Supplementary Information (SI) for Journal of Materials Chemistry C. This journal is © The Royal Society of Chemistry 2025

Supporting Information

Construction of SnSe/SnSe2 Heterojunction for superior Photoelectrochemical

Photodetectors

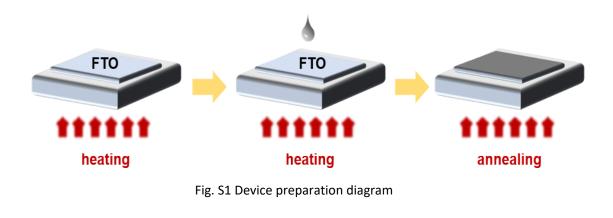
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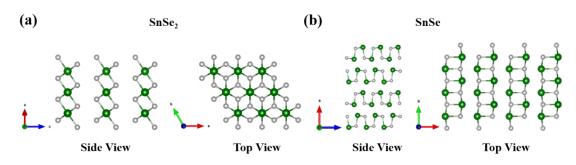


Fig. S2 (a) crystal packing of $SnSe_2$ and (b) crystal packing of SnSe

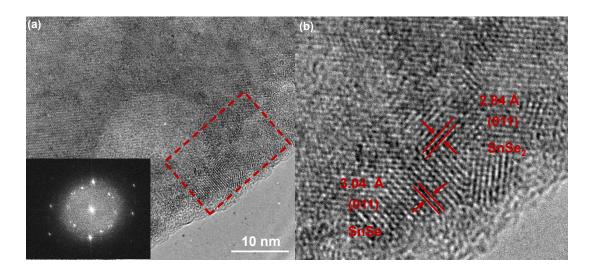


Fig. S3 HRTEM image of $SnSe/SnSe_2$ heterojunction (a) (inset is FFT pattern) and (b) is partial enlargement of (a)

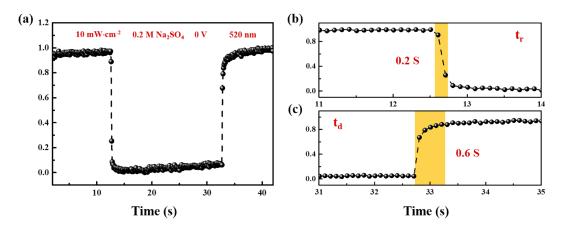


Fig. S4 Single period I-t curve of SnSe/SnSe₂ self-powered photodetector, (b) rise time and (c) decline time

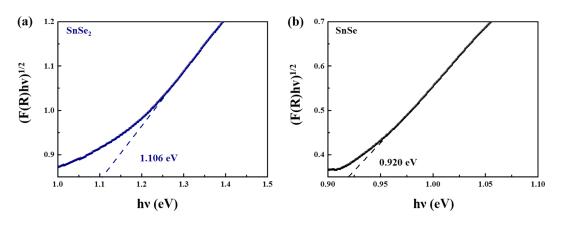


Fig S5 Optical band gap of $SnSe_2$ (a) and (b) SnSe