# Abstracts

## New closed-form electromagnetic Green's functions in layered media

*A.C. Cangellaris and V. Okhmatovsky. "New closed-form electromagnetic Green's functions in layered media." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 1065-1068.*

A new methodology is introduced for the development of electromagnetic Green's functions in layered media. This methodology does not require the extraction of the guided wave terms from the spectral domain Green's function, and does not rely on its approximation by complex exponentials. Instead, a discrete approximation of the governing differential equation in the spectral-domain is used as the vehicle for the development of the spatial Green's function in closed form. Since this new method does not require the development of the spectral-domain Green's function in closed form, it is suitable for the generation of closed form Green's function in planar inhomogeneous media exhibiting arbitrary variation in their electromagnetic properties in the vertical direction.

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