Dr. Anna LLOBET MEGIAS

Curriculum Vitae

Los Alamos National Laboratory, Lujan Center-LANSCE-LC,
Mail stop H805, Los Alamos, New Mexico 87545, USA
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e-mail : allobet@lanl.gov

Citizenship: US
Clearance: DOE Q
Languages: English, French, Spanish, Catalan

Scientific Interests

Condensed Matter Physics: Strongly correlated electron phenomena, Magnetism, Phase transitions, Multiferroics, Actinide science
Materials Science: Structure-lengthscales-property relationships of materials relevant to industry and weapons program
Methods : Diffraction (X-ray, neutron), Local Structure/Total scattering

Scientific Impact

Author and co-author in more than 124 refereed publications
Cited 1439 times
h-index 21 (18 since 2008)
i10-index 41 (32 since 2008) - number of publications with at least 10 citations

Professional Experience

Acting Deputy Group Leader *(R&D Manager 3) for LANSCE-LC* *since June 2012*
Lujan Center Instrument Scientist *(TSM- Scientist 3)* *2010-2012*
Lujan Center Instrument Scientist *(TSM- Scientist 2)* *2003-2010*

- Acting Group Leader LANSCE-LC in 06/2006.
- Instrument scientist of HIPD (since 2003) and Pharos (2007, 2008) at the Lujan Neutron Scattering Center
- Alternate instrument scientist on NPDF at the Lujan Neutron Scattering Center
- Co-organizer of LANSCE Winter Neutron School in 2013 and 2008 and lecturer on the 2012, 2008, 2006, 2005 and 2004 LANSCE Neutron schools.
- Organizer of Lujan Seminar Series, Lujan Seminar Series on Plutonium, Lujan Seminar Series on Energy Materials and Storage and current Lujan Seminar Series on Nanoscience and complex fluids and Lujan Seminar Series on National Security Materials Physics. Lujan Seminar Series has so far hosted more than 200 seminars.
- Member of: LANL hiring committees, LDRD-ER committee, Lujan Center Safety review committee and MPAC committee, Postdoc research day judge, Postdoc Publication Prize in Theoretical Physics judge, volunteer/science teacher in Santa Fe Public schools (SFPS), Science fair judge and Careers and Professions day presenter at SFPS .

Post-doc (Los Alamos National Laboratory, NM, USA) *April 2001- March 2003*
LDRD funded project: "Superconductivity and emergent behavior in correlated electron materials"
Study of the interplay between *magnetism and superconductivity on heavy fermion compounds* of the family $CeMIn_5$ and Ce_2MIn_8 (M=Rh, Ir, Co) by means of elastic and inelastic neutron scattering techniques at MST-10 (Dr. J.L. Sarrao, Dr. W.Bao, Dr. D. Pines,)

Awards/Leadership training

2013 Los Alamos LAAP Award
2012 Selected for the LANL Protegee-Mentor Program
2010 Selected for the Leadership Development Initiative program of the Los Alamos National Laboratory's Experimental Science's Directorate.
2009 Los Alamos Award "For Significant Contributions to the Stockpile Stewardship"
2007 Los Alamos Award "For Significant Contributions to the Stockpile Stewardship"
2006 Los Alamos LAAP Award

Educational Background

Ph.D. in Physics by Univ. Joseph Fourier (Grenoble-France) and Univ. Autònoma de Barcelona(Spain) *December 2000*
Title: *Contribution to the study of the magneto-transport and the phase segregation phenomena in manganites.* (www.tdcat.cbuc.es TDCat-1128101-091002/)
Master's degree: Equivalence de DEA by Univ. Joseph Fourier and Magister by Univ. Aut. de Barcelona *1996-2000*
NATO advanced study on MUON : MuSR in physics, chemistry and materials (St Andrews) *August 1998*
HERCULES (Higher European Research Course of Large Experimental Systems. (Grenoble) *February- 1997*
Bachelor degree in Physics: Materials Science (Universitat Autonoma de Barcelona-Spain), *1992-1996*

