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Photonic Integrated Circuits for Information, Computing and Sensing

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Message from the Guest Editors

Dear Colleagues,

Integrated photonics is a well-established research field with numerous applications ranging from telecommunications to integrated sensors, classical computing to quantum computing.

On the one hand, advances in manufacturing technologies made available by the microelectronics industry have enabled the design of new devices and the production of increasingly large photonic integrated circuits.

On the other hand, nanofabrication technologies that have recently become available have enabled the fabrication of entirely new devices, such as new types of sensors, light detectors, or devices for the generation, manipulation, and detection of non-classical states of light.

This Special Issue aims to provide an overview of cuttingedge research and review papers on photonic integrated circuits and their applications. Topics include, but are not limited to, the following:

- Nanophotonics;
- Integrated photon detectors and sensors;
- Quantum information;
- Integrated quantum photonics;
- Polymer waveguides;
- 1D and 2D materials;
- · Optical sensing.

