

# Abstracts

## Development of Megawatt-Level Narrow-Band Far-Infrared Lasers for Plasma Diagnostics (Letters)

*F. Brown and D.R. Cohn. "Development of Megawatt-Level Narrow-Band Far-Infrared Lasers for Plasma Diagnostics (Letters)." 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)): 1112-1113.*

Required megawatt-level 30-MHz linewidth 496- $\mu$ m radiation for plasma diagnostics may be achieved in CH<sub>3</sub>F using an oscillator-pulse-amplifier combination employing transverse optical pumping (TOP). It is estimated that an upper limit of 150 J of CO<sub>2</sub> laser pump energy is required to produce 1-MW (0.07-J 60-ns) far-infrared (FIR) pulses.

[Return to main document.](#)