirconium Diboride with High Thermal Conductivity. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1689-1691.	1.9	56
52	A study of size effects in bioinspired, ‘‘nacre-like’’, metal-compliant-phase (nickel-alumina) coextruded ceramics. <i>Acta Materialia</i> , 2018, 148, 147-155.	3.8	56
53	Superhard high-entropy AlB <sub>2</sub> -type diboride ceramics. <i>Scripta Materialia</i> , 2021, 199, 113855.	2.6	56
54	Aqueous-based extrusion of high solids loading ceramic pastes: Process modeling and control. <i>Journal of Materials Processing Technology</i> , 2009, 209, 2946-2957.	3.1	55

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55	Silicon carbide-titanium diboride ceramic composites. Journal of the European Ceramic Society, 2013, 33, 2943-2951.	2.8	54
56	Oxidation of ZrB <sub>2</sub> -SiC Ultrahigh-Temperature Ceramic Composites in Dissociated Air. Journal of Thermophysics and Heat Transfer, 2009, 23, 267-278.	0.9	52
57	Characterization of zirconia specimens fabricated by ceramic on-demand extrusion. Ceramics International, 2018, 44, 12245-12252.	2.3	52
58	Mechanical behaviour of carbon fibre reinforced TaC/SiC and ZrC/SiC composites up to 2100°C. Journal of the European Ceramic Society, 2019, 39, 780-787.	2.8	52
59	Dispersion of Zirconium Diboride in an Aqueous, High-Solids Paste. International Journal of Applied Ceramic Technology, 2007, 4, 470-479.	1.1	50
60	Behavior of a composite multidisk clutch subjected to mechanical and frictionally excited thermal load. Wear, 2008, 264, 1059-1068.	1.5	50
61	The effect of a graphite addition on oxidation of ZrB <sub>2</sub> -SiC in air at 1500°C. Journal of the European Ceramic Society, 2013, 33, 413-421.	2.8	45
62	Effect of Nb content on the phase composition, densification, microstructure, and mechanical properties of high-entropy boride ceramics. Journal of the European Ceramic Society, 2021, 41, 92-100.	2.8	45
63	Microstructural Changes in beta-Silicon Nitride Grains upon Crystallizing the Grain-Boundary Glass. Journal of the American Ceramic Society, 1989, 72, 1931-1937.	1.9	44
64	Sintering Mechanisms and Kinetics for Reaction Hot-Pressed ZrB <sub>2</sub> . Journal of the American Ceramic Society, 2015, 98, 2344-2351.	1.9	44
65	Effect of a weak fiber interface coating in ZrB <sub>2</sub> reinforced with long SiC fibers. Materials and Design, 2015, 88, 610-618.	3.3	42
66	ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramics: A comprehensive overview of microstructure and properties relationships. Part I: Processing and microstructure. Journal of the European Ceramic Society, 2019, 39, 1939-1947.	2.8	40
67	Processing, microstructure, and mechanical properties of zirconium diboride-boron carbide ceramics. Ceramics International, 2017, 43, 6942-6948.	2.3	39
68	Processing of ZrC-Mo Cermets for High-Temperature Applications, Part I: Chemical Interactions in the ZrC-Mo System. Journal of the American Ceramic Society, 2007, 90, 1998-2002.	1.9	38
69	Titanium diboride-silicon carbide-boron carbide ceramics with super-high hardness and strength. Journal of the American Ceramic Society, 2018, 101, 497-501.	1.9	37
70	Densification Behavior and Microstructure Evolution of Hot-Pressed HfB <sub>2</sub> . Journal of the American Ceramic Society, 2011, 94, 49-58.	1.9	36
71	Processing, microstructure, and mechanical properties of large-grained zirconium diboride ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 670, 196-204.	2.6	36
72	Processing of ZrC-Mo Cermets for High Temperature Applications, Part II: Pressureless Sintering and Mechanical Properties. Journal of the American Ceramic Society, 2008, 91, 873-878.	1.9	34

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73	Plasma arc welding of ZrB <sub>2</sub> -20vol% ZrC ceramics. Journal of the European Ceramic Society, 2014, 34, 3549-3557.	2.8	33
74	Thermal Shock Resistance and Fracture Behavior of ZrB <sub>2</sub> -Based Fibrous Monolith Ceramics. Journal of the American Ceramic Society, 2009, 92, 161-166.	1.9	32
75	Densification, microstructure, and mechanical properties of ZrC-SiC ceramics. Journal of the American Ceramic Society, 2019, 102, 5786-5795.	1.9	32
