

标题: THz Spectroscopy Using Low Temperature Mesoscopic Devices

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摘要: The prototype of a THz spectroscopic camera based on low temperature mesoscopic devices is presented. The core of this system is an array of Quantum-Dots coupled to Quantum Point Contact sensors. Readout electronics is based on Time Domain Multiplexing combined with Lock-in technique. Results show that such system can reach the sensitivity needed to detect THz emission of materials in a fully passive way.

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