Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Sb $5s^2$ lone pairs and band alignment of Sb_2Se_3: a photoemission and density functional theory study - Supplementary Information

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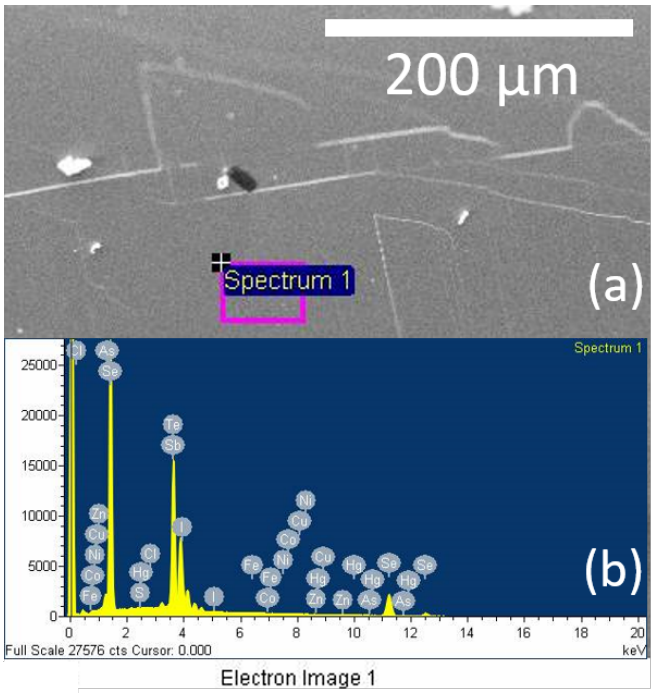

(c) Composition Omitting Trace Elements

Element	Weight%	Atomic%
Se L	48.96	59.66
Sb L	51.04	40.34

Estimated Error ±1.00 at%

FIG. S1: (a) SEM image from a bulk Sb_2Se_3 crystal with region from which the EDX signal was colected depicted by the purple square; (b) the EDX spectrum; and (c) the weight and atomic percentage of Sb and Se determined from the EDX omitting trace elements from the analysis. The signals from trace elements were all negligibly small when the error is considered.

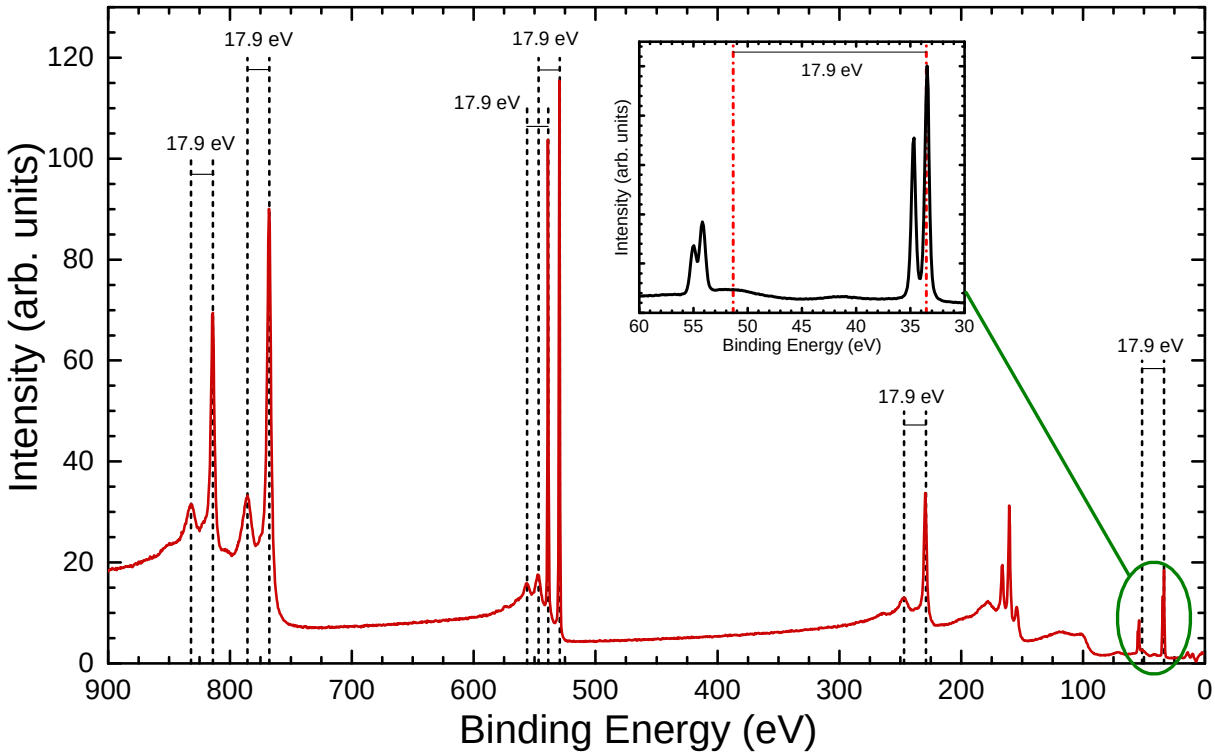

FIG. S2: HAXPES survey spectrum from cleaved Sb_2Se_3, showing plasmon loss features at a binding energy of 17.9 eV above that of each core level peaks, corresponding to lower photoelectron kinetic energy due to energy loss to the plasmon excitations.