

# Diletta Sciti

## List of Publications by Year in descending order

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209  
papers

7,786  
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docs citations

210  
times ranked

3061  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast Densification of Ultra-High-Temperature Ceramics by Spark Plasma Sintering. International Journal of Applied Ceramic Technology, 2006, 3, 32-40.	2.1	201
2	Spark plasma sintering and mechanical behaviour of ZrC-based composites. Scripta Materialia, 2008, 59, 638-641.	5.2	198
3	Toughened ZrB <sub>2</sub> -based ceramics through SiC whisker or SiC chopped fiber additions. Journal of the European Ceramic Society, 2010, 30, 2155-2164.	5.7	178
4	Densification and Mechanical Behavior of HfC and HfB <sub>2</sub> Fabricated by Spark Plasma Sintering. Journal of the American Ceramic Society, 2008, 91, 1433-1440.	3.8	168
5	Arc-jet testing on HfB <sub>2</sub> and HfC-based ultra-high temperature ceramic materials. Journal of the European Ceramic Society, 2008, 28, 1899-1907.	5.7	164
6	Effects of MoSi <sub>2</sub> additions on the properties of HfC and ZrB <sub>2</sub> composites produced by pressureless sintering. Scripta Materialia, 2007, 57, 165-168.	5.2	144
7	Microstructure and mechanical properties of ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramic composites produced by different sintering techniques. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 303-309.	5.6	137
8	Oxidation behavior of a pressureless sintered ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramic composite. Journal of Materials Research, 2005, 20, 922-930.	2.6	121
9	Processing, mechanical properties and oxidation behavior of TaC and HfC composites containing 15 vol% TaSi <sub>2</sub> or MoSi <sub>2</sub> . Journal of Materials Research, 2009, 24, 2056-2065.	2.6	121
10	Title is missing!. Journal of Materials Science, 2000, 35, 3849-3855.	3.7	119
11	Long-term oxidation behavior and mechanical strength degradation of a pressurelessly sintered ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramic. Scripta Materialia, 2005, 53, 1297-1302.	5.2	114
12	Oxidation behavior of ZrB <sub>2</sub> composites doped with various transition metal silicides. Corrosion Science, 2014, 83, 281-291.	6.6	113
13	Spark plasma sintering of Zr- and Hf-borides with decreasing amounts of MoSi <sub>2</sub> as sintering aid. Journal of the European Ceramic Society, 2008, 28, 1287-1296.	5.7	99
14	Bonding of zirconia to super alloy with the active brazing technique. Journal of the European Ceramic Society, 2001, 21, 45-52.	5.7	97
15	Microstructure and properties of HfC and TaC-based ceramics obtained by ultrafine powder. Journal of the European Ceramic Society, 2011, 31, 619-627.	5.7	97
16	Densification of ZrB <sub>2</sub> -TaSi <sub>2</sub> and HfB <sub>2</sub> -TaSi <sub>2</sub> Ultra-High-Temperature Ceramic Composites. Journal of the American Ceramic Society, 2011, 94, 1920-1930.	3.8	93
17	Understanding the oxidation behavior of a ZrB <sub>2</sub> -MoSi <sub>2</sub> composite at ultra-high temperatures. Acta Materialia, 2018, 151, 216-228.	7.9	93
18	Sintering and Mechanical Properties of ZrB <sub>2</sub> -TaSi <sub>2</sub> and HfB <sub>2</sub> -TaSi <sub>2</sub> Ceramic Composites. Journal of the American Ceramic Society, 2008, 91, 3285-3291.	3.8	91

