

ARTICLES

2002

INSTITUT DE CIÈNCIA DE MATERIALS DE BARCELONA

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

B.- MAGNETIC MATERIALS

C.- SUPERCONDUCTING MATERIALS

D.- INORGANIC ORGANOMETALLIC MATERIALS, AND COORDINATION COMPOUNDS

E.- ORGANIC MATERIALS

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

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

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

- 1.- *An In-Depth Correlation of the Perturbation of the Organic-Inorganic Interface Topology, Electronic Structure, and Transport Properties within an Extended Series of 21 Metallic Pseudopolymorphs, β'' -(BEDT-TTF)₄ · (guest)_n · [Re₆Q₆Cl₈], (Q = S, Se)*
Chemistry European Journal, 8 (17), (2002), pp. 3884-3900
A. Deluzet, R. Rousseau, C. Guilbaud, I. Granger, K. Boubekour, P. Batail, E. Canadell, P. Auban-Senzier and D. Jérôme
- 2.- *Solid phosphorus carbide?*
Chemical Communications, 21, (2002), pp. 2494-2495
F. Claeysens, N.L. Allan, P.W. May, P. Ordejón and J.M. Oliva
- 3.- *Theoretical evidence for the kick-out mechanism for B diffusion in SiC*
Applied Physics Letters, 81 (16), (2002), pp. 2989-2991
R. Rurali, P. Godignon, J. Rebollo, P. Ordejón and E. Hernández
- 4.- *From weak to strong interactions: A comprehensive analysis of the topological and energetic properties of the electron density distribution involving X-H...F-Y systems*
Journal of Chemical Physics, 117 (12), (2002), pp. 5529-5542
E. Espinosa, I Alkorta, J. Elguero and E. Molins
- 5.- *Ab initio determination of the phonon deformation potentials of graphene*
Physical Review B, 65, (2002), pp. 073403-1 – 073403-3
C. Thomsen, S. Reich and P. Ordejón
- 6.- *Ab initio local vibrational modes of light impurities in silicon*
Physical Review B, 65, (2002), pp. 075210-1 – 075210-8
J.M. Pruneda, S. Estreicher, J. Junquera, J. Ferrer and P. Ordejón
- 7.- *First-principles study of the neutral molecular metal Ni(tmdt)₂*
Physical Review B, 65, (2002), pp. 081104-1 – 081104-4
C. Rovira, J. Novoa, J.L. Mozos, P. Ordejón and E. Canadell
- 8.- *Elastic properties of carbon nanotubes under hydrostatic pressure*
Physical Review B, 65, (2002), pp. 153407-1 – 153407-4
S. Reich, C. Thomsen and P. Ordejón
- 9.- *Electronic band structure of isolated and bundled carbon nanotubes*
Physical Review B, 65, (2002), pp. 155411-1 - 155411-11
S. Reich, C. Thomsen and P. Ordejón
- 10.- *Density-functional method for nonequilibrium electron transport*
Physical Review B, 65, (2002), pp. 165401-1 – 165401-17
M. Brandbyge, J.L. Mozos, P. Ordejón, J. Taylor and K. Stokbro
- 11.- *First-principles study of the blue bronze K_{0.3}MoO₃*
Physical Review B, 65, (2002), pp. 233105-1 – 233105-4
J.L. Mozos, P. Ordejón and E. Canadell
- 12.- *Tight-binding description of graphene*
Physical Review B, 66, (2002), pp. 035412-1 – 035412-5
S. Reich, J. Maultzsch, C. Thomsen and P. Ordejón
- 13.- *Ab initio calculations of the optical properties of 4-Å-diameter single-walled nanotubes*
Physical Review B, 66, (2002), pp. 155410-1 – 155410-5
M. Machón, S. Reich, C. Thomsen, D. Sánchez-Portal and P. Ordejón
- 14.- *Vibrational properties of single-wall nanotubes and monolayers of hexagonal BN*

