Special Issue

Advances in Polymer Composite Deposition Additive Manufacturing

Message from the Guest Editors

We aim to include research on the latest advances and trends in the materials, processing, simulation, and design of polymer composite deposition. The topics of interest in polymer composite deposition include but are not limited to:

- Fused filament fabrication of polymer composites;
- Large scale polymer composite deposition;
- Polymer composite deposition filament and pellet properties;
- Process–structure–property maps of polymer composites;
- Variability in processing and part performance;
- Control of the polymer composite deposition process;
- Design for manufacturing parts produced with polymer composite deposition;
- Effect of fiber reinforcement (carbon, glass, Kevlar, baron, natural fibers, etc.) on deposition and part properties;
- Effect of the deposition process on part properties (strength, stiffness, toughness, density, etc.);
- Multifunctionality (structural properties, thermal and electrical conductivities, energetic properties, etc.) of the deposited polymer composites;
- Effect of additives and fillers at various length scales (micro, nano);
- Modelling and simulation of the polymer composites melt flow during processing;

Guest Editors

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Deadline for manuscript submissions

closed (20 January 2024)

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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