Professional Activities/ Mentorship

Referee: Physical Review Letters, Physical Review B, Journal of the American Chemical Society, Journal of Magnetism and Magnetic Materials, Journal of Materials Chemistry A, Journal of Nanoparticle Research, Journal of Scientific Research and Reports and others.
Consulting agent: NSF, BES, Oak Ridge Natl Lab, NIST, LDRD, Agencia de gestio d'ajuts universitaris i de recerca (AGAUR- Catalan Government).
Professional Societies: Member of American Physical Society
Co-thesis adviser of GRA Efrain Rodriguez (UCSB) with Prof. A. Cheetham (UCSB) and Dr. A. Sattelberger (Argonne), Defense on 04/09/2009. Efrain Rodriguez received the 2009 NRC Research Associateship Program at NIST and was awarded to attend the Lindau Nobel Laureate Conference. Efrain Rodriguez is currently assistant professor at University of Maryland.
UGRA mentor of Efrain Rodriguez (2003-2004) and UGRA Eni Rotimi (2008)
GRA mentor of Sami El-Khatib (NMSU) 2005-2007. Sami El-Khatib is currently Assistant professor at the American University of Sharjah.
Post-doc mentor of K. Ramesha (2005-2006) currently staff at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) India, and currently mentoring Graham King (2010-2014)
Student mentor: Caroline Wurden (2009) awarded with the LANL summer student Prize and Kyle Thomas (2011)

Publications

http://www.researcherid.com/rid/B-1672-2010

Top 15 Most cited papers (google scholar)

Citations

160 C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, "Selective spin-state switch and metal-insulator transition in $GdBaCo_2O_{5.5}$" Phys. Rev. B **65**, 180405 (2002)

123 M. Respaud, B. Raquet, J.M. Broto, C. Frontera, J.L. García-Muñoz, H. Rakoto, M. Goiran, M.A.G. Aranda, **A. Llobet**, , J. Rodriguez Carvajal, "Magnetic and magnetotransport properties of $GdBaCo_2O_{5+\delta}$: a high magnetic field study" Phys. Rev. B **64**, 214401 (2001)

99 J.L. García-Muñoz, C. Frontera, M.A. García-Aranda, **A. Llobet** and C. Ritter "High Temperature orbital and charge ordering in $Bi_{1/2}Sr_{1/2}MnO_3$" Phys. Rev. B **63**, 064415 (2001)

82 L. León-Reina, E.R. Losilla, M. Martínez-Lara, S. Bruque, **A. Llobet**, M.A.G. Aranda" Direct Evidence of Interstitial Oxygen in Lanthanum Oxy-apatite" Journal of Materials Chemistry; Jul 7 2005; v.15, no.25, p.2489-2498

76 **Llobet, A**.; Gardner, JS; Moshopoulou, EG; Mignot, JM; Nicklas, M.; Bao, W.; Moreno, NO; Pagliuso, PG; Goncharenko, IN; Sarrao, JL; et. al. "Magnetic structure of CeRhIn 5 as a function of pressure and temperature" Physical Review B (Condensed Matter and Materials Physics); 1 Jan. 2004; vol.69, no.2, p.24403-1-6

73 L. Ranno, **A. Llobet**, R. Tiron, E. Favre-Nicolin. " Strain induced magnetic anisotropy in epitaxial manganites films" Applied Surface Science, vol.188, no.1-2, p.170-5 (2002)

50 C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Ritter, M. Respaud and J. Vanacken. "Low temperature charge and magnetic order of $Bi_{0.5}Sr_{0.5}MnO_3$". Phys. Rev. B **64**, 054401 (2001)

49 C. Frontera, J.L. Garcia-Muñoz, **A. Llobet**, M. Respaud, J.M. Broto, J.S. Lord , A. Planes "Phase coexistence, magnetic inhomogeneity and disorder in the charge-order state of $Pr_{2/3}Ca_{1/3}MnO_3$" Phys. Rev. B, **62**, 3381, (2000)

