



New Materials and Compounds

Advanced Materials Research

Journals

- A. Rodríguez, M.I. Ortiz, J. Sangrador, T. Rodríguez, M. Avella, A.C. Prieto, A. Torres, J. Jiménez, A. Kling, C. Ballesteros, Comparative study of the luminescence of structures with Ge nanocrystals formed by dry and wet oxidation of SiGe films, *Nanotechnology* 18, 065702, 2007.
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- A.C. Fernandes, F. Vaz, L. Rebouta, A. Pinto, E. Alves, N.M.G. Parreira, Ph. Goudeau, E. Le Bourhis, J.P. Rivière, Influence of the O/C ratio in the behaviour of TiC_xO_y thin films, *Surf. Coat. Tech.* 201, 5587-5591, 2007.
- B. Berini, N. Keller, Y. Dumont, E. Popova, W. Noun, M. Guyot, J. Vigneron, A. Etchberry, N. Franco, R.C. da Silva, Reversible phase transformation of LaNiO_{3-x} thin films studied *in-situ* by spectroscopic ellipsometry, *Phys. Rev. B* 76, 205417, 2007.
- B. Savoini, R. González, J.V. Pinto, R.C. da Silva, E. Alves, Copper and cobalt nanocolloids in implanted MgO crystals, *Nucl. Inst. & Meth.* B257, 563-567, 2007
- B. Savoini, R. González, R.C. da Silva, E. Alves, Lithium ion implantation and annealing of MgO single crystals, *Nucl. Inst. & Meth.* B257, 558-562, 2007
- C. Hums, J. Blasing, A. Dadgar, A Diez, T. Hempel, J. Chisten, A. Krost, K. Lorenz, E. Alves, Metal-organic vapour phase epitaxy and properties of AlInN in the whole compositional range, *Appl. Phys. Lett.* 90, 022105, 2007
- C. Marques, N. Franco, L.C. Alves, R.C. da Silva, E. Alves, G. Safran, C.J. McHargue, Synthesis of ZnO nanocrystals in sapphire by ion implantation and vacuum annealing, *Nucl. Inst. & Meth. B* 257, 515-518, 2007.
- C. Marques, N. Franco, L.C. Alves, R.C. da Silva, E. Alves, Optical and structural behaviour of Cu-implanted sapphire, *Surf. Coat. Tech.* 201, 8190-8196, 2007
- D. Babonneau, F. Pailloux, G. Abadias, F. Petroff, N.P. Barradas, E. Alves, Structure and magnetic properties of C/FePt granular multilayers prepared by ion-beam sputtering, *Rev. Adv. Mat. Science* 15, 198-2007, 2007.
- E. Alves, L.C. Alves, N. Franco, M.R. da Silva, A. Paul, Structural and oxidation studies of titanium beryllides, *Nuclear Technology* 159 (3), 233-237, 2007.
- F. Bernardi, J.H.R. dos Santos, M. Behar, A. Kling, Lattice site investigation of F in preamorphized Si, *Phys. Rev. B* 76, 033201, 2007.
- G. Itskos, G. Heliotis, P.G. Lagoudakis, J. Lupton, N.P. Barradas, E. Alves, S. Pereira, I.M. Watson, M.D. Dawson, J. Feldmann, R. Murray, D.D.C. Bradley, Efficient dipole-dipole coupling of Mott-Wannier and Frenkel excitons in (Ga,In)N quantum well/polyfluorene semiconductor heterostructures, *Phys. Rev. B* 76, 035344, 2007.
- J.V. Pinto, M.M. Cruz, R.C. da Silva, N. Franco, A. Casaca, E. Alves, M. Godinho, Anisotropic ferromagnetism induced in rutile single crystals by Co implantation, *Eur. Phys. J. B* 55, 253-260, 2007.
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- M.P. Gispert, A.P. Serro, R. Colaço, A.M. Botelho do Rego, E. Alves, R.C. da Silva, P. Brogueira, E. Pires, B. Saramago, Tribological behaviours of Cl-implanted TiN coating for biomedical applications, *Wear* 262, 1337-1345, 2007.
- M.P.F. Graça, M.A. Valente, M. Peres, A. Cruz, M.J. Soares, A.J. Neves, T. Monteiro, L.C. Alves, E. Alves, Structural and optical properties of Er³⁺ ion sol-gel grown LiNbO₃, *J. of Physics:Cond. Matter* 19 (1), 016213, 2007

M.P.F. Graça, M.A. Valente, M. Peres, A. Cruz, M.J. Soares, A.J. Neves, T. Monteiro, E. Alves, C. Marques, Influence of sol-gel growth parameters on the optical and structural properties on LiNbO₃ samples, *Mat. Sci. and Eng. C* 27, 1065-1068, 2007.

