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## Resonant photoacoustic simultaneous detection of methane and ethylene by means of a 1.63-μm diode laser

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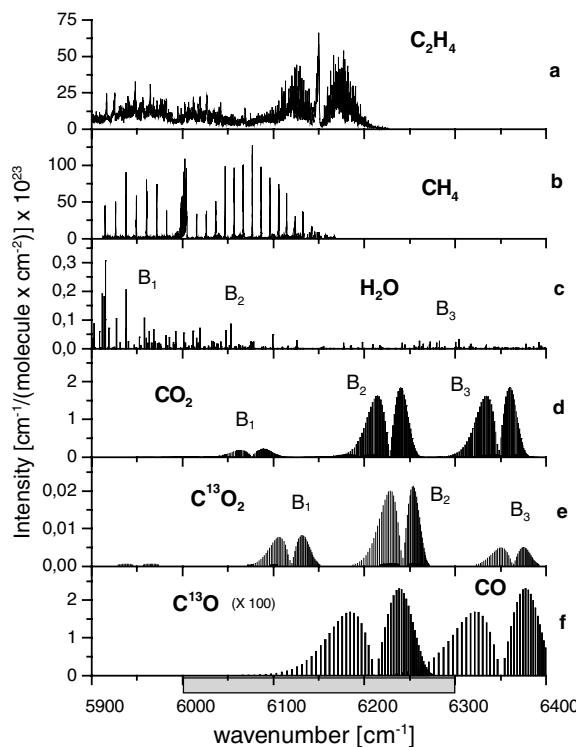
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The intensity values for the  $\nu_5 + \nu_9$  band of  $\text{C}_2\text{H}_4$  reported in Fig. 2a are overestimated by a factor of four as a result of a normalization error.

The corrected Fig. 2 is printed here.



**FIGURE 2** Survey spectra between 5900 and 6400  $\text{cm}^{-1}$  of  $\text{C}_2\text{H}_4$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{O}$ ,  $\text{CO}_2$  and  $\text{CO}$ . **a**  $\text{C}_2\text{H}_4$  spectrum. The PQR rotational structure around 6150  $\text{cm}^{-1}$  is assigned to the  $\nu_5 + \nu_9$  CH stretch combination band. **b**  $2\nu_3$  overtone band of  $\text{CH}_4$ . **c**  $\text{H}_2\text{O}$  rotational lines of the  $\nu_2 + \nu_3$  ( $\text{B}_1$ ),  $4\nu_2$  ( $\text{B}_2$ ) and  $\nu_1 + 2\nu_2$  ( $\text{B}_3$ ) bands. **d**  $30014 \leftarrow 00001$  ( $\text{B}_1$ ),  $30013 \leftarrow 00001$  ( $\text{B}_2$ ) and  $30012 \leftarrow 00001$  ( $\text{B}_3$ ) bands of  $\text{CO}_2$ . **e**  $30013 \leftarrow 00001$  ( $\text{B}_1$ ),  $30012 \leftarrow 00001$  ( $\text{B}_2$ ) and  $30011 \leftarrow 00001$  ( $\text{B}_3$ ) bands of the  $\text{C}^{13}\text{O}_2$  isotope. **f** Third overtone of the most abundant isotopes of  $\text{CO}$ . Spectra (a) and (b) were obtained by pulsed laser photoacoustic measurement with 10 mbar of  $\text{C}_2\text{H}_4$  or  $\text{CH}_4$  in 50 mbar of Ar at room temperature. Spectra (c), (d), (e) and (f) have been obtained from the HITRAN96 database. The wavelength interval shown corresponds to the tuning range of the ECDL (5990–6290  $\text{cm}^{-1}$ )