Announcing a Special Issue of the
IEEE Journal of Selected Topics in Quantum Electronics on
Microresonator frequency comb technologies

New Submission Deadline: February 29, 2024
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The IEEE Journal of Selected Topics in Quantum Electronics (JSTQE) invites manuscript submissions in broadly defined microresonator frequency comb technologies. Microresonator-based photonics grew to a broad and multi-disciplinary field over the last decade. It draws upon knowledge in fields ranging from fundamental and applied physics, chemistry, material and device science to quantum information as well as linear, nonlinear and ultrafast science. The microresonator-related research focuses on advancing fundamental knowledge and techniques, as well as applications in diverse areas from biology to quantum sciences and technology. The purpose of this issue is to provide an overview of ongoing progress and trends in advancing the knowledge, understanding, and novel applications of microresonator-based technology with focus on generation and applications of microresonator frequency combs. Areas of interest include (but are not limited to):

- Dispersion management and functionalization
- Fundamental properties
- Oscillators and frequency synthesis
- Signal processing and sensing
- Clocks and timing
- Spectroscopy
- LIDAR and RADAR
- Quantum physics, photonics and optics
- Astronomy and astrophysics
- THz generation, measurement and communications
- 5G and 6G applications
- Mode locked lasers

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