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Supporting Information

Optical anisotropy in van der Waals heterostructures integrated with low symmetry layered compound $Nb_4P_2S_{21}$

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Figure S1. AFM characterization of the device



Figure S2. PL spectrum of $MoS_2/Nb_4P_2S_{21}$ heterostructrue collected at 1.8 K and 0 T.

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Figure S3. Polarized PL spectra of heterostructure under different magnetic fields from -8 T to +8 T with 2 T step.



Figure S4. Band alignment of the $MoS_2/Nb_4P_2S_{21}$ heterostructure. The arrows indicate charge transfer between two materials at their interface.