hv photonics

an Open Access Journal by MDPI

IMPACT FACTOR 2.1

CITESCORE 2.6

Laser as a Detection: From Spectral Imaging to LiDAR for Remote Sensing Applications

Guest Editors:

Dr. Jianfeng Chen

Dr. Ming Zhao

Dr. He Tian

Deadline for manuscript submissions:
20 December 2024

Message from the Guest Editors

Laser spectral imaging techniques (single-pixel imaging, hyperspectral, resonance fluorescence spectroscopy, etc.) are important tools for studying the interaction between light and matter. LiDAR (Light detection and ranging) is a remote sensing technology that makes accurate measurements by emitting a laser that shines at an object and reflects or scatters it over a period of time.

This Special Issue invites manuscripts that introduce the recent advances in “Laser as a detection: from spectral imaging to LiDAR for remote sensing applications”. All theoretical, numerical and experimental papers are accepted. Topics include, but are not limited to, the following:

- Laser detection technology;
- LiDAR detection technology;
- Laser Spectroscopy;
- Atmospheric Detection and Remote Sensing;
- Single-pixel imaging;
- Hyperspectral technology;
- Resonance fluorescence spectroscopy;
- Fiber optic sensing technology;
- Optical waveguide resonant cavity design;
- Optical machine system design;
- High average-power laser technology;
- Progress in high-quality optics.
- Image processing.