Announcing a Special Issue of the
IEEE Journal of Selected Topics in Quantum Electronics on
Photonics Signal Processing

Submission Deadline: **February 1, 2023**
Hard Copy Publication: November/December 2023

The *IEEE Journal of Selected Topics in Quantum Electronics* (JSTQE) invites manuscript submissions in photonic signal processing. The field of photonic signal processing is broad and multi-disciplinary, and draws upon knowledge in fields ranging from, amongst others, physics; materials and devices; communications, signal processing, and information theory; neuroscience; quantum information science; linear and nonlinear science; computing; and ultrafast science. Research focuses on advancing fundamental knowledge and techniques, as well as applications in diverse areas from communications to natural and biological sciences. The purpose of this issue is to provide an overview of ongoing progress and trends in advancing the knowledge, understanding, and novel applications of photonic signal processing. Areas of interest include (but are not limited to):

- Photonics for AI and neuromorphic computing
- Quantum photonic signal processing
- Microwave photonic signal processing and sensing
- Ultrafast photonic signal processing
- Integration for photonic signal processing
- Photonic signal processing for sensing and communications
- Integrated photonics for 6G networks
- AI/machine learning for photonic device design and signal processing
- Quantum microwave photonics
- Programmable photonic signal processing
- Optical frequency combs for photonic signal processing
- Photonic Ising machine
- Photonic reservoir computing

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