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**Terahertz emission from a stack of intrinsic Josephson junctions in  $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$**  MANABU TSUJIMOTO, University of Tsukuba, IT-SUHIRO KAKEYA, Kyoto University, SHINTARO ADACHI, TAKAO WATANABE, Hirosaki University, TAKANARI KASHIWAGI, HIDETOSHI MINAMI, KAZUO KADOWAKI, University of Tsukuba — Terahertz radiation in the 0.3–10 THz frequency range is a technologically attractive form of electromagnetic radiation, because it has applications in numerous fields. Terahertz generation from stacks of intrinsic Josephson junctions fabricated from  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  (Bi-2212) has become a major focus of both experimental and theoretical research [U. Welp *et al.*, Nat. Photonics **7**, 702 (2013)]. Here, we observe continuous terahertz emission from a stack of intrinsic Josephson junctions made of  $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$  (Bi-2223). We investigate how triple  $\text{CuO}_2$  planes affect the c-axis current–voltage and emission characteristics. The terahertz emission spectra are measured by Fourier-transform infrared spectroscopy.

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