

Science of Advanced Materials

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A Special Issue on

"Nanostructured Ceramic Oxides: Challenges and Opportunities"

CALL FOR PAPERS

Developing new advanced functional materials and devices with controlled features on the nanometer scale is at the core of R & D innovation. However, the widespread utilization of nano-structured materials is often complicated by the conflicting demands for precise control of hyperfine features and for large-scale mass production.

This special issue focuses on the fabrication of nano-structures of ceramic oxides using lithographic and non-lithographic approaches. Due to the exceptional properties, the ceramic oxide nanostructures are ideal platforms for variety of applications, to name a few, catalysis, sensors (gas, bio-, chemical, etc), electronic and energy devices applications, antimicrobial functions, environmental, biomedical, transportation, chemical manufacturing applications and many more. The fabrication methods covered in this special issue will represent recent innovations in nano-processing that integrates cutting edge expertise and resources in ceramic processing, lithographic and non-lithographic approaches in micro- and nano-fabrications, gas-solid reaction kinetics, microscopy, and other advanced characterization techniques.

This special issue covers all topics related to lithographic and non-lithographic approaches for oxide nano-structures. We invite submission of review chapters and original research articles covering the following topics (but not limited to)

- *Synthesis/fabrication of oxide nano-structures using lithographic and non-lithographic approaches*
- *Characterizations of ceramic oxides at atomic, molecular and nanometer scale level*
- *Mechanism, modeling and simulation of ceramic oxides nanostructures*
- *Novel applications of ceramic oxide nanostructures in electronics, sensing, catalysis, bio-medical devices, and other applications.*

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Manuscript Submission

Manuscripts must be prepared according to Journal's guidelines, available at <http://www.aspbs.com/sam>. Submit your manuscripts **in MS word or PDF format** directly to **Sheikh A. Akbar** at e-mail: Akbar.1@osu.edu

All papers submitted to this issue will be subject to a strict peer review process to ensure high quality articles. Please make sure in the cover letter that the submitted paper has not been published previously and is not currently submitted for review to any other journal and will not be submitted elsewhere before a decision is made by this journal. Please notify well in advance for your intention to submit a research paper.

Important Dates

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