

## **Articles in journals 2004**

A.- THEORETICAL PHYSICS AND CHEMISTRY: MODELLING AND SIMULATION OF MATERIALS

B.- MAGNETIC MATERIALS

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D.- INORGANIC, ORGANOMETALLIC MATERIALS, AND COORDINATION COMPOUNDS

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G.- NOT INCLUDED IN JCR (JOURNAL CITATION REPORTS)

A.- THEORETICAL PHYSICS AND CHEMISTRY: MODELLING AND SIMULATION OF MATERIALS

- 1.- *Phonon dispersion in graphite*  
**Physical Review Letters**, 92, (2004), pp. 075501-1 - 075501-4  
J. Maultzsch, S. Reich, C. Thomsen, H. Requardt and P. Ordejón
- 2.- *Stability and mobility of mono- and di-interstitials in  $\alpha$ -Fe*  
**Physical Review Letters**, 92, (2004), pp. 175503-1 - 175503-4  
C.-C. Fu, F. Willaime and P. Ordejón
- 3.- *Step-by-step construction of the electronic structure of molecular conductors: Conceptual aspects and applications*  
**Advanced Functional Materials**, 14 (3), (2004), pp. 201-214  
R. Rousseau, M. Gener and E. Canadell
- 4.- *SAFT Modelling of the solubility of gases in perfluoroalkanes*  
**Journal of Physical Chemistry B**, 108, (2004), pp. 1450-1457  
A.M.A. Dias, J.C. Pàmies, J.A.P. Coutinho, I.M. Marrucho and L.F. Vega
- 5.- *Dynamical screening and absorption within a strictly localized basis implementation of time-dependent LDA: From small clusters and molecules to aza-fullerenes*  
**Physical Review B**, 69, (2004), pp. 085111-1 - 085111-10  
X. Blase and P. Ordejón
- 6.- *Systematic study of electron localization in an amorphous semiconductor*  
**Physical Review B**, 69, (2004), pp. 085207-1 - 085207-10  
R. Atta-Fynn, P. Biswas, P. Ordejón and D.A. Drabold
- 7.- *First-principles studies of the diffusion of B impurities and vacancies in SiC*  
**Physical Review B**, 69, (2004), pp. 125203-1 - 125203-11  
R. Rurali, E. Hernández, P. Godignon, J. Rebollo and P. Ordejón
- 8.- *Reversible scaling simulations of the melting transition in silicon*  
**Physical Review B**, 69, (2004), pp. 214105-1 - 214105-10  
M. Kaczmariski, R. Rurali and E. Hernández
- 9.- *Sampling the diffusion paths of a neutral vacancy in silicon with quantum mechanical calculations*  
**Physical Review B**, 70, (2004), pp. 205202-1 - 205202-9  
F. El-Mellouhi, N. Mousseau and P. Ordejón
- 10.- *Thermodynamic properties and aggregate formation of surfactant-like molecules from theory and simulation*  
**Journal of Chemical Physics**, 120 (20), (2004), pp. 9822-9830  
C. Herdes, J.C. Pàmies, R.M. Marcos and L.F. Vega
- 11.- *Some issues on the calculation of interfacial properties by molecular simulation*  
**Journal of Chemical Physics**, 121 (17), (2004), pp. 8611-8617

D. Duque and L.F. Vega

- 12.- *Thermodynamic properties of Lennard-Jones chain molecules: Renormalization-group corrections to a modified statistical associating fluid theory*  
**Journal of Chemical Physics**, 121 (21), (2004), pp. 10715-10724  
F. Llovell, J.C. Pàmies and L.F. Vega
- 13.- *Interfacial properties of Lennard-Jones chains by direct simulation and density gradient theory*  
**Journal of Chemical Physics**, 121 (22), (2004), pp. 11395-11401  
D. Duque, J.C. Pàmies and L.F. Vega
- 14.- *Computing the properties of materials from first principles with SIESTA*  
**Structure and Bonding**, 113, (2004), pp. 103-170  
D. Sánchez-Portal, P. Ordejón and E. Canadell
- 15.- *First principles study of gold absorption and diffusion on graphite*  
**Surface Science**, 564, (2004), pp. 173-178  
P. Jensen, X. Blase and P. Ordejón
- 16.- *Simulations of minerals using density-functional theory based on atomic orbitals for linear scaling*  
**Physics and Chemistry of Minerals**, 31, (2004), pp. 12-21  
M.S. Craig, M.C. Warren, M.T. Dove, J.D. Gale, D. Sánchez-Portal, P. Ordejón, J.M. Soler and E. Artacho
- 17.- *Global instability index optimizations for the localization of mobile protons*  
**Solid State Ionics**, 168, (2004), pp. 281-290  
S. Adams, O. Moretzki and E. Canadell
- 18.- *Concerning the origin of superstructures in hydrogen molybdenum bronzes  $H_xMoO_3$*   
**Solid State Ionics**, 168, (2004), pp. 291-298  
D.A. Scherlis, Y.J. Lee, C. Rovira, S. Adams, R.M. Nieminen, P. Ordejón and E. Canadell
- 19.- *Electronic band structure of  $\alpha$ -(Per) $_2$ M(mnt) $_2$  compounds*  
**The European Physical Journal B**, 42, (2004), pp. 453-456  
E. Canadell, M. Almeida and J. Brooks
- 20.- *Thermodynamic properties of perfluoro-n-octane*  
**Fluid Phase Equilibria**, 225, (2004), pp. 39-47  
A.M.A. Dias, A.I. Caço, J.A.P. Coutinho, L.M.N.B.F. Santos, M.M. Piñeiro, L.F. Vega, M.F. Costa Gomes and I.M. Marrucho
- 21.- *Electronic, thermal and mechanical properties of carbon nanotubes*  
**Philosophical Transactions of the Royal Society of London Series A-Mathematical Physical and Engineering Sciences**, 362, (2004), pp. 2065-2098  
M.S. Dresselhaus, G. Dresselhaus, J.C. Charlier and E. Hernández

- 22.- *Review of Carbon nanotubes and related structures: New materials for the twenty-first century*  
**American Journal of Physics**, 72 (3), (2004), pp. 415  
E. Hernández and B.I. Yakobson (Reviewers)

## B.- MAGNETIC MATERIALS

- 23.- *Pressure effect on the 3-D magnetic ordering of a quasi-1-D enantiopure molecular magnet*  
**Journal of Physical Chemistry B**, 108, (2004), pp. 18441-18445  
V. Laukhin, B. Martínez, J. Fontcuberta, D.B. Amabilino, M. Minguet and J. Veciana
- 24.- *Configurational disorder and magnetism in double perovskites: A Monte Carlo simulation study*  
**Physical Review B**, 69, (2004), pp. 014406-1 - 014406-6  
C. Frontera and J. Fontcuberta
- 25.- *Magnetism of isolated  $Mn_{12}$  single-molecule magnets detected by magnetic circular dichroism: Observation of spin tunneling with a magneto-optical technique*  
**Physical Review B**, 69, (2004), pp. 052405-1 - 052405-4  
N. Domingo, B.E. Williamson, J. Gómez-Segura, Ph. Gerbier, D. Ruiz-Molina, D.B. Amabilino, J. Veciana and J. Tejada
- 26.- *NMR evidence for selective enhancement of Mo magnetic moment by electron doping in  $Sr_{2-x}La_xFeMoO_6$*   
**Physical Review B**, 69, (2004), pp. 100407-1 - 100407-4  
M. Wójcik, E. Jędryka, S. Nadolski, J. Navarro, D. Rubi and J. Fontcuberta
- 27.- *Curie-temperature enhancement of electron-doped  $Sr_2FeMoO_6$  perovskites studied by photoemission spectroscopy*  
**Physical Review B**, 69, (2004), pp. 115101-1 - 115101-6  
J. Navarro, J. Fontcuberta, M. Izquierdo, J. Ávila and M.C. Asensio
- 28.- *Combination frequencies of magnetic oscillations in  $\beta''$ -(BEDT-TTF) $_4$ (NH $_4$ )[Fe(C $_2$ O $_4$ ) $_3$ ] $\cdot$ DMF*  
**Physical Review B**, 69, (2004), pp. 144523-1 - 144523-6  
A. Audouard, V.N. Laukhin, L. Brossard, T.G. Prokhorova, E.B. Yagubskii and E. Canadell
- 29.- *Effect of surface modifications on magnetic coupling in Fe nanoparticle systems*  
**Physical Review B**, 70, (2004), pp. 054412-1 - 054412-5  
A. Slawska-Waniewska, A. Roig, M. Gich, Ll. Casas, K. Racka, N. Nedelko and E. Molins
- 30.- *Probing Mo core valence on  $Sr_2FeMoO_6$  half-metallic ferromagnets and their electron-doped derivative compounds by photoelectron spectroscopy*  
**Physical Review B**, 70, (2004), pp. 054423-1 - 054423-5  
J. Navarro, J. Fontcuberta, M. Izquierdo, J. Avila and M.C. Asensio
- 31.- *Ferromagnetic coupling in  $Nd_xCa_{2-x}FeMoO_6$  double perovskites: Dominant band-filling effects*  
**Physical Review B**, 70, (2004), pp. 094405-1 - 094405-8  
D. Rubi, C. Frontera, J. Fontcuberta, M. Wojcik, E. Jedryka and C. Ritter

