

# Abstracts

## Efficient Krylov-subspace simulation of autonomous RF/microwave circuits driven by digitally modulated carriers

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*V. Rizzoli, A. Costanzo and F. Matri. "Efficient Krylov-subspace simulation of autonomous RF/microwave circuits driven by digitally modulated carriers." 2001 Microwave and Wireless Components Letters 11.7 (Jul. 2001 [MWCL]): 308-310.*

Presents a new approach to the simulation of self-oscillating nonlinear circuits excited by modulated RF/microwave carriers and/or dc sources. The analysis is reduced to the solution of a sequence of coupled harmonic-balance systems. A Krylov-subspace method explicitly developed for autonomous circuits and the suppression of any time-domain integration provide a dramatic speed increase with respect to conventional envelope-oriented techniques.

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