Fig. 1. (a) Portion of the transmittance spectrum with resolved comb lines of 100-MHz spacing, showing the $(J' = 11, K_a' = 0, K_c' = 11)$ - $(J'' = 10, K_a'' = 0, K_c'' = 10)$ line of the R-branch of the ν_{11} band of $^{12}C_2H_4$. (b) Portion of absorbance and phase spectra of the ν_9 and ν_{11} band of $^{12}C_2H_4$. The baseline is corrected with a third-order polynomial fit.