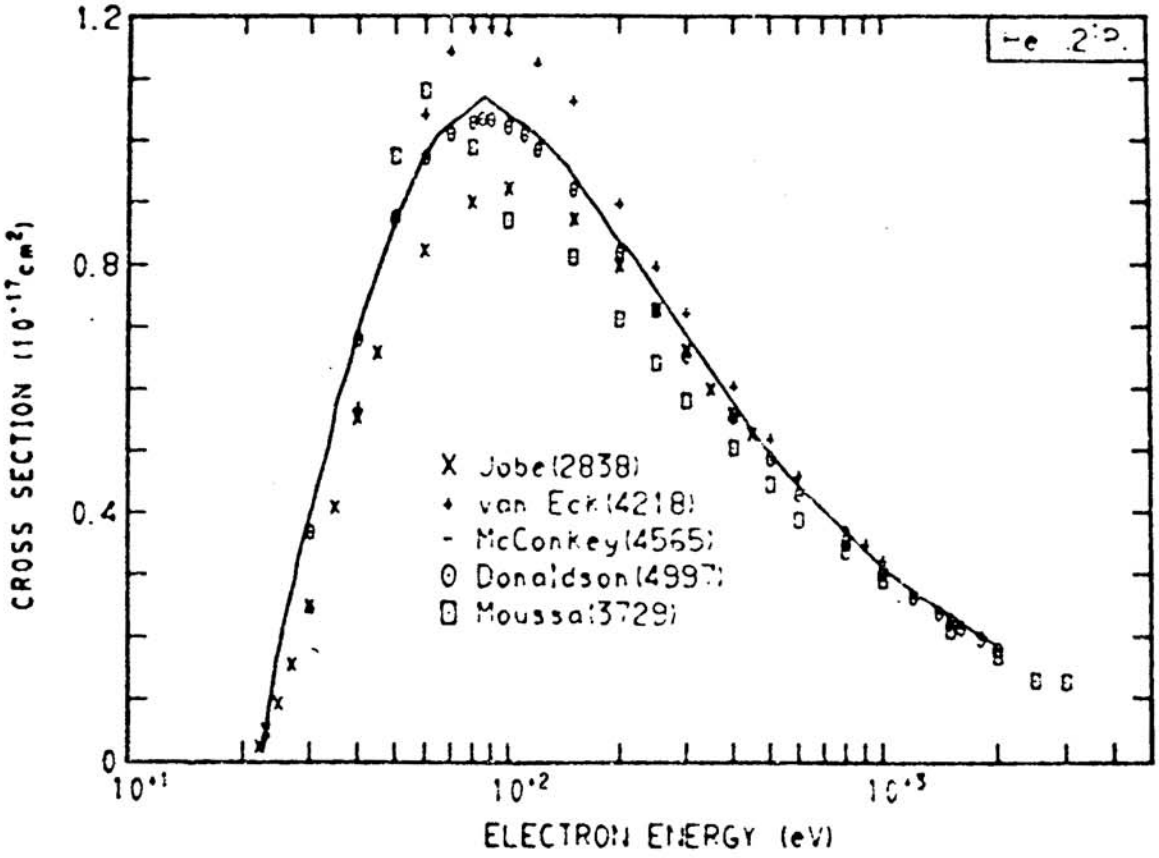
Sinfailam, A. L., Nesbet, R. K. Phys. Rev. A, 6, 2118 (1972)