#	ARTICLE	IF	CITATIONS
19	Effect of annealing treatments on microstructure and mechanical properties of liquid-phase-sintered silicon carbide. Journal of the European Ceramic Society, 2001, 21, 621-632.	5.7	87
20	High-Density Pressureless-Sintered HfC-Based Composites. Journal of the American Ceramic Society, 2006, 89, 2668-2670.	3.8	86
21	Microstructure and Toughening Mechanisms in Spark Plasma-Sintered ZrB <sub>2</sub> Ceramics Reinforced by SiC Whiskers or SiC-Chopped Fibers. Journal of the American Ceramic Society, 2010, 93, 2384-2391.	3.8	83
22	Spark plasma sintering and hot pressing of ZrB <sub>2</sub> -MoSi <sub>2</sub> ultra-high-temperature ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 475, 108-112.	5.6	82
23	Suitability of ultra-refractory diboride ceramics as absorbers for solar energy applications. Solar Energy Materials and Solar Cells, 2013, 109, 8-16.	6.2	80
24	Efficacy of a ZrB <sub>2</sub> -SiC matrix in protecting C fibres from oxidation in novel UHTCMC materials. Materials and Design, 2017, 113, 207-213.	7.0	77
25	Solar Thermionic-Thermoelectric Generator (ST <sup>2</sup> G): Concept, Materials Engineering, and Prototype Demonstration. Advanced Energy Materials, 2018, 8, 1802310.	19.5	77
26	Spectrally selective ultra-high temperature ceramic absorbers for high-temperature solar plants. Journal of Renewable and Sustainable Energy, 2012, 4, .	2.0	76
27	On the thermal shock resistance and mechanical properties of novel unidirectional UHTCMCs for extreme environments. Scientific Reports, 2018, 8, 9148.	3.3	75
28	Ultra-refractory ceramics for high-temperature solar absorbers. Scripta Materialia, 2011, 65, 775-778.	5.2	73
29	Fabrication and properties of HfB <sub>2</sub> -MoSi <sub>2</sub> composites produced by hot pressing and spark plasma sintering. Journal of Materials Research, 2006, 21, 1460-1466.	2.6	71
30	Synthesis, consolidation and characterization of monolithic and SiC whiskers reinforced HfB <sub>2</sub> ceramics. Journal of the European Ceramic Society, 2013, 33, 603-614.	5.7	70
31	Microstructure and properties of porous $\beta$ -SiC templated from soft woods. Journal of the European Ceramic Society, 2004, 24, 533-540.	5.7	66
32	TaB <sub>2</sub> -based ceramics: Microstructure, mechanical properties and oxidation resistance. Journal of the European Ceramic Society, 2012, 32, 97-105.	5.7	65
33	Hafnium and tantalum carbides for high temperature solar receivers. Journal of Renewable and Sustainable Energy, 2011, 3, .	2.0	64
34	Properties of a Pressureless-Sintered ZrB <sub>2</sub> -MoSi <sub>2</sub> Ceramic Composite. Journal of the American Ceramic Society, 2006, 89, 060427083300081-???	3.8	61
35	Transmission electron microscopy on Zr- and Hf-borides with MoSi <sub>2</sub> addition: Densification mechanisms. Journal of Materials Research, 2010, 25, 828-834.	2.6	61
36	Oxidation behaviour of a pressureless sintered HfB <sub>2</sub> -MoSi <sub>2</sub> composite. Journal of the European Ceramic Society, 2009, 29, 1809-1815.	5.7	60

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37	Porous and dense hafnium and zirconium ultra-high temperature ceramics for solar receivers. Optical Materials, 2013, 36, 163-168.	3.6	60
38	Oxidation behaviour of a continuous carbon fibre reinforced ZrB <sub>2</sub> -SiC composite. Corrosion Science, 2017, 123, 129-138.	6.6	59
39	Sintering Mechanisms of Zirconium and Hafnium Carbides Doped with MoSi <sub>2</sub> . Journal of the American Ceramic Society, 2009, 92, 1574-1579.	3.8	58
40	Sintering Behavior, Microstructure, and Mechanical Properties: A Comparison among Pressureless Sintered Ultra-Refractory Carbides. Advances in Materials Science and Engineering, 2010, 2010, 1-11.	1.8	54
41	Bulk monolithic zirconium and tantalum diborides by reactive and non-reactive spark plasma sintering. Journal of Alloys and Compounds, 2016, 663, 351-359.	5.5	53
42	Laser-induced surface drilling of silicon carbide. Applied Surface Science, 2001, 180, 92-101.	6.1	52
43	Processing, sintering and oxidation behavior of SiC fibers reinforced ZrB <sub>2</sub> composites. Journal of the European Ceramic Society, 2012, 32, 1933-1940.	5.7	52
44	Strength and toughness: The challenging case of TaC-based composites. Composites Part B: Engineering, 2015, 72, 10-20.	12.0	52
45	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.	5.7	52
46	Ablation tests on HfC- and TaC-based ceramics for aeropropulsive applications. Journal of the European Ceramic Society, 2015, 35, 1401-1411.	5.7	51
47	Arc-jet wind tunnel characterization of ultra-high-temperature ceramic matrix composites. Corrosion Science, 2019, 149, 18-28.	6.6	51
48	Design, fabrication and high velocity oxy-fuel torch tests of a Cf-ZrB <sub>2</sub> - fiber nozzle to evaluate its potential in rocket motors. Materials and Design, 2016, 109, 709-717.	7.0	50
49	SiC chopped fibers reinforced ZrB <sub>2</sub> : Effect of the sintering aid. Scripta Materialia, 2011, 64, 769-772.	5.2	49
50	Relationships between carbon fiber type and interfacial domain in ZrB <sub>2</sub> -based ceramics. Journal of the European Ceramic Society, 2016, 36, 17-24.	5.7	49
51	Effect of different sintering aids on thermo-mechanical properties and oxidation of SiC fibers reinforced ZrB <sub>2</sub> composites. Materials Chemistry and Physics, 2013, 137, 834-842.	4.0	46
52	Lanthanum hexaboride for solar energy applications. Scientific Reports, 2017, 7, 718.	3.3	46
53	Microstructure and properties of alumina-SiC nanocomposites prepared from ultrafine powders. Journal of Materials Science, 2002, 37, 3747-3758.	3.7	44
54	Aerothermal behaviour of a SiC fibre-reinforced ZrB <sub>2</sub> sharp component in supersonic regime. Journal of the European Ceramic Society, 2012, 32, 1837-1845.	5.7	44

