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Antiproton-impact ionization of H_2^1 TECK-GHEE LEE, M.S. PINDZOLA, Auburn University, J. COLGAN, Los Alamos National Lab — Antiproton-impact ionization cross sections are calculated for H_2 . Both one active and two active electron time-dependent close-coupling methods are used to calculate cross sections for H_2 at various molecular orientations for incident energies ranging from 1 to 100 keV. Differences between the calculations for the single ionization of H_2 are attributed to strong electron correlation effects in the few-body system. The results are compared with experiments [1,2].

[1] P Hvelplund et al. J. Phys. B 27, 925 (1994)

[2] H Knudsen et al. Phys. Rev. Lett. 105, 213201 (2010)

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> Teck-Ghee Lee Auburn University

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