

S8-1 Nanostructured Ceramics

SHORT DESCRIPTION:

This symposium aims to provide an overview of the key aspects of nanostructured ceramics and nanotechnology, highlighting advancements in their fabrication, processing, properties, applications, current challenges, and future potential. In addition to discussing these challenges and limitations, this symposium will offer a platform to explore the role of nanostructured ceramics in critical areas such as energy, health, industrial progress, and sustainable technologies. The goal is to deepen our understanding of the fundamentals of these materials, facilitating future discoveries and advancing technology for a better world.

SESSION TOPICS:

1. Fundamentals of nanostructured ceramics and nanotechnology
2. Fabrication of nanoceramics
3. New design and processing technologies
4. Advanced techniques and tools
5. Nanoceramics for renewal energy
6. Nanoceramics for biomedical application
7. Glassy/amorphous nanoceramics
8. High-performance nanoceramics
9. Sustainable nanotechnology
10. 2D/thin film nanoceramics
11. Green nanoceramics
12. Water purification and pollution control
13. Challenges in nanotechnology
14. Simulation and machine learning in nanotechnology

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