Orbital moments in uranium compounds- *ab-intio* calculations

A. Jezierski[1] **and A. Szytuła** [2]

[1]Institute of Molecular Physics, Polish Academy of Sciences, 60-179 Poznań, Poland
[2] M.Smoluchowski Institute of Physics, Jagiellonian University, 30-059 Kraków, Poland

The electronic structure and magnetic properties of the tetragonal $U_2T_2In_2$ (T=Ni,Rh,Pt) compounds were studied recently [1]. In this work we present the electronic structure and the magnetic moments (spin and orbital) of U_2Rh_2In and U_2Pt_2In compounds. The electronic structure and magnetic properties were calculated by the fully relativistic full potential local orbital minimum basic band structure scheme (FPLO-5 code) [2]. We used the Perdew-Wang [3] parametrization of the exchange-correlation potential.

9.7 cm

[1] A. Szytuła, A. Jezierski, A. Winiarski, B. Penc, V.H. Tran, (2005) -to be published
[2] K. Koepernik, H. Eschrig, Phys.Rev.B.**59** (1999)1743
[3] J.P. Perdew, Yu. Wang, Phys.Rev. B**45** (1992) 13244

13.4 cm

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Corresponding author :
A. Jezierski

Address for correspondence :
Institute of Molecular Physics
Polish Academy of Sciences
ul. Smoluchowskiego 17, 60-179 Poznań, Poland

Email address :
jeziersk@ifmpan.poznan.pl