# Abstracts

## A Unique Single-Step Algorithm for Time-Stepping Electromagnetic Fields

*R.F. Bowers and C.H. Chan. "A Unique Single-Step Algorithm for Time-Stepping Electromagnetic Fields." 1993 Microwave and Guided Wave Letters 3.11 (Nov. 1993 [MGWL]): 411-413.*

A unique algorithm for time-stepping electromagnetic fields is developed that saves a significant amount of computer resources. It is applied to two-dimensional scattering problems and can be applied to any type of grid and finite difference scheme that uses the Yee time-stepping algorithm. The two-step finite difference equations are reduced to a single step which bypasses many redundant calculations. CPU and memory savings are presented.

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