- Physical Review B**, 66, (2002), pp. 235415-1 – 235415-12
D. Sánchez-Portal and E. Hernández
- 15.- *Possible Nonactivated Conductivity of the Low-Dimensional Ternary Nitride Ca_2GeN_2*
Inorganic Chemistry, 41 (18), (2002), pp. 4630-4632
J.M. Oliva and E. Canadell
- 16.- *Electronic Structure, Electrical and Magnetic Properties of $\text{RMO}_8\text{O}_{14}$ Compounds ($R = \text{La}, \text{Ce}, \text{Pr}, \text{Nd}, \text{Sm}$) Containing Bicapped Mo_8 Clusters*
Inorganic Chemistry, 41 (18), (2002), pp. 4689-4699
R. Gautier, O.K. Andersen, P. Gougeon, J.-F. Halet, E. Canadell and J.D. Martin
- 17.- *The SIESTA method for ab initio order-N materials simulation*
Journal of Physics: Condensed Matter, 14, (2002), pp. 2745-2779
J.M. Soler, E. Artacho, J. Gale, A. García, J. Junquera, P. Ordejón and D. Sánchez-Portal
- 18.- *Simulations of quantum transport in nanoscale systems: application to atomic gold and silver wires*
Nanotechnology, 13, (2002), pp. 346-351
J.L. Mozos, P. Ordejón, M. Brandbyge, J. Taylor and K. Stokbro
- 19.- *“Avalanches” in the ground state of the 3D Gaussian random field Ising model driven by an external field*
Computer Physics Communications, 147, (2002), pp. 455-458
C. Frontera and E. Vives
- 20.- *SnO_2 : bulk and surface simulations by an ab initio numerical local orbitals method*
Phase Transitions, 75 (1-2), (2002), pp. 143-149
A.V. Postnikov, P. Entel and P. Ordejón
- 21.- *Copper-Defect and Copper-Impurity Interactions in Silicon*
Solid State Phenomena, 82-84, (2002), pp. 341-348
S.K. Estreicher, D. West and P. Ordejón
- 22.- *Ab initio Calculations of B Diffusion in SiC*
Materials Science Forum, 389-393, (2002), pp. 553-556
R. Rurali, E. Hernández, P. Godignon, J. Rebollo and P. Ordejón