48 K Ramesha , **A Llobet** , Th Proffen , C R Serrao and C N R Rao, "Observation of local non-centrosymmetry in weakly biferroic YCrO3" Journal of Physics Condensed Matter 19, Issue: 10, March 14, 2007, pp. 102202

47 E.E Rodriguez, Th. Proffen, **A. Llobet**, J.J. Rhyne, J.F. Mitchell "Neutron diffraction study of average and local structure in La0.5Ca0.5MnO3, Physical Review B (Condensed Matter and Materials Physics); 1 March 2005; vol.71, no.10, p.104430-1-9

45 M. E. Manley, A. J. Sievers, J. W. Lynn, S. A. Kiselev, N. I. Agladze, Y. Chen, **A. Llobet**, and A. Alatas, "Intrinsic localized modes observed in the high-temperature vibrational spectrum of NaI" Phys. Rev. B 79, 134304 (2009)

44 J.D. Thompson, M. Nicklas, A. Bianchi, R. Movshovic, **A. Llobet**, W. Bao, A. Malinowski, M. F. Hundley, N. O. Moreno, P.G. Pagliuso, J.L. Sarrao, S. Nakatsuji, Z. Fisk, R. Borth, E. Lengyel, N. Oeschler, G. Sparn, F. Steglich

"Magnetism and unconventional superconductivity in $Ce_nM_mIn_{3n+2m}$ heavy-fermion crystals" Physica B, **329**, 446-449, (2003) 4141

42 J. C. Palmer, **A. Llobet**, S.-H. Yeon, J. E. Fischer, Y. Shi, Y. Gogots3, K. E. Gubbins "Modeling the Structural Evolution of Carbide Derived Carbons Using Quenched Molecular Dynamics" Carbon (2010) Vol.48, iss.4, p.1116-1123

42 M. Respaud, **A. Llobet**, C. Frontera, C. Ritter, J.M. Broto, H. Rakoto, M. Goiran and J.L. García-Muñoz "High magnetic field study of lattice and magnetic effects on the charge-melting transition in $Ln_{1/2}Ca_{1/2}MnO_3$ perovskites." Phys. Rev. B **61**, 9014-9018 (2000)

38 C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Ritter, M. Respaud, J. Vanacken "Room temperature charge and orbital ordering an phase coexistence in $Bi_{1/2}Sr_{1/2}MnO_3$" J. of Physics: Condensed Matter **13**, 1071 (2001)

Complete Publication List:

(citations in this section might not up to date. For up to date information http://www.researcherid.com/rid/B-1672-2010 or http://scholar.google.com/citations?user=WoKILK8AAAAJ)

1998

1. **15** O. Toulemonde, F. Studer, **A. Llobet**, L. Ranno, A. Maignan, E. Pollert, M. Nevriva, E. Pellegrin, N.B. Brooks, J. Goedkoop. "Orientation of Nd and Mn magnetic moments in a CMR Nd0.72Ba0.28MnO3 by X-ray magnetic circular dichroism" J. of Magnetism Mag. Materials **307,** 190(3) (1998)