O. Okhay, A. Wu, P.M. Vilarinho, I.M. Reaney, A.R.L. Ramos, E. Alves, J. Petzelt, J. Pokorný, Microstructural studies and electrical properties of Mg-doped SrTiO₃ thin films, *Acta Materiallica* 55, 4947-4954, 2007.

R. Schwarz, R. Cabeça, E. Morgado, M. Niehus, O. Ambacher, C.P. Marques, E. Alves, Stability of GaN films under intense MeV He ion irradiation, *Diamond and Related Materials* 16, 1437-1440, 2007.

R.P. Borges, J.V. Pinto, R.C. da Silva, A.P. Gonçalves, M.M. Cruz, M. Godinho, Ferromagnetism in ZnO doped with Co by ion implantation, *J. Magn. Magn. Mater.*, Volume 316, Issue 2, e191-e194, 2007.

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S. Magalhães, K. Lorenz, M. Peres, T. Monteiro, S. Tripathy, E. Alves, Implantation of nanoporous GaN with Eu ions, *Nucl.Inst. & Meth.* B257, 328-331, 2007

S. Pereira, K. O'Donnell, E. Alves, Role of nanoscale strain inhomogeneity on the light emission from InGaN epilayers, *Adv. Functional Materials* 17, 37-42, 2007.

T. Monteiro, M.J. Soares, A. Neves, M.C. Carmo, S. Pereira, M.R. Correia, M. Peres, E. Alves, D. Rogers, F. Teherani, V. Munoz-SanJose, T. Trindade, A. Pereira, Optical active centres in ZnO samples, *J. of Non-Cryst. Solids* 352, 1453-1456, 2007.

U. Wahl, E. Rita, J.G. Correia, A.C. Marques, E. Alves, J.C. Soares, The ISOLDE Collaboration, Lattice location of implanted As in ZnO, *Superlattices and Microstructures* 42, 8-13, 2007.

X. Marko, P. Talagala, M.B. Sahana, R. Naik, K.R. Padmanabhan, C.P. Marques, E. Alves, Ion implantation and ion beam analysis of MOD deposited oxide films, *Nucl. Inst. & Meth. B* 261, 456-460, 2007.

Y. Dumont, N. Keller, E. Popova, D.S. Schmool, M. Tessier, S. Bhattacharya, B. Stahl, R.M.C. da Silva and M. Guyot, Tuning magnetic properties with off-stoichiometry in oxide thin films: An experiment with Yttrium Iron Garnet as a model system, *Phys. Rev. B* 76, 104413, 2007.

Y. Nunes, A. Wemans, H.P. Marques, C. Marques, Q. Ferreira, O.M.N.D. Teodoro, E. Alves, M.J.P. Maneira, Dual DC magnetron cathode co-deposition of (Al,Ti) and (Al,Ti,N) thin films controlled depth composition, *Vacuum* 81, 1503-1506, 2007.

Z. Siketić, I.B. Radović, N. Skukan, M. Jakšić, A.R. Ramos, Proton elastic scattering from aluminium for 120°, 150° and 165° in the energy interval from 2.5 to 5 MeV, *Nucl. Inst. & Meth. B* 261, 414, 2007.

Conference Proceedings

M. Avella, A.C. Prieto, J. Jiménez, A. Rodríguez, J. Sangrador, T. Rodríguez, M.I. Ortiz, C. Ballesteros, A. Kling, Luminescence in multilayers of SiGe nanocrystals embedded in SiO₂, *Mat. Res. Soc. Symp. Proc.* 958, 0958-L04-03, 2007.

W.R. Branford, J.R. Neal, C.L. Spencer, G.A. Gehring, A.M. Fox, N. Popovici, R.C. da Silva, O. Conde, L.F. Cohen, Magneto-optical properties of Co-doped TiO₂ thin films grown by Pulsed Laser Deposition, *28th Int. Conf. Physics of Semiconductors*, ed. W. Jantsch and F. Schaeffler, American Institute of Physics, CP893, 1199-1200, 2007

Communications

Oral

E. Alves, Characterization of nanostructures by ion beam methods, *Int. school on characterization of nanostructures*, Univ. Aveiro, Aveiro, Portugal, 25-27 Jan 2007, Invited talk.