Electronic Excitation

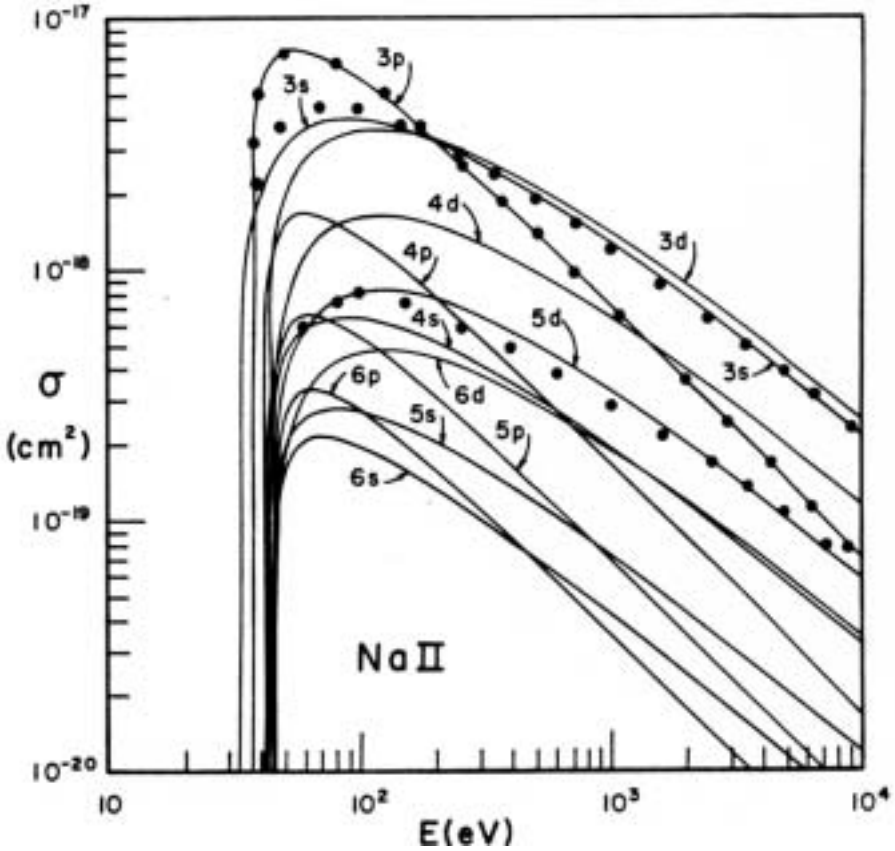


Experimental Measurement of
Electron impact cross section for He 2^1P **Ref: Kieffer, JILA**

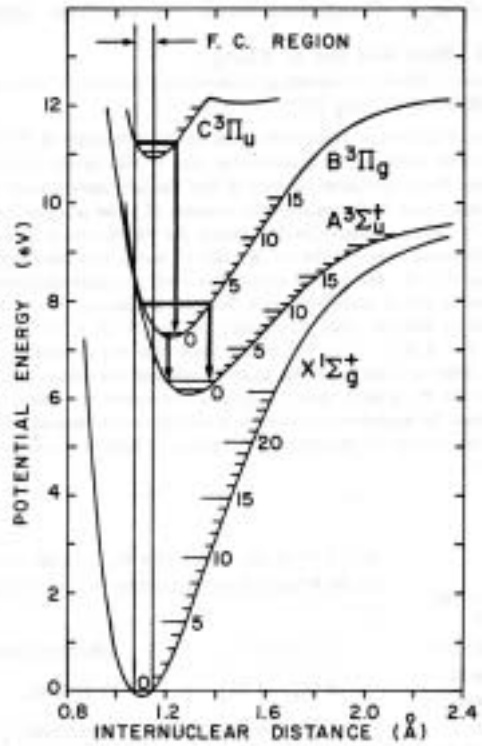
Electron-impact excitation cross sections for Na II

P. S. Ganas, M. Aryafar, and L. P. Gately
Department of Physics and Astronomy, California State University at Los Angeles, Los Angeles, California 90032

J. Chem. Phys. 81 (4), 15 August 1984



NA_XSECTION



Excitation of Metastable $N_2(A)$ Vibrational Levels
by Electron Impact
W. L. Borst and S. L. Chang,
J. Chem. Phys. 59, 5830 (1973)

