DIODE LASER SPECTROSCOPY MEASUREMENT OF OXYGEN A-BAND LINESTRENGTHS

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Linestrength measurements for the oxygen A-band at 13122 cm^{-1} using tunable diode laser absorption spectroscopy are reported. The diode lasers are scanned over individual lines and the absorption at different pressures is recorded; from these data the linestrength for each transition is obtained. Average values for each transition are compared to those previously published, and in particular a comparison with the HITRAN database will be presented. Preliminary results indicate linestrengths 5-10% lower than HITRAN values, but in approximate agreement with another set of published results.