E. Alves, Rare-Earth doping of III-nitrides by ion implantation, *Conf. on Photonic Materials*, Kariega, South Africa, 2-6 May 2007, Invited.

E. Alves, Wide bandgap nitride and oxide semiconductors doped by implantation of rare earth ions, *E-MRS Spring Meeting, Symp. C: Rare Earth ion doping for photonics: materials, mechanisms and devices*, Strasbourg, France, 28 May-1 Jun 2007, Invited.

E. Alves, Ion Beam processing of insulating materials, *15th Int. Conf. on Surface Modification of Materials by Ion Beams*, Mumbai, India, 30Sep-5Oct 2007, Invited.

U. Wahl, Ion implantation doping of perovskites and related oxides, *3rd Research Coordination Meeting of the IAEA Coordinated Research Project on Ion Beam Modification of Insulators*, Chiang Mai University, Chiang Mai, Thailand, 10-14 Dec 2007, Invited.

A. Gurbich, I. Bogdanovic-Radovic, M. Chiari, C. Jeynes, M. Kokkori, A.R. Ramos, M. Mayer, E. Rauhala, O. Schwerer, Shi Liqun, I. Vickridge, Status of the problem of nuclear cross section data for IBA, *18th Int. Conf. on Ion Beam Analysis*, Hyderabad, India, 23-28 Sep. 2007.

C. Marques, Anisotropy effects on the formation of new phases in α -Al₂O₃ by high fluence Zn implantation, *14th Int. Conf. Radiation Effects in Insulators*, Caen, França, 28 Aug-1 Sep 2007.

E. Alves, Defect Studies of neutron irradiated GaN, *14th Int. Conf. Radiation Effects in Insulators*, Caen, France, 28 Aug-1 Sep 2007.

E. Alves, Ion beam induced structural and radiation effects in wide band gap materials, *IAEA Technical Meeting on Ion Beam Induced Changes to the Surface Morphology of Materials*, Univ. Surrey, UK, 13-16 Mar. 2007.

E. Alves, Ion beam studies of InAs/GaAs self assembled quantum dots, *18th Int. Conf. Ion Beam Analysis*, Hyderabad, India, 23-28 Sep 2007.

