Special Issue

Advances in Manufacturing of Ceramic Matrix Composites

Message from the Guest Editor

We are pleased to invite you to contribute to our Special Issue on "Advances in Manufacturing of Ceramic Matrix Composites". Ceramic Matrix Composites (CMCs) are driving innovation and maturing into enabling materials for high-temperature structures in gas turbines. hypersonic vehicles, and nuclear power applications. In recent years, there has been significant effort in advancing the manufacturing of CMCs with the goal of improving their quality, cost, properties, and scalability. The articles presented in this Special Issue will cover the recent advances and related challenges in the manufacturing of a broad range of CMCs such as oxide/oxide, SiC/SiC, C/SiC, C/C-SiC, and ultra-high temperature ceramic matrix composites (UHTCMCs). Topics of interest include, but are not limited to, the following:

- Emerging methods of manufacturing such as additive manufacturing
- Improvements in traditional manufacturing methods
- Low-cost manufacturing
- Process-property relationships
- Process modeling and optimization
- Advancements in interfacial coating methodologies

Guest Editor

Dr. Abhendra Singh

Department of Mechanical Engineering, Baylor University, Waco, TX 76798, USA

Deadline for manuscript submissions

closed (20 September 2025)



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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





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About the Journal

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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