# Special Issue

# Elaboration of New Materials Using Hydrothermal Methods

## Message from the Guest Editors

Hydrothermal methods still represent a “black box” technology that is based on the crystallization of materials directly from aqueous solution via controlling the thermodynamic (temperature, pressure, solution pH and the chemical composition of precursors) and nonthermodynamic variables. The unique pressure-temperature interaction in hydrothermal solutions can be used as a basis for controlling the rate and uniformity of nucleation and growth, allowing the size, morphology, stoichiometry, polymorphism, metastable phases, and aggregation to be controlled in designing the obtained materials. Therefore, this Special Issue intends to gather state-of-the-art advances in research on the hydrothermal synthesis of new materials alongside continuous materials production, hydrothermal recycling technology, and the modeling and simulation of hydrothermal synthesis. Original and review papers on the scientific fundamentals and technological applications of the hydrothermal synthesis of new materials are welcome.

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## Deadline for manuscript submissions

closed (20 March 2023)

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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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