# Abstracts

## An Improved Finite Element Method Formulation for the Analysis of Nonlinear Anisotropic Dielectric Waveguides

*S. Selleri and M. Zoboli. "An Improved Finite Element Method Formulation for the Analysis of Nonlinear Anisotropic Dielectric Waveguides." 1995 Transactions on Microwave Theory and Techniques 43.4 (Apr. 1995, Part I [T-MTT]): 887-892.*

An efficient and accurate vectorial finite element formulation is presented for the analysis of dielectric waveguides with arbitrary cross-sections, nonlinear behaviors, and anisotropic materials. Remarkable improvements in solution precision and computational effort have been obtained by evaluating new coefficients used in the matrix assembling procedure of the method. The influence of the mesh division is discussed and comparison with a scalar finite element approach is reported.

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