VIBRATIONAL-ROTATIONAL-TUNNELING SPECTROSCOPY OF N_2-D_2O WITH AN ALL SOLID STATE, OPTICAL HETERODYNE, SUBMILLIMETER-WAVE SPECTROMETER

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Recent advances in the fabrication of ultrafast low-temperature-grown GaAs optoelectronic devices have made possible the generation of spectroscopically significant amounts of tunable, cw far-IR radiation via optical heterodyne processes. We will present VRT spectra of the N_2-D_2O complex using an all-solid-state, passively frequency-stabilized, optical-heterodyne FIR spectrometer.