Supplementary information for

VUV threshold photoelectron spectroscopy of SiS

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Supplementary note 1: total ion yields

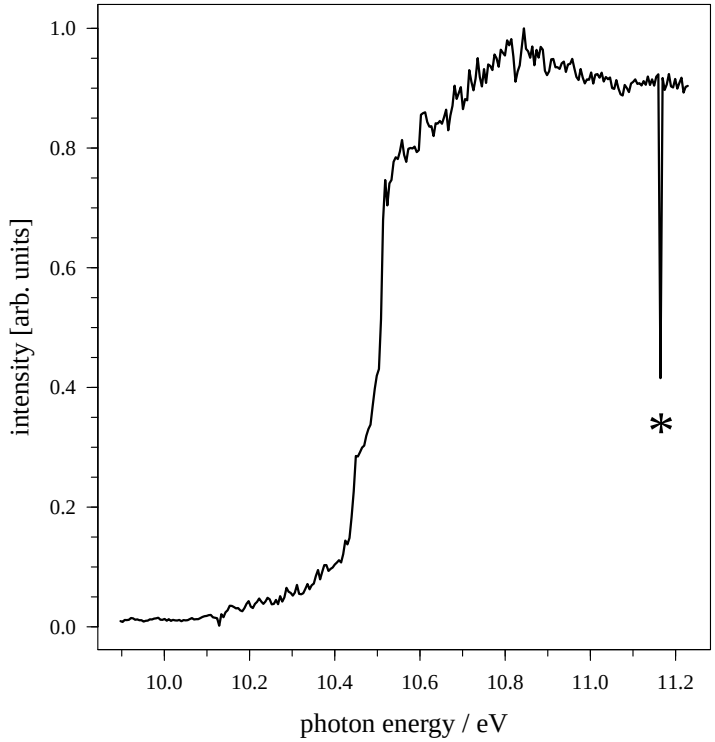

Fig. S1: Mass-selected experimental ion yield of SiS (m/z 60 amu) between 9.9 and 11.2 eV. The * corresponds to a point for which the acquisition was compromised.

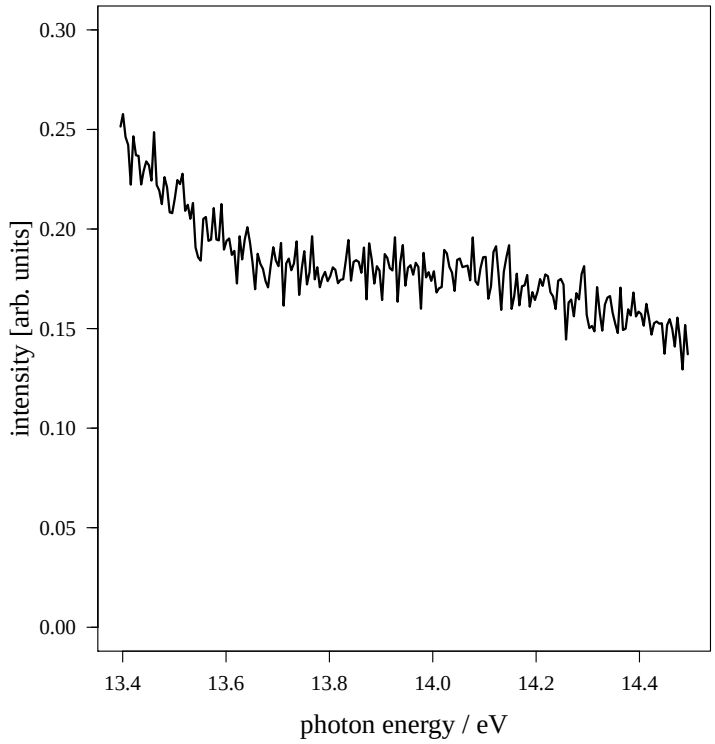

Fig. S2: Mass-selected experimental ion yield of SiS (m/z 60 amu) between 13.4 and 14.5 eV.

