

Abstract Submitted
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The Terahertz Spectrum of Nitric Acid¹ PAUL HELMINGER, University of South Alabama, DOUGLAS T. PETKIE, Wright State University, IVAN MEDVEDEV, FRANK C. DE LUCIA, The Ohio State University — A solid state tripler has been put into operation on the FASSST system at Ohio State University. This device converts the microwave input power from a swept OB-30 backward wave oscillator (240-375 GHz) to terahertz output power. We have used this device to record the rotational spectrum of nitric acid in the 875-1100 GHz range. Spectral assignments have now been made for the molecule in the ground, $v_9=1$, and $v_8=1$ states, and work is underway on the assignment of spectral lines in several other excited vibration states. Results will be reported.

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