Does density-functional theory predict a spin-density-wave ground state for Cr?

2002 J. Phys.: Condens. Matter 14 2119

(http://iopscience.iop.org/0953-8984/14/8/501)

INSTITUTE OF PHYSICS PUBLISHING JOURNAL OF PHYSICS: CONDENSED MATTER

J. Phys.: Condens. Matter **14** (2002) 2119–2120 PII: S0953-8984(02)25781-1

Erratum

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R Hafner, D Spišák, R Lorenz and J Hafner 2001 *J. Phys.: Condens. Matter* **13** L239

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Received 16 August 2001
Published 15 February 2002
Online at stacks.iop.org/JPhysCM/14/2119

Inadvertently, the results calculated using the VASP-PAW method and presented in figures 3 and 4 were obtained for the theoretical equilibrium lattice constant. The correct figures with the values at the experimental lattice constant are displayed below. The conclusions of the paper are not modified by these changes.

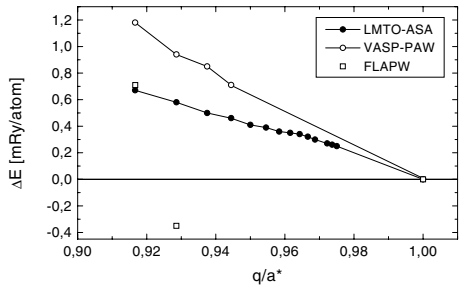

Figure 3. The variation of the energy difference between the SDW and the commensurate AFM1 state of Cr as a function of the wavevector. Full dots: LMTO-ASA results; empty circles: VASP-PAW results; squares: FLAPW results of reference [1]. All calculations use the GGA.

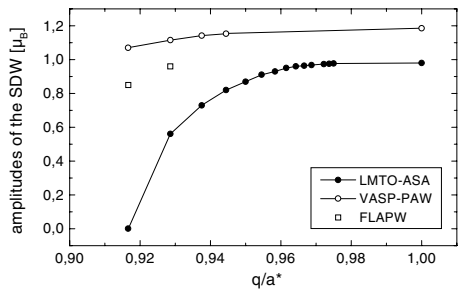

Figure 4. The variation of the amplitude m_0 of the SDW as a function of the wavevector q as calculated in the GGA. Full dots: LMTO-ASA results; empty circles: VASP-PAW results; squares: FLAPW results (reference [1]).

We are grateful to S Cottenier, B De Vries, J Meersschaut and M Rots for bringing this mistake to our attention.

References

[1] Bihlmayer G, Asada T and Blügel S 2000 *Phys. Rev.* B **62** 11 937