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55	Compositional dependence of optical properties of zirconium, hafnium and tantalum carbides for solar absorber applications. <i>Solar Energy</i> , 2016, 131, 199-207.	6.1	44
56	A systematic approach for horizontal and vertical scale up of sintered Ultra-High Temperature Ceramic Matrix Composites for aerospace “Advances and perspectives. <i>Composites Part B: Engineering</i> , 2022, 234, 109709.	12.0	43
57	Tantalum diboride-based ceramics for bulk solar absorbers. <i>Solar Energy Materials and Solar Cells</i> , 2014, 130, 208-216.	6.2	42
58	Effect of a weak fiber interface coating in ZrB <sub>2</sub> reinforced with long SiC fibers. <i>Materials and Design</i> , 2015, 88, 610-618.	7.0	42
59	Continuous C fibre composites with a porous ZrB <sub>2</sub> Matrix. <i>Materials and Design</i> , 2015, 85, 127-134.	7.0	42
60	Combined effect of SiC chopped fibers and SiC whiskers on the toughening of ZrB <sub>2</sub> . <i>Ceramics International</i> , 2014, 40, 4819-4826.	4.8	41
61	Microstructure evolution of a W-doped ZrB <sub>2</sub> ceramic upon high-temperature oxidation. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1760-1772.	3.8	41
62	Effect of PAN-based and pitch-based carbon fibres on microstructure and properties of continuous Cf/ZrB <sub>2</sub> -SiC UHTCMCs. <i>Journal of the European Ceramic Society</i> , 2021, 41, 3045-3050.	5.7	41
63	Spark plasma sintering of HfB <sub>2</sub> with low additions of silicides of molybdenum and tantalum. <i>Journal of the European Ceramic Society</i> , 2010, 30, 3253-3258.	5.7	40
64	Ultra-High Temperature Ceramics for solar receivers: spectral and high-temperature emittance characterization. <i>Journal of the European Optical Society-Rapid Publications</i> , 0, 7, .	1.9	40
65	Ice templating of ZrB <sub>2</sub> porous architectures. <i>Journal of the European Ceramic Society</i> , 2013, 33, 1599-1607.	5.7	40
66	Femtosecond laser treatments to tailor the optical properties of hafnium carbide for solar applications. <i>Solar Energy Materials and Solar Cells</i> , 2015, 132, 460-466.	6.2	40
67	ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramics: A comprehensive overview of microstructure and properties relationships. Part I: Processing and microstructure. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1939-1947.	5.7	40
68	Formation of high entropy metal diborides using arc-melting and combinatorial approach to study quinary and quaternary solid solutions. <i>Journal of the European Ceramic Society</i> , 2020, 40, 588-593.	5.7	40
69	Nanoindentation Characterization of Submicro- and Nano-Sized Liquid-Phase-Sintered SiC Ceramics. <i>Journal of the American Ceramic Society</i> , 2004, 87, 2101-2107.	3.8	39
70	Tough salami-inspired Cf/ZrB <sub>2</sub> UHTCMCs produced by electrophoretic deposition. <i>Journal of the European Ceramic Society</i> , 2018, 38, 403-409.	5.7	39
71	High temperature oxidation of Zr- and Hf-carbides: Influence of matrix and sintering additive. <i>Journal of the European Ceramic Society</i> , 2013, 33, 2867-2878.	5.7	38
72	Influence of SiC content on the oxidation of carbon fibre reinforced ZrB <sub>2</sub> /SiC composites at 1500 and 1650 °C in air. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3767-3776.	5.7	38

