Spin and orbital magnetic moment on cobalt in Co/Ti multilayers: $ab-initio$ calculations

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The influence of local environment on the electronic and magnetic properties of Co-Ti multilayers is studied by ab-initio spin polarized tight binding LMTO [1] and FPLO [2] methods. In this work we present the electronic structure and the magnetic moments (spin and orbital) of Co calculated for the different structural models. Ab-initio calculations are performed for Co atom located on the surface of titanium. The band structure is also calculated for the chain of (3-5) cobalt atoms surrounded by the titanium layers.

9.7 cm

[1]O.K.Andersen, O.Jepsen, Phys. Rev. Lett. 53, 2572 (1984)
[2]K.Koepernik, H.Eschrig, Phys.Rev.B.59, 1743 (1999)

13.4 cm

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