

## Special Issue

# Synthesis, Sintering and Application of Ceramic Materials

### Message from the Guest Editors

The aim of this Special Issue lies on three fundamental features of ceramic processing and its property measurements:

- New route of materials synthesis for achieving high-quality green powders suitable for subsequent processing. Innovative aspects of chemical and physical reactions are expected to lead to obtaining powders having a controlled phase and chemical composition. Green materials in the form of micro or nano powder may be used for sintering or other types of processing;
- Manufacturing of dense or porous ceramic polycrystals by solid or liquid state sintering. Characterization of mass transfer by pressureless sintering, hot-pressing (HP) or spark plasma sintering (SPS). Microstructure depiction related to heat treatment and other sintering conditions. Specific behavior of ceramic powder densification;
- Functional and structural properties of advanced ceramic for use both at room and elevated temperature to support manufacturing within sectors such as chemical, mechanical, electronical, and energy production.

The Special Issue welcomes high-quality research articles from the rapidly developing ceramic fields.

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 December 2021)



## 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.

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