

Publications 2010 to present

2010

- [216] *A study on the magnetic behaviour of polymorphic YbFe₆Ge₆*
J.M. Cadogan and D.H. Ryan
J. Phys.: Condensed Matter **22** 016009 (9pp) (2010)
- [217] *Using neutron diffraction and Mössbauer spectroscopy to study magnetic ordering in the R₃T₄Sn₄ family of compounds (INVITED REVIEW)*
D.H. Ryan, J.M. Cadogan, C.J. Voyer, M. Napoletano, P. Riani and L.M.D. Cranswick
Mod. Phys. Lett B **24**(1) 1-28 (2010)
- [218] *The incommensurate magnetic structure of Er₃Cu₄Ge₄ below 1K*
J.M. Cadogan, D.H. Ryan and L.M.D. Cranswick
J. Phys.: Conf. Series **200** 032009 (4pp) (2010)
- [219] *Valence change and magnetic order in YbMn₆Ge_{6-x}Sn_x*
T. Mazet, H. Ihou-Mouko, D.H. Ryan, C.J. Voyer, J.M. Cadogan and B. Malaman
J. Phys.: Condensed Matter **22** 116005 (13pp) (2010)
- [220] *The spin-reorientation transition in H-type YbFe₆Ge₆*
D.H. Ryan, J.M. Cadogan and R. Gagnon
J. Phys.: Conf. Series **217** 012124 (4pp) (2010)
- [221] *Disproportionation of Cobalt-Ferrite nanoparticles upon annealing*
R.D. Desautels, J.M. Cadogan and J. van Lierop
J. Phys.: Conf. Series **217** 012105 (4pp) (2010)
- [222] *Structural and magnetic transitions in Gd₅Si_xGe_{4-x} (0 ≤ x ≤ 0.9) from neutron powder diffraction*
D. H. Ryan, J. M. Cadogan, L.M.D. Cranswick, Karl A. Gschneidner Jr., V.K. Pecharsky and Y. Mudryk
Physical Review B **82** 224405 (6pp) (2010)
- [223] *The Locked-in magnetic structure of Er₃Cu₄Si₄ below 1K*
J.M. Cadogan, D.H. Ryan and L.M.D. Cranswick
J. Phys.: Conf. Series **251** 012020 (4pp) (2010)
- [224] *Mechanosynthesis of Nanocrystalline MgFe₂O₄ – Neutron Diffraction and Mössbauer Spectroscopy*
V. Šepelák, I. Bergmann, A. Feldhoff, F. J. Litterst, K. D. Becker, J. M. Cadogan, M. Hofmann, M Hoelzel, J. L. Wang, M. Avdeev and S. J. Campbell
Hyperfine Interactions **198** 67-71 (2010)
- [225] *Phonon mode softening at the ferroelectric transition in Eu_{0.5}Ba_{0.5}TiO₃*
W.N. Rowan-Weetaluktuk, D. H. Ryan, A.O. Sushkov, S. Eckel, S. K. Lamoreaux, O.P. Sushkov, J. M. Cadogan, M. Yethiraj and A.J. Studer
Hyperfine Interactions **198** 1-4 (2010)

