Abstracts

A Flexible Quasi-Optical System for Polarimetric Submillimeter-Wave Reflectometry

J. Brune. "A Flexible Quasi-Optical System for Polarimetric Submillimeter-Wave Reflectometry." 1992 Transactions on Microwave Theory and Techniques 40.12 (Dec. 1992 [T-MTT] (1992 Symposium Issue)): 2321-2324.

First measurements of the reflectivity of different natural and artificial materials in the 600 GHz range are reported. The investigations were carried out using a heterodyne broadband dual-polarization reflectometer which was realized in a flexible quasi-optical technique. This special construction allows the design to be changed very quickly according to the desired measurement task. The design principles of this setup are presented. Compared to Fourier-transform spectrometers the described reflectometer is capable to carry out real-time measurements even outside the laboratory. Reflectivity data of several interesting materials are presented in co- and crosspolarization.

❑ Return to main document.