Special Issue

Application of Rapid Design and Preparation Methods for Advanced Structural and Functional Inorganic Materials

Message from the Guest Editors

Dear colleagues, With the development of new devices, apparatuses and application fields, the demand for the R&D of advanced structural and functional materials is increasing. Rapid material design and preparation methods have recently gained much research interest in both the research and application communities due to the time-saving and high-efficiency advantages they offer as compared to conventional techniques. These include the theoritcal calculation, high-throughput component screening technology using powders or films. The application of Spark Plasma Sintering (SPS), Selective Laser Sintering (SLS), flash sintering in ceramics preparation, rapid growth of high quality crystals by Optical Floating Zone method or micro-pulling down method (m-PD), functional glass preparation by containerless aerodynamic levitation method, etc. Therefore, a series of new materials have been developed, and consequently, novel structures and/or high performances have been presented. This Special Issue covers these topics and focuses on the recent progress of rapid design and preparation methods for advanced structural and functional inorganic materials.

Guest Editors

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Deadline for manuscript submissions

closed (20 August 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/107061

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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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