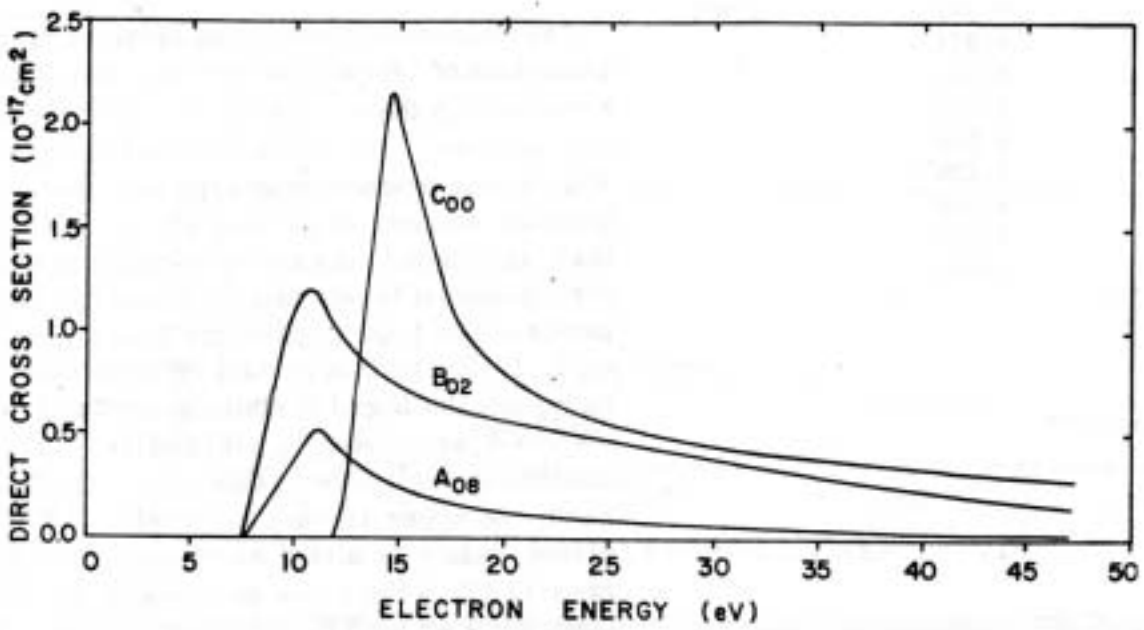


FIG. 3. Examples of direct excitation cross sections for individual vibrational levels of the *A*, *B*, and *C* states. The vibrational levels chosen are those with the largest cross section, *i.e.*, maximum Franck–Condon factor. The label A_{08} denotes the $v=8$ level of the *A* state as excited from the $v=0$ level of the N_2 ground state and similar labeling applies to the *B* and *C* states.

N2_XSECTION

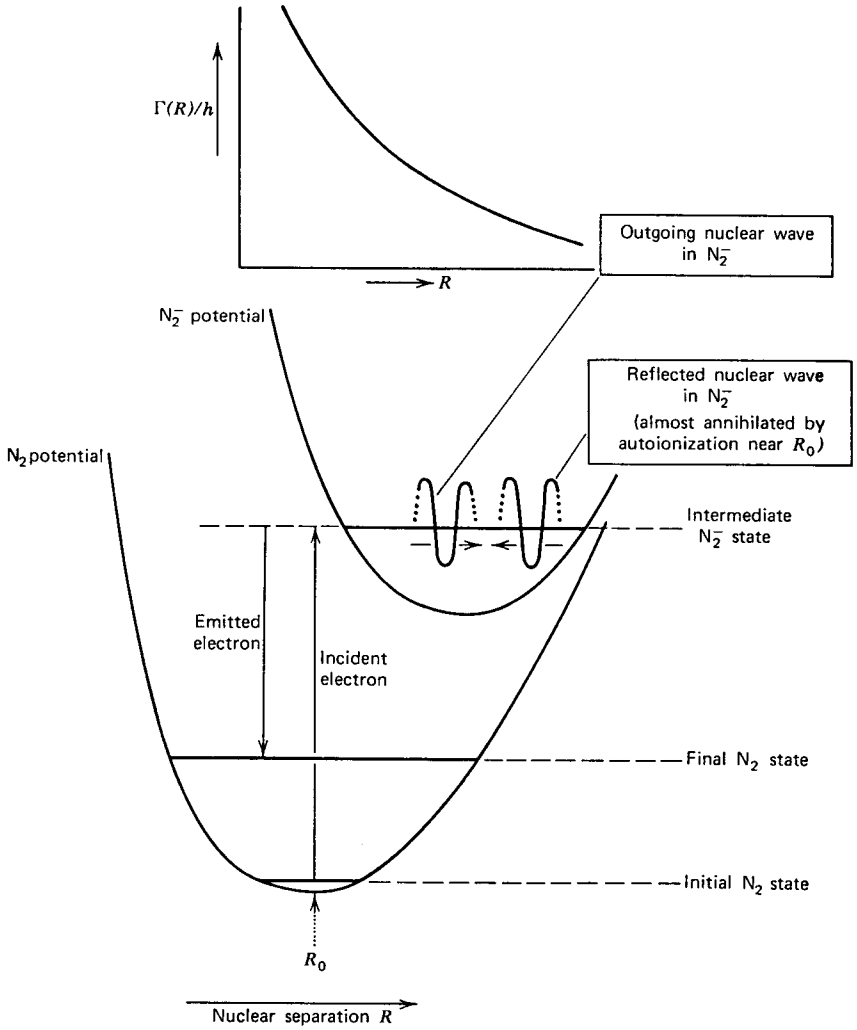


Fig. 2.1 The "boomerang" model of the nuclear wavefunction applied to the N_2^- ion. This model is discussed by Herzenberg (1968). It is based on the assumption that the magnitude and R-dependence of the width $\Gamma(R)$ are such that only a single outgoing and a single reflected wave are important. (From Birtwistle and Herzenberg, 1971.)