- 32.- *Structural and magnetic study of PrBaCo<sub>2</sub>O<sub>5+δ</sub> (δ=0.75) cobaltite*  
**Physical Review B**, 70, (2004), pp. 184428-1 - 184428-9  
 C. Frontera, J.L. García-Muñoz, A.E. Carrillo, C. Ritter, D. Martín y Marero and A. Caneiro
- 33.- *Band filling versus bond bending in substituted L<sub>x</sub>Sr<sub>2-x</sub>FeMoO<sub>6</sub> (L= Ca, La, Nd) compounds*  
**Journal of Applied Physics**, 95 (11), (2004), pp. 7082-7084  
 D. Rubi, C. Frontera, G. Herranz, J.L. García-Muñoz, J. Fontcuberta and C. Ritter
- 34.- *Self-interference of charge carriers in ferromagnetic SrRuO<sub>3</sub>*  
**Journal of Applied Physics**, 95 (11), (2004), pp. 7213-7215  
 G. Herranz, F. Sánchez, B. Martínez, J. Fontcuberta, M.V. García-Cuenca, C. Ferrater and M. Varela
- 35.- *Enhanced ferromagnetic interactions in electron-doped Nd<sub>x</sub>Sr<sub>2-x</sub>FeMoO<sub>6</sub> double perovskites*  
**Journal of Physics: Condensed Matter**, 16, (2004), pp. 3173-3182  
 D. Rubi, C. Frontera, J. Nogués and J. Fontcuberta
- 36.- *Weak localization effects in some metallic perovskites*  
**The European Physical Journal B**, 40, (2004), pp. 439-444  
 G. Herranz, F. Sánchez, B. Martínez, J. Fontcuberta, M.V. García-Cuenca, C. Ferrater, M. Varela and P. Levy
- 37.- *Transverse resistance measurements: A very sensitive probe to charge inhomogeneities in manganites*  
**Journal of Physics D: Applied Physics**, 37, (2004), pp. 3145-3150  
 V. Laukhin, Ll. Abad, B. Martínez, J. Fontcuberta, O. Gorbenko and A. Kaul
- 38.- *Relevance of the 3D to 2D growth mode transition for the transport properties of nanometric SrRuO<sub>3</sub> films*  
**Materials Science and Engineering B**, 109, (2004), pp. 221-225  
 G. Herranz, F. Sánchez, B. Martínez, J. Fontcuberta, M.V. García-Cuenca, C. Ferrater and M. Varela
- 39.- *Anisotropic magnetoresistance in SrRuO<sub>3</sub> ferromagnetic oxide*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 517-518  
 G. Herranz, F. Sánchez, M.V. García-Cuenca, C. Ferrater, M. Varela, B. Martínez and J. Fontcuberta
- 40.- *Magnetisation and neutron diffraction studies on Sr<sub>2-x</sub>Ca<sub>x</sub>FeMoO<sub>6</sub>*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 852-854  
 C. Ritter, D. Rubi, J. Navarro, C. Frontera, J.L. García-Muñoz and J. Fontcuberta
- 41.- *Experimental evidence of the dependence of spin tunnelling on the concentration of dislocations in Mn<sub>12</sub> crystals*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 1111-1112

F. Torres, J.M. Hernández, A. García-Santiago, J. Tejada and E. Molins

- 42.- *Microstructure and magnetic properties of  $Fe_{81}P_{13}Si_2Nb_3Cu_1$  nanocrystalline alloy*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 1360-1361  
L.K. Varga, A. Slawska-Waniewska, A. Roig, K. Racka, E. Fazakas, J. Ferenc and T. Kulik
- 43.- *Magnetism of  $Bi_{0.75}Sr_{0.25}MnO_3$  and its dependence on bismuth concentration*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 1734-1735  
C. Frontera, J.L. García-Muñoz, A.E. Carrillo, M. Hervieu, C. Martin, A. Llobet, A. Calleja, X.G. Capdevila and C. Ritter
- 44.- *Magnetic and electronic properties of the oxygen-deficient  $PrBaCo_2O_{5+\delta}$  ( $\delta > 0.50$ )*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 1762-1763  
J.L. García-Muñoz, C. Frontera, A. Llobet, A.E. Carrillo, A. Caneiro, M.A.G. Aranda, M. Respaud, C. Ritter and E. Dooryee
- 45.- *Mo-Fe antisite defects in  $Sr_2FeMoO_6$  studied by NMR*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 1834-1835  
M. Wójcik, E. Jędryka, S. Nadolski, J. Navarro and J. Fontcuberta
- 46.- *Measuring the magnetoelastic anisotropy constant in manganite epitaxial thin films*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. 2100-2101  
J.I. Arnaudas, M. Ciria, L. Benito, C. de la Fuente, M.R. Ibarra, A. del Moral, M. Bibes, Ll. Balcells and J. Fontcuberta
- 47.- *Electron spin resonance measurements in  $CoFe_2O_4$  free rotor nanoparticles*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. e1191-e1192  
R.D. Zysler, J. Tejada and E. Molins
- 48.- *Magnetic field induced entropy change and magnetoelasticity in Ni-Mn-Ga alloys*  
**Journal of Magnetism and Magnetic Materials**, 272-276, (2004), pp. e1595-e1596  
J. Marcos, Ll. Mañosa, A. Planes, F. Casanova, X. Batlle, A. Labarta and B. Martínez
- 49.- *High magnetic field study of charge/polaron ordering in  $Bi_{1-x}Sr_xMnO_3$  ( $x \leq 0.5$ ) perovskites*  
**Physica B**, 346-347, (2004), pp. 70-73  
M. Respaud, A. Kirste, M. Goiran, J. Vanaken, J.M. Broto, H. Rakoto, A.E. Carrillo, M. Von Ortenberg, M. Hervieu, C. Frontera and J.L. García-Muñoz

- 50.- *High magnetic field study of HoBaCo<sub>2</sub>O<sub>5.5</sub> and GdBaCo<sub>2</sub>O<sub>5.5</sub> layered cobaltites: The effect of rare earth size*  
**Physica B**, 346-347, (2004), pp. 246-249  
C. Frontera, M. Respaud, J.L. García-Muñoz, A. Llobet, A.E. Carrillo, A. Caneiro and J.M. Broto
- 51.- *Charge and Zener polaron order in Bi<sub>0.75</sub>Sr<sub>0.25</sub>MnO<sub>3</sub>: A comparison with Bi<sub>0.75</sub>Sr<sub>0.25</sub>MnO<sub>3</sub>*  
**Physica B**, 350, (2004), pp. 48-50  
C. Frontera, J.L. García-Muñoz, A.E. Carrillo, M. Hervieu, A. Calleja, X.G. Capdevila, M.T. Casais and C. Ritter
- 52.- *Study of oxygen deficient double perovskite PrBaCo<sub>2</sub>O<sub>5.75</sub>*  
**Physica B**, 350, (2004), pp. e277-e279  
J.L. García-Muñoz, C. Frontera, A. Llobet, A.E. Carrillo, A. Caneiro, M.A.G. Aranda, C. Ritter and E. Dooryee
- 53.- *Mechanism for Curie temperature variation in La<sub>x</sub>Sr<sub>2-x</sub>FeMoO<sub>6</sub> and Ca<sub>x</sub>Sr<sub>2-x</sub>FeMoO<sub>6</sub>*  
**Physica B**, 350, (2004), pp. e285-e288  
C. Frontera, D. Rubi, J. Navarro, J.L. García-Muñoz, C. Ritter and J. Fontcuberta
- 54.- *Magnetoresistive ceramics. Recent progress: From basic understanding to applications*  
**Boletín de la Sociedad Española de Cerámica y Vidrio**, 43 (3), (2004), pp. 627-633  
J. Fontcuberta, Ll. Balcells, J. Navarro, D. Rubi, B. Martínez, C. Frontera, J.L. García-Muñoz, M. Lacaba, A.M. González, C. Forniés, A. Calleja and Ll. Aragonés
- 55.- *Diamagnetic susceptibility and root growth responses to magnetic fields in Lens culinaris, Glycine soja, Triticum aestivum*  
**Electromagnetic Biology and Medicine**, 23 (2), (2004), pp. 97-112  
J. Peñuelas, J. Lluisá, B. Martínez and J. Fontcuberta



