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Supporting Information for

High-performance photodetectors based on bandgap engineered novel layer GaSe_{0.5}Te_{0.5} nanoflakes

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Fig. S1. The photograph of peeled off sample from quartz tube.

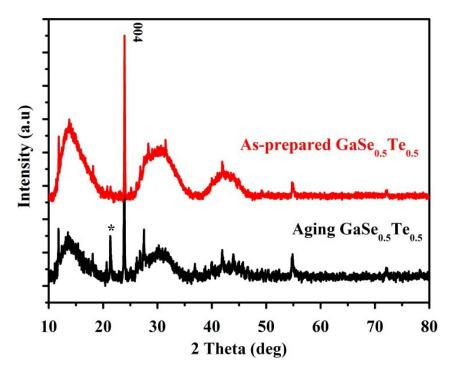


Fig. S2. XRD of peeled off sample. The aging sample was stored in dark condition for several months. The diffraction peak masked with \ast is the oxide of GaSe_{0.5}Te_{0.5}.

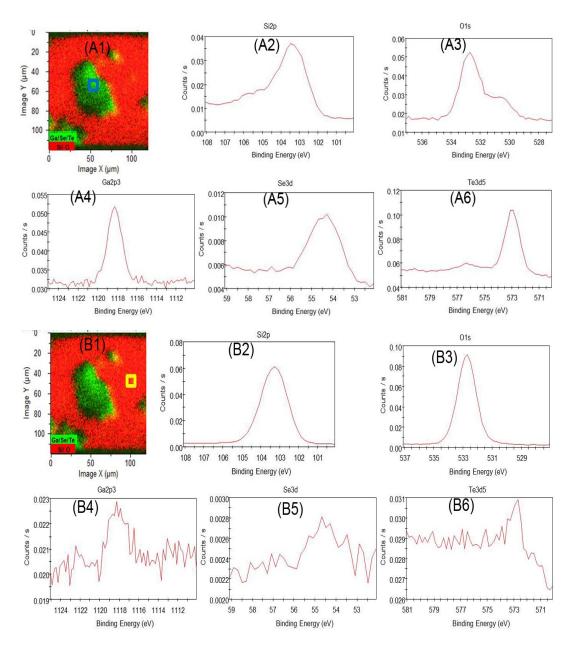


Figure S3. (A1-A6) XPS and corresponding overlayed image of single $GaSe_{0.5}Te_{0.5}$ nanoflake (blue marked area). (B1-B6) XPS and corresponding overlayed image SiO_2/Si substrate (yellow marked area).