Special Issue

Advances in Design and Characterization of Graded and Hierarchical Honeycomb Materials

Message from the Guest Editors

As a typical lightweight cellular material, honeycombs have attracted great interest and have been used in a wide range of applications due to their high specific stiffness and strength, excellent energy absorption capability, and multifunctional characteristics. Driven by the increasing demand for high-performance lightweight materials, advances in the design of honeycombs with enhanced performance have sprung up in recent years. This Special Issue aims to provide an overview of the latest achievements in the design and characterization of graded and hierarchical honeycombs and to highlight possible research directions to further advance the development of these materials. Contributions are welcome on topics that include, but are not limited to:

- Novel graded or hierarchical honeycomb materials;
- Graded or hierarchical design strategies for honeycomb materials;
- Advanced manufacturing and processing technologies;
- Novel methods for performance characterization;
- Optimal design of graded or hierarchical honeycomb materials;
- Classic graded or hierarchical honeycomb configurations and their properties;
- Applications of graded or hierarchical honeycomb materials.

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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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