

Resonance widths in the predissociation of N₂ and CO

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Abstract

The resonance widths observed in the spectrum of the ¹Π_u states of N₂ are interpreted by an indirect predissociation mechanisms due to the ³Π_u states. They are calculated by solving the coupled-channel Schrödinger equations^{1,2}.

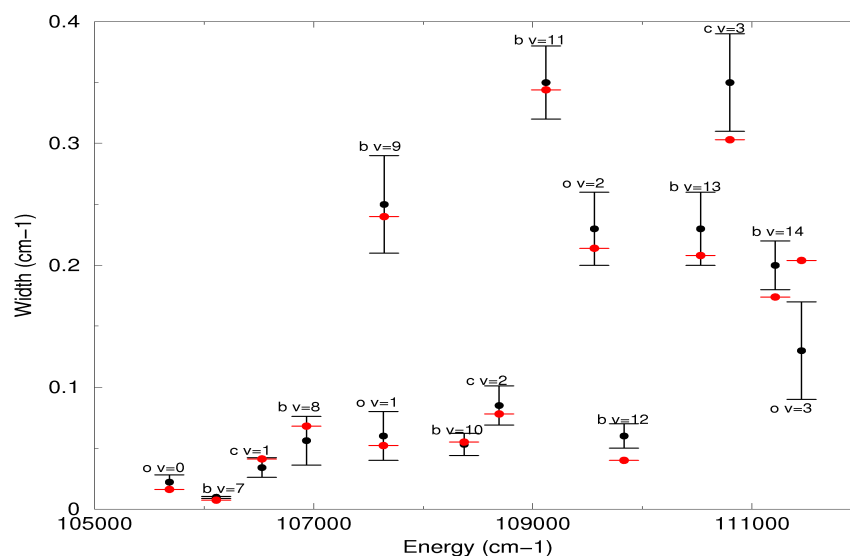


Figure 1: Observed and calculated widths of N₂ ¹Π_u.

A similar study for the ¹Π states of the isoelectronic molecule CO is under way^{3,4}.

- 1- B. R. Lewis, S. T. Gibson, W. Zhang, H. Lefebvre-Brion and J. M. Robbe, *J. Chem. Phys.* **122**, 144302 (2005)
- 2- B. R. Lewis et al, *J. Chem. Phys.* to be published.
- 3- H. Lefebvre-Brion and B. R. Lewis, *Mol. Phys.* **105**, 1625 (2007).
- 4- G. J. Vázquez, J. M. Amero, H. P. Liebermann and H. Lefebvre-Brion, in preparation.