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Recent Progress in Optical Gyroscopes

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Optical gyroscope is an inertial sensor that uses the Sagnac effect to measure the rotation rate. Compared to traditional mechanical gyroscopes, has it the characteristics of a fully solid-state structure, high precision, low power, and ease of integration. It is widely used in fields such as aerospace, navigation, land navigation, robotics, simulation training, and scientific research. Currently, classical optical gyroscopes are mainly divided into interferometric optical/fiber gyroscopes, laser gyroscopes, resonant optical/fiber gyroscopes, and Brillouin optical/fiber gyroscopes, as well as some new types of optical gyroscopes, such as optomechanical gyroscopes and optical gyroscopes based on non-Hermitian systems with exceptional point (EP). Researchers are invited to contribute papers to this Special Issue. Topics include, but are not limited to, the following:

- Fiberoptic gyroscope (FOG);
- Ring-laser gyroscope (RLG);
- Resonant optical gyroscope;
- Integrated optical gyroscope;
- Brillouin optical gyroscope;
- Optomechanical gyroscope.





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