76	The irradiation response of ZrC ceramics under 10 MeV Au <sup>3+</sup> ion irradiation at 800 Å°C. Journal of the European Ceramic Society, 2020, 40, 1791-1800.	2.8	32
77	Superhard Boride-Carbide Particulate Composites. Journal of the American Ceramic Society, 2010, 93, 3580-3583.	1.9	31
78	Influence of fibre content on the strength of carbon fibre reinforced HfC/SiC composites up to 2100Å°C. Journal of the European Ceramic Society, 2019, 39, 3594-3603.	2.8	31
79	A simple route to fabricate strong boride hierarchical composites for use at ultra-high temperature. Composites Part B: Engineering, 2020, 183, 107618.	5.9	31
80	Microstructural Evolution in Near-Eutectic Yttrium Silicate Compositions Fabricated from a Bulk Melt and as an Intergranular Phase in Silicon Nitride. Journal of the American Ceramic Society, 1990, 73, 3575-3579.	1.9	30
81	Hybrid Extrusion Force-Velocity Control Using Freeze-Form Extrusion Fabrication for Functionally Graded Material Parts. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2013, 135, .	1.3	30
82	Thermal Properties of Hf-Doped ZrB <sub>2</sub> Ceramics. Journal of the American Ceramic Society, 2015, 98, 2689-2691.	1.9	30
83	Densification behavior of ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramics: The formation and evolution of core-shell solid solution structures. Journal of Alloys and Compounds, 2019, 779, 950-961.	2.8	30
84	Investigation of laser sintering for freeform fabrication of zirconium diboride parts. Virtual and Physical Prototyping, 2012, 7, 25-36.	5.3	29
85	Fabricating ceramic components with water dissolvable support structures by the Ceramic On-Demand Extrusion process. CIRP Annals - Manufacturing Technology, 2017, 66, 225-228.	1.7	29
86	Binderless WC with high strength and toughness up to 1500Å°C. Journal of the European Ceramic Society, 2020, 40, 2287-2294.	2.8	29
87	Mechanical characterization of parts produced by ceramic on-demand extrusion process. International Journal of Applied Ceramic Technology, 2017, 14, 486-494.	1.1	28
88	Effect of ZrB <sub>2</sub> content on the densification, microstructure, and mechanical properties of ZrC-SiC ceramics. Journal of the European Ceramic Society, 2020, 40, 220-225.	2.8	28
89	Thermal Properties of (Zr, TM)B <sub>2</sub> Solid Solutions with TM=Ta, Mo, Re, V, and Cr. Journal of the American Ceramic Society, 2015, 98, 637-644.	1.9	27
90	Oxidation of zirconium diboride with niobium additions. Journal of the European Ceramic Society, 2013, 33, 1591-1598.	2.8	26

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91	Extrusion-based additive manufacturing of functionally graded ceramics. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2049-2057.	2.8	26
92	Slip activation controlled nanohardness anisotropy of ZrB <sub>2</sub> ceramic grains. <i>Acta Materialia</i> , 2017, 140, 452-464.	3.8	25
93	High-temperature damage-tolerance of coextruded, bioinspired (œœnacre-likeœœ), alumina/nickel compliant-phase ceramics. <i>Scripta Materialia</i> , 2019, 158, 110-115.	2.6	25
94	Thermal properties and thermal shock resistance of liquid phase sintered ZrCœœMo cermets. <i>Materials Chemistry and Physics</i> , 2009, 115, 690-695.	2.0	24
95	Optical Emission Spectroscopy During Plasmatron Testing of ZrB <sub>2</sub> -SiC Ultrahigh-Temperature Ceramic Composites. <i>Journal of Thermophysics and Heat Transfer</i> , 2009, 23, 279-285.	0.9	24
96	Effect of Carbon and Oxygen on the Densification and Microstructure of Hot Pressed Zirconium Diboride. <i>Journal of the American Ceramic Society</i> , 2013, 96, 3622-3630.	1.9	24
97	Effect of carbon on the thermal and electrical transport properties of zirconium diboride. <i>Journal of the European Ceramic Society</i> , 2015, 35, 887-896.	2.8	24
98	Coextrusion of ZirconiaœœIron Oxide Honeycomb Substrates for Solar-Based Thermochemical Generation of Carbon Monoxide for Renewable Fuels. <i>Energy &amp; Fuels</i> , 2012, 26, 712-721.	2.5	23
99	New insights into the structure, chemistry, and properties of Cu <sub>4</sub> SnS <sub>4</sub> . <i>Journal of Solid State Chemistry</i> , 2017, 253, 192-201.	1.4	23
