# Abstracts

## Exact analysis of coupled nonuniform transmission lines with exponential power law characteristic impedance

*A. Cheldavi. "Exact analysis of coupled nonuniform transmission lines with exponential power law characteristic impedance." 2001 Transactions on Microwave Theory and Techniques 49.1 (Jan. 2001 [T-MTT] (Mini-Special Issue on 2000 Radio-Frequency Integrated Circuits (RFIC) Conference and Automatic Radio Frequency Techniques Group (ARFTG) Meeting)): 197-199.*

A new method for frequency domain and transient analysis of the multiple coupled lossless nonuniform transmission lines with general exponential power law characteristic impedance will be presented in this paper. First, the analytical solution in frequency domain (as ABCD and S-parameters matrices) is obtained using the Frobenius method, and then a simple fast Fourier transform algorithm is used to find the time-domain response of the lines.

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