

Carbon based Smart Materials: Functional Carbon for Lightweight Automotive Component 3D Printing

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Abstract : Flame retardant composite filaments with functional carbon in the composition were fabricated, and printed parts showed enhanced crash resistance properties and improved EMI shielding. The negligible mass difference after prolonged immersion in automobile chemicals revealed the outstanding performance of parts for under-the-hood high-temperature applications.

Keywords : FDM, crash worthy, EMI Shield, lightweight, automotive parts

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