2011

- [226] *Magnetic ordering in GdAgSb₂*
D.H. Ryan, N.R. Lee-Hone, J.M. Cadogan, P.C. Canfield and S.L. Bud'ko
J. Phys.: Condensed Matter **23** 106003 (4pp) (2011)
- [227] *⁵⁷Fe Mössbauer study of magnetic ordering in superconducting K_{0.80}Fe_{1.76}Se_{2.00} single-crystals*
D.H. Ryan, W.N. Rowan-Weetaluktuk, J.M. Cadogan, R. Hu, W.E. Straszheim, S.L. Bud'ko and P.C. Canfield
Physical Review B **83** 104526 (6pp) (2011)
- [228] *A structural phase transition in the intermetallic compound Tm₃Cu₄Sn₄*
S. Muñoz Pérez, R. Cobas, R.A. Susilo and J.M. Cadogan
J. Phys.: Conf. Series **286** 012018 (5pp) (2011)
- [229] *The magnetic structure of EuFe₂P₂ studied by neutron powder diffraction*
D.H. Ryan, J.M. Cadogan, Shenggao Xu, Zhu'an Xu and Guanghan Cao
Physical Review B **83** 132403 (4pp) (2011)
- [230] *Interpretation of the magnetic order, neutron diffraction and ¹¹¹Cd PAC studies of NdScGe*
J.M. Cadogan and D.H. Ryan
Solid State Phenomena **170** 282-5 (2011)
- [231] *Short-range correlations and their thermal hysteresis in the paramagnetic phase of YFe₃(BO₃)₄*
L. Rebbouh, R. D. Desautels, C. Ritter, J. M. Cadogan, V. Temerov, A. Pankrats and J. van Lierop
Physical Review B **83** 140406(R) (4pp) (2011)
- [232] *Neutron diffraction study of the magnetic order in NdMn₂Ge_{1.6}Si_{0.4}*
J.L. Wang, S.J. Campbell, J.M. Cadogan, A.J. Studer, R. Zeng and S.X. Dou
J. Phys.: Conf. Series **303** 012022 (6pp) (2011)
- [233] *Neutron powder diffraction determination of the magnetic structure of Nd₂Al*
J.M. Cadogan, M. Avdeev, P. Kumar, K. Suresh and D.H. Ryan
J. Phys.: Conf. Series **303** 012026 (4pp) (2011)
- [234] *Magnetocaloric Effect in layered NdMn₂Ge_{0.4}Si_{1.6}*
J.L. Wang, S.J. Campbell, J.M. Cadogan, A.J. Studer, R. Zeng and S.X. Dou
Appl. Phys. Lett. **98** 232509 (3pp) (2011)
- [235] *Magnetoresistance in epitaxial thin films of La_{0.85}Ag_{0.15}MnO₃ produced by Polymer Assisted Deposition*
R. Cobas, S. Muñoz Pérez, J.M. Cadogan, T. Puig and X. Obradors
Appl. Phys. Lett. **99** 083133 (3pp) (2011)

2012

- [236] *Magnetic order and spin-reorientation in HoGa*
R.A. Susilo, S. Muñoz Pérez, R. Cobas, J.M. Cadogan and M. Avdeev
J. Phys.: Conf. Series **340** 012071 (6pp) (2012)
- [237] *Phonon Density of States and search for resonance in LaFeAsO_{0.85}F_{0.15} (T_c=26K)*
Z. Yamani, D.H. Ryan, J.M. Cadogan, F. Canepa, A. Palenzona and A. Orecchini
J. Phys.: Conf. Series **340** 012074 (6pp) (2012)
- [238] *Field dependence of the transverse spin-glass phase transition: Quantitative agreement between Monte Carlo simulations and experiments*
D.H. Ryan, A.D. Beath, J.M. Cadogan and J. van Lierop
J. Appl. Phys. **111** 07E108 (3pp) (2012)
- [239] *¹⁵⁵Gd Mössbauer investigation of the magnetic order and spin-reorientation in Gd₃Ag₄Sn₄.*
C.J. Voyer, D.H. Ryan and J.M. Cadogan
Hyp. Int. **207** 121-5 (2012)
- [240] *Doping-induced valence changes in Yb₅Ge_{4-x}(Sb,Ga)_x (x≤1)*
D.H. Ryan, N.R. Lee-Hone, J.M. Cadogan, K. Ahn, V.K. Pecharsky and K.A. Gschneidner Jr.
Hyp. Int. **208** 59-63 (2012)
- [241] *Mössbauer study of the Ordinary-Chondrite meteorite Thylacine Hole-001*
J.M. Cadogan and E.J. Devlin
Hyp. Int. **208** 91-4 (2012)
- [242] *Magnetic and structural transitions in the iron-chalcogenide high-T_c superconductor: K_{0.8}Fe_{1.76}Se_{2.00}*
W. N. Rowan-Weetaluktuk, D.H. Ryan, J.M. Cadogan, R. Hu, S. L. Bud'ko and P. C. Canfield
J. Appl. Phys. **111** 07E126 (3pp) (2012)
- [243] *Metallic state induced in Eu₂Ru₂O₇ by hole creation and orbital overlap in the t_{2g} bands*
S. Muñoz Pérez, R. Cobas, J.M. Cadogan, J. Albino Aguiar, P. Bonville, T. Puig and X. Obradors
J. Appl. Phys. **111** 07E150 (3pp) (2012)
- [244] *The magnetic structure of EuPdSn*
P. Lemoine, J.M. Cadogan, D.H. Ryan and M. Giovannini
J. Phys.: Condensed Matter: **24** 236004 (8pp) (2012)