

Special Issue

Advances in Metal and Ceramic Matrix Composites

Message from the Guest Editor

Metal and ceramics together is a challenging alliance, however, their liaison produces composites, which are the most important engineering materials in recent years. They offer outstanding properties compared to conventional materials, with potential applications for tools, automobiles, medicine, aerospace and other industrial applications. The new generations of metal and ceramic matrix composites are ternary or multiphase systems and demands to create complex microstructures. The key factor to produce such advanced composites, also called hybrid composites, is a microstructural control from the nano to the micro scale, which results in a synergistic effect of micro and nano phase combinations and with a spectrum of known and as yet unknown properties. In this Special Issue on "Advanced in Metal and Ceramic Matrix Composites", original papers, which relate to the new composite materials of both metal–ceramic and ceramic–metal systems, are expected. The following topics are proposed:

- new composites, hybrid composites,
- fabrication, new methods and concepts of tailoring the microstructure,
- characterization, properties and practical applications.

Guest Editor

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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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