



an Open Access Journal by MDPI

Photonic Integrated Circuits for Information, Computing and Sensing

Guest Editors:

Dr. Andrea Salamon

Istituto Nazionale di Fisica Nucleare, Sezione di Roma Tor Vergata, 00133 Rome, Italy

Dr. Liam O'Faolain

Centre for Advanced Photonics and Process Analysis (CAPPA), Munster Technological University, T12 P928 Cork, Ireland

Dr. Simone ladanza

Paul Scherrer Institut - EPFL - IBM Research, 5232 Villigen, Switzerland

Deadline for manuscript submissions: **31 July 2024**



mdpi.com/si/175834

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:

Secialsue

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