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73	Ultra-high-temperature testing of sintered ZrB <sub>2</sub> -based ceramic composites in atmospheric re-entry environment. International Journal of Heat and Mass Transfer, 2020, 156, 119910.	4.8	38
74	Spark plasma sintering of ultra refractory compounds. Journal of Materials Science, 2008, 43, 6414-6421.	3.7	37
75	Understanding the mechanical properties of novel UHTCMCs through random forest and regression tree analysis. Materials and Design, 2018, 145, 97-107.	7.0	37
76	Nanoindentation characterization of SiC-based ceramics. Journal of the European Ceramic Society, 2007, 27, 1399-1404.	5.7	35
77	Oxidation behaviour of HfB <sub>2</sub> -15 vol.% TaSi <sub>2</sub> at low, intermediate and high temperatures. Scripta Materialia, 2010, 63, 601-604.	5.2	35
78	An overview of ultra-refractory ceramics for thermodynamic solar energy generation at high temperature. Renewable Energy, 2019, 133, 1257-1267.	8.9	35
79	Oxidation behavior and kinetics of ZrB <sub>2</sub> containing SiC chopped fibers. Journal of the European Ceramic Society, 2015, 35, 4377-4387.	5.7	34
80	Rapid spark plasma sintering to produce dense UHTCs reinforced with undamaged carbon fibres. Materials and Design, 2017, 130, 1-7.	7.0	34
81	Introduction to H2020 project C <sup>3</sup> HARME – next generation ceramic composites for combustion harsh environment and space. Advances in Applied Ceramics, 2018, 117, s70-s75.	1.1	34
82	Pressureless sintered in situ toughened ZrB <sub>2</sub> -SiC platelets ceramics. Journal of the European Ceramic Society, 2011, 31, 2145-2153.	5.7	33
83	From random chopped to oriented continuous SiC fibers-ZrB <sub>2</sub> composites. Materials & Design, 2014, 63, 464-470.	5.1	33
84	Optical properties of black and white ZrO <sub>2</sub> for solar receiver applications. Solar Energy Materials and Solar Cells, 2015, 140, 477-482.	6.2	33
85	Continuous SiC fibers-ZrB <sub>2</sub> composites. Journal of the European Ceramic Society, 2015, 35, 4371-4376.	5.7	33
86	Process and composition dependence of optical properties of zirconium, hafnium and tantalum borides for solar receiver applications. Solar Energy Materials and Solar Cells, 2016, 155, 368-377.	6.2	33
87	Microstructure, mechanical properties and oxidation behavior of TaC- and HfC-based materials containing short SiC fiber. Ceramics International, 2015, 41, 1367-1377.	4.8	32
88	Effect of surface texturing by femtosecond laser on tantalum carbide ceramics for solar receiver applications. Solar Energy Materials and Solar Cells, 2017, 161, 1-6.	6.2	32
89	High temperature oxidation of ZrC-20%MoSi <sub>2</sub> in air for future solar receivers. Solar Energy Materials and Solar Cells, 2011, 95, 2228-2237.	6.2	31
90	Joining of ultra-refractory carbides. Journal of the European Ceramic Society, 2012, 32, 4469-4479.	5.7	31

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91	Hard and easy sinterable B <sub>4</sub> C-TiB <sub>2</sub> -based composites doped with WC. Journal of the European Ceramic Society, 2018, 38, 3089-3095.	5.7	31
92	Influence of fibre content on the strength of carbon fibre reinforced HfC/SiC composites up to 2100°C. Journal of the European Ceramic Society, 2019, 39, 3594-3603.	5.7	31
93	A simple route to fabricate strong boride hierarchical composites for use at ultra-high temperature. Composites Part B: Engineering, 2020, 183, 107618.	12.0	31
94	Emissivity, catalyticity and microstructural characterization of ZrB <sub>2</sub> -SiC fiber based UHTC at high temperature in a non-equilibrium air plasma flow. Ceramics International, 2014, 40, 9731-9742.	4.8	30
95	Optical properties of ZrB <sub>2</sub> porous architectures. Solar Energy Materials and Solar Cells, 2016, 144, 608-615.	6.2	30
96	Synthesis of group IV and V metal diboride nanocrystals via borothermal reduction with sodium borohydride. Journal of the American Ceramic Society, 2018, 101, 2627-2637.	3.8	30
97	Ablation behaviour of ultra-high temperature ceramic matrix composites: Role of MeSi <sub>2</sub> addition. Journal of the European Ceramic Society, 2019, 39, 2771-2781.	5.7	30
98	Microstructure and properties of pressureless sintered ZrC-based materials. Journal of Materials Research, 2008, 23, 1882-1889.	2.6	29
99	XPS and AES studies of UHTC ZrB <sub>2</sub> -SiC-Si <sub>3</sub> N <sub>4</sub> treated with solar energy. Surface and Interface Analysis, 2014, 46, 817-822.	1.8	29
100	Influence of Y <sub>2</sub> O <sub>3</sub> addition on the mechanical and oxidation behaviour of carbon fibre reinforced ZrB <sub>2</sub> /SiC composites. Journal of the European Ceramic Society, 2020, 40, 5067-5075.	5.7	29
101	Binderless WC with high strength and toughness up to 1500°C. Journal of the European Ceramic Society, 2020, 40, 2287-2294.	5.7	29
102	Ceramic surface modifications induced by pulsed laser treatment. Applied Surface Science, 2000, 154-155, 682-688.	6.1	28
103	Transmission electron microscopy on Hf- and Ta-carbides sintered with TaSi <sub>2</sub> . Journal of the European Ceramic Society, 2011, 31, 3033-3043.	5.7	28
104	Impact of residual stress on thermal damage accumulation, and Young's modulus of fiber-reinforced ultra-high temperature ceramics. Materials and Design, 2018, 160, 803-809.	7.0	28
105	Ti <sub>3</sub> SiC <sub>2</sub> -Cf composites by spark plasma sintering: Processing, microstructure and thermo-mechanical properties. Journal of the European Ceramic Society, 2019, 39, 2824-2830.	5.7	28
106	Tyranno SA3 fiber-ZrB <sub>2</sub> composites. Part I: Microstructure and densification. Materials & Design, 2015, 65, 1253-1263.	5.1	27
107	Excimer laser-induced microstructural changes of alumina and silicon carbide. Journal of Materials Science, 2000, 35, 3799-3810.	3.7	26
108	Assessment of the high temperature elastic and damping properties of silicon nitrides and carbides with the impulse excitation technique. Journal of the European Ceramic Society, 2002, 22, 2501-2509.	5.7	26



