Abstracts

Strong Submillimeter Radiation from Intense Relativistic Electron Beams

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Radiation from an intense relativistic electron beam at submillirneter wavelengths has been measured with bandpass and high-pass filters. Radiated power ~100 kW has been measured in the passband 390-540 µm. The generation of this radiation depends on giving the electrons a large energy component transverse to the magnetic field. Coherent wave generation mechanisms which may account for the observed radiation are discussed.

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