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2. **9** J.L. García-Muñoz, M. Respaud, C. Frontera, **A. Llobet**, J.M. Broto, H. Rakoto, M. Goiran, "H-T diagrams of $Ln_{1-x}Ca_xMnO_3$ (x=1/2, 1/3) in pulsed fields up to 50 T"J. Appl. Physics **85**, 5570-5572 (1999)
3. **7** J.L. García-Muñoz, **A. Llobet**, C. Frontera, C. Ritter, "Charge localization and magnetic dynamics in ferromagnetic and charge-ordered manganites", J. Appl. Physics **85**, 5639-5641 (1999)
4. **3** J.L. García-Muñoz, **A. Llobet**, C. Frontera, J. Fontcuberta, X. Obradors, C. Ritter "Charge localization and magnetic dynamics in manganites" J. of Magnetism Mag. Materials **196-197**, 477-478 (1999)
5. **1** **A. Llobet**, C. Ritter, C. Frontera, X. Obradors, J.L. García-Muñoz, J. A. Alonso "Structural instability vs bandwidth-controlled charge ordering in x=1/2 manganites" J. of Magnetism Mag. Materials **196-197**, 549-551 (1999)
6. **29** **A. Llobet**, J.L. García-Muñoz, C. Frontera, C. Ritter. "Tetragonal to monoclinic transition in the metallic antiferromagnet $Pr_{1/2}Sr_{1/2}MnO_3$ " Phys. Rev. B **60**, R9889-9892 (1999)
7. **15** L. Ranno, **A. Llobet**, M. Hunt, J. Pierre. "Influence of substrate temperature on magnetotransport properties on thin films of $La_{0.7}Sr_{0.3}MnO_3$" Applied Surface Science **138-139** 228-232 (1999)
8. **0** M. Goiran, M. Respaud, J.M. Broto, H. Rakoto, **A. Llobet**, C. Frontera, J.L. Garcia-Muñoz y J.Vanacken. "Stability of charge-ordering and H-T diagrams of $RE_{1-x}Ca_xMnO_3$ manganites in pulsed fields up to 50 T".J. de Physique IV **9**, 315 (1999).

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9. **9** M. Respaud, J.M. Broto, H. Rakoto, M. Goiran, **A. Llobet**, C. Frontera, J.L. García-Muñoz, J. Vanacken."Stability of charge-ordering and H-T diagrams of $Ln_{1-x}Ca_xMnO_3$ manganites in pulsed magnetic fields up to 50 T." J. of Magnetism Mag. Materials **211**, 128 (2000)
10. **42** M. Respaud, **A. Llobet**, C. Frontera, C. Ritter, J.M. Broto, H. Rakoto, M. Goiran and J.L. García-Muñoz "High magnetic field study of lattice and magnetic effects on the charge-melting transition in $Ln_{1/2}Ca_{1/2}MnO_3$ perovskites." Phys. Rev. B **61**, 9014-9018 (2000)
11. **3** **A. Llobet**, J.L. García-Muñoz, C. Frontera, M. Respaud, H. Rakoto, J.S. Lord "Magnetic dynamics and discommensuration in charge-ordered $Pr_{1-x}Ca_xMnO_3$ (x=1/3 and 1/2)" Physica B **289-290**, 73 (2000).
12. **5** **A. Llobet**, J.L. García-Muñoz, C. Frontera, M. Respaud, L. Pinsard, A. Revcolevschi, C. Scott "Magnetism and orbital-ordering in $La_{7/8}Sr_{1/8}MnO_3$" Physica B **289-290**, 77 (2000).
13. **0** **A. Llobet**, J.L. García-Muñoz, C. Frontera and C. Ritter "Charge reallocation in the tetragonal to monoclinic transition in $Pr_{0.5}Sr_{0.5}MnO_3$"Physica B **276-278**, 790 (2000)
14. **4** C.Frontera, **A. Llobet**, M.A. García-Aranda, C. Ritter and J.L. García-Muñoz "Phase coexistence and magnetic structures of $Bi_{1-x}Sr_xMnO_3$ (x=1/2,2/3)" Physica B **276-278**, 793-794 (2000)
15. **49** C. Frontera, J.L. Garcia-Muñoz, **A. Llobet**, M. Respaud, J.M. Broto, J.S. Lord , A. Planes "Phase coexistence, magnetic inhomogeneity and disorder in the charge-order state of $Pr_{2/3}Ca_{1/3}MnO_3$" Phys. Rev. B, **62**, 3381, (2000)
16. **4** C. Frontera, J.L. García-Muñoz, **A. Llobet**, C. Ritter "Reply to "Comment on :' Tetragonal to monoclinic transition in the metallic antiferromagnet $Pr_{1/2}Sr_{1/2}MnO_3$" Phys. Rev. B, **62,** 6822 (2000)
17. **28** C. Frontera, J.L. García-Muñoz, **A. Llobet**, C. Ritter, J.A. Alonso, J. Rodríguez-Carvajal "Dependence of the physical properties of $Nd_{0.5}Ca_{0.5}MnO_{3+d}$ on the oxydation state of Mn " Phys. Rev. B, **62,** 3002, (2000)
18. **16** B. Grévin, I. Maggio-Aprile, A. Bentzen, L. Ranno, **A. Llobet**, and Ø. Fischer , "Local electronic transport in $La_{0.7}Sr_{0.3}MnO_3$ thin films studied by scanning tunneling potentiometry". Phys. Rev. B, **62**, 8596(2000)

