

Supporting Information

Enhanced Photodetectivity and Responsivity in $\text{In}_{10}\text{Se}_{70}\text{Te}_{15}\text{Bi}_5$ Film upon Time-Dependent Laser Irradiation for Photodetector Applications

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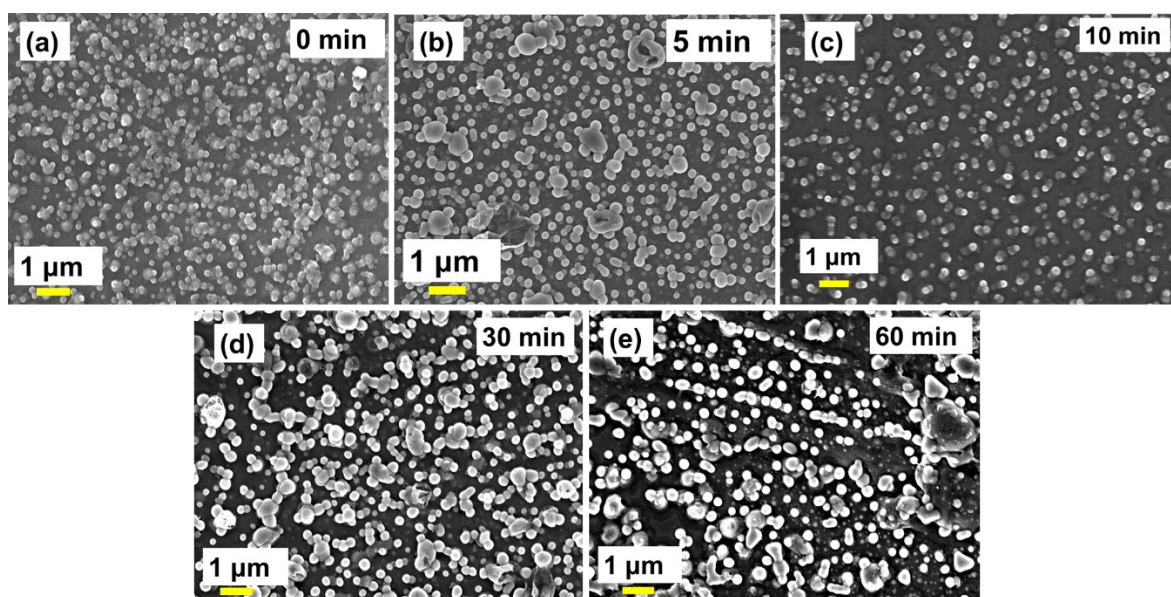


Fig. S1 FESEM micrographs of (a) 0, (b) 5, (c) 10, (d) 30, and (e) 60 min laser-irradiated $\text{In}_{10}\text{Se}_{70}\text{Te}_{15}\text{Bi}_5$ thin films at 1 μm magnification scale.

