Abstracts

A nonlinear and dispersive APML ABC for the FD-TD methods

M. Fujii and P. Russer. "A nonlinear and dispersive APML ABC for the FD-TD methods." 2002 Microwave and Wireless Components Letters 12.11 (Nov. 2002 [MWCL]): 444-446.

We have developed a modified anisotropic perfectly matched layer (APML) absorbing boundary condition (ABC) for the finite-difference time-domain (FD-TD) analysis of nonlinear and dispersive media. The formulation is a simple modification to the original nonsplit APML, and retains the robustness and the simple implementation in the FD-TD and the higher-order schemes. The proposed ABC has a broad area of application, and is especially suitable for the analysis of nonlinear optical waveguide problems.

❑ Return to main document.