

Call for Papers - IET Circuits, Devices & Systems

Special Issue on Photonic and RF Communications Systems

Aim and Scope:

Photonic and RF Communications Systems have been critical to the development of ICT infrastructure. Rapid advances in photonic and RF photonic technologies have been an impetus for deploying photonics in access, storage, backbone and grid networks, hence realizing the long standing quest for transporting data at multi-terabit rates. RF Communications Systems have been a key part of telecommunications from the very beginning of their existence. In mobile and satellite communication systems, wideband and multi-band RF circuits are important for achieving high-date wireless transmission, and supporting a large number of standards (e.g., UMTS, Bluetooth, WiFi, WiMAX, DSRC, LTE). A wideband or multi-band RF circuit can replace a number of single-band RF circuits, leading to a significant reduction of size, weight and cost of modern wireless systems. There have been lots of developments in the above areas during recent years. The objective of this special issue is to bring together the state-of-the-art research contributions that address challenges in emerging devices and architecture for photonic systems and RF circuits for wideband and multi-band communications systems. Recent developments in RF photonic technologies for wideband and multi-band wireless communication systems will also be included.

Topics of Interest:

The topics of primary interest include, but are not limited to:

- Optical Packet Switching and Optical Burst Switching, and the related high-speed circuits, optical devices and routing and switching systems
- Spectrum-sliced optical networks based on O-OFDM and elastic optical networks, and the related DSP circuits, optical devices and flexible-grid optical switching systems
- Emerging devices and architecture in optical networks
- Optical equipment architecture and performance
- Analytical modelling and performance evaluation of optical communication systems
- Test and measurement in experimental trials of optical transmission and switching systems
- Traffic engineering for next-generation optical networks
- Fiber-optics and wireless network integrations (FiWi)
- Free-space or wireless optical transmissions, systems and networks
- Call admission control and QoS- awareness in optical networks
- RF devices and circuits for wideband and multi-band wireless communication systems
- RF photonics for wideband and multi-band wireless communication systems
(e.g., true-time delay-line circuits for wideband phased arrays)

Submission rules

Authors are required to prepare their submissions according to the journal's Author Guidelines at <http://digital-library.theiet.org/journals/author-guide>.

All papers must be submitted through the journal's Manuscript Central system:
<http://mc.manuscriptcentral.com/iet-cds>.

Important Dates:

- Submission deadline: 30 Oct. 2013
- Author Notification: 30 Feb. 2014
- Publication: Q3 2014

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