

Abstracts

Resonances in heterogeneous dielectric bodies with rotational symmetry-volume integral-equation formulation

A.A. Kucharski. "Resonances in heterogeneous dielectric bodies with rotational symmetry-volume integral-equation formulation." 2000 *Transactions on Microwave Theory and Techniques* 48.5 (May 2000 [T-MTT]): 766-770.

In this paper, a method of determining resonant frequencies and field distributions in heterogeneous bodies of revolution is presented. A volume electric-field integral equation is put into modal form, and then discretized with the method of moments. In the solution process, specially defined divergenceless basis functions are used, which reduces the number of unknowns and makes the algorithm more efficient. The identification of resonances is particularly easy because of the mode separation included in the formulation.

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