

## Distribution and Orientation of Carbon Fibers in Poly(lactic Acid) Parts Produced by Fused Deposition Modeling - DTU Orbit (09/11/2017)

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The aim of this paper is the understanding of the fiber orientation by investigations in respect to the inner configuration of a poly(lactic acid) matrix reinforced with short carbon fibers after a fused deposition modeling extrusion process. The final parts were analyzed by X-ray, tomography, and magnetic resonance imaging allowing a resolved orientation of the fibers and distribution within the part. The research contributes to the understanding of the fiber orientation and fiber reinforcement of fused deposition modeling parts in additive manufacturing.

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