100	A modified phase-field model for quantitative simulation of crack propagation in single-phase and multi-phase materials. <i>Engineering Fracture Mechanics</i> , 2018, 200, 339-354.	2.0	23
101	Effects of Ti, Y, and Hf additions on the thermal properties of ZrB <sub>2</sub> . <i>Journal of the European Ceramic Society</i> , 2020, 40, 3824-3828.	2.8	22
102	From thermal conductive to thermal insulating: Effect of carbon vacancy content on lattice thermal conductivity of ZrC. <i>Journal of Materials Science and Technology</i> , 2021, 82, 105-113.	5.6	22
103	Elevated Temperature Thermal Properties of <sc><sc>ZrB<sub>2</sub></sc></sc> with Carbon Additions. <i>Journal of the American Ceramic Society</i> , 2012, 95, 1077-1085.	1.9	21
104	Elevated Temperature Strength Enhancement of ZrB<sub>2</sub>œœ30 vol% SiC Ceramics by Postsintering Thermal Annealing. <i>Journal of the American Ceramic Society</i> , 2016, 99, 962-970.	1.9	20
105	Reaction Processing of UltraœœHigh Temperature W/Ta<sub>2</sub>CœœBased Cermets. <i>Journal of the American Ceramic Society</i> , 2009, 92, 1966-1971.	1.9	19
106	Processing of Carbon Nanofiber Reinforced ZrB <sub>2</sub> Matrix Composites for Aerospace Applications. <i>Advanced Engineering Materials</i> , 2010, 12, 623-626.	1.6	19
107	Microstructural Effects on the Mechanical Properties of <sc><sc>SiC</sc></sc> œœ1.5œœvol% <sc><sc>TiB</sc></sc><sub>2</sub> ParticulateœœReinforced Ceramic Composites. <i>Journal of the American Ceramic Society</i> , 2013, 96, 577-583.	1.9	19
108	Predicting effective fracture toughness of ZrB <sub>2</sub> -based ultra-high temperature ceramics by phase-field modeling. <i>Materials and Design</i> , 2020, 192, 108713.	3.3	19

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109	Synthesis of ZrC <sub>x</sub> with controlled carbon stoichiometry by low temperature solid state reaction. Journal of the European Ceramic Society, 2019, 39, 2594-2600.	2.8	18
110	High-entropy boride-carbide ceramics by sequential boro/carbothermal synthesis. Journal of the American Ceramic Society, 2022, 105, 5543-5547.	1.9	18
111	Mechanical and thermal properties of AlN-BN-SiC ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 494, 239-246.	2.6	17
112	Numerical simulation of wear in a C/C composite multidisk clutch. Carbon, 2009, 47, 2219-2225.	5.4	17
113	ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramics: A comprehensive overview of microstructure and properties relationships. Part II: Mechanical properties. Journal of the European Ceramic Society, 2019, 39, 1948-1954.	2.8	17
114	Room-temperature mechanical properties of a high-entropy diboride. International Journal of Applied Ceramic Technology, 2022, 19, 2293-2299.	1.1	17
115	Mechanical properties of reactively processed W/Ta <sub>2</sub> C-based composites. Journal of the European Ceramic Society, 2010, 30, 2197-2201.	2.8	16
116	Plasma Arc Welding of TiB <sub>2</sub> -TiC. Journal of the American Ceramic Society, 2014, 97, 56-59.	1.9	16
117	Characterization of fusion welded ceramics in the SiC-ZrB <sub>2</sub> -ZrC system. Journal of the European Ceramic Society, 2021, 41, 2255-2262.	2.8	16
118	Effect of tantalum solid solution additions on the mechanical behavior of ZrB <sub>2</sub> . Journal of the European Ceramic Society, 2021, 41, 3219-3226.	2.8	16
119	Densification Behavior and Thermal Properties of Hafnium Diboride with the Addition of Boron Carbides. Journal of the American Ceramic Society, 2012, 95, 2035-2043.	1.9	15
120	Escape from the strength-to-toughness paradox: Bulk ceramics through dual composite architectures. Journal of the European Ceramic Society, 2018, 38, 2961-2970.	2.8	15
121	Effect of moisture on the oxidation behavior of ZrB <sub>2</sub> . Journal of the American Ceramic Society, 2021, 104, 1058-1066.	1.9	15
122	Thermal Shock Resistance of an AlN-BN-SiC Ceramic. Journal of the American Ceramic Society, 2009, 92, 1358-1361.	1.9	14
123	Carbon vacancy ordering in zirconium carbide powder. Journal of the American Ceramic Society, 2020, 103, 2891-2898.	1.9	14
124	Title is missing!. Journal of Materials Science, 1999, 34, 5605-5612.	1.7	13
125	Oxidation of ZrB <sub>2</sub> and ZrB <sub>2</sub> -SiC Ceramics with Tungsten Additions. ECS Transactions, 2009, 16, 137-145.	0.3	13