## C.- SUPERCONDUCTING MATERIALS

- 56.- *Simultaneous inductive determination of grain and intergrain critical current densities of  $YBa_2Cu_3O_{7-x}$  coated conductors*  
**Applied Physics Letters**, 84 (2), (2004), pp. 230-232  
A. Palau, T. Puig, X. Obradors, E. Pardo, C. Navau, A. Sanchez, A. Usoskin, H.C. Freyhardt, L. Fernández, B. Holzapfel and R. Feenstra
- 57.- *Comparison of ac susceptibility of  $YBa_2Cu_3O_7$  coated conductors and single crystals*  
**Applied Physics Letters**, 85 (23), (2004), pp. 5646-5648  
D.-X. Chen, E. Pardo, A. Sánchez, A. Palau, T. Puig and X. Obradors
- 58.- *Biaxial texture analysis of  $Yba_2Cu_3O_7$ . coated conductors by micro-Raman spectroscopy*  
**Physical Review B**, 70, (2004), pp- 094525-1 - 094525-8  
J.C. González, N. Mestres, T. Puig, J. Gázquez, F. Sandiumenge, X. Obradors, A. Usoskin, Ch. Jooss, H.C. Freyhardt and R. Feenstra
- 59.- *Critical state in superconducting single-crystalline  $YBa_2Cu_3O_7$  foams: Local versus long-range currents*  
**Physical Review B**, 70, (2004), pp. 144514-1 - 144514-7  
E. Bartolomé, X. Granados, T. Puig, X. Obradors, E.S. Reddy and G. Schmitz
- 60.- *High critical current  $YBa_2Cu_3O_7$  artificial joints using Ag foils as welding agent*  
**Superconductor Science and Technology**, 17, (2004), pp. 182-185  
S. Iliescu, X. Granados, E. Bartolomé, S. Sena, A.E. Carrillo, T. Puig, X. Obradors and J.E. Evetts
- 61.- *Chemical solution deposition: A path towards low cost coated conductors*  
**Superconductor Science and Technology**, 17, (2004), pp. 1055-1064  
X. Obradors, T. Puig, A. Pomar, F. Sandiumenge, S. Piñol, N. Mestres, O. Castaño, M. Coll, A. Cavallaro, A. Palau, J. Gázquez, J.C. González, J. Gutiérrez, N. Romà, S. Ricart, J.M. Moretó, M.D. Rossell and G. van Tendeloo
- 62.- *The identification of grain boundary networks of distinct critical current density in  $YBa_2Cu_3O_{7-x}$  coated conductors*  
**Superconductor Science and Technology**, 17, (2004), pp. 1283-1288  
T. Puig, A. Palau, X. Obradors, E. Pardo, C. Navau, A. Sanchez, Ch. Jooss, K. Guth and H.C. Freyhardt
- 63.- *Kinetics study of YBCO thin films epitaxial growth on LAO(100) single crystals by the TFA-MOD method*  
**Superconductor Science and Technology**, 17, (2004), pp. 1415-1419  
O. Castaño and S. Piñol
- 64.- *Oscillation of  $Y_2BaCuO_5$  particle concentration in the melt-grown  $YBaCuO$  bulk superconductors*  
**Journal of Crystal Growth**, 270, (2004), pp. 685-690

K. Zmorayová, P. Diko, M. Sefciková, X. Granados, F. Sandiumenge and X. Obradors

- 65.- *Chemical solution techniques for epitaxial growth of oxide buffer and  $YBa_2Cu_3O_7$  films*  
**Journal of the European Ceramic Society**, 24, (2004), pp. 1831-1835  
A. Cavallaro, O. Castaño, A. Palau, J.C. González, M.D. Rossell, T. Puig, F. Sandiumenge, N. Mestres, S. Piñol and X. Obradors
- 66.- *Influence of the mercury source on the synthesis of  $Hg_{0.8}Re_{0.2}Ba_{2-y}Sr_yCa_2Cu_3O_{8+\delta}$  at normal pressures*  
**Physica C**, 403, (2004), pp. 132-138  
D.M. Bastidas, S. Piñol, J. Plain, T. Puig and X. Obradors
- 67.- *Magnetic granularity analysis of YBCO coated conductors*  
**Physica C**, 408-410, (2004), pp. 866-868  
A. Palau, T. Puig, X. Obradors, A. Usoskin, H. Freyhardt, L. Fernández, B. Holzapfel, R. Feenstra, A. Sánchez and E. Pardo
- 68.- *Chemical solution growth of superconductors: A new path towards high critical current coated conductors*  
**Physica C**, 408-410, (2004), pp. 913-914  
X. Obradors, T. Puig, A. Pomar, N. Mestres, F. Sandiumenge, S. Piñol, O. Castaño, A. Cavallaro, A. Palau, J.C. González, M. Coll and J. Gazquez

D.- INORGANIC, ORGANOMETALLIC MATERIALS, AND COORDINATION COMPOUNDS

- 69.- *Supramolecular self-assembled molecules as organic directing agent for synthesis of zeolites*  
**Nature**, 431, (2004), pp. 287-290  
A. Corma, F. Rey, J. Rius, M.J. Sabater and S. Valencia
- 70.- *Stepwise construction of oligomeric 1,2-diselenolene platinum(IV) complexes*  
**Angewandte Chemie-International Edition**, 43, (2004), pp. 4049-4052  
X. Ribas, J.C. Dias, J. Morgado, K. Wurst, M. Almeida, T. Parella, J. Veciana and C. Rovira
- 71.- *A molecular multiproperty switching array based on the redox behavior of a ferrocenyl polychlorotriphenylmethyl radical*  
**Angewandte Chemie-International Edition**, 43, (2004), pp. 5266-5268  
C. Sporer, I. Ratera, D. Ruiz-Molina, Y. Zhao, J. Vidal-Gancedo, K. Wurst, P. Jaitner, K. Clays, A. Persoons, C. Rovira and J. Veciana
- 72.- *Anhydrous supercritical carbon dioxide method for the controlled silanization of inorganic nanoparticles*  
**Advanced Materials**, 16 (8), (2004), pp. 739-744  
E. Loste, J. Fraile, M.A. Fanovich, G.F. Woerlee and C. Domingo
- 73.- *Single-component magnetic conductors based on  $Mo_3S_7$  trinuclear clusters with outer dithiolate ligands*  
**Journal of the American Chemical Society**, 126, (2004), pp. 12076-12083  
R. Llusar, S. Uriel, C. Vicent, J.M. Clemente-Juan, E. Coronado, C.J. Gómez-García, B. Braïda and E. Canadell
- 74.- *New approaches for synthesizing  $\gamma$ -III-CoOOH by soft chemistry*  
**Chemistry of Materials**, 16 (2), (2004), pp. 299-306  
F. Bardé, M.-R. Palacín, B. Beaudoin, A. Delahaye-Vidal and J.M. Tarascon
- 75.- *In situ neutron powder diffraction of a nickel hydroxide electrode*  
**Chemistry of Materials**, 16, (2004), pp. 3936-3948  
F. Bardé, M.R. Palacin, Y. Chabre, O. Isnard and J.-M. Tarascon
- 76.- *Thermal transformation of  $(NH_4)[Fe(AsO_4)]$  into the new textural porous orthorhombic  $Fe(AsO_4)$  phase. Crystal structures, thermal behavior, and spectroscopic and magnetic properties*  
**Chemistry of Materials**, 16, (2004), pp. 5249-5259  
B. Bazán, J.L. Mesa, J.L. Pizarro, J. Rodríguez-Fernández, J. Sánchez-Marcos, A. Roig, E. Molins, M.I. Arriortua and T. Rojo
- 77.- *Optimized synthesis of the elusive  $\epsilon$ - $Fe_2O_3$  phase via sol-gel chemistry*  
**Chemistry of Materials**, 16, (2004), pp. 5542-5548  
M. Popovici, M. Gich, D. Nižňanský, A. Roig, C. Savii, Ll. Casas, E. Molins, K. Zaveta, C. Enache, J. Sort, S. de Brion, G. Chouteau and J. Nogués

- 78.- *Novel Cu<sup>III</sup> Bis-1,2-dichalcogenene complexes with tunable ED framework through alkaline cation coordination: A structural and theoretical study*  
**Chemistry - A European Journal**, 10, (2004), pp. 1691-1704  
 X. Ribas, J.C. Dias, J. Morgado, K. Wurst, E. Molins, E. Ruiz, M. Almeida, J. Veciana and C. Rovira
- 79.- *A new multifunctional ferrocenyl-substituted ferrocenophane derivative: Optical and electronic properties and Selective Recognition of Mg<sup>2+</sup> Ions*  
**Chemistry - A European Journal**, 10, (2004), pp. 1815-1826  
 J.J. Lopez, A. Tárraga, A. Espinosa, M.D. Velasco, P. Molina, V. Lloveras, J. Vidal-Gancedo, C. Rovira, J. Veciana, D.J. Evans and K. Wurst
- 80.- *Synthesis, characterization, and electronic structure of Ba<sub>5</sub> In<sub>4</sub>Bi<sub>5</sub>: An acentric and one-electron deficient phase*  
**Chemistry - A European Journal**, 10, (2004), pp. 3615-3621  
 S. Ponou, T.F. Fässler, G. Tobías, E. Canadell, A. Cho and S.C. Sevov
- 81.- *Synthesis and coordinating ability of an anionic cobaltabisdicarbollide ligand geometrically analogous to BINAP*  
**Chemistry - A European Journal**, 10, (2004), pp. 5376-5385  
 I. Rojo, F. Teixidor, C. Viñas, R. Kivekäs and R. Sillanpää
- 82.- *Superhydrophobic silica aerogels by fluorination at the gel stage*  
**Chemical Communications**, (2004), pp. 2316-2317  
 A. Roig, E. Molins, E. Rodríguez, S. Martínez, M. Moreno-Mañas and A. Vallribera
- 83.- *Polyoxometalates: From inorganic chemistry to materials science*  
**Frontiers in Bioscience**, 9, (2004), pp. 1759-1770  
 N. Casañ-Pastor and P. Gómez-Romero
- 84.- *Insertion reactions of [M(SR)<sub>3</sub>(PMe<sub>2</sub>Ph)<sub>2</sub>] with CS<sub>2</sub> (M=Ru,Os; R=C<sub>6</sub>F<sub>4</sub>H-4,C<sub>6</sub>F<sub>5</sub>). X-ray structures of [Ru(S<sub>2</sub>CSC<sub>6</sub>F<sub>4</sub>H-4)<sub>2</sub>(PMe<sub>2</sub>Ph)<sub>2</sub>], trans-thiolates [M(SR)<sub>2</sub>(S<sub>2</sub>CSR)(PMe<sub>2</sub>Ph)<sub>2</sub>] (M=Ru; R=C<sub>6</sub>F<sub>5</sub> and M= Os;R=C<sub>6</sub>F<sub>4</sub>H-4), and trans-thiolate-phospine [Os(SC<sub>6</sub>F<sub>5</sub>)<sub>2</sub>(S<sub>2</sub>CSC<sub>6</sub>F<sub>5</sub>)(PMe<sub>2</sub>Ph)<sub>2</sub>]*  
**Inorganic Chemistry**, 43 (3), (2004), pp. 986-992  
 M. Arroyo, S. Bernès, J. Cerón, J. Rius and H. Torrens
- 85.- *Synthesis, crystal structure, and physical properties of (BEDT-TTF)[Ni(tdas)<sub>2</sub>] (BEDT-TTF=Bis(ethylenedithio)tetrathiafulvalene; tdas=1,2,5-thiadiazole-3,4-dithiolate): First monomeric [Ni(tdas)<sub>2</sub>]<sup>-</sup> monoanion*  
**Inorganic Chemistry**, 43 (6), (2004), pp. 2049-2056  
 S. Curreli, P. Deplano, M.L. Mercuri, L. Pilla, A. Serpe, J.A. Schlueter, M.A. Whited, U. Geiser, E. Coronado, C.J. Gómez-García and E. Canadell
- 86.- *Alkaline side-coordination strategy for the design of nickel(II) and nickel(III) Bis(1,2-diselenolene) complex based materials*  
**Inorganic Chemistry**, 43 (12), (2004), pp. 3631-3641  
 X. Ribas, J.C. Dias, J. Morgado, K. Wurst, I.C. Santos, M. Almeida, J. Vidal-Gancedo, J. Veciana and C. Rovira

