

Abstract Submitted
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Near-Threshold Electron Impact Excitation of the Electronic states of N₂ D.S. NEWMAN, M. LANGE, J. MATSUMOTO, J.C. LOWER, S.J. BUCKMAN, CAMS, Australian National University — Using a new position-sensitive, time-of-flight technique we have measured differential scattering cross sections for a number of electronically excited levels of N₂ at energies between 8.5 and 15 eV. This technique has the advantage of providing a uniform transmission for the scattered particles as a function of energy, and thus removes substantial uncertainty from the inelastic cross sections that are derived through a comparison with the elastic scattering intensity. The present results are compared with a number of recent measurements.

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