Abstracts

A New Technique for Dispersive-Reflection Spectroscopy in the Far Infrared

T.J. Parker and W.G. Chambers. "A New Technique for Dispersive-Reflection Spectroscopy in the Far Infrared." 1974 Transactions on Microwave Theory and Techniques 22.12 (Dec. 1974, Part I [T-MTT] (Special Issue on the Proceedings of the First International Conference on Submillimeter Waves and Their Applications)): 1032-1036.

A new technique is described for measuring the amplitude and phase-reflection spectra of solids in the far infrared. The field of view in the fixed arm of a Michelson interferometer is divided by screens to allow the specimen and reference mirror to be placed side by side. Interferograms are then recorded by reflection from each in turn so that phase errors arising from the physical replacement of the reference mirror by the specimen are eliminated. The method is demonstrated with room-temperature and low-temperature measurements on a crystal of KBr.

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