

# Special Issue

## Photon Counting Instrumentation and Applications

### Message from the Guest Editor

This Special Issue aims to present the latest state-of-the-art research on photon counting instrumentation and photon counting applications. Researchers are invited to submit papers on the following topics:

- Time-to-digital converters (TDCs);
- Time-to-amplitude converters (TACs);
- Detector arrays with onboard timing electronics;
- Methods to improve TDC dead-time, linearity, and precision;
- Coincidence counting instruments;
- Time correlated single photon counting (TCSPC) instruments;
- TDC timestamp post processing algorithms and use of graphical processing units (GPUs) to speed up processing;
- High throughput instrument to computer communication systems to enable high-rate timestamping;
- Applications of photon counting such as photon counting LiDAR, quantum optics, quantum key distribution, biophotonic applications, etc.;
- Other related photon counting systems, techniques or applications.

### Guest Editor

Dr. Richard Nock

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### Deadline for manuscript submissions

closed (31 December 2021)



## Photonics

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## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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### Editor-in-Chief

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).