

Foreign Gas Broadening Studies of the $J' \leftarrow J = 1 \leftarrow 0$ Rotational Line of CO by Frequency and Time Domain Techniques

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The collisional broadening of the $J' \leftarrow J = 1 \leftarrow 0$ rotational line of carbon monoxide by the buffer gases He, Ne, Ar, Kr, CO, N₂, O₂, and air has been studied at room temperature. Two different experimental techniques in time- and frequency-domain, respectively, were used. The obtained data are in good agreement. Time-domain investigations on the temperature dependence of the foreign gas broadening parameters are also presented.

Key words: CO; Line Broadening; Buffer Gases; Temperature Dependence.

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