

## Special Issue

# Advanced Laser and Material Technologies for Applications in Nuclear Energy

### Message from the Guest Editors

By bringing together contributions from outstanding researchers and industry experts, this issue aims to provide valuable insights into the evolving landscape of advanced laser and material technologies for applications in nuclear energy. The aim of this Special Issue is to disseminate the latest findings in experimental, theoretical, numerical, and modeling research regarding laser and material technologies for nuclear energy, covering a broad spectrum of topics including, but not limited to, the following:

- Laser-Based Processing Technologies for Nuclear Applications;
- Laser-Assisted Decontamination and Inspection;
- Material Innovations for the Advancement of Nuclear Energy Systems;
- Interactions and Performance of Nuclear Materials;
- Laser-Induced Material Behaviors and Phenomena;
- Anti-corrosion Technology for Extreme Conditions Use;
- Applications of Laser and Material Technologies in Nuclear Reactor Development and Decommissioning;
- Other Issues Related to Laser and Material Technologies for Nuclear Energy.

### Guest Editors

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### Deadline for manuscript submissions

31 March 2026



## Materials

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## About the Journal

### 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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