Supplementary note 2: SiS TPES between 10.2-11.1 eV

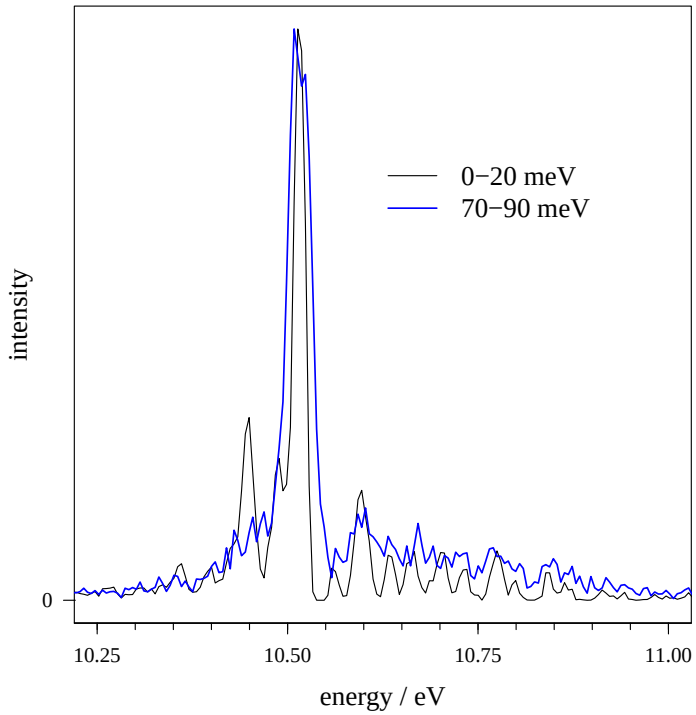

Fig. S3: Mass-selected experimental TPES of SiS (m/z 60 amu). The black trace shows the spectrum obtained when integrating over an electron kinetic energy between 0 and 20 meV and the blue trace between 70 and 90 meV. Apart from the degradation in resolution observed and expected for faster photoelectrons, the differences between both spectra are attributed to autoionisation features.

Supplementary note 3: SiS PES matrix

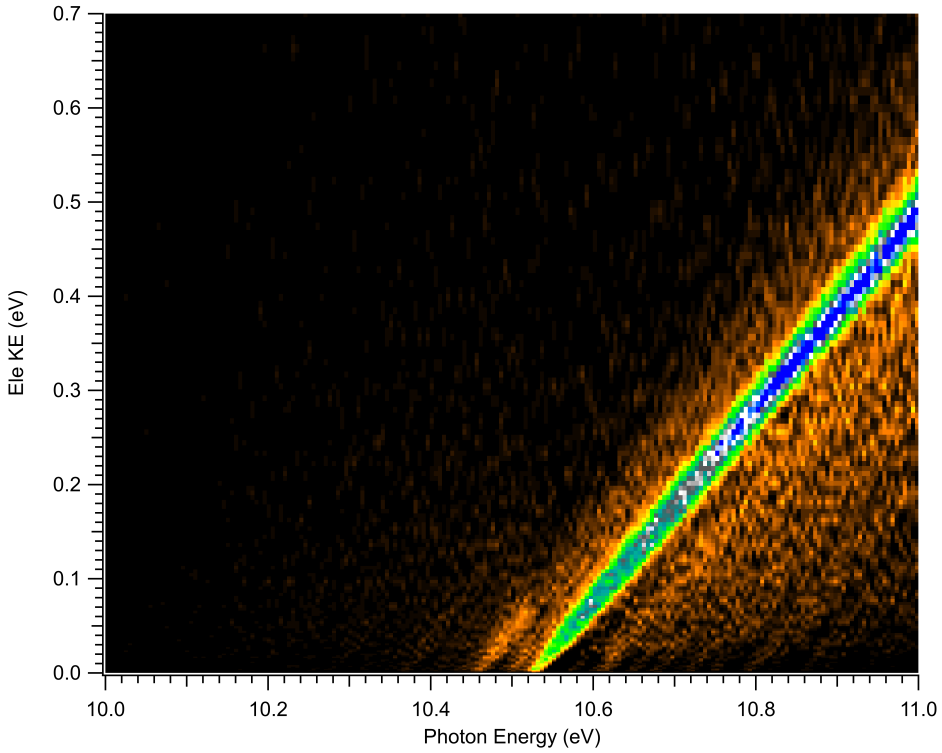

Fig. S4: Mass-selected experimental PES matrix of SiS (m/z 60 amu).