- 87.- *Synthesis, characterization, and dynamic studies of 12-vertex  $\eta^5$ -ruthenium(II) closo-phosphine complexes with monoanionic [10-L-nido-7-R-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>9</sub>]<sup>-</sup> ligands*  
**Inorganic Chemistry**, 43 (19), (2004), pp. 6067-6074  
 O. Tutusaus, R. Núñez, C. Viñas, F. Teixidor, I. Mata and E. Molins
- 88.- *Antifluorite-type lithium chromium oxide nitrides: Synthesis, structure, order, and electrochemical properties*  
**Inorganic Chemistry**, 43 (22), (2004), pp. 7050-7060  
 J. Cabana, C.D. Ling, J. Oró-Solé, D. Gautier, G. Tobias, S. Adams, E. Canadell and M.R. Palacín
- 89.- *Anion ordering and defect structure in Ruddlesden-Popper strontium niobium oxynitrides*  
**Inorganic Chemistry**, 43 (25), (2004), pp. 8010-8017  
 G. Tobías, D. Beltrán-Porter, O.I. Lebedev, G. Van Tendeloo, J. Rodríguez-Carvajal and A. Fuertes
- 90.- *A chiral molecular conductor: Synthesis, structure, and physical properties of [ET]<sub>3</sub>[Sb<sub>2</sub>(L-tart)<sub>2</sub>] $\cdot$ CH<sub>3</sub>CN (ET = bis(ethylenedithio)tetrathiafulvalene; L-tart = (2R,3R)-(+)-tartrate)*  
**Inorganic Chemistry**, 43 (25), (2004), pp. 8072-8077  
 E. Coronado, J.R. Galán-Mascarós, C.J. Gómez-García, A. Murcia-Martínez and E. Canadell
- 91.- *Novel five-membered pallada- and platinacycles containing a [C(sp<sup>2</sup>, ferrocene), N, S]<sup>-</sup> terdentate ligand. Theoretical interpretation of their electrochemical and electronic properties based on density functional calculations*  
**Organometallics**, 23, (2004), pp. 224-236  
 S. Pérez, C. López, A. Caubet, R. Bosque, X. Solans, M. Font Bardía, A. Roig and E. Molins
- 92.- *Formation of new  $\eta^5$ -rhodium(III) complexes from  $\eta^5$ -Rh(I) rhodacarborane-containing charge-compensated ligands*  
**Organometallics**, 23, (2004), pp. 2273-2280  
 R. Núñez, O. Tutusaus, F. Teixidor, C. Viñas, R. Sillanpää and R. Kivekäs
- 93.- *New derivatives of [NHMe<sub>3</sub>][7-Me- $\mu$ -(9,10-HMeC)-nido-7-CB<sub>10</sub>H<sub>10</sub>]*  
**Organometallics**, 23, (2004), pp. 3335-3342  
 J. Bould, A. Laromaine, C. Viñas, F. Teixidor, L. Barton, N.P. Rath, R.E.K. Winter, R. Kivekäs and R. Sillanpää
- 94.- *Ultraporous single phase iron oxide-silica nanostructured aerogels from ferrous precursors*  
**Langmuir**, 20, (2004), pp. 1425-1429  
 M. Popovici, M. Gich, A. Roig, Ll. Casas, E. Molins, C. Savii, D. Becherescu, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró and J. Nogués
- 95.- *Pressure-induced melting of charge-order in the self-doped Mott insulator YNiO<sub>3</sub>*

- Physical Review B**, 69, (2004), pp. 094106-1 - 094106-6  
J.L. García-Muñoz, M. Amboage, M. Hanfland, J.A. Alonso, M.J. Martínez-Lope and R. Mortimer
- 96.- *Synthesis, structural and magnetic properties of a series of copper(II) complexes containing a monocarboxylated perchlorotriphenylmethyl radical as a coordinating open-shell ligand*  
**Journal of the Chemical Society-Dalton Transactions**, (2004), pp. 1073-1082  
D. Maspoch, D. Ruiz-Molina, K. Wurst, J. Vidal-Gancedo, C. Rovira and J. Veciana
- 97.- *Mild mono and double demethylation in dimethylsulfonium substituted ruthenacarborane complexes. A regioselective reaction*  
**Journal of the Chemical Society-Dalton Transactions**, (2004), pp. 2059-2061  
J. Giner, C. Viñas, F. Teixidor, M.B. Hursthouse and M.E. Light
- 98.- *Sulfur, tin and gold derivatives of 1-(2'-pyridyl)-ortho-carborane, 1-R-2-X-1,2-C<sub>2</sub>B<sub>10</sub>H<sub>10</sub> (R = 2'-pyridyl, X = SH, SnMe<sub>3</sub> or AuPPh<sub>3</sub>)*  
**Journal of the Chemical Society-Dalton Transactions**, (2004), pp. 3822-3828  
A.S. Batsanov, M.A. Fox, T.G. Hibbert, J.A.K. Howard, R. Kivekäs, A. Laromaine, R. Sillanpää, C. Viñas and K. Wade
- 99.- *Open-shell channel-like salts formed by the supramolecular assembly of a tricarboxylated perchlorotriphenylmethyl radical and a [Co(bpy)<sub>3</sub>]<sup>2+</sup> cation*  
**CrystEngComm**, 6 (93), (2004), pp. 573-578  
D. Maspoch, D. Ruiz-Molina, K. Wurst, G. Vuaghan, N. Domingo, J. Tejada, C. Rovira and J. Veciana
- 100.- *2D Layered coordination polymer based on an unusual mixed valence Cu(III)/Cu(I) bis-1,2-diselenolene compound*  
**CrystEngComm**, 6 (96), (2004), pp. 589-592  
X. Ribas, D. Maspoch, J. Dias, J. Morgado, M. Almeida, K. Wurst, G. Vaughan, J. Veciana and C. Rovira
- 101.- *(EDT-TTF-I<sub>2</sub>)<sub>2</sub>PbI<sub>3</sub>·H<sub>2</sub>O: An ambient pressure metal with a β' donor slab topology*  
**Journal of Materials Chemistry**, 14, (2004), pp. 135-137  
T. Devic, E. Canadell, P. Auban-Senzier and P. Batail
- 102.- *Magnetic nanoporous coordination polymers*  
**Journal of Materials Chemistry**, 14, (2004), pp. 2713-2723  
D. Maspoch, D. Ruiz-Molina and J. Veciana
- 103.- *Conducting oriented [(n-C<sub>4</sub>H<sub>9</sub>)<sub>4</sub>N]<sub>2</sub>[Ni(dcbdt)<sub>2</sub>]<sub>5</sub> and new (BEDT-TTF)[Ni(dcbdt)<sub>2</sub>] phases as microcrystalline films, electrodeposited on silicon substrates*  
**Journal of Materials Chemistry**, 14, (2004), pp. 2801-2805  
D. de Caro, H. Alves, M. Almeida, S. Caillieux, M. Elgaddari, C. Faulmann, I. Malfant, F. Senocq, J. Fraxedas, A. Zwick and L. Valade

