Special Issue

Advances in the Manufacturing of Optical Materials, in Optical Sensing, and in Material Performance Analysis

Message from the Guest Editors

The ultraprecision processing of optical components and the progress made in the sensing capabilities of optical devices, as well as the analysis of their material properties, are all key focuses within this research topic. Starting from basic material theories, we aim to investigate advanced manufacturing methods and technologies that can meet the needs of high-end equipment, such as laser fusion devices, lithography machines, and Earth observation satellites. By combining optical sensing, surface manufacturing, and material analysis, we aim to develop innovative solutions for precision manufacturing and advanced applications in optical materials. This Special Issue seeks contributions exploring various areas including, but not limited to, the following:

- Innovative approaches to the manufacturing of optical materials;
- Advancements in optical sensing techniques and applications;
- Analysis of material performance in optical systems;
- Novel methods for characterizing optical materials;
- Experimental insights into the behavior of materials used in optical devices;
- Nondestructive testing methodologies for the evaluation of optical materials.

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Deadline for manuscript submissions

20 August 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/206904

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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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