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Preliminary Call for Papers

Announcing an Issue of the IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS on

<u>Ultra Low Loss Planar Waveguides and Their Applications</u>

Submission Deadline: October 1, 2017

Hard Copy Publication: July/August 2018

The **IEEE Journal of Selected Topics in Quantum Electronics** (JSTQE) invites manuscript submissions in the area of **Ultra Low Loss Planar Waveguides and Their Applications (ULLPWA)** featuring planar technologies with state of the art low losses:

- ULLPW design and basic technology
- ULLPW integration platforms and fabrication
- ULLPW based components
- Nonlinearities in ULLPWs (e.g. Brillouin, Raman)
- Heterogeneous integration with Silicon Photonics and InP
- Active ULLPW based devices
- High Q resonators
- Filtering and dispersion compensation
- Optical delay lines
- Optical gyros
- Optical true time delays
- Integration of quantum devices with ULLPWs
- Energy efficient photonic integration
- TE and TM response and polarization sensitivity

- Octave spanning frequency generation and comb generators
- ULLPW based gratings
- ULLPW based lasers
- Microwave and optical oscillators
- ULLPW based sensors
- ULLPW based signal processing and coding
- Phased array devices and applications
- Wavelength and polarization dependence on scattering and bending loss
- Coherent optical transmitters, receivers and transmission
- Optical clocks
- Low loss on-chip communications and networks
- Photonic molecules and topological photonics

The Primary Guest Editor for this issue is **Daniel J Blumenthal**, University of California at Santa Barbara (UCSB), USA. The Guest Editors of the issue are **Mario Dagenais**, University of Maryland, USA; **Benjamin Eggleton**, University of Sydney, Australia; **Dries Van Thourhout**, Ghent University, Belgium; **Caterina Ciminelli**, Politecnico di Bari, Italy.

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For inquiries, please contact:

IEEE Photonics Society JSTQE Editorial Office - Chin Tan Lutz (Phone: 732-465-5813, Email: c.tanlutz@ieee.org)

The following documents are required during the mandatory online submission at: http://mc.manuscriptcentral.com/jstqe-pho.

- 1) PDF or MS Word manuscript (double column format, up to 12 pages for an invited paper, up to 8 pages for a contributed paper). Manuscripts over the standard page limit will have an overlength charge of \$220.00 per page imposed. Biographies of all authors are mandatory, photographs are optional. See the Tools for Authors link: www.ieee.org/web/publications/authors/transinl/index.html.
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