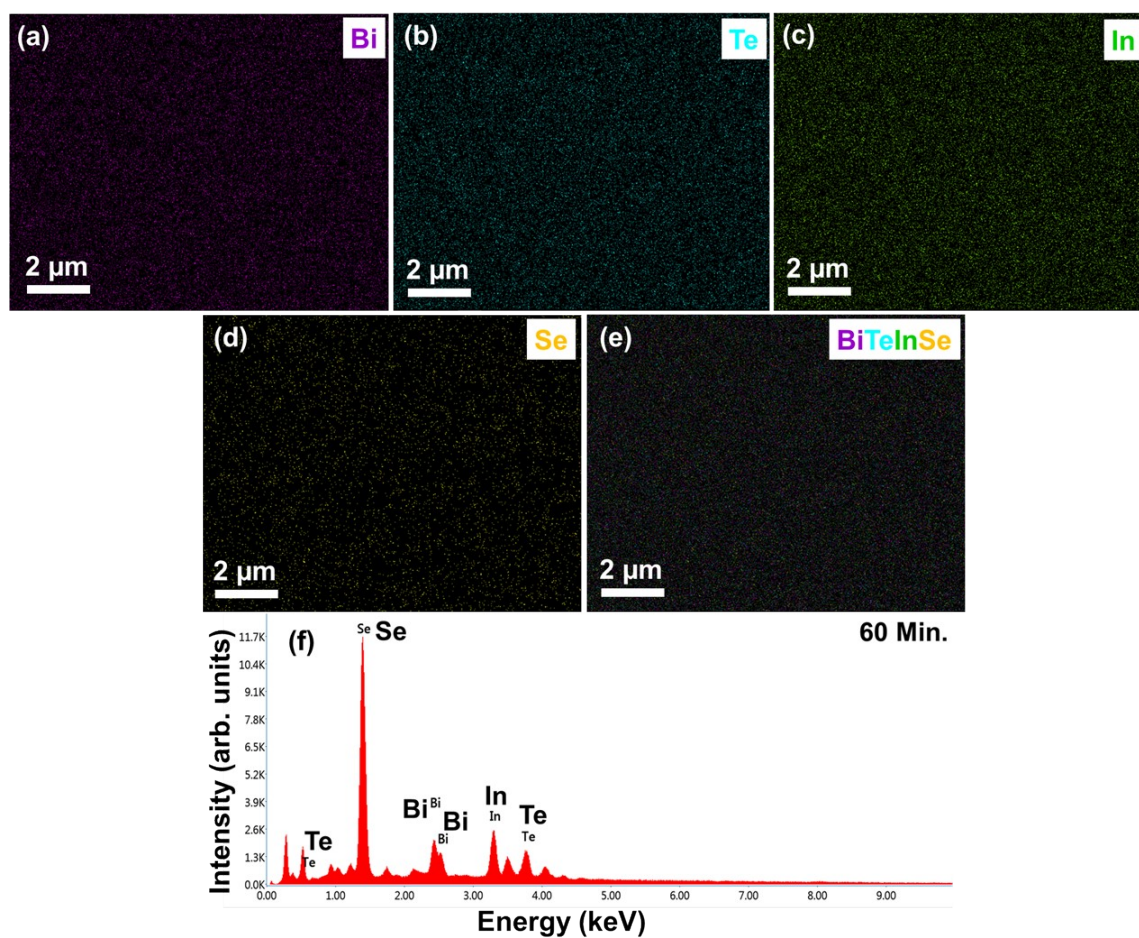


Fig. S2 (a-e) Elemental mapping and (f) EDS spectra of 60 min laser-irradiated $\text{In}_{10}\text{Se}_7\text{Te}_{15}\text{Bi}_5$ film.

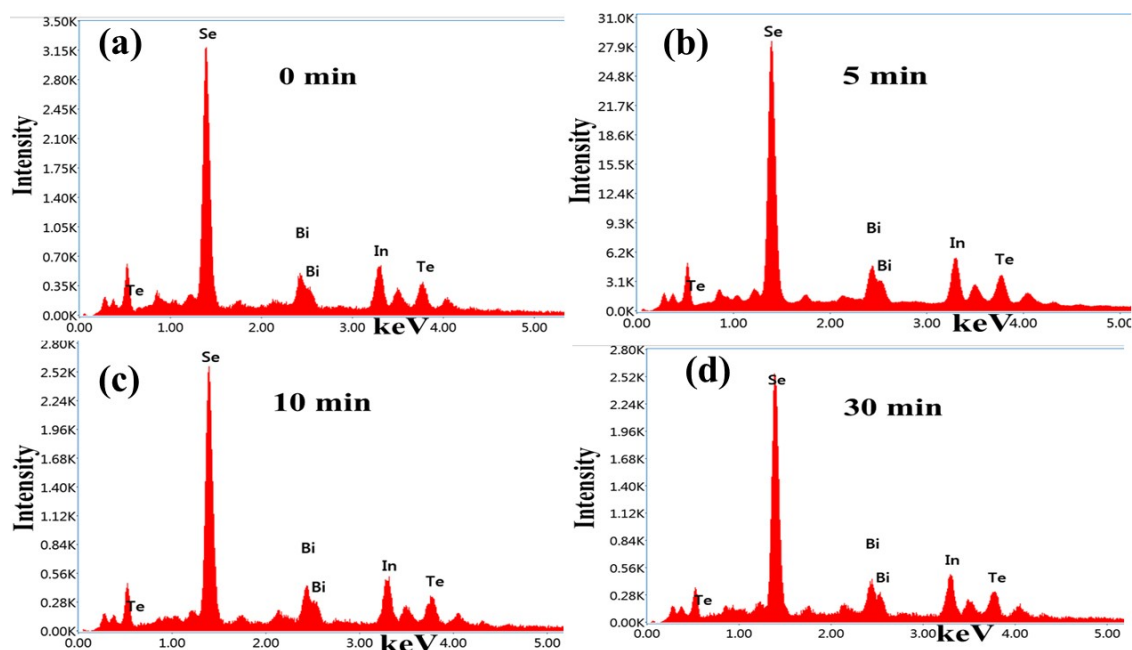


Fig. S3 EDX spectrum of (a) 0, (b) 5, (c) 10, (d) 30, min laser-irradiated $\text{In}_{10}\text{Se}_7\text{Te}_{15}\text{Bi}_5$ thin films.

