Special Issue

Additive Manufacturing for Advanced Thermal Management Systems

Message from the Guest Editors

In just a few short years, the additive manufacturing (AM) technology known as 3D printing has experienced intense growth from a niche technology to a disruptive innovation that has captured the imaginations of both mainstream manufacturers and hobbyists. This Special Issue will present the use of 3D printing for specific applications, materials, and manufacturing processes that help to optimize heat transfer in advanced thermal management systems, with a focus on sustainability. The ability to create complex geometries, customize designs, and use advanced materials provides opportunities for more efficient and stable heat transfer solutions. One of the key benefits of incremental technology is the potential reduction in material waste compared to traditional manufacturing methods. By optimizing the design and structure of heat transfer components, 3D printing enables lighter yet more efficient solutions and systems. The customization and flexibility of 3D printing enables the integration of heat transfer components into renewable energy systems.

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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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