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

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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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Message from the Editor-in-Chief

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