

## Special Issue

# Advances in Properties of the Rapidly Solidified Alloy

### Message from the Guest Editors

Rapidly solidified amorphous and nanocrystalline alloys attract the attention of the scientific community due to their unique physical properties. Appropriate processing of amorphous materials allows researchers to control their crystallization and shape their functionalities. In particular, some amorphous and nanocrystalline materials based on iron and cobalt exhibit exceptionally good soft magnetic properties and are key components of electromagnetic devices such as transformers, sensors, actuators and others. The annealing of rapidly solidified alloys containing rare-earth elements allows deriving the hard magnetic materials. Studies of multi-elemental alloys have brought significant development of bulk metallic glasses. Particularly, Zr-, Hf-, Cu-, Pd-, and Mg-based alloys can be obtained in the form of bulk specimens of significant geometrical sizes due to their high glass forming abilities. Their mechanical properties seem to be promising for their potential applications.

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### Guest Editors

Prof. Piotr Pawlik

Dr. Katarzyna Pawlik

Dr. Paweł Pietrusiewicz

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### Deadline for manuscript submissions

closed (31 October 2021)



## Materials

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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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