

# Supplementary Materials

## Highly Responsive, Broadband and Self-Powered Photodetector Based on PtSe<sub>2</sub>/MoS<sub>2</sub> Heterostructure

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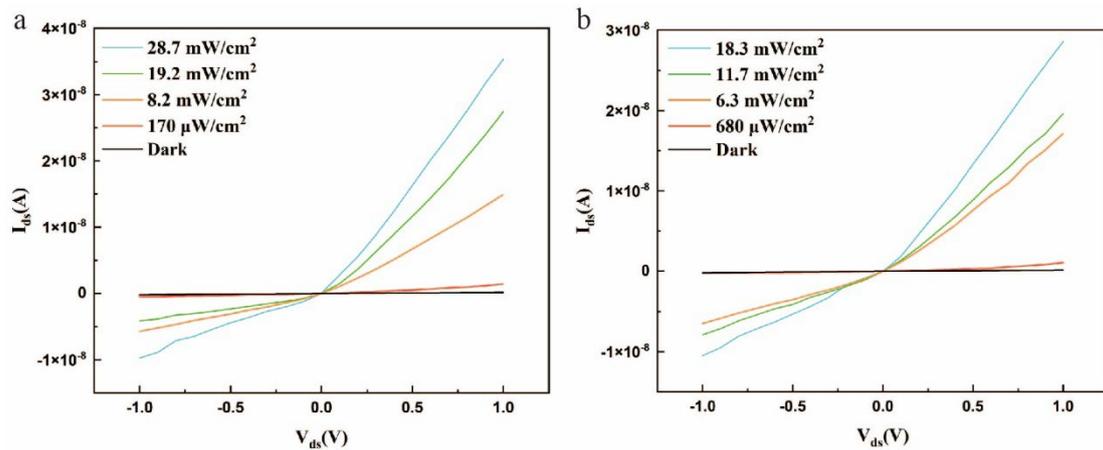


Figure S1. (a, b) The curves of  $I_{ds}$ - $V_{ds}$  for PtSe<sub>2</sub>/MoS<sub>2</sub> photodetector illuminated under 700 and 980 nm, respectively.

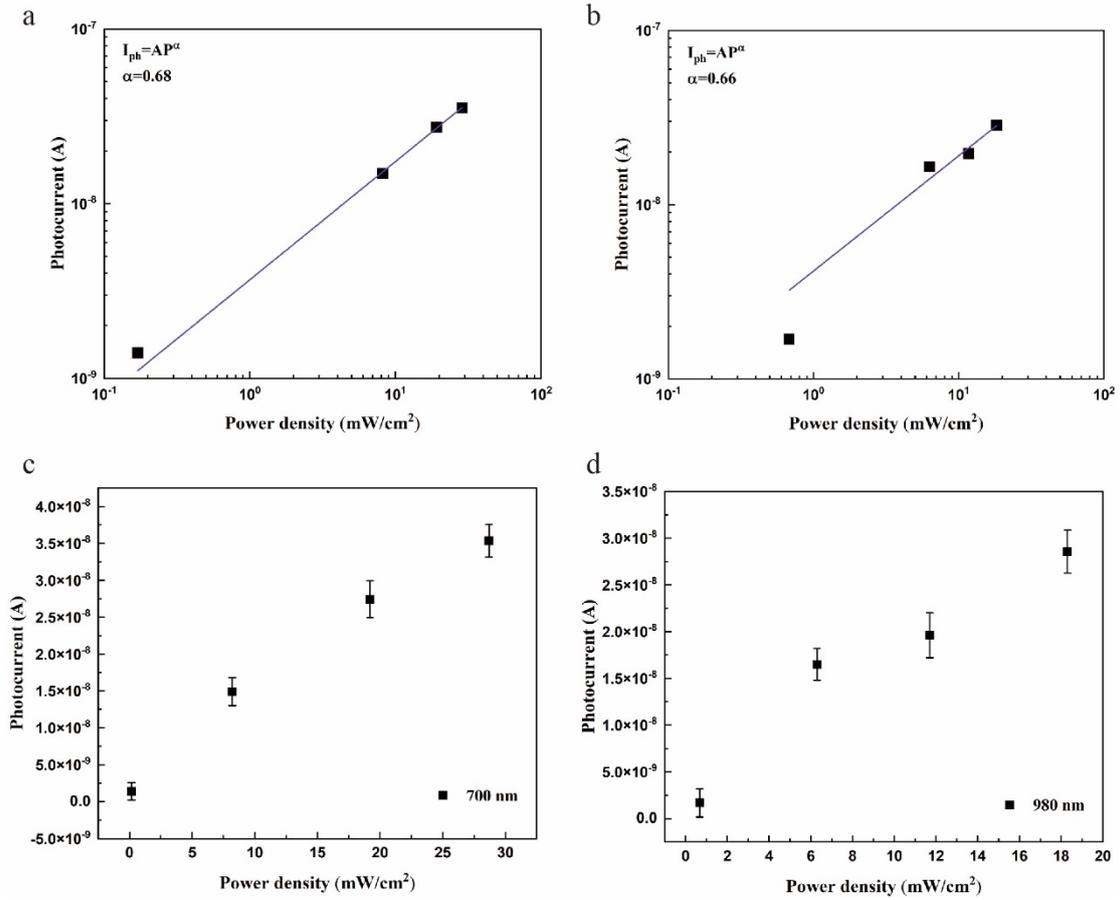


Figure S2. (a) Photocurrent as a function of power density ( $V_{ds} = 1$  V,  $\lambda = 700$  nm). (b) Photocurrent as a function of power density ( $V_{ds} = 1$  V,  $\lambda = 980$  nm). (c, d) Photocurrent of PtSe<sub>2</sub>/MoS<sub>2</sub> heterostructure under 700 nm and 980 nm illumination. Error bars indicate the sample under multiple test.