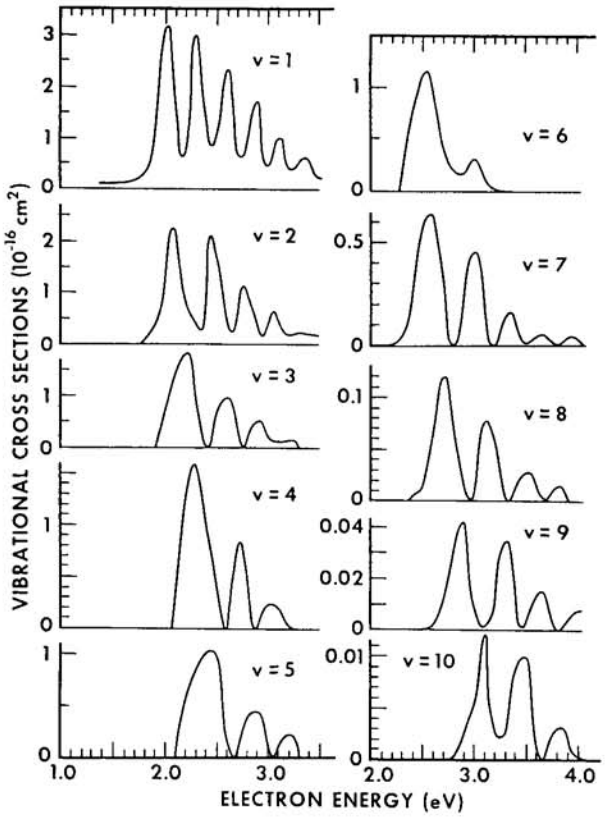


Fig. 2.6 Vibrational cross sections to $v = 1$ to 10 in N_2. The data plotted here are from Schulz (1964) for $v = 1$ to 6 and from Boness and Schulz (1973) for $v = 7$ to 10, normalized to the value given by Spence, Mauer and Schulz (1972). A digitized listing has been assembled by Kieffer (1973). The absolute values shown here may be too low by a factor of up to two (Wong, private communication).

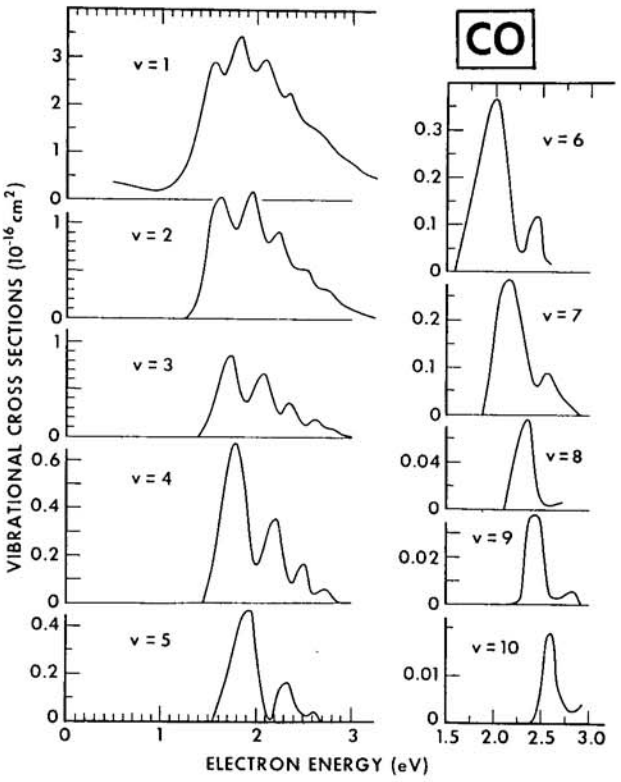


Fig. 2.7 Vibrational cross sections for $v = 1$ to 10 in CO. The data are taken from Ehrhardt et al. (1968) for $v = 1$ to 7 and from Boness and Schulz (1973) for $v = 8$ to 10. Absolute values are taken from Ehrhardt et al. (1968) as listed by Kieffer (1973).

