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Porous Ceramics: Structure Analysis and Applications

Guest Editor:

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Message from the Guest Editor

This Special Issue aims to showcase the latest advancements in relevant research on the production of advanced porous ceramics, with a focus on tailoring pore structures and properties for specific applications. Emphasis will be placed on the fabrication processes responsible for determining pore structures, geometries, surface chemistry, and their potential to reduce the overall carbon footprint in porous ceramic production (such as additive manufacturing techniques), emerging as a promising method for producing components of porous ceramics. This Special Issue also seeks to underscore the potential applications of advanced porous ceramics in energy and environmental contexts such as energy storage and conversion, water purification, the degradation of pollutants, and hydrogen production. Research areas includes but are not limited to:

(1) the fabrication, functionalization, and characterization of porous ceramic materials with desired pore configuration and geometry;

(2)the exploration of correlations between process, structure, and properties;

(3) circular porous ceramic materials;

(4) the application of porous ceramics in environmentaland energy-related scenarios.





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Message from the Editor-in-Chief

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