Two-dimensional atomic crystals for prominently electrical device

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The next generation electronics need to not only be smaller but also be more flexible. To meet such demands, electronic devices using two dimensional (2D) atomic crystals have been studied intensely. Especially, graphene which have unprecedented performance fulfillments in versatile research fields leads a parade of 2D atomic crystals. In this talk, I will introduce the electrical characterization and applications of graphene for prominently electrical transistors realization. Even the rising 2D atomic crystals such as hexagonal boron nitride (h-BN), molybdenum disulfide (MoS_2) and organic thin film for field effect transistor (FET) toward competent enhancement will be mentioned.