B.- MAGNETIC MATERIALS

- 23.- *Quadratic transverse anisotropy term due to dislocations in Mn₁₂ acetate crystals directly observed by EPR spectroscopy*
Physical Review B, 65, (2002), pp. 172403-1 - 172403-4
R. Amigó, E. del Barco, Ll. Casas, E. Molins, J. Tejada, I.B. Rutel, B. Mommouton, N. Dalal and J. Brooks
- 24.- *Selective spin-state switch and metal-insulator transition in GdBaCo₂O_{5.5}*
Physical Review B, 65, (2002), pp. 180405-1 - 180405-4
C. Frontera, J.L. García-Muñoz, A. Llobet and M.A.G. Aranda
- 25.- *Evidence of strong antiferromagnetic coupling between localized and itinerant electrons in ferromagnetic Sr₂FeMoO₆*
Physical Review B, 66, (2002), pp. 024409-1 - 024409-5
M. Tovar, M.T. Causa, A. Butera, J. Navarro, B. Martínez, J. Fontcuberta and M.C.G. Passeggi
- 26.- *Magnetic field and pressure effects on the magnetic transitions of La_{0.9}Ca_{0.1}MnO₃ perovskites*
Physical Review B, 66, (2002), pp. 054436-1 - 054436-6
B. Martínez, V. Laukhin, J. Fontcuberta, L. Pinsard and A. Revcolevschi
- 27.- *Charge trapping in optimally doped epitaxial manganite thin films*
Physical Review B, 66, (2002), pp. 134416-1 - 134416-9
M. Bibes, S. Valencia, Ll. Balcells, B. Martínez, J. Fontcuberta, M. Wojcik, S. Nadolski and E. Jedryka
- 28.- *Crystal defects and spin tunneling in single crystals of Mn₁₂ clusters*
Physical Review B, 66, (2002), pp. 161407(R)
J.M. Hernández, F. Torres, J. Tejada and E. Molins
- 29.- *Preparation of Narrow Size Distribution Superparamagnetic γ -Fe₂O₃ Nanoparticles in a Sol-Gel Transparent SiO₂ Matrix*
Langmuir, 18, (2002), pp. 4972-4978
E.M. Moreno, M. Zayat, M.P. Morales, C.J. Serna, A. Roig and D. Levy
- 30.- *Reduced microwave losses of YBa₂Cu₃O_{7-d} thin films on electro-optic LiNbO₃ crystals*
Journal of Applied Physics, 92 (10), (2002), pp. 6346-6348
L. Fàbrega, R. Rubí, J. Fontcuberta, F. Sánchez, C. Ferrater, M.V. García-Cuenca, M. Varela, C. Collado, J. Mateu, O. Menendez and J. O'Callaghan
- 31.- *Charge modulation and orientational variants in Bi_{1/3}Ca_{2/3}MnO₃*
Applied Physics A: Materials Science & Processing, 74, (2002), pp. S1761-S1764
A. Llobet, C. Frontera, C. Ritter, M. Respaud, J.M. Broto, M. J. Martínez-Lope, M.A.G. Aranda and J.L. García-Muñoz
- 32.- *Anomalously high charge/orbital ordering temperature in Bi_{0.5}Sr_{0.5}MnO₃*
Applied Physics A: Materials Science & Processing, 74, (2002), pp. S1787-S1789
C. Frontera, J.L. García-Muñoz, M.A.G. Aranda, C. Ritter, A. Llobet, L. Ranno, M. Respaud, J. Vanacken, J.M. Broto, A.E. Carrillo, A. Calleja and J. García
- 33.- *Magnetoresistive oxides: new developments and applications*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 98-104
J. Fontcuberta, Ll. Balcells, M. Bibes, J. Navarro, C. Frontera, J. Santiso, J. Fraxedas, B. Martínez, S. Nadolski, M. Wojcik, E. Jedryka and M.J. Casanove
- 34.- *Surface effects in CoFe₂O₄ magnetic fluids studied by Mössbauer spectrometry*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 613-616
P. Didukh, J.M. Greneche, A. Slawska-Waniewska, P.C. Fannin and Ll. Casas

- 35.- *Electronic and magnetic transitions in Bi-Sr-Mn-O oxides: high temperature charge-ordering*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 645-647
 J.L. García-Muñoz, C. Frontera, M.A.G. Aranda, C. Ritter, A. Llobet, L. Ranno, M. Respaud, J. Vanacken and J.M. Broto
- 36.- *Spin state transition: the origin of structural, magnetic and metal-insulator transitions in $GdBaCo_2O_{5+d}$ ($d \approx 0.5$)*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 751-753
 C. Frontera, J.L. García-Muñoz, A. Llobet, M.A.G. Aranda, J. Rodríguez-Carvajal, M. Respaud, J.M. Broto, B. Raquet, H. Rakoto and M. Goiran
- 37.- *Magnetic properties and pressure effects in $Ca_3Co_2O_6$ ferrimagnet*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 757-759
 M. Hernando, B. Martínez, V. Laukhin, J. Fontcuberta, M. Parras and J.M. González-Calbet
- 38.- *Room-temperature anisotropic magnetoresistive sensor based on manganese perovskite thick films*
Journal of Magnetism and Magnetic Materials, 242-245, (2002), pp. 1166-1168
 Ll. Balcells, E. Calvo and J. Fontcuberta
- 39.- *Magnetotransport properties of fully strained epitaxial thin films of $La_{2/3}Ca_{1/3}MnO_3$ grown on $SrTiO_3$*
Applied Surface Science, 188, (2002), pp. 202-208
 M. Bibes, M.-J. Casanove, Ll. Balcells, S. Valencia, B. Martínez, J.-C. Ousset and J. Fontcuberta
- 40.- *Temperature dependence of ESR anisotropy in $La_{7/8}Sr_{1/8}MnO_3$*
Physica B: Condensed Matter, 320, (2002), pp. 26-29
 G. Alejandro, C.A. Ramos, D. Vega, M.T. Causa, J. Fontcuberta and M. Tovar
- 41.- *ESR of double-perovskite Sr_2FeMoO_6*
Physica B: Condensed Matter, 320, (2002), pp. 79-82
 M.T. Causa, A. Butera, M. Tovar and J. Fontcuberta
- 42.- *Enhancement of the low field magnetoresistance by grain boundary modification in Sr_2FeMoO_{6+d}*
Physica B: Condensed Matter, 320, (2002), pp. 107-110
 D. Niebieskikwiat, A. Caneiro, R.D. Sánchez and J. Fontcuberta