- 104.- *Amino-substituted ferra-bis(tricarbollides) - metallatricarbaboranes designed for linear molecular constructions*  
**European Journal of Inorganic Chemistry**, (2004), pp. 1402-1410  
 B. Grüner, J. Bačkovský, R. Sillanpää, R. Kivekäs, I. Císařová, F. Teixidor, C. Viñas and B. Stibr
- 105.- *Electron-rich organoantimony(III) dithiolate complexes*  
**European Journal of Inorganic Chemistry**, (2004), pp. 3409-3414  
 N. Avarvari, M. Fourmigué and E. Canadell
- 106.- *Polymer electrolyte fuel cells based on phosphoric acid-impregnated poly(2,5-benzimidazole) membranes*  
**Journal of the Electrochemical Society**, 151 (2), (2004), pp. A304-A310  
 J.A. Asensio, S. Borrós and P. Gómez-Romero
- 107.- *Uracilato and 5-halouracilato complexes of Cu(II), Zn(II) and Ni(II). X-ray structures of  $[Cu(uracilato-N^1)_2(NH_3)_2] \cdot 2(H_2O)$ ,  $[Cu(5-chlorouracilato-N^1)_2(NH_3)_2](H_2O)_2$ ,  $[Ni(5-chlorouracilato-N^1)_2(en)_2] \cdot 2H_2O$  and  $[Zn(5-chlorouracilato-N^1)(NH_3)_3] \cdot (5-chlorouracilato-N^1) \cdot (H_2O)$*   
**Journal of Inorganic Biochemistry**, 98, (2004), pp. 632-638  
 A. Terrón, A. García-Raso, J.J. Fiol, S. Amengual, M. Barceló-Oliver, R.M. Tótaró, M.C. Apella, E. Molins and I. Mata
- 108.- *Ternary complexes metal [Co(II), Ni(II), Cu(II) and Zn(II)] – orthoiodohippurate (I-hip) – acyclovir. X-ray characterization of isostructural [(Co, Ni or Zn)(I-hip)<sub>2</sub>(ACV)(H<sub>2</sub>O)<sub>3</sub>] with stacking as a recognition factor*  
**Journal of Inorganic Biochemistry**, 98, (2004), pp. 1703-1711  
 M. Barceló-Oliver, A. Terrón, A. García-Raso, J.J. Fiol, E. Molins and C. Miravittles
- 109.- *On the key importance of homogeneity in the electrochemical performance of industrial positive active materials in nickel batteries*  
**Journal of Power Sources**, 134, (2004), pp. 298-307  
 M. Casas-Cabanas, J.C. Hernández, V. Gil, M.L. Soria and M.R. Palacín
- 110.- *Proton-conducting membranes based on poly(2,5-benzimidazole) (ABPBI) and phosphoric acid prepared by direct acid casting*  
**Journal of Membrane Science**, 241, (2004), pp. 89-93  
 J.A. Asensio, S. Borrós and P. Gómez-Romero
- 111.- *Sulfonated poly(2,5-benzimidazole) (SABPBI) impregnated with phosphoric acid as a proton conducting membranes for polymer electrolyte fuel cells*  
**Electrochimica Acta**, 49 (25), 2004, pp. 4461-4466  
 J.A. Asensio, S. Borrós and P. Gómez-Romero
- 112.- *Organometallic nickel (II) complexes with dithiophosphate, dithiophosphonate and monothiophosphonate ligands*  
**Inorganica Chimica Acta**, 357, (2004), pp. 677-683  
 G. Sánchez, J. García, D.J. Meseguer, J.L. Serrano, J. Pérez, E. Molins and G. López

- 113.- *Zinc complexes of 6-methyl-2-pyridinecarboxylic acid. Crystal structure of  $[Zn(MeC_5H_3NCOO)_2(H_2O)] \cdot H_2O$*   
**Inorganica Chimica Acta**, 357, (2004), pp. 3789-3792  
 J. Pons, R. March, J. Rius and J. Ros
- 114.- *Crystal structure solution of the low and high temperature forms of potassium dawsonite: An intermediate compound in the alkaline hydrolysis of calcium aluminate cements*  
**Acta Crystallographica A**, 60, (2004) pp. s231  
 L. Fernández-Carrasco and J. Rius
- 115.- *Synthesis, morphological-structural characterization and magnetic properties of amorphous iron (III)-oxyhydroxy-phosphate nanoparticles*  
**Journal of Solid State Chemistry**, 177, (2004), pp. 2440-2448  
 L. Suber, S. Foglia, D. Fiorani, H. Romero, A. Montone, A. Roig and Ll. Casas
- 116.- *Rationalization of the industrial nickel hydroxide synthetic process in view of optimizing its electrochemical performances*  
**Industrial & Engineering Chemistry Research**, 43, (2004), pp. 4957-4963  
 M. Casas-Cabanas, J.C. Hernández, V. Gil, M.L. Soria and M.R. Palacín
- 117.- *Synthesis, crystal structure and properties of the new semiconductor  $(EVT)_4[Pt(CN)_4]$*   
**Synthetic Metals**, 140, (2004), pp. 171-176  
 A.D. Dubrovskii, N.G. Spitsina, A.N. Chekhlov, O.A. Dyachenko, L.I. Buravov, A.A. Lobach, J. Vidal-Gancedo and C. Rovira
- 118.- *New molecular conductors based on EDT with anionic complexes of rare-earth elements:  $(EDT)_2[Ho(NCS)_4(H_2O)_4]$  and  $(EDT)_3[Y(NO_3)_5]$*   
**Synthetic Metals**, 143, (2004), pp. 221-228  
 O. Kazheva, E. Canadell, L. Kushch, G. Aleksandrov, A. Chekhlov, L. Buravov and O. Dyachenko
- 119.- *Microstructure-conductivity relationship in Gd- and Sm-doped ceria-based electrolytes prepared by the acrylamide sol-gel related method*  
**Journal of Solid State Electrochemistry**, 8, (2004), pp. 650-654  
 S. Piñol, M. Najib, D.M. Bastidas, A. Calleja, X.G. Capdevila, M. Segarra, F. Espiell, J.C. Ruiz-Morales, D. Marrero-Lopez and P. Nuñez
- 120.- *Structure determination of the blue mineral pigment aerinite from synchrotron powder diffraction data: The solution of an old riddle*  
**European Journal of Mineralogy**, 16, (2004), pp. 127-134  
 J. Rius, E. Elkaim and X. Torrelles
- 121.- *Synthesis, X-ray structure and magnetic properties of the quinone cobalt complexes  $[Co^{III}(3,5-DTBSQ)(bpy)_2]X_2$  ( $X = BF_4^-, ClO_4^-$ )*  
**Journal of Physics and Chemistry of Solids**, 65, (2004), pp. 831-837  
 D. Ruiz-Molina, L.N. Zakharov, A.L. Rheingold and D.N. Hendrickson



- 122.- *In situ neutron diffraction study of the nickel oxihydroxide electrode upon discharge*  
**Physica B**, 350, (2004), pp. e431-e434  
F. Bardé, M.R. Palacin, Y. Chabre, O. Isnard and J.-M. Tarascon
- 123.- *1,2-Bis(methylsulfanyl)-1,2-dicarba-closo-dodecaborane(12)*  
**Acta Crystallographica C**, 60, (2004), pp. 524-526  
A. Laromaine, C. Viñas, R. Sillanpää and R. Kivekäs
- 124.- *Geochemical characteristics of particulate matter in the atmosphere surrounding a ceramic industrialized area*  
**Environmental Geology**, 45 (4), (2004), pp. 536-543  
E.T. Gomez, T. Sanfeliu, M.M. Jordan, J. Rius and C. de la Fuente
- 125.- *Exploitation of the photochromic nitroprusside anion  $[FeNO(CN)_5]^{2-}$  As counterion for constructing molecular conductors: The first radical cation salts based on BDH-TTP and the amide functionalized derivatives of EDT-TTF*  
**Journal de Physique IV**, 114, (2004), pp. 481-485  
R. Shibaeva, S. Khasanov, L. Zorina, S. Simonov, I. Shevyakova, L. Kushch, L. Buravov, E. Yagubskii, S. Baudron, C. Mézière, P. Batail, E. Canadell and J. Yamada
- 126.- *Structural and electrical properties of  $(DT-TTF)_2[Cu(mnt)_2]$*   
**Journal de Physique IV**, 114, (2004), pp. 497-499  
J.C. Dias, E.B. Lopes, I.C. Santos, M.T. Duarte, R.T. Henriques, M. Almeida, X. Ribas, C. Rovira, J. Veciana, P. Foury-Leylekian, J.-P. Pouget, P. Auban-Senzier and D. Jérôme
- 127.- *The low and high temperature phase transitions in the family of compounds  $(DT-TTF)_4[M(L)_2]_3$ ,  $M = Au, Cu$  and  $L = pds, pdt$*   
**Journal de Physique IV**, 114, (2004), pp. 537-539  
E.B. Lopes, J.C. Dias, J.P. Seïça, I.C. Santos, J. Morgado, R.T. Henriques, M. Almeida, X. Ribas, K. Wurst, J. Veciana and C. Rovira
- 128.- *Oxidación electroquímica de plata y cobre en medio acuoso básico y en hidróxidos fundidos*  
**Boletín de la Sociedad Española de Cerámica y Vidrio**, 43 (2), (2004), pp. 220-223  
E. Tejada-Rosales, N. Casañ-Pastor and P. Gómez-Romero
- 129.- *Estudio por GXRD de la formación de fases en metales de los grupos IV y V por implantación iónica de nitrógeno*  
**Boletín de la Sociedad Española de Cerámica y Vidrio**, 43 (2), (2004), pp. 315-318  
J.A. García, J. Rius and R.J. Rodriguez
- 130.- *Materiales híbridos basados en fosfato de vanadilo y polímeros conductores como cátodos en baterías reversibles de litio*  
**Boletín de la Sociedad Española de Cerámica y Vidrio**, 43 (2), (2004), pp. 429-433

