

Special Issue

Process Innovations and Microstructure Engineering for Advanced Ceramics

Message from the Guest Editors

Advanced ceramics are widely used in aerospace, nuclear, cutting machine, renewable energy, and scintillation applications. The investigation and development of these materials are critical for national defense, energy, and healthcare industries.

The processing of advanced ceramics is the key to properties and performance. It determines the materials' microstructure, phase composition, grain boundary, reproducibility, scalability, energy consumption, and production cost. To achieve certain properties and reliable performance, a precise processing routine must be performed. Therefore, the processing needs to keep improving.

This Special Issue on “Process Innovations and Microstructure Engineering for Advanced Ceramics” aims to cover recent research about the development of effects of processing on microstructure and properties. Topics include, but are not limited to, ceramic fabrication methods in the following areas:

- Manufacturing of ultra-high temperature ceramics;
- Improving the properties of ceramics for thermal protection systems;
- Design and fabrication of composites for nuclear applications;
- Ceramic processing simulations;
- Processing of energy storage materials.

Guest Editors

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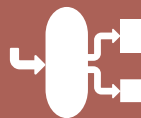
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Deadline for manuscript submissions

20 January 2027



Processes

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 5.7



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