

Abstracts

High Power Optically Pumped Far Infrared Lasers

T.K. Plant, L.A. Newman, E.J. Danielewicz, T.A. DeTemple and P.D. Coleman. "High Power Optically Pumped Far Infrared Lasers." 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)): 988-990.

Intense superradiant laser action in the far infrared (FIR) has been observed in several gases optically pumped with a CO₂ transversely excited atmospheric-pressure (TEA) laser. A maximum FIR power of 100 kW was observed from CH₃F at 496 μm. Characteristics of the system and possibilities of scaling to higher powers are also discussed.

[Return to main document.](#)