

# Abstracts

## Computer-Aided Renormalized Perturbation Method for the Inhomogeneously Loaded Waveguide (Correspondence)

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*T. Hidaka. "Computer-Aided Renormalized Perturbation Method for the Inhomogeneously Loaded Waveguide (Correspondence)." 1972 Transactions on Microwave Theory and Techniques 20.2 (Feb. 1972 [T-MTT]): 180-181.*

The renormalized perturbation method is applied to the inhomogeneously loaded waveguide. The second-order term in the usual Rayleigh-Schrodinger perturbation method is divergent with respect to increasing the concerned mode number. Introducing the phenomenological parameter by analogy to the quantum electro-dynamics, we have the nondivergent second-order perturbation term.

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