Special Issue

Fusion Bonding/Welding of Polymer Composites

Message from the Guest Editors

Joining of polymer composites may be achieved by different technologies. However, one of the greatest drivers for thermoplastic composites use is the ability to join components via fusion bonding/welding. Although some methods like resistance or induction welding are quite well established, other technologies are still at a more or less advanced development stage. One of the challenges is to master the interfacial phenomena, structure and quality in the assembly area (welds). The same issues are also to tackle for 3D-printed or overmolded parts. Besides, there is a need for reliable predictive process simulation softwares, and also for increased inline monitoring and control of welding process parameters. This Special Issue welcomes papers on the latest advances and development of fusion bonding/welding of thermoplastic composites. Suggested contributions may address materials, processing, modeling/simulation, monitoring/control, performance or application issues, with either experimental or numerical approches.

Guest Editors

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Deadline for manuscript submissions

closed (20 October 2023)



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Impact Factor 3.1 CiteScore 5.8 Indexed in PubMed



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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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