19. **12** **A. Llobet**, C. Frontera, J.L. García-Muñoz, C. Ritter, M.A.G. Aranda Chem. Mater. , "Chemical Heterogeneity in a Single Phase: $Bi_{0.15}Ca_{0.85}MnO_3$ a Case Example of Macroscopic Phase Segregation" Chem. Mat. **12**, 3648 (2000)

2001

20. **38** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Ritter, M. Respaud, J. Vanacken "Room temperature charge and orbital ordering an phase coexistence in $Bi_{1/2}Sr_{1/2}MnO_3$" J. of Physics: Condensed Matter **13**, 1071 (2001)
21. **99** J.L. García-Muñoz, C. Frontera, M.A. García-Aranda, **A. Llobet** and C. Ritter "High Temperature orbital and charge ordering in $Bi_{1/2}Sr_{1/2}MnO_3$" Phys. Rev. B **63**, 064415 (2001)
22. **0** J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Frontera, J.A. Alonso and C. Ritter "Phase segregation and orbital ordering in $Bi_{1-x}Ca_xMnO_3$ (x>75): A neutron and synchrotron x-ray diffraction study" J. of Alloys and Compounds **323-324**, 408 (2001)
23. **14** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, J. Rodriguez-Carvajal, M.Respaud, J.M. Broto, B. Raquet, H.Rakoto, M Goiran "Structural spin state, and magnetic transitions in $GdBaCo_2O_{5+\Delta}$" J. of Alloys and Compounds **323-324**, 468 (2001)
24. **50** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Ritter, M. Respaud and J. Vanacken. "Low temperature charge and magnetic order of $Bi_{0.5}Sr_{0.5}MnO_3$". Phys. Rev. B **64**, 054401 (2001)
25. **0** J.L. García-Muñoz, M.A.G. Aranda, **A. Llobet**, C. Frontera, J.A. Alonso and C. Ritter "Phase segregation in $Bi_{1-x}Ca_xMnO_3$ (x>75) investigated by neutron and synchrotron x-ray diffraction" Mat. Sci. Forum. **378-381**, 611 (2001)
26. **0** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, C. Ritter, M. Respaud, J. Vanacken "Charge order and phase coexistence in $Bi_{1/2}Sr_{1/2}MnO_3$" Mat. Sci. Forum. **378-381**, 621 (2001)
27. **14** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, J. Rodriguez Carvajal, M. Respaud, J.M. Broto, B. Raquet, H. Rakoto, M. Goiran, "Structural, spin state, and magnetic transitions in GdBaCo2O5-delta (delta approximate to 0.5) " Journal of Alloys and Compounds, **323-324**, p.468-71 (2001)
28. **123** M. Respaud, B. Raquet, J.M. Broto, C. Frontera, J.L. García-Muñoz, H. Rakoto, M. Goiran, M.A.G. Aranda, **A. Llobet**, , J. Rodriguez Carvajal, "Magnetic and magnetotransport properties of $GdBaCo_2O_{5+\Delta}$: a high magnetic field study" Phys. Rev. B **64**, 214401 (2001)
29. **1** **A. Llobet**, L. Ranno, J. Pierre. "Tuning Magnetotransport and Magnetic properties of $La_{2/3}Ca_{1/3}MnO_3$ Thin Films using epitaxial strain", Materials Science Forum Vol (373-376) (2001) pp. 517-520