- E. Alves, Surface analyses of oxynitride compounds with ion beams, *XIII Conf. Sociedade Portuguesa de Materiais*, Porto, Portugal, 1-4 Apr 2007
- J. Schmitz, J. Penner, K. Lorenz, E. Alves, and R. Vianden, Site instability of In in AlN, *XIV Int. Conf. Hyperfine Interactions and XVIII Int. Symp. on Nuclear Quadrupole Interaction*, Iguassu Falls, Brazil, 5-10 Aug, 2007. Talk by K. Lorenz.
- J.V. Pinto, N. Franco, M.M. Cruz, R.C. da Silva and M. Godinho, TiO₂ implanted with Co, Ni and Fe: influence of the dopant in the anisotropic magnetic behaviour, *13th Workshop on Magnetism and Intermetallics*, Porto, Portugal, 8-9 Feb 2007. Talk by J.V. Pinto.
- K. Lorenz, Lattice site location, damage and optical characterization of Eu implanted Al_xGa(1-x)N layers, *E-MRS Spring Meeting, Symp. C: Rare Earth ion doping for photonics: materials, mechanisms and devices*, Strasbourg, France, 28 May-1 Jun 2007.
- L.C. Alves, Oxidation studies of beryllides using ion beams, *8th Int. Workshop on Beryllium Technology*, ITN, Sacavém, Portugal, 5-7 Dec 2007
- N.P. Barradas, RBS analysis of (Ga,In)N/GaN quantum wells for hybrid inorganic or-ganic structures with efficient Förster coupling, *18th Int. Conf. Ion Beam Analysis*, Hyderabad, India, 23-28 Sep 2007.
- P.A. Rodrigues, External micro PIXE/RBS analysis at ITN, *Int. Conf. Non-destructive and Microanalytical Techniques in Art and Cultural Heritage Research*, Lisboa, Portugal, 25-28 Apr 2007.
- R.P. Borges, S. Magalhães, R.C. da Silva, J.V. Pinto, M.M. Cruz, M. Godinho, Magnetism in argon implanted ZnO, in *13th Workshop on Magnetism and Intermetallics*, Porto, Portugal, 8-9 Feb 2007. Talk by R.P. Borges.
- S. Magalhães, Effect of annealing on AlN/GaN quantum dot heterostructures, *XIII Conf. da Sociedade Portuguesa de Materiais*, Porto, Portugal, 1-4 Apr.
- U. Wahl, Doping ZnO and SrTiO₃ by ion implantation: magnetism and impurity lattice site location, *XIXth Int. Summer School on Physics and Chemistry of Condensed Matter: Physics and Chemistry of Magnetic Materials – the Basics*, Univ. Białystok, Białowiesa, Poland, 7-14 Jul 2007.
- U. Wahl, Spintronica de semicondutores magnéticos, *III Jornadas do IFIMUP*, Porto, Portugal, 9 May 2007
- Posters**
- C. Marques, K. Lorenz, R. Colaço, R.C. da Silva, E. Alves, AFM studies of transition metal Hf implanted sapphire, *XIII Portuguese Materials Soc. Meeting and IV Int. Materials Symp.*, Porto, Portugal, 1-4 Apr 2007
- C. Pascual-Izarra, N. P. Barradas, Introducing routine pulse height defect corrections in IBA, *18th Int. Conf. on Ion Beam Analysis*, Hyderabad, India, 23-28 Sep 2007.
- C. Marques, N. Franco, L.C. Alves, R.C. da Silva, E. Alves, G. Safran, C.J. McHargue, Synthesis of ZnO nanocrystals in Al₂O₃ by ion implantation and vacuum annealing, *Int. School on Structural Characterization of Nanostructures*, Aveiro, Portugal, 25-27 Jan 2007.
- F. Gloux, P. Ruterana, K. Lorenz, and E. Alves, A TEM investigation of GaN implanted with rare earths at 500 °C, *E-MRS Spring Meeting, Symp. C: Rare Earth ion doping for photonics: materials, mechanisms and devices*, Strasbourg, France, 28 May-1 Jun 2007.
- J.P. Leitão, N.A. Sobolev, M.R. Correia, M.C. Carmo, N. Stepina, A.Yakimov, A. Nikiforov, S. Magalhães, E. Alves, Electronic properties of Ge islands embedded in multilayer and superlattice structures, *5th Int. Conf. Silicon Epitaxy and Heterostructures*, Univ. de la Méditerranée, Marseille, 20 - 25 May, 2007.
- J.V. Pinto, M.M. Cruz, R.C. da Silva, E. Alves, M. Godinho, Characterization of nanoclusters of transition metals formed in TiO₂ rutile by ion implantation, *Int. School on Structural Characterization of Nanostructures ISSN -2007*, Aveiro, Portugal, 25-27 Jan 2007.
- K. Lorenz, E. Alves, T. Monteiro, M. Peres, A. J. Neves, M. R. Correia, Lattice Site Location and Optical Activity of Eu Implanted Al_xGa_(1-x)N Layers, *XIII Portuguese Materials Society Meeting and IV Int. Materials Symp.*, Porto, Portugal, 1-4 Apr 2007.
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- K. Lorenz, N. Franco, E. Alves, S. Pereira, I.M. Watson, R.W. Martin, K.P. O'Donnell, Structural analysis of near-lattice-matched AlInN/GaN bilayers grown by MOCVD, *Int. School on Structural Characterization of Nanostructures*, Aveiro, Portugal, 25-27 Jan 2007.
- K. Lorenz, Temperature dependence of the electric field gradient in GaN measured with the PAC-probe ¹⁸¹Hf, *XIV Int. Conf. on Hyperfine Interactions and XVIII Int. Symp. on Nuclear Quadrupole Interaction*, Iguassu Falls, Brazil, 5-10 Aug 2007.
- L. Beck, C. Jeynes, N.P. Barradas, Characterisation of paint layers by simultaneous self-consistent fitting of RBS/PIXE spectra using simulated annealing, *18th Int. Conf. Ion Beam Analysis*, Hyderabad, India, 23-28 Sep. 2007.
- L. Bentes, R. Ayouchi, C. Santos, C. Casteleiro, R. Schwarz, O. Conde, C.P. Marques, E. Alves, A.M.C. Moutinho, O. Teodoro, Pulsed Laser Deposition of ZnO under Various Background Conditions, *XIII Portuguese Materials Society Meeting and IV Int. Materials Symp.*, Porto, Portugal, 1-4 Apr 2007.
- L. Bodiou, A. Braud, M. Wojdak, J-L. Doualan, R. Moncorgé, K. Lorenz, E. Alves, Optical spectroscopy study of excitation and quenching processes in Eu, Er implanted and Eu in-situ doped GaN, *E-MRS Spring Meeting, Symp. C: Rare Earth ion doping for photonics: materials, mechanisms and devices*, Strasbourg, France, 28 May-1 Jun 2007.
- L. Pereira, J.P. Araújo, U. Wahl, A.C. Marques, Indication of high-temperature ferromagnetism with

