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Elaboration of New Materials Using Hydrothermal Methods

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Message from the Guest Editors

Dear Colleagues,

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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Message from the Editor-in-Chief

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