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Title:A mode-matching analysis of dielectric-filled resonant cavities coupled to terahertz parallelplate waveguides

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Abstract:We use the mode-matching technique to study parallel-plate waveguide resonant cavities that are filled with a dielectric. We apply the generalized scattering matrix theory to calculate the power transmission through the waveguide-cavities. We compare the analytical results to experimental data to confirm the validity of this approach. © 2012 Optical Society of America.

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