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Coherent THz emission from isosceles-triangular mesas of Bi2Sr2CaCu2O8 RICHARD KLEMM, ERICA LABERGE, CANDY REID, DUSTIN MORLEY, University of Central Florida, KAVEL DELFANAZARI, KAZUO KADOWAKI, University of Tsukuba — Using the standard emission patterns predicted for thin, isosceles triangular patch antennae, combined with a spatially uniform ac Josephson current source, we have performed two-parameter least-squares fits to our recently obtained unpublished experimental emission data from isosceles-triangularly-shaped $Bi_2Sr_2CaCu_2O_{8+\delta}$ mesas. Our results support the notion that such irregular patch antennae shapes may be useful in constructing high-powered, tunable continuous-wave coherent sources of light in the sub-terahertz to terahertz regime.

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