Abstract Submitted
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The ferromagnetic properties of MnX2 Monolayers QIANG SUN, Peking University — Since the successful synthesis of graphene, tremendous efforts have been devoted to two-dimensional monolayers such as boron nitride (BN), silicene and MoS2. These 2D materials exhibit a large variety of physical and chemical properties, but they are intrinsically nonmagnetic in their pristine forms. In order to explore the applications in spin-related devices, considerable efforts have been made to study ferromagnetic monolayers. We have systematically studied the electronic and magnetic properties of the MnX2 (X=O, S, Se) monolayers, and found that they display intrinsic ferromagnetism with high Curie temperatures..

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