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Recent Advances on RF/Microwave Signal-Interference Filters

by

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Venue : J213, Silver Jubilee Building, 2nd Floor, Rm13

ABSTRACT

In the last few years, signal-interference circuits have become a suitable choice to carry out high-frequency passive filtering processes. They allow high-selectivity and low insertion-loss performances to be attained in microwave filters with almost no circuit complexity. Although firstly employed to develop bandpass filters, more sophisticated filtering actions can be synthesized through them for emerging applications. In this talk, recent advances on signal-interference microwave filters are presented, with emphasis in the multi-band operation as required by modern multi-mode/multi-purpose telecommunication transceivers. Other interesting applications of signal-interference circuits, such as tunable-bandwidth filters with very broad tuning ratio, frequency-asymmetrical duplexers and extended-stopband lowpass filters are also expounded.

BIOGRAPHY

Roberto Gómez-García is an Associate Professor at the Department of Signal Theory and Communications, University of Alcalá, Alcalá de Henares, Spain. His research interests are in the pursuit of new concepts to design advanced fixed-/reconfigurable-frequency RF filters and multiplexers in planar, hybrid and MMIC technologies, multi-function circuits, and novel software-defined radio and radar architectures for telecommunications, remote sensing and biomedical applications. He currently serves as Associate Editor for the journals "IEEE Transactions on Microwave Theory and Techniques", "IEEE Transactions on Circuits and Systems I: Regular Papers" and "IET Microwaves, Antennas and Propagation". He is a Senior Member of IEEE.

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