

Design, Preparation and Properties of Carbon Fiber Reinforced Ceramic Composites for Aerospace Applications: A Review

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Oxidation behaviour of a continuous carbon fibre reinforced ZrB ₂ -SiC composite. Corrosion Science, 2017, 123, 129-138.	3.0	59
2	Sandwich-structured C/C-SiC composites fabricated by electromagnetic-coupling chemical vapor infiltration. Scientific Reports, 2017, 7, 13120.	1.6	17
3	Preparation, ablation behavior and thermal retardant ability of C/C-HfB ₂ -SiC composites. Materials and Design, 2017, 132, 552-558.	3.3	47
4	Microstructure Evolution and Ablation Mechanism of C/C and C/C-SiC Composites Under a Hypersonic Flowing Propane Torch. Advanced Engineering Materials, 2017, 19, 1700239.	1.6	15
5	Prediction of structure changes of organic-silica aerogels during pyrolysis. Computer Aided Chemical Engineering, 2017, 40, 181-186.	0.3	3
6	Two-step method to deposit ZrO ₂ coating on carbon fiber: Preparation, characterization, and performance in SiC composites. Ceramics International, 2018, 44, 11812-11819.	2.3	12
7	Microstructure and properties of C/C-ZrC composites prepared by hydrothermal deposition combined with carbothermal reduction. Journal of Alloys and Compounds, 2018, 741, 323-330.	2.8	17
8	Aero-thermo-chemical characterization of ultra-high-temperature ceramics for aerospace applications. Journal of the European Ceramic Society, 2018, 38, 2937-2953.	2.8	117
9	Advances in oxidation and ablation resistance of high and ultra-high temperature ceramics modified or coated carbon/carbon composites. Journal of the European Ceramic Society, 2018, 38, 1-28.	2.8	283
10	Testing ultra-high-temperature ceramics for thermal protection and rocket applications. Advances in Applied Ceramics, 2018, 117, s9-s18.	0.6	26
11	Microstructural evolution and performance of carbon fiber-toughened ZrB ₂ ceramics with SiC or ZrSi ₂ additive. Journal of Advanced Ceramics, 2018, 7, 343-351.	8.9	28
12	Progress in research and development on matrix modification of continuous fiber-reinforced silicon carbide matrix composites. Advanced Composites and Hybrid Materials, 2018, 1, 685-695.	9.9	11
13	Degradation kinetics of Ti-Cu compound layer in transient liquid phase bonded graphite/copper joints. Scientific Reports, 2018, 8, 15190.	1.6	8
14	Geometrical deviation analysis of CFRP thin laminate assemblies: Numerical and experimental results. Composites Science and Technology, 2018, 168, 1-11.	3.8	29
15	Microstructure and ablation properties of C/C-Zr-Si-O composites prepared by carbothermal reduction of hydrothermal co-deposited oxides. Materials and Design, 2018, 159, 145-154.	3.3	14
16	Optimization of Structures Made From Composites With Elliptical Inclusions. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	1.1	3
17	Recycling, reclamation and re-manufacturing of carbon fibres. Current Opinion in Green and Sustainable Chemistry, 2018, 13, 86-90.	3.2	40
18	High Temperature Coatings for Oxidation and Erosion Protection of Heat-Resistant Carbonaceous Materials in High-Speed Flows. Key Engineering Materials, 2018, 771, 103-117.	0.4	12

