

Abstracts

Finite Element Formulation for Guided-Wave Problems Using Transverse Electric Field Component (Short Papers)

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A finite-element formulation for electromagnetic waveguide problems is described using the transverse electric field component. In this approach, the divergence relation $\nabla \cdot D = 0$ is satisfied and spurious solutions can be eliminated in the entire region of a propagation diagram. The validity of the formulation is examined via applications to a few canonical guided-wave problems.

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