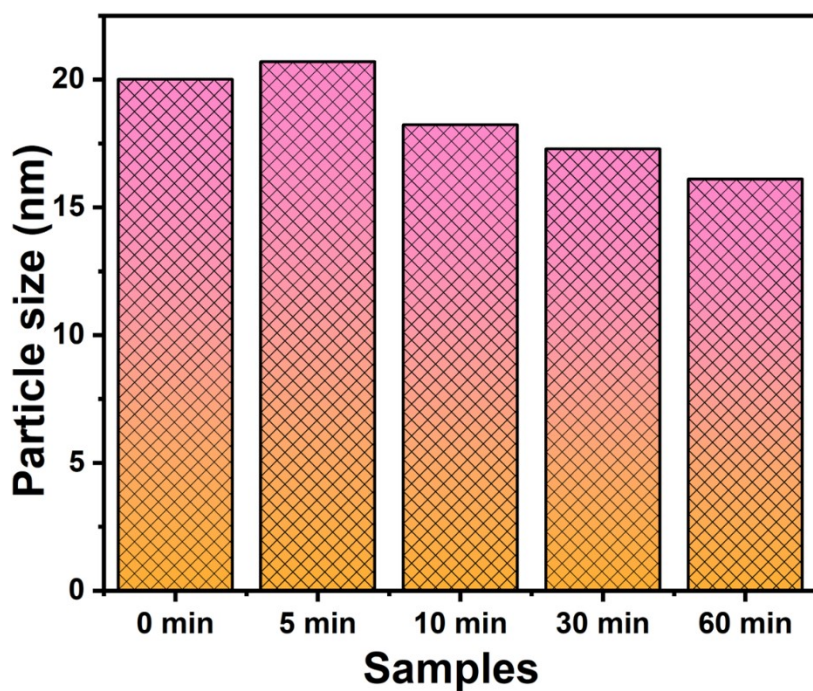


Fig. S4 Particle size bar diagram of as-prepared and laser irradiated $\text{In}_{10}\text{Se}_7\text{Te}_{15}\text{Bi}_5$ thin films.