PUBLICATIONS

- giant magnetic moment in SrTiO_3 , *31st Int. Symp. on the Dynamic Properties of Solids*, Porto, 29 Sep 2007
- N.P. Barradas, A.R. Ramos, E. Alves, Determination of non-Rutherford cross sections from simple RBS spectra using Bayesian inference data analysis, *18th Int. Conf. on Ion Beam Analysis*, Hyderabad, India 23-28 Sep 2007.
- N.P. Barradas, C. Jeynes, Advanced physics and algorithms in the IBA DataFurnace, *18th Int. Conf. on Ion Beam Analysis*, Hyderabad, India, 23-28 Sep 2007.
- P.A. Rodrigues, L.C. Alves, G. Encarnação, R.C. da Silva, External micro PIXE/RBS analysis at ITN, *Int. Conf. on Non-destructive and Microanalytical Techniques in Art and Cultural Heritage Research*, Lisbon, Portugal, 25-28 Apr 2007.
- P.A. Rodrigues, L.C. Alves, G. Encarnação, R.C. da Silva, External beam analysis of Roman glasses, *11th*
- Int. Conf. on Particle Induced X-Ray Emission and its Analytical Applications*, Puebla, Mexico, May 2007
- S. Magalhães, N. Sobolev, E. Alves, Study of SiGe alloys with different germanium concentrations implanted with Mn and As ions, *XIII Portuguese Materials Society Meeting and IV Int. Materials Symp.*, Porto, Portugal, 1-4 Apr 2007.

Theses

Ph.D.

Maria Alexandra Fonseca, *Estudo de Estruturas quânticas de Silício Germânio*, Univ. Aveiro, 14 Mai. 2007. Co-supervisor: E. Alves.

M.Sc.

Sérgio Nuno Canteiro de Magalhães, *Estudo de estruturas quânticas semicondutoras*, Instituto Superior Técnico, 20 Dec. 2007. Co-supervisor: E. Alves.

Materials Characterization with Radioactive Nuclear Techniques

Communications

L. Pereira, J.P. Araújo, U. Wahl, A.C. Marques, Doping ZnO and SrTiO_3 by ion implantation: magnetism and impurity lattice site location, *XIXth Int. Summer School on Physics and Chemistry of Condensed Matter: Physics and Chemistry of Magnetic Materials*, Bialystok Univ., Bialowiesa, Poland, 7-14 Jul 2007, Oral.

L. Pereira, J.P. Araújo, U. Wahl, Diluted magnetic semiconductors, *Instituut voor Kern- en Stralingsfysica (IKS)*, Leuven, Belgium, 4 Jun 2007. Invited talk.

L. Pereira, J.P. Araújo, U. Wahl, Spintronica de semicondutores magnéticos, *III Jornadas do IFIMUP*, Universidade do Porto, Porto, Portugal, 9 May 2007.

Nuclear Reactions

Journals

F. Raiola, T. Spillane, B. Limata, B. Wang, S. Yan; M. Aliotta, H.W. Becker, J. Cruz, M. Fonseca, L. Galianella, A.P. Jesus, *et al.*, First hint on a change of the ^{210}Po alpha-decay half-life in the metal Cu, *Eur. Phys. J. A* **32**, 51-53, 2007.

R. Mateus, A.P. Jesus, M. Fonseca, H. Luís, J.P. Ribeiro, The sensitivity of the PIGE analytical technique, *Nucl. Inst. & Meth. B* **264**, 340-344, 2007.

Condensed Matter Physics

Journals

S.R. Gomes, F.M.A. Margaça, L.M. Ferreira, I.M. Miranda Salvado, A.N. Falcão, Hybrid PDMS-Silica-Zirconia materials prepared by γ -irradiation, *Nucl. Inst. & Meth. B* **265**, 114-117, 2007.

of oxycarbide glasses derived from hybrid structures, *14th Int. Sol-Gel Conf., Solgel2007*, Montpellier, France, 2-7 Sep. 2007, poster.

L.M. Ferreira, A.N. Falcão, M.H. Gil, Elemental and topographic characterization of LDPE based copolymeric films obtained by gamma irradiation, *Nucl. Inst. & Meth. B* **265**, 193-197, 2007.