Supplementary note 4: Complete time-of-flight spectrum

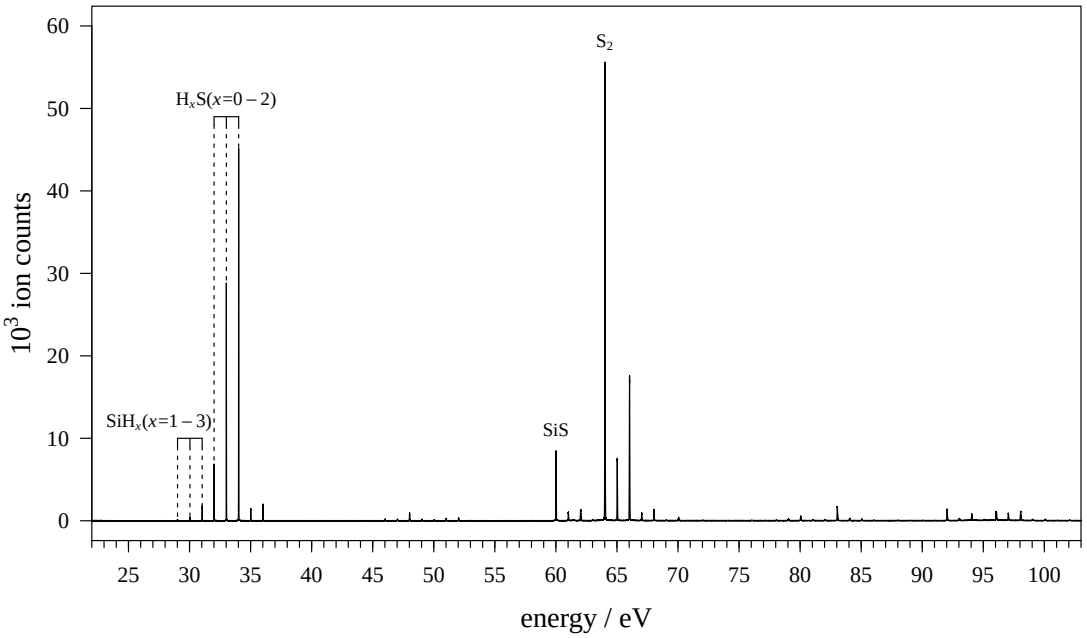

Fig. S5: TOF mass spectra integrated between 9.9 and 10.9 eV photon energy for the F + SiH4 + H2S system between 25 and 100 amu.

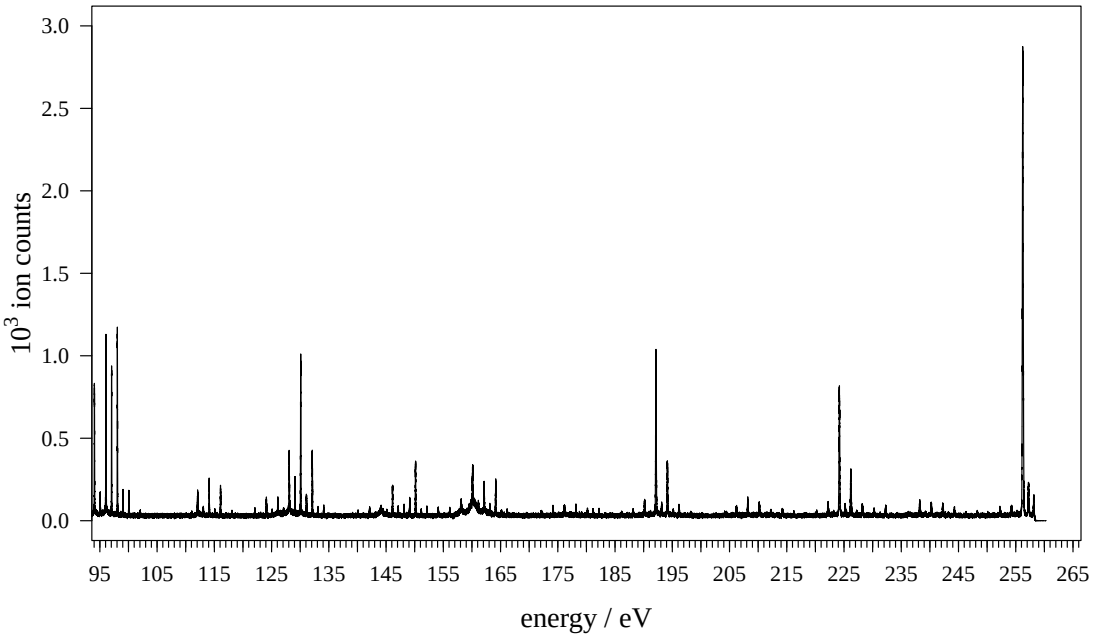

Fig. S6: TOF mass spectra integrated between 9.9 and 10.9 eV photon energy for the F + SiH4 + H2S system between 100 and 260 amu.