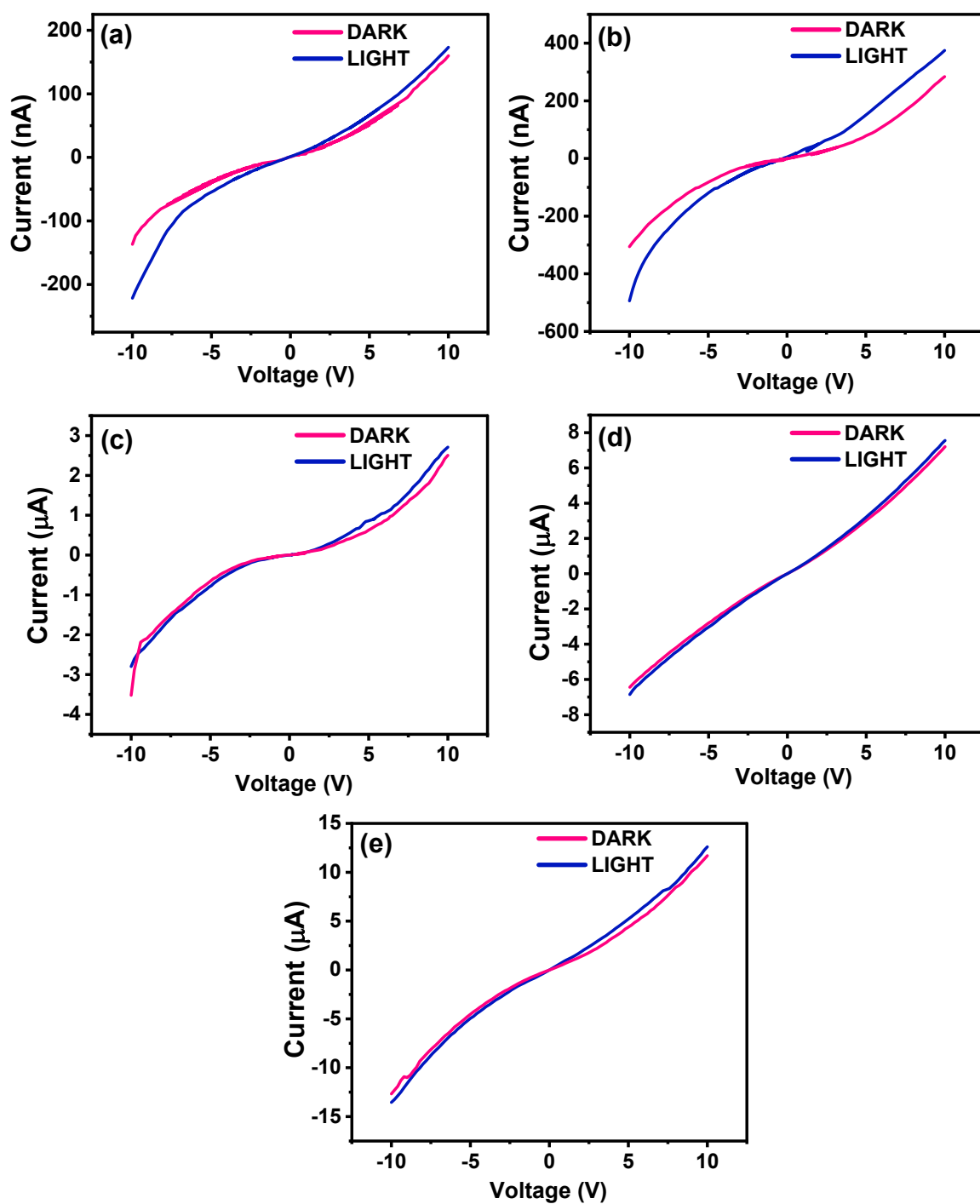


Fig. S5 Individual I~V plots of (a) 0 min, (b) 5 min, (c) 15 min, (d) 30 min, and (e) 60 min for all the $\text{In}_{10}\text{Se}_{70}\text{Te}_{15}\text{Bi}_5$ thin films.

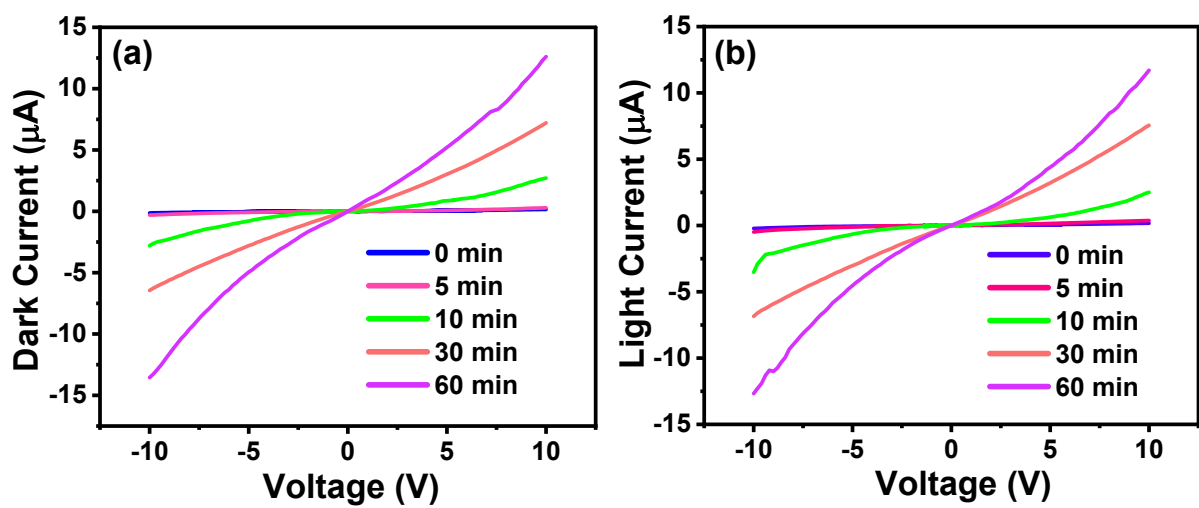


Fig. S6 I~V plots of all the $\text{In}_{10}\text{Se}_{70}\text{Te}_{15}\text{Bi}_5$ films in (a) dark and (b) light conditions.