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109	Microstructure and Properties of Pressureless Sintered HfB <sub>2</sub> -Based Composites with Additions of ZrB <sub>2</sub> or HfC. <i>Advanced Engineering Materials</i> , 2007, 9, 915-920.	3.5	26
110	Temperature dependence of the dynamic Young's modulus of ZrB <sub>2</sub> -MoSi <sub>2</sub> ultra-refractory ceramic composites. <i>Scripta Materialia</i> , 2010, 62, 831-834.	5.2	26
111	Development of UHTCMCs via water based ZrB <sub>2</sub> powder slurry infiltration and polymer infiltration and pyrolysis. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5076-5084.	5.7	26
112	Short-term oxidation of a ternary composite in the system AlN-SiC-ZrB <sub>2</sub> . <i>Journal of the European Ceramic Society</i> , 2005, 25, 1771-1780.	5.7	25
113	Are short Hi-Nicalon SiC fibers a secondary or a toughening phase for ultra-high temperature ceramics?. <i>Materials &amp; Design</i> , 2014, 55, 821-829.	5.1	25
114	Properties of large scale ultra-high temperature ceramic matrix composites made by filament winding and spark plasma sintering. <i>Composites Part B: Engineering</i> , 2021, 216, 108839.	12.0	24
115	Oxidation of ZrB <sub>2</sub> Ceramics Containing SiC as Particles, Whiskers, or Short Fibers. <i>Journal of the American Ceramic Society</i> , 2011, 94, 2796-2799.	3.8	23
116	TEM analysis, mechanical characterization and oxidation resistance of a highly refractory ZrB <sub>2</sub> composite. <i>Journal of Alloys and Compounds</i> , 2014, 602, 346-355.	5.5	23
117	Is spark plasma sintering suitable for the densification of continuous carbon fibre - UHTCMCs?. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2597-2603.	5.7	23
118	Tailoring optical properties of surfaces in wide spectral ranges by multi-scale femtosecond-laser texturing: A case-study for TaB <sub>2</sub> ceramics. <i>Optical Materials</i> , 2020, 109, 110347.	3.6	23
119	Reactive melt infiltration of carbon fibre reinforced ZrB <sub>2</sub> /B composites with Zr <sub>2</sub> Cu. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 137, 105973.	7.6	23
120	Additive Manufacturing of Ceramics Enabled by Flash Pyrolysis of Polymer Precursors with Nanoscale Layers. <i>Journal of the American Ceramic Society</i> , 2016, 99, 57-63.	3.8	22
121	Zirconium carbide doped with tantalum silicide: Microstructure, mechanical properties and high temperature oxidation. <i>Materials Chemistry and Physics</i> , 2013, 143, 407-415.	4.0	21
122	Optical properties of boride ultrahigh-temperature ceramics for solar thermal absorbers. <i>Journal of Photonics for Energy</i> , 2014, 4, 045599.	1.3	21
123	Preliminary characterization of ST2G: Solar thermionic-thermoelectric generator for concentrating systems. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	21
124	Tyranno SA3 fiber-ZrB <sub>2</sub> composites. Part II: Mechanical properties. <i>Materials &amp; Design</i> , 2015, 65, 1264-1273.	5.1	21
125	Micro-EDM milling of zirconium carbide ceramics. <i>Precision Engineering</i> , 2020, 65, 156-163.	3.4	21
126	Influence of pressure on the oxidation resistance of carbon fiber reinforced ZrB <sub>2</sub> /SiC composites at 2000 and 2200°C. <i>Corrosion Science</i> , 2021, 184, 109377.	6.6	21