S.R. Gomes, F.M.A. Margaça, L.M. Ferreira, I.M. Miranda Salvado, J.P. Leal, A.N. Falcão, PDMS-TEOS-PrZr Hybrid materials prepared by γ -irradiation, *XIII Portuguese Materials Society Meeting and IV Int. Materials Symp.*, Porto, Portugal, 1- 4 Apr 2007.

Theses

M.Sc.

Susana Raquel Rodrigues Gomes, Preparação e caracterização de Materiais Híbridos, FCUL, 20 Fev. 2007. Supervisor: F.M.A. Margaça

Communications

S. Gomes, Y. Vueva, F. Margaça, I.M. Miranda Salvado, M.H.V. Fernandes, Y. Ivanova, L. Almasy, SANS study

Solid State

Journals

- D. Belo, M. J. Figueira, J. P. M. Nunes, I. C. Santos, M. Almeida, N. Crivillers, C. Rovira, Synthesis and characterization of the novel extended TTF-type donor ligands with thiophenic units, *Inor. Chim. Acta* 360 (2007) 3909-3914.
- D. Berthebaud, E.B. Lopes, O. Tougait, A.P. Gonçalves, M. Potel, H. Noël, Thermoelectric properties of ternary compounds from the U-Fe-Si system, *J. Alloys Compd.* 442 (2007) 348-350.
- D. Berthebaud, A.P. Gonçalves, O. Tougait, M. Potel, E.B. Lopes, H. Noël, The novel intermetallic compound UFe_5Si_3 : a new room-temperature magnet with an original atomic arrangement, *Chemistry of Materials* 19 (2007) 3441-3447.
- D. Berthebaud, O. Tougait, M. Potel, E.B. Lopes, A.P. Gonçalves, H. Noël, Crystal structure and electronic properties of the new compounds, $\text{U}_6\text{Fe}_{16}\text{Si}_7$ and its interstitial carbide $\text{U}_6\text{Fe}_{16}\text{Si}_7\text{C}$, *J. Solid State Chem.* 180 (2007) 2926-2932.
- R.P. Borges, J.V. Pinto, R.C. da Silva, A.P. Gonçalves, M. M. Cruz, M. Godinho, Ferromagnetism in ZnO doped with Co by ion implantation, *J. Magn. Magn. Mat.* 316 (2007) e191-e194.
- S.A. Carabineiro, L.C. Silva, P.T. Gomes, L.C.J. Pereira, L.F. Veiros, S.I. Pascu, M.T. Duarte, S. Namorado, R.T. Henriques, Synthesis and characterization of tetrahedral and square planar bis-iminopyrrolyl complexes of Cobalt(II), *Inorg. Chem.* 46 (2007) 6880-6890.
- S.A. Carabineiro, P.T. Gomes, L.F. Veiros, C. Freire, L.C.J. Pereira, R.T. Henriques, J.E. Warren, S.I. Pascu, Bis-ketopyrrolyl complexes of Co(II) stabilised by trimethylphosphine ligands, *Dalton Trans.* 5460-5470 (2007).
- E. Coronado, J.R. Galán Mascarós, M.C. Giménez-López, M. Almeida, J.C. Waerenborgh, Spin crossover Fe^{II} complexes as templates for bimetallic oxalate-based 3D magnets *Polyhedron* 26 (2007) 1838-1844.
- B.F.O. Costa, J.M. Gómez, M. Ramos Silva, L. Pereira, X-ray diffraction and Mössbauer spectrometry studies of molecular iron compounds *Nucl. Inst. Meth. A* 580 (2007) 408-411.
- M. Dias, O.L. Sologub, L.C.J. Pereira, A.P. Gonçalves, Crystal structure and magnetism of YPt_2B , *J. Alloys Comp.* 438 (2007) 62-65.
- M. Dias, P.A. Carvalho, O. Sologub, O. Tougait, H. Noël, C. Godart, E. Leroy, A.P. Gonçalves, Isothermal section at 950°C of the U-Fe-B ternary system, *Intermetallics* 15 (2007) 413-418.
- A. Domingos, I. Lopes, J.C. Waerenborgh, N. Marques, G.Y. Lin, X.W. Zhang, J. Takats, R.McDonald, A.C. Hillier, A.Sella, M.R.J. Elsegood, V.W. Day, Trapping of Anionic Organic Radicals by $(\text{Tp}^{\text{Me}_2})_2\text{Ln}$ ($\text{Ln} = \text{Sm, Eu}$), *Inorg. Chem.* 46 (2007) 9415-9424.
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