

# Introduction to the Microwave Photonics feature issue

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Microwave photonics is a field that studies the interaction between microwave and optical waves for the generation, processing, control, and distribution of microwave signals by means of photonics. The key advantages of using photonics for microwave applications include wide bandwidth, low loss, and large tunability. In addition, the distribution of microwave signals over optical fibers can avoid a serious problem, electromagnetic interferences, especially in an electromagnetic-complex environment. The intention of this feature issue is to provide participants in the 2013 Asia Communications and Photonics Conference (ACP2013) with an opportunity to publish an account of their microwave photonics research as a peer-reviewed archival paper.

In this feature issue, fourteen papers are accepted, including four invited papers produced by internationally recognized research teams. The papers in the feature issue cover

a wide range of the recent advances in microwave photonics research, including dynamic-range improved microwave photonic links, microwave signal generation, microwave photonic filters, antennas for radio-over-fiber systems, laser sources for microwave photonic applications, and photonic-assisted microwave and THz imaging.

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