# Abstracts

## Nonlinear Analysis of Microwave FET Oscillators Using Volterra Series

*Y. Hu, J.J. Obregon and J.-C. Mollier. "Nonlinear Analysis of Microwave FET Oscillators Using Volterra Series." 1989 Transactions on Microwave Theory and Techniques 37.11 (Nov. 1989 [T-MTT]): 1689-1693.*

In this paper, a novel approach to determine the amplitude and frequency of nonlinear FET oscillators is presented. The nonlinear elements of the active device are modeled by Volterra series. The frequency and amplitude of oscillation are then calculated by solving two algebraic equations. Experimental results obtained from a constructed oscillator confirm the validity of the theory, the discrepancy between measured and calculated frequency and amplitude values being less than 10 percent.

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