

"Advancing Photodetection in MoSe₂:GaSe Heterostructures developed on h-BN

Substrates

Supplementary:

In the supplementary portion, we perform the crystal study of MoSe₂ and GaSe (Figure S1). The temperature-dependent electrical measurements on the junction devices (metal–TMD material–metal). The results were as illustrated in Figure S2 (a) and S2 (b). We have represented the photocurrent I_{ph} as a function of the drain-source voltage V_{ds} for a heterojunction device under different incident laser powers in Figure S3.

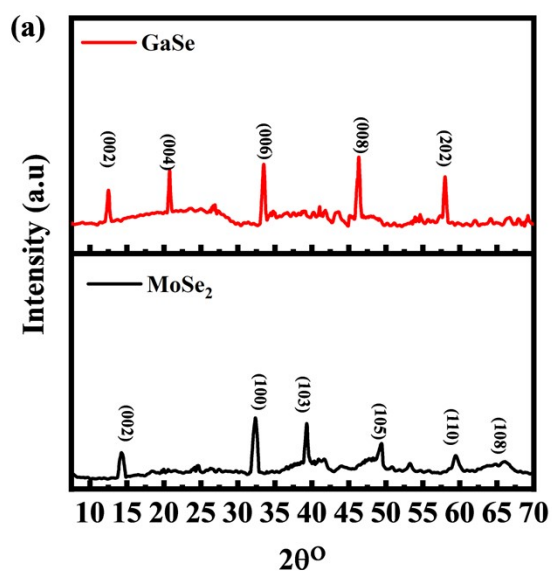


Figure S1. Represents the XRD pattern for MoSe₂ and GaSe.

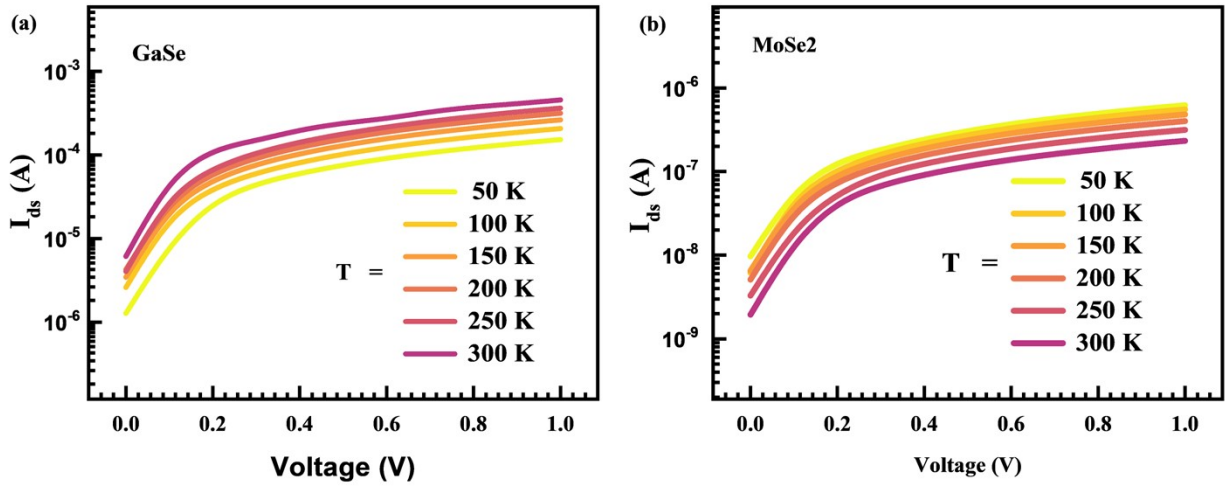


Figure S2. (a) temperature-dependent electrical measurements on the junction devices GaSe and MoSe₂, respectively.

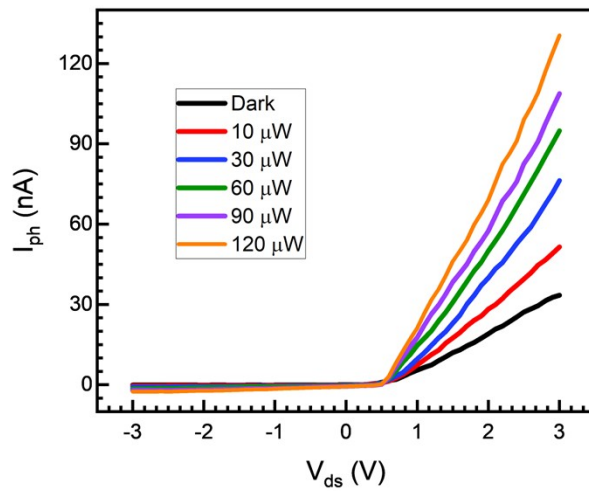


Figure S3. Represents the photocurrent I_{ph} as a function of the drain-source voltage V_{ds} for a heterojunction device under different incident laser powers