Vibrationally inelastic and elastic cross sections for $e + NF_3$ collisions

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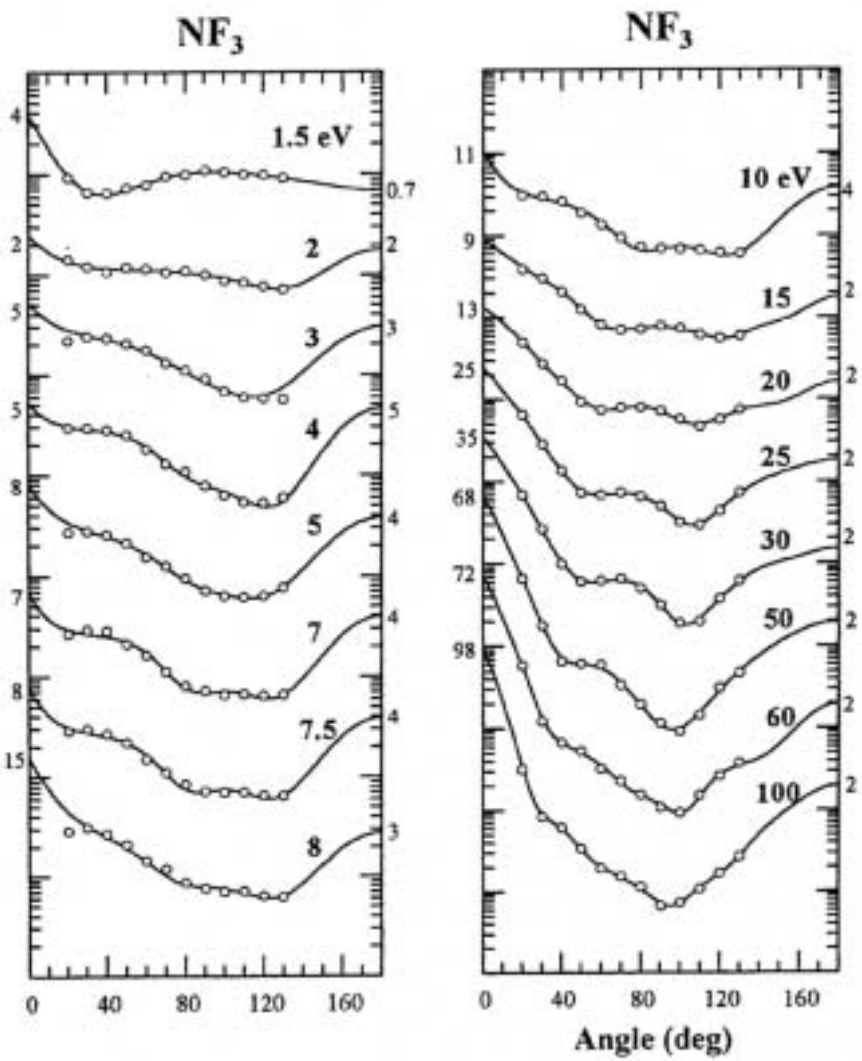
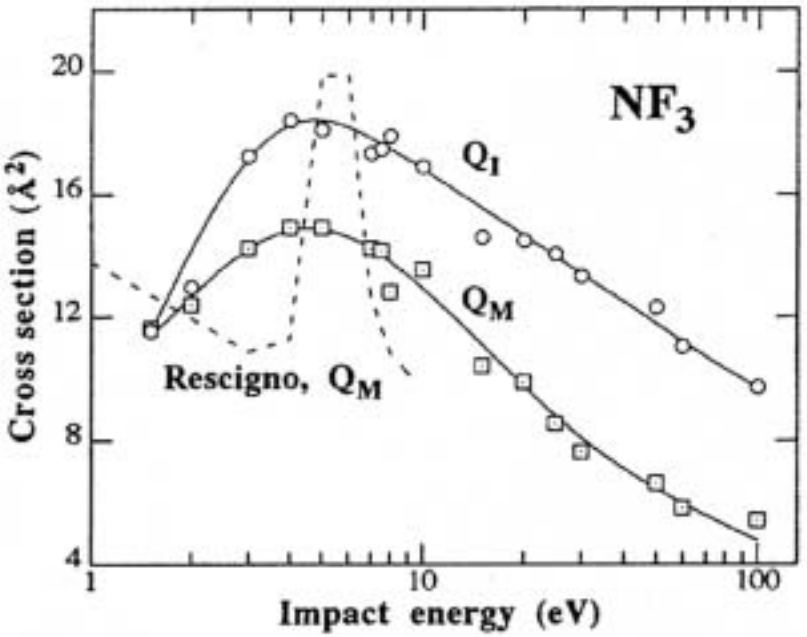
J. Phys. B: At. Mol. Opt. Phys. **29** (1996) 5475–5491.





NF3_VIB_XSECTION