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标题: THz Spectroscopy Using Low Temperature Mesoscopic Devices

作者: Dell'Anna, M (Dell'Anna, M.); Antonov, V (Antonov, V.); Bagliani, D (Bagliani, D.); Biasotti, M (Biasotti, M.); Coutaz, JL (Coutaz, J. L.); Gatti, F (Gatti, F.); Kiviranta, M (Kiviranta, M.); Kubatkin, S (Kubatkin, S.); Otto, E (Otto, E.); Sypek, M (Sypek, M.); Spasov, S (Spasov, S.)

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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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地址: [Dell'Anna, M.; Bagliani, D.; Biasotti, M.; Gatti, F.] Univ Genoa, Dipartimento Fis, I-16146 Genoa, Italy

[Antonov, V.; Spasov, S.] Royal Holloway Univ London, Dept Phys, Egham TW20 0EX, Surrey, England

[Kubatkin, S.; Otto, E.] Chalmers, Dept Microtechnol & Nanosci MC2, S-41296 Gothenburg, Sweden

[Kiviranta, M.] VTT Tech Res Ctr Finland, Espoo 02044, Finland

[Coutaz, J. L.] Univ Savoie, Lab IMEP LAHC, UMR 5130, CNRS, F-73376 Le Bourget Du Lac, France

[Sypek, M.] Ortech, PL-04479 Warsaw, Poland

通讯作者地址: Dell'Anna, M (通讯作者), Univ Genoa, Dipartimento Fis, Via Dodecaneso 33, I-16146 Genoa, Italy

电子邮件地址: dellanna@ge.infn.it

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