TWO KONDO IMPURITIES IN ARMCHAIR GRAPHENE NANORIBBON

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An interplay of Kondo effect and inter-impurity correlations in the armchair graphene nanoribbon is studied. The mean field slave boson approach and the equation of motion method are used. The impurities are placed on the sites belonging either to the same or to different graphene sublattices or in the centers of lattice hexagons. Depending on the position of impurities the exchange interaction is ferromagnetic or antiferromagnetic. The relative strength of exchange interaction and Kondo coupling changes with doping and various cases of magnetic ordering or Kondo screening are observed.

9.7 cm

13.4 cm

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