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127	Dry sliding wear behavior of nano-sized SiC pins against SiC and Si <sub>3</sub> N <sub>4</sub> discs. <i>Wear</i> , 2007, 262, 529-535.	3.1	20
128	Toughening effect of non-periodic fiber distribution on crack propagation energy of UHTC composites. <i>Journal of Alloys and Compounds</i> , 2019, 777, 612-618.	5.5	20
129	High-Temperature Resistant Composites in the AlN-SiC-MoSi <sub>2</sub> System. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1720-1726.	3.8	19
130	Synergy and competition in nano- and micro-design of structural ceramics. <i>Journal of the European Ceramic Society</i> , 2004, 24, 3295-3302.	5.7	19
131	High-Strength and -Toughness Electroconductive SiC-Based Composites. <i>Advanced Engineering Materials</i> , 2006, 8, 997-1001.	3.5	19
132	Microstructural characterization of ZrC-MoSi <sub>2</sub> composites oxidized in air at high temperatures. <i>Applied Surface Science</i> , 2013, 283, 751-758.	6.1	19
133	Effect of high temperature oxidation on the radiative properties of HfC-based ceramics. <i>Corrosion Science</i> , 2017, 126, 255-264.	6.6	19
134	Characterization of novel ceramic composites for rocket nozzles in high-temperature harsh environments. <i>International Journal of Heat and Mass Transfer</i> , 2020, 163, 120492.	4.8	19
135	Surface modification and oxidation kinetics of hot-pressed AlN-SiC-MoSi <sub>2</sub> electroconductive ceramic composite. <i>Applied Surface Science</i> , 2003, 210, 274-285.	6.1	18
136	Synthesis of nanosized zirconium diboride powder via oxide-borohydride solid-state reaction. <i>Scripta Materialia</i> , 2015, 109, 100-103.	5.2	18
137	Effect of hypersonic flow chemical composition on the oxidation behavior of a super-strong UHTC. <i>Corrosion Science</i> , 2019, 159, 108125.	6.6	18
138	Off-axis damage tolerance of fiber-reinforced composites for aerospace systems. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2691-2698.	5.7	18
139	Disclosing small scale length properties in core-shell structured B <sub>4</sub> C-TiB <sub>2</sub> composites. <i>Materials and Design</i> , 2021, 197, 109204.	7.0	18
140	Spectral emittance of ceramics for high temperature solar receivers. <i>Solar Energy</i> , 2021, 222, 74-83.	6.1	18
141	Significant improvement of the self-protection capability of ultra-high temperature ceramic matrix composites. <i>Corrosion Science</i> , 2021, 189, 109575.	6.6	18
142	Qualification and reusability of long and short fibre-reinforced ultra-refractory composites for aerospace thermal protection systems. <i>Corrosion Science</i> , 2022, 195, 109955.	6.6	18
143	Merging toughness and oxidation resistance in a light ZrB <sub>2</sub> composite. <i>Materials and Design</i> , 2019, 183, 108078.	7.0	17
144	ZrB <sub>2</sub> -MoSi <sub>2</sub> ceramics: A comprehensive overview of microstructure and properties relationships. Part II: Mechanical properties. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1948-1954.	5.7	17

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145	Improved aero-thermal resistance capabilities of ZrB <sub>2</sub> -based ceramics in hypersonic environment for increasing SiC content. Corrosion Science, 2021, 178, 109067.	6.6	17
146	Insight into microstructure and flexural strength of ultra-high temperature ceramics enriched SiC/C composite. Materials and Design, 2021, 208, 109888.	7.0	17
147	Properties of ZrB <sub>2</sub> -Reinforced Ternary Composites. Advanced Engineering Materials, 2004, 6, 775-781.	3.5	16
148	Ultra-high temperature porous graded ceramics for solar energy applications. Journal of the European Ceramic Society, 2019, 39, 72-78.	5.7	16
149	Oxidation behaviour of a pressureless sintered AlN-SiC composite. Journal of Materials Science, 2004, 39, 6965-6973.	3.7	15
150	Effect of Milling on the Mechanical Properties of Chopped SiC Fiber-Reinforced ZrB <sub>2</sub> . Materials, 2013, 6, 1980-1993.	2.9	15
151	Transient liquid phase bonding of HfC-based ceramics. Journal of Materials Science, 2014, 49, 654-664.	3.7	15
152	Ultra-refractory Diboride Ceramics for Solar Plant Receivers. Energy Procedia, 2014, 49, 468-477.	1.8	15
153	Round Robin Test for the comparison of spectral emittance measurement apparatuses. Solar Energy Materials and Solar Cells, 2019, 191, 476-485.	6.2	15
154	Colored zirconia with high absorbance and solar selectivity. Scripta Materialia, 2020, 186, 147-151.	5.2	15
155	Design of ultra-high temperature ceramic nano-composites from multi-scale length microstructure approach. Composites Part B: Engineering, 2021, 226, 109344.	12.0	15
156	Influence of long term oxidation on the microstructure, mechanical and electrical properties of pressureless sintered AlN-SiC-MoSi <sub>2</sub> ceramic composites. Journal of the European Ceramic Society, 2003, 23, 3135-3146.	5.7	14
157	Dark alumina for novel solar receivers. Scripta Materialia, 2020, 176, 58-62.	5.2	14
158	Dry Sliding Wear Behavior of Al <sub>2</sub> O <sub>3</sub> -SiC Submicro- and Nano-Composites. Journal of the American Ceramic Society, 2005, 88, 179-183.	3.8	13
159	Ice templating of ZrB <sub>2</sub> -SiC systems. Ceramics International, 2015, 41, 10324-10330.	4.8	13
160	Experimental set up for characterization of carbide-based materials in propulsion environment. Journal of the European Ceramic Society, 2015, 35, 1715-1723.	5.7	13
161	Surface modifications of carbide ceramics induced by pulsed laser treatments. Applied Physics A: Materials Science and Processing, 1999, 69, S515-S519.	2.3	12
162	Tape casting of AlN-SiC-MoSi <sub>2</sub> composites. Journal of the European Ceramic Society, 2004, 24, 2303-2311.	5.7	12

