



Photon Counting Instrumentation and Applications

Guest Editor:

Dr. Richard Nock

Aston Institute of Photonic
Technologies, Aston University,
Aston St, Birmingham B4 7ET, UK

Deadline for manuscript
submissions:

closed (31 December 2021)

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.

