

Call for Papers

Special Issue on Quasi-Optical Techniques IEEE Transactions on Microwave Theory and Techniques to be published October, 1993

Quasi-optical techniques are playing an increasingly important role in the development of millimeter-wave and submillimeter-wave components and systems. This technology is based upon wave-beam principles and structures having transverse dimensions that range from a few wavelengths to a few hundred wavelengths. A very strong effort has been exercised in developing quasi-optical mixers and detectors in a stand-alone and array format. More recently, a substantial effort has emerged in developing a number of "active" quasi-optical components and systems based upon hybrid and monolithic planar integrated circuit technology. As operating frequencies of ground-based and space-based systems increase, this technology will enjoy escalating importance and will provide an alternative approach for many components.

Papers describing original contributions are solicited for this special issue on subject areas related to quasi-optical techniques. Examples of areas of interest for this special issue include the following:

- Gaussian-beam optics
- Quasi-optical mixers
- Quasi-optical filters and diplexers
- Quasi-optical active devices
- Spatial power combiners
- Quasi-optical oscillators, multipliers, and amplifiers
- Beam-steering arrays
- Focal-plane arrays
- Quasi-optical imaging and phased arrays
- Active antennas
- Modeling and analysis
- Characterization of linear and nonlinear optical structures

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