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30. 5 J.L. García-Muñoz, C. Frontera, M.A.G. Aranda, C. Ritter, **A. Llobet**, L. Ranno, M. Respaud, J. Vanacken, J.M. Broto "Electronic and magnetic transition in BiSrMnO oxides: High temperature charge ordering" J. Mag. Mag. Mat, **242-245**, 645-647, (2002)
31. **160** C. Frontera, J.L. García-Muñoz, **A. Llobet**, M.A.G. Aranda, "Selective spin-state switch and metal-insulator transition in $GdBaCo_2O_{5.5}$" Phys. Rev. B **65**, 180405 (2002)
32. **2** **A. Llobet,** C. Frontera, C. Ritter, M. Respaud, J.M. Broto, M.J. Martinez-Lope, M.A.G. Aranda, J.L. García-Muñoz, "Charge modulation and orientational variants in $Bi_{1/3}Ca_{2/3}MnO_3$" Applied Physics A, **74**, p.S1761, (2002)
33. **12** C. Frontera, J.L. García-Muñoz, **A. Llobet,** M.A.G. Aranda, J. Rodriguez Carvajal, M. Respaud, J.M. Broto, B. Raquet, H. Rakoto, "Spin state transition: the origin of structural, magnetic and metal–insulator transitions in $GdBaCo_2O_{5+\delta}$ ($\delta \approx 0.5$) J. Mag. Mag. Mat., **242-245**, 751, (2002)
34. **73** L. Ranno, **A. Llobet**, R. Tiron, E. Favre-Nicolin. " Strain induced magnetic anisotropy in epitaxial manganites films" Applied Surface Science, vol.188, no.1-2, p.170-5 (2002)
35. **1** C. Frontera, J. L. Garcia-Munoz, M. A. G. Aranda, C. Ritter**, A. Llobet**, L. Ranno, M. Respaud, J. Vanacken, J. M. Broto, A. E. Carrillo, A. Calleja, J. Garcia, J "Anomalously high charge/orbital ordering temperature in Bi0.5Sr0.5MnO3" Applied Physics A, **74**, 1787-S1789, (2002)

2003

36. **28** J. L. Garcia-Munoz; C. Frontera; M. A. G. Aranda; C. Ritter, **A. Llobet**, M. Respaud, M. Goiran, H. Rakoto, O. Masson, J. Vanacken, J.M. Broto, " Charge and orbital order in rare-earth and Bi manganites: a comparison", J. Sol. State Chem., **171**, 84-89, (2003)
37. **30** C. Frontera, J. L. Garcia-Munoz , **A. Llobet**, L. Manosa, M. A. G. Aranda, "Selective spin-state and metal-insulator transitions in GdBaCo2O5.5", J. Sol. State Chem. **171**, 349-352, (2003)
38. **44** J.D. Thompson, M. Nicklas, A. Bianchi, R. Movshovic, **A. Llobet**, W. Bao, A. Malinowski, M. F. Hundley, N. O. Moreno, P.G. Pagliuso, J.L. Sarrao, S. Nakatsuji, Z. Fisk, R. Borth, E. Lengyel, N. Oeschler, G. Sparn, F. Steglich "Magnetism and unconventional superconductivity in $Ce_nM_mIn_{3n+2m}$ heavy-fermion crystals" Physica B, **329**, 446-449, (2003)

2004

39. **6** Frontera, C; Respaud, M; Garcia-Munoz, JL; **Llobet, A**; Carrillo, AE; Caneiro, A; Broto, JM, "High magnetic field study of HoBaCo{sub 2}O{sub 5.5} and GdBaCo{sub 2}O{sub 5.5} layered cobaltites: the effect of rare-earth size.": Physica B; 30 April 2004; vol.346-347, p.246-9
40. **1** **Llobet, A**; Bao, W; Moreno, NO; Pagliuso, PG; Sarrao, JL; Thompson, JD; Prokes, K; Mignot, JM "Interplay between magnetism and superconductivity in CeMIn{sub 5} heavy fermion. " Journal of Magnetism and Magnetic Materials; May 2004; vol.272-276, pt.1, p.175-6