126	Microstructure and mechanical properties of reaction-sintered zirconium diboride based ceramics. International Journal of Applied Ceramic Technology, 2019, 16, 1715-1722.	1.1	13



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127	Thermal properties of ZrB <sub>2</sub> -TiB <sub>2</sub> solid solutions. Journal of the European Ceramic Society, 2021, 41, 7434-7441.	2.8	13
128	Thermal and electrical properties of a high entropy carbide (Ta, Hf, Nb, Zr) at elevated temperatures. Journal of the American Ceramic Society, 2022, 105, 4426-4434.	1.9	13
129	Solidification of welded SiC-ZrB <sub>2</sub> -ZrC ceramics. Journal of the American Ceramic Society, 2018, 101, 4331-4339.	1.9	12
130	Processing and room temperature mechanical properties of a zirconium carbide ceramic. Journal of the American Ceramic Society, 2021, 104, 413-418.	1.9	12
131	Pressureless sintering of zirconium diboride with carbon and boron carbide nanopowder. Ceramics International, 2022, 48, 13071-13079.	2.3	12
132	Thermal properties and elastic constants of Ta <sub>4</sub> C <sub>3</sub> . Journal of the American Ceramic Society, 2020, 103, 2986-2990.	1.9	11
133	Freeform extrusion fabrication of titanium fiber reinforced 13 <sup>93</sup> bioactive glass scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 153-162.	1.5	10
134	A high strength alumina-silicon carbide-boron carbide triplex ceramic. Ceramics International, 2017, 43, 7958-7962.	2.3	10
135	Additive manufacturing of zirconia parts with organic sacrificial supports. International Journal of Applied Ceramic Technology, 2020, 17, 1544-1553.	1.1	10
136	Electronic structure and thermal conductivity of zirconium carbide with hafnium additions. Journal of the American Ceramic Society, 2021, 104, 4708-4717.	1.9	10
137	Factorial design to minimize residual oxygen in reaction hot-pressed zirconium diboride. International Journal of Applied Ceramic Technology, 2017, 14, 636-643.	1.1	9
138	Response of isotopically tailored titanium diboride to neutron irradiation. Journal of the American Ceramic Society, 2019, 102, 85-89.	1.9	8
139	Superhard single-phase (Ti,Cr)B <sub>2</sub> ceramics. Journal of the American Ceramic Society, 2022, 105, 5032-5038.	1.9	8
140	Strength of functionally designed cellular cemented carbides produced by coextrusion. Journal of Materials Science, 2006, 41, 8367-8371.	1.7	7
141	Processing and thermal properties of an Mo <sub>5</sub> Si <sub>3</sub> C-SiC ceramic. Intermetallics, 2008, 16, 854-859.	1.8	7
142	Freeform extrusion fabrication of titanium fiber reinforced 13 <sup>93</sup> bioactive glass scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 70, 43-52.	1.5	7
143	Elevated temperature electrical resistivity measurements of zirconium diboride using the van der Pauw Method. Journal of the American Ceramic Society, 2019, 102, 7397-7404.	1.9	7
144	Synthesis, densification, microstructure, and mechanical properties of samarium hexaboride ceramic. Journal of the American Ceramic Society, 2019, 102, 1379-1385.	1.9	6

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145	Solute distributions in tantalum-containing zirconium diboride ceramics. Journal of the American Ceramic Society, 2020, 103, 2880-2890.	1.9	6
146	Elevated temperature thermal properties of ZrB <sub>2</sub> -B <sub>4</sub> C ceramics. Journal of the European Ceramic Society, 2022, 42, 4024-4029.	2.8	6
147	Advances in the Fabrication of Functionally Graded Materials Using Extrusion Freeform Fabrication. , 1997, , 319-324.		5
148	Mechanical properties of borothermally synthesized zirconium diboride at elevated temperatures. International Journal of Applied Ceramic Technology, 2021, 18, 1235-1243.	1.1	5
149	Solid-state formation mechanisms of core-shell microstructures in (Zr,Ta)B <sub>2</sub> ceramics. Journal of the American Ceramic Society, 2022, 105, 3147-3152.	1.9	5
150	Mechanical properties of fusion welded ceramics in the SiC-ZrB <sub>2</sub> and SiC-ZrB <sub>2</sub> -ZrC systems. Journal of the European Ceramic Society, 2022, 42, 2107-2117.	2.8	5
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