

Peer Review

Review of: "A Review on the Mechanical, Thermomechanical Properties and Crystallinity Aspects of 3D-Printed Nanocomposites Used for Fabricating Electronic/Structural Parts"

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This manuscript presents a thorough and well-organized review of 3D-printed thermoplastic nanocomposites. The authors compile an impressive amount of literature across PLA, ABS, PA, PC, PEEK, TPU, and other engineering polymers, and the comparative tables are particularly valuable for quickly assessing the influence of nanofillers on tensile, flexural, impact, and thermomechanical performance. The review appropriately highlights sustainability motivations, discusses crystallinity effects, acknowledges processing-parameter influences, and offers actionable recommendations for future research. Overall, the breadth of coverage, clarity of data presentation, and practical relevance are strong assets that make this manuscript a useful resource for researchers in additive manufacturing and polymer nanocomposites.

However, several areas require improvement to enhance readability and analytical depth. The manuscript is heavily data-driven and, in several places, reads as a list of numerical results rather than a synthesized narrative; clearer trend interpretation and mechanistic discussion would strengthen the review. Some necessary analysis is missing. The introduction is somewhat unfocused, figures are not well-integrated, and referencing formats are inconsistent. Including graphical summaries or trend charts and providing stronger cross-polymer comparisons would also improve clarity. With a tightened structure, deeper synthesis, and improved presentation, the manuscript has the potential to become a high-impact review in this area.

Declarations

Potential competing interests: No potential competing interests to declare.