## Atomic-Scale Carving of Nanopores into a van der Waals Heterostructure with Slow Highly Charged Ions

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Supporting information

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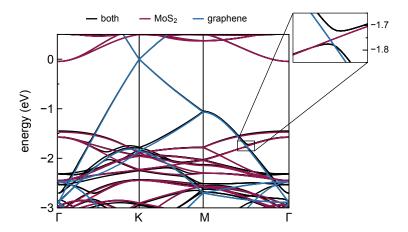


Figure 1: Band structure of a  $3 \times 3 \text{ MoS}_2 + 4 \times 4$  graphene bilayer system from density functional theory (see methods). Band structures of the individual, separate layers are shown in red (MoS<sub>2</sub>) and blue (graphene). Changes in the bandstructure are minimal, with small avoided crossings (see zoom-in).

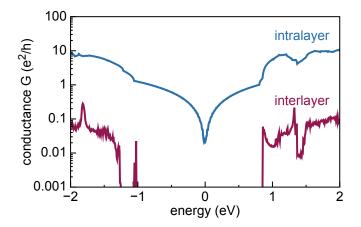


Figure 2: Intralayer conductance of graphene/ $MoS_2$  heterostructure is at least two orders of magnitude larger than the interlayer conductance.