

A study of magnetic and optical properties for Cu-doped ZnO

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Ferromagnetism of ZnO-based magnetic semiconductors was investigated by theoretical calculation and many kinds of experiments. In the system of Cu-doped ZnO, the ferromagnetic ordering of Cu magnetic moment does not exist, but Cu-doped ZnO could have a ferromagnetism due to the distortion of ZnO-based structure by Cu-doping. In this study, we investigated the magnetic properties of Cu-doped ZnO and discussed the possible origin of magnetism in this system.