



## Advances in Hydrothermal Sintering and Crystal Growth

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### Message from the Guest Editors

Hydrothermal processes are an integral part of the High-Pressure (HP) domain. Fluid under the combination of temperature and pressure is involved in applications in several existing fields, such as obtaining single crystals of  $\alpha$ -quartz  $\text{SiO}_2$  by hydrothermal crystal growth. In materials science, hydrothermal pressure, in addition to temperature, allows obtaining solid material by sintering, consolidation, or densification. The solid materials obtained by sintering phenomena are generally in ceramic form, while consolidation phenomena result in monoliths with dense (by densification) or porous (by interparticle bridging) forms. Innovative hydrothermal/solvothermal processes were designed for growth of single crystals at low temperature and also for the fabrication of hybrid materials by sintering. Recently, innovative hydrothermal/solvothermal processes have emerged from the combination of technologies, opening new possibilities for obtaining these advanced functional materials.

To this end, it is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are welcome.





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## Message from the Editor-in-Chief

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