Abstracts

GT-PML: Generalized Theory of Perfectly Matched Layers and its Application to the Reflectionless Truncation of Finite-Difference Time-Domain Grids (1996 Vol. II [MWSYM])

L. Zhao and A.C. Cangellaris. "GT-PML: Generalized Theory of Perfectly Matched Layers and its Application to the Reflectionless Truncation of Finite-Difference Time-Domain Grids (1996 Vol. II [MWSYM])." 1996 MTT-S International Microwave Symposium Digest 96.2 (1996 Vol. II [MWSYM]): 569-572.

A new formulation is presented for the systematic development of perfectly matched layers (PML) from Maxwell's equations in properly constructed anisotropic media. The proposed formulation has an important advantage over the original Berenger's PML in that it can be implemented in the time domain without any splitting of the fields. Results from 3-D simulations illustrate the effectiveness of the proposed method.

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