#	ARTICLE	IF	CITATIONS
163	On the toughening mechanisms of MoSi <sub>2</sub> reinforced Si <sub>3</sub> N <sub>4</sub> ceramics. Applied Physics A: Materials Science and Processing, 2006, 86, 243-248.	2.3	12
164	Depth-Sensing Indentation Hardness Characterization of HfC-Based Composites. Advanced Engineering Materials, 2007, 9, 389-392.	3.5	12
165	Preparation of UHTCMCs by hybrid processes coupling Polymer Infiltration and Pyrolysis with Hot Pressing and vice versa. Journal of the European Ceramic Society, 2022, 42, 2118-2126.	5.7	12
166	Effects of powder processing on colloidal and microstructural characteristics of $\hat{\text{I}}^2\text{-SiC}$ powders. Materials Chemistry and Physics, 2007, 103, 70-77.	4.0	11
167	Deformation mechanism in graphene nanoplatelet reinforced tantalum carbide using high load in situ indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 674, 270-275.	5.6	11
168	Thermionic emission measurement of sintered lanthanum hexaboride discs and modelling of their solar energy conversion performance. Ceramics International, 2021, 47, 20736-20739.	4.8	11
169	Improvements Offered by Coprecipitation of Sintering Additives on Ultra-Fine SiC Materials. Advanced Engineering Materials, 2005, 7, 152-158.	3.5	10
170	Indentation grid analysis of nanoindentation bulk and in situ properties of ceramic phases. Journal of Materials Science, 2008, 43, 4348-4352.	3.7	10
171	Study of the interactions between HfB <sub>2</sub> and Hi-Nicalon <sup>®</sup> fiber. Journal of the European Ceramic Society, 2013, 33, 2879-2888.	5.7	10
172	Effect of the Sintering Additive on Microstructure and Mechanical Properties of $\text{Hi-Nicalon}^{\text{TM}}$ SiC Fibers in a $\text{HfB}_2$ Matrix. Journal of the American Ceramic Society, 2013, 96, 643-650.	3.8	10
173	Effect of MoSi <sub>2</sub> Particles on the Fracture Toughness of AlN-, SiC-, and Si <sub>3</sub> N <sub>4</sub> -based Ceramics. Journal of Composite Materials, 2007, 41, 2585-2593.	2.4	9
174	Effects of residual stresses on the fracture properties of non-oxide laminated composites. Journal of the European Ceramic Society, 2007, 27, 351-356.	5.7	9
175	Microstructure evolution upon annealing of a ZrB <sub>2</sub> -SiC composite containing lanthana and magnesia. Journal of the European Ceramic Society, 2013, 33, 403-412.	5.7	9
176	Processing, Mechanical and Optical Properties of Additive-Free ZrC Ceramics Prepared by Spark Plasma Sintering. Materials, 2016, 9, 489.	2.9	9
177	Analysis of residual stresses in ternary electroconductive composites. Applied Physics A: Materials Science and Processing, 2006, 82, 317-324.	2.3	8
178	Microstructure and Nanoindentation Properties of Surface Textures Obtained by Laser Machining and Molding in Silicon Carbide. Advanced Engineering Materials, 2013, 15, 330-335.	3.5	8
179	Improving solar radiation absorbance of high refractory sintered ceramics by fs Ti:sapphire laser surface treatment. Applied Surface Science, 2014, 302, 177-183.	6.1	8
180	Arc-Jet Testing on HfB <sub>2</sub> - TaSi <sub>2</sub> Models: Effect of the Geometry on the Aerothermal Behaviour~!2009-09-21~!2009-11-06~!2010-04-20~!. The Open Aerospace Engineering Journal, 2010, 3, 10-19.	0.6	8

