

Abstract Submitted
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Observation of highly intense THz radiation from relativistic solid plasmas SVEN HERZER, AMRUTHA GOPAL, ALBRECHT SCHMIDT, ANDREAS REINHARD, WOLFGANG ZIEGLER, GERHARD PAULUS, Institute of Optics and Quantumelectronics, Friedrich-Schiller-Universitaet Jena, Max-Wien-Platz 1, 07743 Jena, Germany, TORSTEN MAY, HANS GEORG MEYER, Institut fuer Photonische Technologien, Postfach 100239, 07702 Jena, Germany — We present the first study of THz generation during relativistic laser solid interaction. THz pulses of few micro joules were detected at intensities of 10^{19} W/cm². The observed radiation has highly non-collinear emission direction. The spectral distribution was studied using a set of bandpass filters. A correlation between the target properties, the ion spectra and THz emission is presented.

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