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19	Influence of particle shape and size on mechanical properties in copper-polymer composites. Powder Technology, 2018, 339, 39-45.	2.1	20
20	Effect of pyrolytic carbon coating on the microstructure and fracture behavior of the Cf/ZrB ₂ -SiC composite. Ceramics International, 2018, 44, 19612-19618.	2.3	36
21	A facile route for graded conversion of carbon fabric to silicon carbide fabric and its oxidation kinetics study in atmospheric high-temperature environment. Bulletin of Materials Science, 2018, 41, 1.	0.8	3
22	Properties and Structure of In Situ Transformed PAN-Based Carbon Fibers. Materials, 2018, 11, 1017.	1.3	12
23	Fabrication and characterization of carbon fiber reinforced SiC ceramic matrix composites based on 3D printing technology. Journal of the European Ceramic Society, 2018, 38, 4604-4613.	2.8	89
24	Consolidation and characterization of highly dense single-phase Ta-Hf-C solid solution ceramics. Journal of the American Ceramic Society, 2019, 102, 58-62.	1.9	24
25	Sequential kriging-based closure approximations for flow-induced fiber orientation and prediction of composite stiffness. Polymer Composites, 2019, 40, 1748-1761.	2.3	4
26	Preparation and anisotropic properties of textured structural ceramics: A review. Journal of Advanced Ceramics, 2019, 8, 289-332.	8.9	107
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31	Effect of carbon fiber surface modification on their interfacial interaction with polysulfone. Results in Physics, 2019, 15, 102634.	2.0	32
32	Effect of carbon fiber on the tribo-mechanical properties of boron carbide: Comparison with carbon nanotube reinforcement. International Journal of Refractory Metals and Hard Materials, 2019, 85, 105055.	1.7	23
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37	Development of a slurry injection technique for continuous fibre ultra-high temperature ceramic matrix composites. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3927-3937.	2.8	30
38	Oxidation behavior of C/SiC-SiBCN composites at high temperature. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3003-3012.	2.8	28
39	Zirconium-Doped Hybrid Composite Systems for Ultrahigh-Temperature Oxidation Applications: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 4711-4731.	1.8	15
40	Oxidation and recession of plain weave carbon fiber reinforced ZrB ₂ -SiC-ZrC in oxygen-hydrogen torch environment. <i>Journal of the European Ceramic Society</i> , 2019, 39, 2812-2823.	2.8	18
41	Design and optimization of the coating thickness on chopped carbon fibers and sintering temperature for ZrB ₂ -SiC-Cf composites prepared by hot pressing. <i>Journal of the European Ceramic Society</i> , 2019, 39, 2805-2811.	2.8	24
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43	Preparation and Oxidation Behavior of SiO ₂ /SiC Coating on Braided Carbon Fiber. <i>Springer Proceedings in Physics</i> , 2019, , 165-171.	0.1	3
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48	Influence of sp ³ /sp ² -carbon ratio of vertically standing carbon nanostructures produced by pulsed laser-treatment on PAN-based carbon fibers. <i>Materials Letters</i> , 2019, 236, 752-756.	1.3	2
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50	Nano-scale 1TaC-3HfC solid solution powder synthesized using a solvothermal method and its densification. <i>Ceramics International</i> , 2019, 45, 1455-1459.	2.3	9
51	Long-term oxidation behaviors of C/SiC composites with a SiC/UHTC/SiC three-layer coating in a wide temperature range. <i>Corrosion Science</i> , 2019, 147, 1-8.	3.0	46
52	A novel vibration-assisted slurry impregnation to fabricate Cf/ZrB ₂ -SiC composite with enhanced mechanical properties. <i>Journal of the European Ceramic Society</i> , 2019, 39, 798-805.	2.8	37
53	Selection, processing, properties and applications of ultra-high temperature ceramic matrix composites, UHTCMCs – a review. <i>International Materials Reviews</i> , 2020, 65, 389-444.	9.4	168
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56	Effects of electrophoretic deposition process parameters on the mechanical properties of graphene carboxylâ€“grafted carbon fiber reinforced polymer composite. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48925.	1.3	15
57	Transformation of fracture mechanism and damage behavior of ceramic-matrix composites during nano-scratching. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 130, 105756.	3.8	47
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60	Effect of CNTs addition on microstructure, ablation property and mechanism of ZrCâ€“SiC coating for C/Câ€“ZrCâ€“SiC composites. <i>Vacuum</i> , 2020, 172, 109099.	1.6	24
61	Electromechanical Assessment and Induced Temperature Measurement of Carbon Fiber Tows under Tensile Condition. <i>Materials</i> , 2020, 13, 4234.	1.3	2
62	Anti-ablation performance of La ₂ O ₃ -modified ZrB ₂ coating on SiC-coated carbon/carbon composites. <i>Ceramics International</i> , 2020, 46, 28758-28766.	2.3	11
63	Damage properties of pre-embedded connection of carbon fiber wound composite tubes. <i>Materials Today Communications</i> , 2020, 25, 101525.	0.9	3
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68	Modeling and Two-Step Homogenization of Aperiodic Heterogenous 3D Four-Directional Braided Composites. <i>Journal of Composites Science</i> , 2020, 4, 179.	1.4	11
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70	Comparison between two numerical tools for geometrical deviation analysis in composite assemblies. <i>Procedia CIRP</i> , 2020, 92, 100-105.	1.0	3
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74	Investigation of improved dielectric and thermal properties of ternary nanocomposite PMMA/MXene/ZnO fabricated by in situ bulk polymerization. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49197.	1.3	33
75	Mechanism and feasibility of ultrasonic-assisted milling to improve the machined surface quality of 2D Cf/SiC composites. <i>Ceramics International</i> , 2020, 46, 15122-15136.	2.3	51
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78	Ultra-high temperature ceramics developments for hypersonic applications. <i>CEAS Aeronautical Journal</i> , 2020, 11, 651-664.	0.9	16
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80	Thermal protection systems for space vehicles: A review on technology development, current challenges and future prospects. <i>Acta Astronautica</i> , 2020, 176, 341-356.	1.7	235
81	Ceramic Composite Materials Obtained by Electron-Beam Physical Vapor Deposition Used as Thermal Barriers in the Aerospace Industry. <i>Nanomaterials</i> , 2020, 10, 370.	1.9	39
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83	Effects of initial density during laser machining assisted CVI process and its influence on strength of C/SiC composites. <i>Ceramics International</i> , 2020, 46, 11743-11746.	2.3	15
84	Current review on the utilization of nanoparticles for ceramic matrix reinforcement. , 2020, , 345-367.		5
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111	A comparative study for the thermal conductivities of C/SiC composites with different preform architectures fabricating by flexible oriented woven process. <i>International Journal of Heat and Mass Transfer</i> , 2021, 170, 120973.	2.5	12
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113	Innovative procedure for 3D printing of hybrid silicon carbide/carbon fiber nanocomposites. <i>Nano Select</i> , 2021, 2, 2201-2208.	1.9	7
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122	Room-temperature deformation of single crystals of ZrB ₂ and TiB ₂ with the hexagonal AlB ₂ structure investigated by micropillar compression. <i>Scientific Reports</i> , 2021, 11, 14265.	1.6	8
123	Improved toughness of HfC with tantalum fibre net and tantalum foil. <i>Ceramics International</i> , 2021, 47, 19260-19266.	2.3	2
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