Special Issue

Sensing Technologies in Optical Image Stabilization

Message from the Guest Editor

Sensing technologies play a vital role in optical image stabilization, which can detect the attitude change in the optical system and the offset of the target position, and provide feedback information for the image stabilization system. Sensors need to have high sensitivity, high dynamic range and stability. Researchers are constantly improving sensor design and performance to meet the challenges brought by the increasing distance of observation targets and the complexity of application scenarios. This Special Issue invites manuscripts that introduce the recent advances in “Sensing Technologies in Optical Image Stabilization”. All theoretical, numerical, and experimental papers are accepted. Topics include, but are not limited to, the following:

- Sensor technology trends in image stabilization;
- Image-based feedback control methods;
- Active vibration control;
- Inertial-sensor measurement and control;
- Adaptive disturbance rejection;
- Remote target sensing and detection;
- Dim image detection;
- Optical signal processing;
- Tip–tilt mirror technology.

Guest Editor

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Deadline for manuscript submissions

closed (15 July 2025)

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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