

# Ni(111)/Graphene/Co(111): Transport characteristics of Magnetic asymmetric Junction

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For several years the electronic structure properties of the graphene are studied very well in last decade and the electron transport across magnetic metal-graphene junctions is a very interesting topic regarding the spintronic application. We have studied the spin dependent transport of asymmetric junction of Ni-Graphene-Co, using the non-equilibrium Green's function (NEGF), embedded with density functional theory (DFT) in ferromagnetic configurations. The transmission spectra and I/V curve have shown that the current at very low bias is generated by the minority spin.

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