A.K. Cuentas-Gallegos, R. Vijayaraghavan, M. Lira-Cantú, N. Casañ-Pastor and  
P. Gómez-Romero

## E.- ORGANIC MATERIALS

- 131.- *Bis(ethylenethio)tetrathiafulvalene (BET-TTF) and related dissymmetrical electron donors: From the molecule to functional molecular materials and devices (OFETs)*  
**Chemical Reviews**, 104, (2004), pp. 5289-5317  
C. Rovira
- 132.- *A robust purely organic nanoporous magnet*  
**Angewandte Chemie-International Edition**, 43, (2004), pp. 1828-1832  
D. MasPOCH, N. Domingo, D. Ruiz-Molina, K. Wurst, G. Vaughan, J. Tejada, C. Rovira and J. Veciana
- 133.- *A robust nanocontainer based on a pure organic free radical*  
**Journal of the American Chemical Society**, 126, (2004), pp. 730-731  
D. MasPOCH, N. Domingo, D. Ruiz-Molina, K. Wurst, J. Tejada, C. Rovira and J. Veciana
- 134.- *High mobility of dithiophene-tetrathiafulvalene single-crystal organic field effect transistor*  
**Journal of the American Chemical Society**, 126, (2004), pp. 984-985  
M. Mas-Torrent, M. Durkut, P. Hadley, X. Ribas and C. Rovira
- 135.- *Importance of intermolecular interactions in assessing hopping mobilities in organic field effect transistors: Pentacene versus dithiophene-tetrathiafulvalene*  
**Journal of the American Chemical Society**, 126, (2004), pp. 6544-6545  
S.T. Bromley, M. Mas-Torrent, P. Hadley and C. Rovira
- 136.- *Correlation between crystal structure and mobility in organic field-effect transistors based on single crystals of tetrathiafulvalene derivatives*  
**Journal of the American Chemical Society**, 126, (2004), pp. 8546-8553  
M. Mas-Torrent, P. Hadley, S.T. Bromley, X. Ribas, J. Tarrés, M. Mas, E. Molins, J. Veciana and C. Rovira
- 137.- *New organic metals based on BDH-TTP radical cation salts with the photochromic nitroprusside anion  $[FeNO(CN)_5]^{2-}$*   
**Advanced Functional Materials**, 14 (7), (2004), pp. 660-668  
I. Shevyakova, L. Buravov, V. Tkacheva, L. Zorina, S. Khasanov, S. Simonov, J. Yamada, E. Canadell, R. Shibaeva and E. Yagubskii
- 138.- *Polymorphism of a new bis(ethylenedithio)tetrathiafulvalene (BEDT-TTF) based molecular conductor; novel transformations in metallic BEDT-TTF layers*  
**Chemistry of Materials**, 16, (2004), pp. 2471-2479  
E. Laukhina, V. Tkacheva, A. Chekhlov, E. Yagubskii, R. Wojciechowski, J. Ulanski, J. Vidal-Gancedo, J. Veciana, V. Laukhin and C. Rovira
- 139.- *Supramolecular photomagnetic materials: Photoinduced dimerization of ferrocene-based polychlorotriphenylmethyl radicals*  
**Chemistry - A European Journal**, 10, (2004), pp. 603-616

- I. Ratera, D. Ruiz-Molina, J. Vidal-Gancedo, J.J. Novoa, K. Wurst, J.-F. Letard, C. Rovira and J. Veciana
- 140.- *Magneto-structural characterization of metallocene-bridged nitronyl nitroxide diradicals by X-ray, magnetic measurements, solid-state NMR spectroscopy, and Ab initio calculations*  
**Chemistry - A European Journal**, 10, (2004), pp. 1355-1365  
C. Sporer, H. Heise, K. Wurst, D. Ruiz-Molina, H. Kopacka, P. Jaitner, F. Köhler, J.J. Novoa and J. Veciana
- 141.- *Structural isomerism in crystals of redox-active secondary ortho-diamides: The role of competing interfacial intra- and intermolecular hydrogen bonds in directing crystalline topologies*  
**Chemistry - A European Journal**, 10, (2004), pp. 4498-4511  
S.A. Baudron, N. Avarvari, E. Canadell, P. Auban-Senzier and P. Batail
- 142.- *Superstructures of donor packing arrangements in a series of molecular charge transfer salts*  
**Chemical Communications**, (2004), pp. 18-19  
H. Akutsu, A. Akutsu-Sato, S.S. Turner, P. Day, E. Canadell, S. Firth, R.J.H. Clark, J. Yamada and S. Nakatsuji
- 143.- *A new (6<sup>3</sup>)-(6<sup>9</sup>.8<sup>1</sup>) non-interpenetrated paramagnetic network with helical nanochannels based on a tricarboxylic perchlorotriphenylmethyl radical*  
**Chemical Communications**, (2004), pp. 1164-1165  
D. MasPOCH, D. Ruiz-Molina, K. Wurst, C. Rovira and J. Veciana
- 144.- *Enantioselective formal synthesis of uleine alkaloids from phenylglycinol-derived bicyclic lactams*  
**Chemical Communications**, (2004), pp. 1602-1603  
M. Amat, M. Pérez, N. Llor, M. Martinelli, E. Molins and J. Bosch
- 145.- *Novel fused D-A dyad and A-D-A triad incorporating tetrathiafulvalene and p-benzoquinone*  
**Journal of Organic Chemistry**, 69, (2004), pp. 2164-2177  
F. Dumur, N. Gautier, N. Gallego-Planas, Y. Sahin, E. Levillain, N. Mercier, P. Hudhomme, M. Masino, A. Girlando, V. Lloveras, J. Vidal-Gancedo, J. Veciana and C. Rovira
- 146.- *Conjugate additons to phenylglycinol-derivel unsaturated  $\delta$ -lactams. Enantioselectie synthesis of uleine alkaloids*  
**Journal of Organic Chemistry**, 69, (2004), pp. 8681-8693  
M. Amat, M. Pérez, N. Llor, C. Escolano, F.J. Luque, E. Molins and J. Bosch
- 147.- *A nanoscale view of supramolecular stereochemistry in self-assembled monolayers of enantiomers and racemates*  
**Langmuir**, 20, (2004), pp. 9628-9635  
W. Mamdouh, H. Uji-i, A. Gesquière, S. De Feyter, D.B. Amabilino, M.M.S. Abdel-Mottaleb, J. Veciana and F.C. De Schryver

- 148.- *Spin transfer and magnetic interaction via phosphorus in nitronyl nitroxide radical-substituted triphenylphosphine derivatives*  
**Journal of Physical Chemistry A**, 108, (2004), pp. 5903-5914  
C. Rancurel, H. Heise, F.H. Köhler, U. Schatzschneider, E. Rentschler, J. Vidal-Gancedo, J. Veciana and J.-P. Sutter
- 149.- *Chiral, single-molecule nanomagnets: Synthesis, magnetic characterization and natural and magnetic circular dichroism*  
**Journal of Materials Chemistry**, 14, (2004), pp. 2455-2460  
Ph. Gerbier, N. Domingo, J. Gómez-Segura, D. Ruiz-Molina, D.B. Amabilino, J. Tejada, B.E. Williamson and J. Veciana
- 150.- *Preparation, conformational analysis and behaviour as chiral solvating agents of 9-anthrylpentafluorophenylmethanol enantiomers: Study of the diastereomeric association*  
**Tetrahedron: Asymmetry**, 15, (2004), pp. 1615-1621  
M. Pérez-Trujillo, A. Virgili and E. Molins
- 151.- *Temperature dependence of the electrical properties of single-crystals of dithiophene-tetrathiafulvalene (DT-TTF)*  
**Synthetic Metals**, 146, (2004), pp. 265-268  
M. Mas-Torrent, P. Hadley, X. Ribas and C. Rovira
- 152.- *Stereochemistry and EPR investigation of a chiral molecular magnet*  
**Journal of Physics and Chemistry of Solids**, 65, (2004), pp. 723-726  
J. Vidal-Gancedo, M. Minguet, D. Luneau, D.B. Amabilino and J. Veciana
- 153.- *Magneto-structural defects on a congested nanoscopic polyradical dendrimer*  
**Journal of Physics and Chemistry of Solids**, 65, (2004), pp. 737-744  
D. Ruiz-Molina, J. Vidal-Gancedo, N. Ventosa, J. Campo, F. Palacio, C. Rovira and J. Veciana
- 154.- *Synthesis, X-ray structure, EPR and optical properties of a ferrocene substituted polychlorotriphenylmethyl radical*  
**Journal of Physics and Chemistry of Solids**, 65, (2004), pp. 753-758  
C. Sporer, I. Ratera, D. Ruiz-Molina, J. Vidal-Gancedo, K. Wurst, P. Jaitner, C. Rovira and J. Veciana
- 155.- *EPR characterization of a nanoporous metal-organic framework exhibiting a bulk magnetic ordering*  
**Journal of Physics and Chemistry of Solids**, 65, (2004), pp. 819-824  
D. MasPOCH, J. Vidal-Gancedo, D. Ruiz-Molina, C. Rovira and J. Veciana
- 156.- *Magnetic oscillations in  $\beta'$ -(BEDT-TTF)<sub>4</sub>(NH<sub>4</sub>)[Fe(C<sub>2</sub>O<sub>4</sub>)<sub>3</sub>]·DMF: Fermi surface study and frequency mixing*  
**Physica B**, 346-347, (2004), pp. 359-362  
V.N. Laukhin, A. Audouard, L. Brossard, T.G. Prokhorova, E.B. Yagubskii and E. Canadell