C.- SUPERCONDUCTING MATERIALS

- 43.- *Anisotropy of the low-field critical point of the melting line of twinned $YBa_2Cu_3O_{7-d}$ single crystals*
Physical Review B, 65, (2002), pp. 092505-1 - 092505-4
J. Figueras, T. Puig, X. Obradors, A. Erb and E. Walker
- 44.- *Microstructural influence on critical currents and irreversibility line in melt-textured $YBa_2Cu_3O_{7-x}$ reannealed at high oxygen pressure*
Physical Review B, 65, (2002), pp. 104526-1 - 104526-10
J. Plain, T. Puig, F. Sandiumenge, X. Obradors and J. Rabier
- 45.- *Anisotropic behaviour of the melting line and the low critical field in YBCO*
Physica C, 369, (2002), pp. 209-212
J. Figueras, T. Puig, X. Obradors, A. Erb and E. Walker
- 46.- *Directional solidification of YBaCuO thick films deposited by screen printing on Ag and Ag-Pd tapes*
Physica C, 372-376, (2002), pp. 738-741
S. Piñol, M. Najib, T. Puig, X. Obradors, H. Xuriguera and M. Segarra
- 47.- *Epitaxial nucleation and growth of buffer layers and Y123 coated conductors deposited by metal-organic decomposition*
Physica C, 372-376, (2002), pp. 806-809
O. Castaño, A. Palau, J.C. González, S. Piñol, T. Puig, N. Mestres, F. Sandiumenge and X. Obradors
- 48.- *Preparation and superconducting properties of Ag/Hg-1223 PIT wires*
Physica C, 372-376, (2002), pp. 854-856
S. Piñol, D.M. Bastidas and E. Varesi
- 49.- *Growth and microstructure of MTG $REBa_2Cu_3O_7/RE'_2BaCuO_5$ with heavy rare earth elements*
Physica C, 372-376, (2002), pp. 1119-1122
A.E. Carrillo, P. Rodríguez Jr., T. Puig, A. Palau, X. Obradors, H. Zheng, U. Welp, L. Chen, B.W. Veal, H. Claus and G.W. Crabtree
- 50.- *Synthesis and densification of Hg(Re)-1223 superconductors*
Physica C, 372-376, (2002), pp. 1171-1173
D.M. Bastidas, S. Piñol, J. Plain, T. Puig, X. Obradors, G. Celotti, S. Sprio and A. Tampieri
- 51.- *Subboundary mesostructures and variable dislocation networks in single domain melt textured $YBa_2Cu_3O_7$ – implications on critical currents*
Physica C, 372-376, (2002), pp. 1204-1207
F. Sandiumenge, N. Vilalta, J. Rabier and X. Obradors
- 52.- *Superconducting armature for induction motor of axial flux based on YBCO bulks*
Physica C, 372-376, (2002), pp. 1517-1519
A. Álvarez, P. Suárez, D. Cáceres, X. Granados, X. Obradors, R. Bosch, E. Cordero, B. Pérez, A. Caballero and J.A. Blanco
- 53.- *Ironless armature for high speed HTS disk shaped rotor in self levitating configuration*
Physica C, 372-376, (2002), pp. 1520-1523
X. Granados, J. Pallarés, S. Sena, J.A. Blanco, J. López, R. Bosch and X. Obradors
- 54.- *Growth and characterization of $YBa_2(Cu_{1-x}A_x)_3O_{7-d}$ ($A=Mg,Zn,Ni$) bars as switching elements for fault current limiters*
Physica C, 372-376, (2002), pp. 1622-1625
E. Mendoza, J. Teva, T. Puig, X. Granados and X. Obradors

