

Supplementary Information

Fermi level tuning of Ag-doped Bi₂Se₃ topological insulator

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The crystallographic data of Ag_{0.05}Bi₂Se₃ were shown in Table S1, which were determined by single crystal XRD analyses. Bragg spots of Ag_{0.05}Bi_{1.95}Se₃ single crystal are shown in Figure S1.

Table S1. Crystallographic data for $\text{Ag}_{0.05}\text{Bi}_2\text{Se}_3$ and Bi_2Se_3 . The Ag atom is assumed to be located at the 6c site occupied by Bi atom.

$\text{Ag}_{0.05}\text{Bi}_2\text{Se}_3$

Rhombohedral lattice: $R\bar{3}m$ (No. 166)

Lattice constant: $a = 4.146(6) \text{ \AA}$, $c = 28.66(4) \text{ \AA}$

		Occ.	x	y	z	$B (\text{\AA})$
6c	Bi(Ag)	1.0	0.00000	0.00000	0.40079(4)	0.73(5)
6c	Se	1.0	0.00000	0.00000	0.2105(1)	0.66(6)
3a	Se	1.0	0.00000	0.00000	0.00000	0.72(8)

$\text{Bi}_2\text{Se}_3^{\text{a)}$

Rhombohedral lattice: $R\bar{3}m$ (No. 166)

Lattice constant: $a = 4.18 \text{ \AA}$, $c = 28.7 \text{ \AA}$

		Occ.	x	y	z
6c	Bi	1.0	0.00000	0.00000	0.40046
6c	Se	1.0	0.00000	0.00000	0.2097
3a	Se	1.0	0.00000	0.00000	0.00000

a) Crystallographic data for Bi_2Se_3 was taken from Ref. 23.

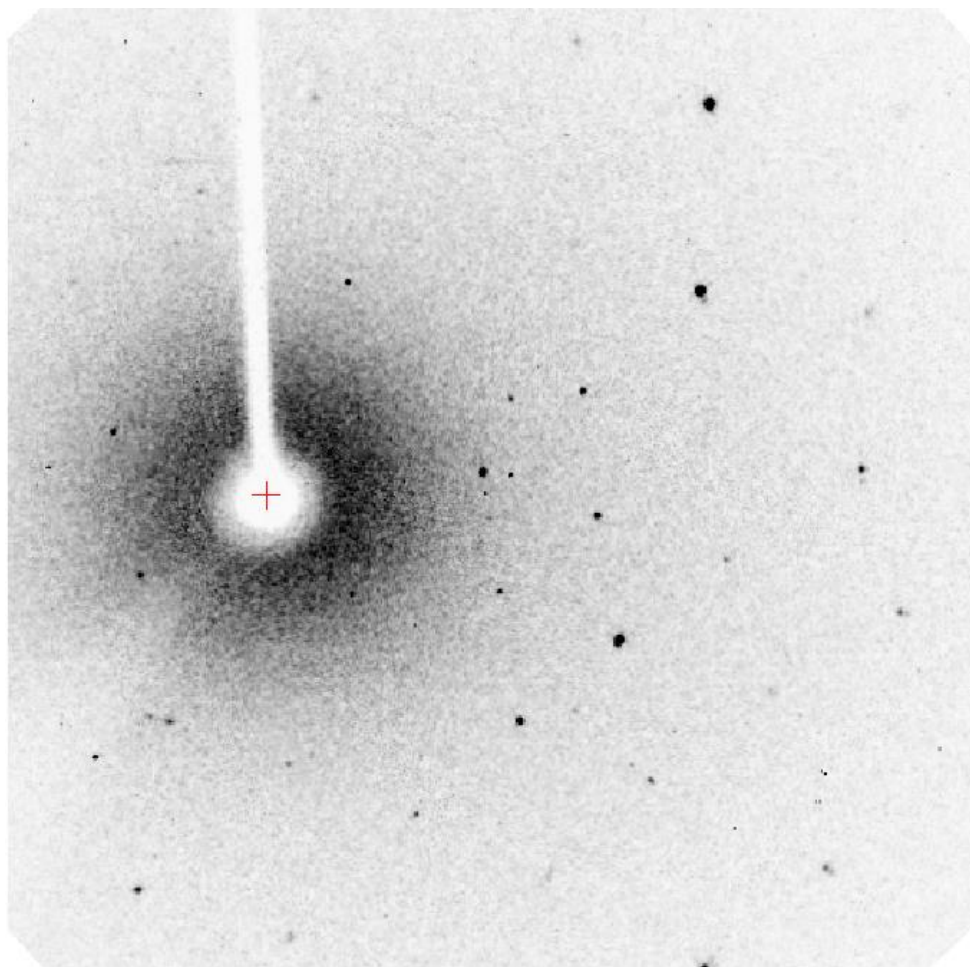


Figure S1. Bragg spots of $\text{Ag}_{0.05}\text{Bi}_{1.95}\text{Se}_3$ single crystal.