

Abstract Submitted
for the DAMOP05 Meeting of
The American Physical Society

Electron Impact Ionization of H₂ J.G. CHILDERS, ERIC SCHOW, KEN HAZLETT, MURTADHA A. KHAKOO, California State University, Fullerton — Relative doubly-differential cross sections for the low energy electron impact ionization of H₂ have been measured. Measurements have been completed at 30 eV incident energy and scattering angles of 60° and 90°, and at 40 eV incident energy and scattering angles of 50° and 90°. The calibration of the electron analyzer during these measurements employed the recent doubly-differential cross section measurements of atomic hydrogen.¹ These measurements represent a new calibration standard useful in the determination of the transmission function of electron analyzers. This work is funded by the National Science Foundation under grant # NSF-RUI-PHY-0096808.

¹J. G. Childers, K.E.James, Jr., Igor Bray, M. Baertschy, and M. A. Khakoo, *Phys.Rev. A* **69**, 022709 (2004).

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Date submitted: 08 Feb 2005

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