- 157.- *Taking chiral induction into the nanometre regime: Chiral teleinduction in the synthesis of poly(isocyanide)s*  
**Mendeleev Communications**, 14, (2004), pp. 256-257  
D.B. Amabilino, J.L. Serrano, T. Sierra and J. Veciana
- 158.- *Raman studies of the charge ordering and semiconductor-metal phase transition in polymorphic forms of (BEDT-TTF)<sub>2</sub>Br<sub>1.3</sub>I<sub>1.1</sub>Cl<sub>0.6</sub>*  
**Journal de Physique IV**, 114, (2004), pp. 393-395  
R. Wojciechowski, A. Kowalska, J. Ulanski, M. Mas-Torrent, E. Laukhina, C. Rovira, V. Tkacheva, K. Yamamoto and K. Yakushi
- 159.- *Intramolecular electron transfer mediated by a tetrathiafulvalene (TTF) bridge*  
**Journal de Physique IV**, 114, (2004), pp. 509-510  
P. Hudhomme, F. Dumur, N. Gautier, A. Gorgues, V. Lloveras, J. Vidal-Gancedo, J. Veciana and C. Rovira

F.- METHODOLOGIES, CHARACTERIZATION, OPTICAL PROPERTIES OF MATERIALS AND CRYSTAL GROWTH

- 160.- *Metallic thin films of TTF[Ni(dmit)<sub>2</sub>]<sub>2</sub> by electrodeposition on (001)-oriented silicon substrates*  
**Advanced Materials**, 16 (9-10), (2004), pp. 835-838  
D. de Caro, J. Fraxedas, C. Faulmann, I. Malfant, J. Milon, J.-F. Lamère, V. Collière and L. Valade
- 161.- *Self-limited growth of a thin oxide layer on Rh(111)*  
**Physical Review Letters**, 92, (2004), pp. 126102-1 - 126102-4  
J. Gustafson, A. Mikkelsen, M. Borg, E. Lundgren, L. Köhler, G. Kresse, M. Schmid, P. Varga, J. Yuhara, X. Torrelles, C. Quiros and N.J. Andersen
- 162.- *The role of intermolecular and molecule-substrate interactions in the stability of alkanethiol nonsaturated phases on Au(111)*  
**Journal of the American Chemical Society**, 126, (2004), pp. 385-395  
E. Barrena, E. Palacios-Lidón, C. Munuera, X. Torrelles, S. Ferrer, U. Jonas, M. Salmeron and C. Ocal
- 163.- *Structure and microstructure of epitaxial Sr<sub>4</sub>Fe<sub>6</sub>O<sub>13±δ</sub> films on SrTiO<sub>3</sub>*  
**Chemistry of Materials**, 16, (2004), pp. 2578-2584  
M.D. Rossell, A.M. Abakumov, G. Van Tendeloo, J.A. Pardo and J. Santiso
- 164.- *Critical effects of substrate terraces and steps morphology on the growth mode of epitaxial SrRuO<sub>3</sub> films*  
**Applied Physics Letters**, 85 (11), (2004), pp. 1981-1983  
F. Sánchez, G. Herranz, I.C. Infante, J. Fontcuberta, M.V. García-Cuenca, C. Ferrater and M. Varela
- 165.- *Self-assembled monolayers of tetrathiafulvalene derivatives on Au(111): Organization and electrical properties*  
**Journal of Physical Chemistry B**, 108, (2004), pp. 7213-7218  
E. Gomar-Nadal, G.K. Ramachandran, F. Chen, T. Burgin, C. Rovira, D.B. Amabilino and S.M. Lindsay
- 166.- *Molecular insight, through IR spectroscopy, on solvating phenomena occurring in CO<sub>2</sub>-expanded solutions*  
**ChemPhysChem**, 5, (2004), pp. 243-245  
S. Sala, T. Tassaing, N. Ventosa, Y. Danten, M. Besnard and J. Veciana
- 167.- *Evaluation of drug deliver characteristics of microspheres of PMMA/PCL-cholesterol obtained by supercritical-CO<sub>2</sub> impregnation and by dissolution-evaporation techniques*  
**Journal of Controlled Release**, 99, (2004), pp. 231-240  
C. Elvira, A. Fanovich, M. Fernández, J. Fraile, J. San Román and C. Domingo
- 168.- *New insights in the c(4x2) reconstruction of hexadecanethiol on Au(111) revealed by grazing incidence X-ray diffraction*  
**Langmuir**, 20, (2004), pp. 9396-9402

X. Torrelles, E. Barrena, C. Munuera, J. Rius, S. Ferrer and C. Ocal

- 169.- *Photoinduced chain-oxygen ordering in detwinned  $YBa_2Cu_3O_{6.7}$  single crystals studied by reflectance-anisotropy spectroscopy*  
**Physical Review B**, 69, (2004), pp. 224508-1 - 224508-5  
A. Bruchhausen, S. Bahrs, K. Fleischer, A.R. Goñi, A. Fainstein, G. Nieva, A.A. Aligia, W. Richter and C. Thomsen
- 170.- *Light-induced oxygen-ordering dynamics in  $(Y,Pr)Ba_2Cu_3O_{6.7}$ : A Raman spectroscopy and Monte Carlo study*  
**Physical Review B**, 70, (2004), pp. 014512-1 - 014512-9  
S. Bahrs, A.R. Goñi, C. Thomsen, B. Maiorov, G. Nieva and A. Fainstein
- 171.- *Self-organized structures in  $CoCr_2O_4(001)$  thin films: Tunable growth from pyramidal clusters to a  $\{111\}$  fully faceted surface*  
**Physical Review B**, 70, (2004), pp. 045403-1 - 045403-6  
U. Lüders, F. Sánchez and J. Fontcuberta
- 172.- *Analysis of the surface termination of  $Nd_{1+x}Ba_{2-x}Cu_3O_y$  thin films*  
**Physical Review B**, 70, (2004), pp. 104519-1 - 104519-13  
X. Torrelles, C. Aruta, A. Fragneto, I. Maggio-Aprile, L. Ortega, F. Ricci, J. Rius, M. Salluzzo and U. Scotti di Uccio
- 173.- *Band structure of indium selenide investigated by intrinsic photoluminescence under high pressure*  
**Physical Review B**, 70, (2004), pp. 125201-1 - 125201-12  
F.J. Manjón, A. Segura, V. Muñoz-Sanjosé, G. Tobías, P. Ordejón and E. Canadell
- 174.- *Evidence of spontaneous spin polarization in the two-dimensional electron gas*  
**Physical Review B**, 70, (2004), pp. 195331-1 - 195331-6  
A.R. Goñi, P. Giudici, F.A. Reboledo, C.R. Proetto, C. Thomsen, K. Eberl and M. Hauser
- 175.- *Effects of the exchange instability on collective spin and charge excitations of the two-dimensional electron gas*  
**Physical Review B**, 70, (2004), pp. 235418-1 - 235418-6  
P. Giudici, A.R. Goñi, C. Thomsen, P.G. Bolcatto, C.R. Proetto and K. Eberl
- 176.-  *$Ta_2Si$  thermal oxidation: A simple route to a high- $k$  gate dielectric on 4H-SiC*  
**Electrochemical and Solid-State Letters**, 7 (12), (2004), pp. F93-F95  
A. Pérez-Tomás, P. Godignon, J. Montserrat, J. Millán, N. Mestres, P. Venegues and J. Stoemenos
- 177.- *Faster acquisition of structure-factor amplitudes in surface X-ray diffraction experiments*  
**Journal of Applied Crystallography**, 37, (2004), pp. 395-398  
X. Torrelles and J. Rius