- 55.- *Design, building up and testing of a 400 kVA hybrid FCL*
Physica C, 372-376, (2002), pp. 1680-1683
 X. Granados, T. Puig, X. Obradors, E. Mendoza, J. Teva, A. Calleja, I.G. Serradilla, M Segarra, J. Calero, L. García-Tabarés, E. Oyarbide, R. Iturbe and L. Peral
- 56.- *Melt textured $YBa_2Cu_3O_7$: fundamental properties and current limitation applications*
Physica C, 378-381, (2002), pp. 1-10
 X. Obradors, T. Puig, X. Granados and F. Sandiumenge
- 57.- *Dislocation substructures and phase stability of melt-textured $YBa_2Cu_3O_{7-x}Y_2BaCuO_5$ composites at high oxygen pressures*
Philosophical Magazine A, 82 (2), (2002), pp. 337-348
 J. Plain, F. Sandiumenge, J. Rabier, M.F. Denanot and X. Obradors
- 58.- *Melt growth and microstructure development of high critical current $REBa_2Cu_3O_7$ superconductors with a natural mixture of rare earths*
Superconductor Science and Technology, 15, (2002), pp. 60-66
 P. Rodrigues Jr, T. Puig, A.E. Carrillo, A. Palau and X. Obradors
- 59.- *Synthesizing the Y-123/Y-211 composite by the PVA method*
Superconductor Science and Technology, 15, (2002), pp. 566-571
 I.G. Serradilla, A. Calleja, X.G. Capdevila, M. Segarra, E. Mendoza, J. Teva, X. Granados, X. Obradors and F. Espiell
- 60.- *Growth related microstructure of Bridgman grown $YBa_2Cu_3O_7/Y_2BaCuO_5$ single-grain bars*
Superconductor Science and Technology, 15, (2002), pp. 1385-1391
 P. Diko, K. Zmorayova, E. Mendoza, F. Sandiumenge and X. Obradors
- 61.- *Observation of a novel stacking-fault nucleation mechanism in melt-textured $YBa_2Cu_3O_7$*
Philosophical Magazine Letters, 82 (8), (2002), pp. 419-423
 J. Rabier, F. Sandiumenge, J. Plain, A. Prout and I. Stretton
- 62.- *Dislocations engineering in melt textured oxide superconductors*
Radiation Effects & Defects in Solids, 157, (2002), pp. 871-880
 J. Rabier, F. Sandiumenge, J. Plain, A. Prout, P.D. Tall and X. Obradors