41. **1** Frontera, C; Garcia-Munoz, JL; Carrillo, AE; Hervieu, M; Martin, C; **Llobet, A**; Calleja, A; Capdevila, XG; Ritter,C "Magnetism of Bi{sub 0.75}Sr{sub 0.25}MnO{sub 3} and its dependence on bismuth concentration" Journal of Magnetism and Magnetic Materials; May 2004; vol.272-276, pt.3, p.1734-5
42. **76** **Llobet, A**.; Gardner, JS; Moshopoulou, EG; Mignot, JM; Nicklas, M.; Bao, W.; Moreno, NO; Pagliuso, PG; Goncharenko, IN; Sarrao, JL; et. al. "Magnetic structure of CeRhIn{sub 5} as a function of pressure and temperature" Physical Review B (Condensed Matter and Materials Physics); 1 Jan. 2004; vol.69, no.2, p.24403-1-6
43. **5** Munoz, JLG; Frontera, C.; **Llobet, A**.; Carillo, AE; Caneiro, A.; Aranda, MAG; Respaud, M.; Ritter, C.; Dooryee, E." Magnetic and electronic properties of the oxygen-deficient PrBaCo{sub 2}O{sub 5+ delta } (delta >0.50). " Journal of Magnetism and Magnetic Materials; May 2004; vol.272-276, pt.3, p.1762-3

2005

44. **5** Y. Janssen, S. Change, B.K. Cho, **A. Llobet**, K.W. Dennis, R.W. McCallum, R.J.Mc Queeney, P.C. Cantfield ": YbGaGe: normal thermal expansion "Journal of Alloys and Compounds vol.389, no.1-2, p.10-13 2005
45. **47** E.E Rodriguez, Th. Proffen, **A. Llobet**, J.J. Rhyne, J.F. Mitchell "Neutron diffraction study of average and local structure in La0.5Ca0.5MnO3, Physical Review B (Condensed Matter and Materials Physics); 1 March 2005; vol.71, no.10, p.104430-1-9
46. **82** L. León-Reina, E.R. Losilla, M. Martínez-Lara, S. Bruque, **A. Llobet**, M.A.G. Aranda" Direct Evidence of Interstitial Oxygen in Lanthanum Oxy-apatite" Journal of Materials Chemistry; Jul 7 2005; v.15, no.25, p.2489-2498
47. **7** Artem M. Abakumov, Marina G. Rozova, Evgeny V. Antipov, Joke Hadermann, Gustaaf Van Tendeloo, Maxim V. Lobanov, Martha Greenblatt, Mark Croft, Eugene V. Tsiper, **Anna Llobet**, Konstantin A. Lokshin, and Yusheng Zhao "Synthesis, Cation Ordering, and Magnetic Properties of the $(Sb_{1-x}Pb_x)_2(Mn_{1-y}Sb_y)O_4$ Solid Solutions with the Sb_2MnO_4-Type Structure", Chem Mater2005, vol 17, 1123-1134
48. **33** **Llobet, A**; Christianson, AD; Bao, W; Gardner, JS; Swainson, IP; Lynn, JW; Mignot, JM; Prokes, K; Pagliuso, PG; Moreno, NO; et. al. Novel coexistence of superconductivity with two distinct magnetic orders**.**, Physical Review Letters; 18 Nov. 2005; vol.95, no.21, p.217002/1-4
49. **20** Lufaso, MW; Hopkins, E; Bell, SM; **Llobet, A**, Crystal chemistry and microwave dielectric properties of Ba3MNb2-xSbxO9 (M = Mg, Ni, Zn): CHEMISTRY OF MATERIALS; AUG 9 2005; v.17, no.16, p.4250-4255
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