Advances in Materials Science and Engineering

Special Issue on

Design, Synthesis, and Characterization of Hybrid Materials

CALL FOR PAPERS

Research on hybrid materials is one of emerging topics in advanced materials science and engineering. Hybrid materials have advanced functionality realized by controlling the interfaces among various functional materials (metal/ceramic/polymer), microstructures (crystalline/amorphous/void), and critical dimension (nano-/micro-/macroscales). By realizing the concept of unprecedented hybrid interface between homogeneous and heterogeneous materials from atomistic level to macroscale, enhanced performance or novel functionality can be achieved along with functionalities of constituent elements. Additionally, unforeseen behaviors at hybrid interfaces can be utilized for future applications. In order to realize and utilize hybrid materials for practical applications, synthesis and fabrication techniques should be developed with hybrid techniques with external energy such as plasma, laser, and electromagnetic field. We invite investigators to contribute original research articles that will stimulate the continuing efforts to design, synthesize, and characterize advanced hybrid materials for various applications. The authors of the 3rd International Symposium on Hybrid Materials and Processing (HyMaP) 2014 (http://hymap.org/) are invited to submit the extended version of their papers to this special issue.

Potential topics include, but are not limited to:

- Design and synthesis of hybrid functional materials
- Design and synthesis of hybrid structural materials
- Hybrid manufacturing process for advanced materials
- Characterization and applications of hybrid materials

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/amse/hymap/.

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