#	ARTICLE	IF	CITATIONS
181	Microstructure and mechanical properties of novel ternary electroconductive ceramics. Journal of Materials Research, 2004, 19, 3343-3352.	2.6	7
182	Advances in Transient-Liquid-Phase Bonding of Ultra-high Temperature ZrC Ceramics. High Temperature Materials and Processes, 2012, 31, 501-511.	1.4	7
183	Synthesis and densification of ultra-fine ZrC powders-effects of C/Zr ratio. International Journal of Refractory Metals and Hard Materials, 2019, 81, 149-154.	3.8	7
184	Thermally stimulated self-healing capabilities of ZrB <sub>2</sub> -SiC ceramics. Journal of the European Ceramic Society, 2021, 41, 7423-7433.	5.7	7
185	Ultra-High Temperature Ceramic Matrix Composites. , 2021, , 340-352.		7
186	Advancements in carbon fibre reinforced ultra-refractory ceramic composites: Effect of rare earth oxides addition. Composites Part A: Applied Science and Manufacturing, 2022, 156, 106858.	7.6	7
187	Novel ceramic fibre - Zirconium diboride composites for solar receivers in concentrating solar power systems. Composites Part B: Engineering, 2022, 242, 110081.	12.0	7
188	Ultra-High-Temperature Ceramic Matrix Composites in Hybrid Rocket Propulsion Environment. , 2018, , .		6
189	Zirconium diboride-based nanofluids for solar energy applications. Journal of Molecular Liquids, 2021, 322, 114981.	4.9	6
190	Effect of Transition Metal Silicides on Microstructure and Mechanical Properties of Ultra-High Temperature Ceramics. , 2013, , 125-179.		6
191	Coloring zirconium oxide for novel energy saving industrial applications. Renewable Energy, 2022, 190, 223-231.	8.9	6
192	Influence of annealing treatments on microstructure and toughness of liquid-phase-sintered silicon carbide. Journal of Materials Research, 2001, 16, 806-816.	2.6	5
193	Fabrication and residual stresses characterization of novel non-oxide multilayer ceramics. Journal of the European Ceramic Society, 2006, 26, 3415-3423.	5.7	5
194	Residual Stress Investigation in SiC/MoSi <sub>2</sub> (p) Composites. Advanced Engineering Materials, 2007, 9, 393-399.	3.5	5
195	Processing and Properties of Ultra-Refractory Composites Based on Zr- and Hf-Borides: State of the Art and Perspectives. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 147-160.	0.3	5
196	fs Laser surface nano-structuring of high refractory ceramics to enhance solar radiation absorbance. Applied Physics A: Materials Science and Processing, 2014, 117, 243-251.	2.3	5
197	Ablation behaviour of carbon fibre ultra-high temperature composites at oblique angles of attack. Materials and Design, 2021, 212, 110199.	7.0	5
198	Retained strength of UHTCMCs after oxidation at 2278ÅK. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106523.	7.6	4

#	ARTICLE	IF	CITATIONS
199	Production of UHTC Complex Shapes and Architectures. , 2013, , 246-277.		4
200	Microstructure Design of Liquid Phase Sintered Silicon Carbide in Function of the Powders Characteristics. Key Engineering Materials, 2004, 264-268, 1039-1042.	0.4	3
201	High-Temperature Stiffness and Damping Measurements to Monitor the Glassy Intergranular Phase in Liquid-Phase-Sintered Silicon Carbides. Journal of the American Ceramic Society, 2005, 88, 2152-2158.	3.8	3
202	Microstructure and properties of an electroconductive SiC-based composite. Journal of Materials Science, 2007, 42, 5570-5575.	3.7	3
203	Slip Casting of a $\text{Si}_3\text{N}_4$ -Based System. International Journal of Applied Ceramic Technology, 2012, 9, 246-258.	2.1	3
204	Effect of residual excess carbon on the densification of ultra-fine HfC powder. Journal of the European Ceramic Society, 2020, 40, 1801-1810.	5.7	3
205	Nanoindentation characterisation of HfC-based composites. International Journal of Surface Science and Engineering, 2007, 1, 198.	0.4	2
206	Intrinsic spectral selectivity in ultra-high temperature ceramics for solar applications. , 2011, , .		2
207	Microstructural and Optical Properties of $\text{MgAl}_2\text{O}_4$ Spinel: Effects of Mechanical Activation, $\text{Y}_2\text{O}_3$ and Graphene Additions. Materials, 2021, 14, 7674.	2.9	2
208	Novel SiC/C composite targets for the production of radioisotopes for nuclear applications. Journal of the European Ceramic Society, 2022, 42, 6750-6756.	5.7	2
209	Analysis of nanoindentation tests on SiC-based ceramics. Philosophical Magazine, 2006, 86, 5321-5329.	1.6	1