

Abstracts

Two-Dimensional Capacitance Calculation in Stratified and/or Arbitrary Dielectric Media

C.-C. Huang. "Two-Dimensional Capacitance Calculation in Stratified and/or Arbitrary Dielectric Media." 1994 *Transactions on Microwave Theory and Techniques* 42.3 (Mar. 1994 [T-MTT]): 501-504.

This paper combines the layered Green's function and bound charge technique to characterize the capacitance matrix in arbitrary two-dimensional geometries. When there exists no infinite ground plane, we enforce the constraint that the sum of all free charges is zero. When arbitrary dielectrics are sandwiched between two parallel ground planes, we numerically differentiate the integral of a closed-form parallel-plate Green's function. Both CPU time and storage are reduced as a result.

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