- 178.- *Preparation of dense, ultra-thin MIEC ceramic membranes by atmospheric spray-pyrolysis technique*  
**Journal of Membrane Science**, 240, (2004), pp. 113-122  
A. Abrutis, A. Teiserskis, G. Garcia, V. Kulibius, Z. Saltyte, Z. Salciunas, V. Faucheux, A. Figueras and S. Rushworth
- 179.- *YSZ thin films deposited on NiO-CSZ anodes by pulsed injection MOCVD for intermediate temperature SOFC applications*  
**Chemical Vapor Deposition**, 10 (5), (2004), pp. 249-252  
G. Garcia, R.I. Merino, V.K. Orera, A. Larrea, J.I. Peña, M.A. Laguna-Bercero, J.A. Pardo, J. Santiso and A. Figueras
- 180.- *Influence of expansion conditions on the characteristics of cholesterol crystals analyzed by statistical design*  
**Journal of Supercritical Fluids**, 31, (2004), pp. 313-322  
P. Subra, P. Berroy, J. Saurina and C. Domingo
- 181.- *Self-organization of phthalocyanines on Al<sub>2</sub>O<sub>3</sub> (11-20) in aligned and ordered films*  
**Journal of Materials Research**, 19 (7), (2004), pp. 2061-2067  
E. Barrena, J.O. Ossó, F. Schreiber, M. Garriga, M.I. Alonso and H. Dosch
- 182.- *Metal-organic chemical vapour deposition of mixed-conducting perovskite oxide layers on monocrystalline and porous ceramic substrates*  
**Thin Solid Films**, 449, (2004), pp. 94-99  
A. Abrutis, A. Bartasyte, G. Garcia, A. Teiserskis, V. Kubilius, Z. Saltyte, V. Faucheux, A. Figueras and S. Rushworth
- 183.- *Optical properties of anisotropic materials: An experimental approach*  
**Thin Solid Films**, 455-456 (5), (2004), pp. 124-131  
M.I. Alonso and M. Garriga
- 184.- *Epitaxial Sr<sub>4</sub>Fe<sub>6</sub>O<sub>13±δ</sub> films obtained by pulsed laser deposition*  
**Journal of Crystal Growth**, 262, (2004), pp. 334-340  
J.A. Pardo, J. Santiso, C. Solís, G. Garcia, A. Figueras, M.D. Rossell and G. Van Tendeloo
- 185.- *The role of conducting-oxide-substrate type and morphology in TiO<sub>2</sub> films grown by microwave chemical bath deposition (MW-CBD) and their photovoltaic characteristics*  
**Journal of Crystal Growth**, 262, (2004), pp. 366-374  
E. Vigil, B. González, I. Zumeta, S. Docteur, A.M. Peiró, D. Gutiérrez-Tauste, C. Domingo, X. Doménech and J.A. Ayllón
- 186.- *Control of calcium carbonate morphology by precipitation in compressed and supercritical carbon dioxide media*  
**Journal of Crystal Growth**, 271 (1-2), (2004), pp. 268-273  
C. Domingo, J. García-Carmona, E. Lose, A. Fanovich, J. Fraile and J. Gómez-Morales

- 187.- *Temperature-dependent tribological properties of low-energy N-implanted V5Ti alloys*  
**Surface & Coatings Technology**, 188-189, (2004), pp. 459-465  
J.A. García, G.G. Fuentes, R. Martínez, R.J. Rodríguez, G. Abrasonis, J.P. Riviere and J. Rius
- 188.- *Transport properties of monocrystalline microwires of EDT-TTF-(CONHMe)<sub>2</sub> and (TMTSF)<sub>2</sub>ClO<sub>4</sub>*  
**Synthetic Metals**, 146, (2004), pp. 273-277  
C. Colin, C.R. Pasquier, P. Auban-Senzier, F. Restangno, S. Baudron, P. Batail and J. Fraxedas
- 189.- *Epitaxial growth of YSZ films prepared by pulsed injection MOCVD*  
**Applied Surface Science**, 233, (2004), pp. 191-196  
G. Garcia, J. Santiso, J.A. Pardo and A. Figueras
- 190.- *Advances and some recent applications of the origin-free modulus sum function*  
**Zeitschrift fur Kristallographie**, 219, (2004), pp. 826-832  
J. Rius
- 191.- *Initial stages in the growth of {111}-faceted CoCr<sub>2</sub>O<sub>4</sub> clusters: Mechanisms and strained nanometric pyramids*  
**Applied Physics A**, 79, (2004), pp. 93-97  
U. Lüders, F. Sánchez and J. Fontcuberta
- 192.- *Growth and magnetic properties of CoCr<sub>2</sub>O<sub>4</sub> epitaxial films*  
**Materials Science and Engineering B**, 109, (2004), pp. 200-202  
U. Lüders, F. Sánchez and J. Fontcuberta
- 193.- *Precipitation of PMMA/PCL blends using supercritical carbon dioxide*  
**Journal of Applied Polymer Science**, 91, (2004), pp. 2422-2426  
A. Vega-González, C. Domingo, C. Elvira and P. Subra
- 194.- *Raman spectroscopy with UV excitation on untwinned single crystals of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub>*  
**Physica Status Solidi B**, 241 (12), (2004), R63-R66  
S. Bahrs, S. Reich, A. Zwick, A.R. Goñi, W. Bacsa, G. Nieva and C. Thomsen
- 195.- *Process performances and characteristics of powders produced using supercritical CO<sub>2</sub> as solvent and antisolvent*  
**Powder Technology**, 142, (2004), pp. 13-22  
P. Subra, P. Berroy, A. Vega and C. Domingo
- 196.- *FULLPROF as a new tool for flipping-ratio analysis: Further improvements*  
**Physica B**, 350, (2004), pp. e731-e733  
C. Frontera and J. Rodríguez-Carvajal
- 197.- *Internal infrared laser deflection system: A tool for power device characterization*  
**Measurement Science and Technology**, 15, (2004), pp. 1011-1018

X. Perpiñà, X. Jordà, N. Mestres, M. Vellvehí, P. Godignon, J. Millán and H. von Kiedrowki

- 198.- *Flasch lamp supported deposition of 3C-SiC (FLASiC) - a promising technique to produce high quality cubic SiC layers*  
**Materials Science Forum**, 457-460, (2004), pp. 175-180  
W. Skorupa, D. Panknin, W. Anwand, M. Voelskow, G. Ferro, Y. Monteil, A. Leycuras, J. Pezoldt, R. McMahon, M. Smith, J. Camassel, J. Stoemenos, E. Polychroniadis, P. Godignon, N. Mestres, D. Turover, S. Rushworth and A. Friedberg
- 199.- *Electrical characterization of deposited and oxidized Ta<sub>2</sub>Si as dielectric film for SiC metal-insulator semiconductor structures*  
**Materials Science Forum**, 457-460, (2004), pp. 845-848  
A. Pérez, D. Tournier, J. Montserrat, N. Mestres, F. Sandiumenge and J. Millán
- 200.- *Room temperature implantation and activation kinetics of nitrogen and phosphorus in 4H-SiC crystals*  
**Materials Science Forum**, 457-460, (2004), pp. 893-896  
S. Blanque, R. Pérez, P. Godignon, N. Mestres, E. Morvan, A. Kerlain, C. Dua, C. Brylinski, M. Zielinski and J. Camassel
- 201.- *Visible light laser irradiation: A tool for implantation damage reduction*  
**Materials Science Forum**, 457-460, (2004), pp. 941-944  
J. Camassel, H. Peyre, D.J. Brink, M. Zielinski, S. Blanque, N. Mestres and P. Godignon
- 202.- *A highly effective edge termination design for SiC planar high power devices*  
**Materials Science Forum**, 457-460, (2004), pp. 1253-1256  
R. Pérez, N. Mestres, S. Blanque, D. Tournier, X. Jordà, P. Godignon and R. Nipoti
- 203.- *SiC base micro-probe for myocardial ischemia monitoring*  
**Materials Science Forum**, 457-460, (2004), pp. 1483-1486  
J. Pascual, F. Valvo, P. Godignon, J. Aguiló, J. Millán, J. Camassel and N. Mestres
- 204.- *Formation of 3C-SiC films embedded in SiO<sub>2</sub> by sacrificial oxidation*  
**Materials Science Forum**, 457-460, (2004), pp. 1515-1518  
D. Panknin, P. Godignon, N. Mestres, E. Polychroniadis, J. Stoemenos, G. Ferro, J. Pezoldt and W. Skorupa
- 205.- *Self-heating experimental study of 600 V PT-IGBTs under low dissipation energies*  
**Microelectronics Journal**, 35, (2004), pp. 841-847  
X. Perpiñà, X. Jordà, N. Mestres, M. Vellvehí, P. Godignon and J. Millán
- 206.- *Growth and physical properties of molecular organic thin films*  
**Journal de Physique IV**, 114, (2004), pp. 661-666  
J. Fraxedas

207.- *Crecimiento de películas delgadas de membranas de conducción iónica mediante la técnica de PIMOCVD*

**Boletín de la Sociedad Española de Cerámica y Vidrio**, 43 (2), (2004), pp. 448-451

G. Garcia, J. Caro, J. Santiso, J.A. Pardo, A. Figueras and A. Abrutis

G.- NOT INCLUDED IN JCR (JOURNAL CITATION REPORTS)

- 208.- *Magnetic properties of Fe - Fe oxide particle systems*  
**Archives of Materials Science (Archiwum Nauki o Materialach)**, 25 (4),  
(2004), pp. 469-475  
K. Racka, M. Gich, A. Roig, A. Krzyzewski and A. Slawska-Waniewska
- 209.- *The structure of Ge(111): C<sub>60</sub> - (13<sup>1/2</sup>x13<sup>1/2</sup>)*  
**ESRF Newsletter**, 39, (2004), pp. 17-18  
X. Torrelles, J. Rius, O. Bikondoa, P. Ordejon, E. Machado, T.L. Lee and J.  
Zegenhagen
- 210.- *Structure, morphology, and optical properties of thin films of F<sub>16</sub>CuPc grown on silicon dioxide*  
**Organic Electronics**, 5, (2004), pp. 135-140  
J.O. Ossó, F. Schreiber, M.I. Alonso, M. Garriga, E. Barrena and H. Dosch
- 211.- *Self-passivation mechanisms in clusters of N dopants in SiC*  
**Physica Status Solidi C**, 1, (2004), pp. 274-277  
R. Rurali, E. Hernández, P. Godignon, J. Rebollo and P. Ordejón
- 212.- *Superconductivitat i superfluïdesa. Un premi per a la comprensió d'efectes quàntics ben visibles*  
**Revista de Física**, 26, (2004), pp. 4-15  
J. Fontcuberta and X. Obradors