

Abstract Submitted
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VUV Study of Electron Impact Dissociative Excitation of H₂S¹
STEPHEN BROTTON, WLADEK KEDZIERSKI, WILLIAM MCCONKEY, University of Windsor — The dissociative excitation of H₂S following electron impact has been studied in the electron energy range from threshold to 300 eV. H, S and S⁺ emissions in the 90 to 170 nm region have been identified and quantified. The dominant Lyman- α feature at 121.6 nm has a measured emission cross section of $(9.79 \pm 0.67) \times 10^{-18} \text{ cm}^2$ at 100 eV. This was used to normalize 100 eV cross sections for all observed spectral features. Excitation functions of the dominant H and S emissions have been studied with particular emphasis on the near-threshold region. A number of dissociation channels have been identified.

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