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Electron-impact excitation of dihydrogen sulfide in the VUV spectral region. ERIC VYSKOCIL, STEPHEN BROTTON, WLADYSLAW KEDZIERSKI, WILLIAM MCCONKEY — The electron-impact excitation of dihydrogen sulfide and discharged fragments including atomic sulfur is presented in the VUV spectral range from 90 nm – 150 nm. Hydrogen sulfide gas was dissociated by a microwave discharge tube prior to injection into an interaction region where electron-impact excitation occurred. By comparing the discharge 'on' and discharge 'off' spectra, contributions to the spectra from dissociative excitation of the parent molecule and from direct excitation of the discharged fragments could be determined. Excitation functions for the different spectral features were determined for electron energies from threshold to 200 eV.

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