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Preliminary Call for Papers

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

Submission Deadline: April 1, 2020
Hard Copy Publication: January/February 2021

The IEEE Journal of Selected Topics in Quantum Electronics (JSTQE) invites manuscript submissions in **Photonic Antennas**. Early attempts in developing Photonic Antennas can be traced back to the 1990's with the design and fabrication of micrometer-scale infrared and visible light antennas. From that time on, interest in this emerging research field has expanded rapidly, with growing sophistication of designs enabled by advancements in the micro and nanofabrication technology. In the last ten years or so, Photonic Antennas have become a very dynamic field of research in the broad area of photonics, both theoretically and experimentally. This has led to remarkable progress in the understanding of resonant optical micro and nanostructures with potential for formidable impact on a wide range of applications, from high-rate wireless communications and optical signal processing to molecular sensing and nonlinear effects enhancement. This special issue focuses on the recent progress of Photonic Antennas and trends in developing leading-edge fundamental concepts and novel applications.

Fundamental topics of interest include (but are not limited to):

- Phased Arrays
- Metasurfaces
- Tunability
- Reconfigurability
- All-dielectric structures
- Plasmonic design
- Nonlinear effects
- Novel materials
- Fabrication, theory, and modeling.

Application areas of interest include (but are not limited to):

- High-rate communications
- Light detection and ranging
- Three-dimensional holography
- THz technology
- Sensing
- Photovoltaics
- Optical processing
- Security
- Biotechnology

The Primary Guest Editor for this issue is **Hugo E Hernandez-Figueroa**, University of Campinas (UNICAMP), Brazil. The Guest Editors are: **Paolo Biagioni**, Politecnico Milano, Italy; **Jennifer Dionne**, Stanford University, USA; **Mona Jarrahi**, UCLA, USA; **Andrey E Miroshnichenko**, University of New South Wales, Australia.

The deadline for submission of manuscripts is **April 1, 2020**. Hardcopy publication of the issue is scheduled for **January/February 2021**. Unedited preprints of accepted manuscripts are normally posted online on IEEE Xplore within 1 week of the final files being uploaded by the author(s) on ScholarOne Manuscripts. Posted preprints have digital object identifiers (DOIs) assigned to them and are fully citable. Once available, the preprints are replaced by final copy-edited and XML-tagged versions of manuscripts on IEEE Xplore. This usually occurs well before the hardcopy publication date. These final versions have article numbers assigned to them to accelerate the online publication; the same article numbers are used for the print versions of JSTQE.

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 located at <http://mc.manuscriptcentral.com/jstqe-pho> are required during the mandatory online submission.

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 during submission of manuscript, photographs are optional. See the Tools for Authors link: www.ieee.org/web/publications/authors/transjnl/index.html.

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