D.- INORGANIC ORGANOMETALLIC MATERIALS, AND COORDINATION COMPOUNDS

- 63.- *A Large-cavity zeolite with wide pore windows and potential as an oil refining catalyst*
Nature, Vol. 418, (2002), pp. 514-517
A. Corma, M.J. Diaz-Cabañas, J. Martínez-Triguero, F. Rey and J. Rius
- 64.- *Preferential location of Ge Atoms in Polymorph C of Beta Zeolite (ITQ-17) and their Structure-Directing Effect: A Computational, XRD, and NMR Spectroscopic Study*
Angewandte Chemie International Edition, 41 (24), (2002), pp. 4722-4726
G. Sastre, J.A. Vidal-Moya, T. Blasco, J. Rius, J.L. Jordá, M.T. Navarro, F. Rey and A. Corma
- 65.- *Surface Layer Formation on Polypyrrole Films*
Advanced Materials, 14 (6), (2002), pp. 449-452
C. Masalles, S. Borrós, C. Viñas and F. Teixidor
- 66.- *Extraordinary Overoxidation Resistance Increase in Self-Doped Polypyrroles by Using Non-conventional Low Charge-Density Anions*
Advanced Materials, 14 (11), (2002), pp. 826-829
C. Masalles, J. Llop, C. Viñas and F. Teixidor
- 67.- *A very bulky carboxylic perchlorotriphenylmethyl radical as a novel ligand for transition metal complexes. A new spin frustrated metal system*
Chemical Communications, 24, (2002), pp. 2958-2959
D. Maspoch, D. Ruiz-Molina, K. Wurst, C. Rovira and J. Veciana
- 68.- *Viscoelasticity of silica aerogels at ultrasonic frequencies*
Applied Physics Letters, 81 (7), (2002), pp. 1198-1200
T.E. Gómez, F.R. Montero, M. Moner-Girona, E. Rodríguez, A. Roig and E. Molins
- 69.- *Frozen-Out Rotamers of Mixed Cobaltacarborane Complexes*
Organometallics, 21 (2), (2002), pp. 355-361
J. Llop, C. Viñas, F. Teixidor, Ll. Victori, R. Kivekäs and R. Sillanpää
- 70.- *Effect of Asymmetry on the Electronic Delocalization in Diiron and Iron-Cobalt Mixed Valence Metallocenic Compounds*
Inorganic Chemistry, 41 (7), (2002), pp.1831-1836
Y. Portilla, I. Chávez, V. Arancibia, B. Loeb, J.M. Manríquez, A. Roig and E. Molins
- 71.- *Redox Potential Modulation in Mixed Sandwich Pyrrolyl/Dicarbollide Complexes*
Inorganic Chemistry, 41 (13), (2002), pp. 3347-3352
J. Llop, C. Viñas, F. Teixidor, Ll. Victori, R. Kivekäs and R. Sillanpää
- 72.- *Room-Temperature Synthesis and Crystal, Magnetic, and Electronic Structure of the First Silver Copper Oxide*
Inorganic Chemistry, 41 (25), (2002), pp. 6604-6613
E.M. Tejada-Rosales, J. Rodríguez-Carvajal, N. Casañ-Pastor, P. Alemany, E. Ruiz, M.S. El-Fallah, S. Alvarez and P. Gómez-Romero
- 73.- *Coordinating properties of mixed pyrrolyl/dicarbollide cobalt metallocene-type complexes*
Journal of the Chemical Society, Dalton Transactions, 8, (2002), pp. 1559-1565
J. Llop, C. Viñas, F. Teixidor and Ll. Victori
- 74.- *Self-assembly of carborane molecules via C-H...I hydrogen bonding: the molecular and crystal structures of 3-I-1,2-closo-C₂B₁₀H₁₁*
Journal of the Chemical Society, Dalton Transactions, 19, (2002), pp. 3647-3648
G. Barberà, C. Viñas, F. Teixidor, G.M. Rosair and A.J Welch

- 75.- *Characterisation of nanoscopic $[Mn_{12}O_{12}(O_2CR)_{16}(H_2O)_4]$ single-molecule magnets: physicochemical properties and LDI- and MALDI-TOF mass spectrometry*
Journal of Materials Chemistry, 12, (2002), pp. 1152-1161
 D. Ruiz-Molina, P. Gerbier, E. Rumberger, D. B. Amabilino, I.A. Guzei, K. Folting, J.C. Huffman, A.L. Rheingold, G. Christou, J. Veciana and D. H. Hendrikson
- 76.- *Cobalt bis(dicarbollide) ions with covalently bonded CMPO groups as selective extraction agents for lanthanide and actinide cations from highly acidic nuclear waste solutions*
New Journal of Chemistry, 26, (2002), pp. 1519-1527
 B. Grüner, J. Plešek, J. Báca, I. Císarová, J.F. Dozol, H. Rouquette, C. Viñas, P. Selucký and J. Rais
- 77.- *Olefin cyclopropanation catalysed by half-sandwich ruthenium complexes*
Tetrahedron Letters, 43 (6), (2002), pp. 983-987
 O. Tutusaus, S. Delfosse, A. Demonceau, A.F. Noels, R. Núñez, C. Viñas and F. Teixidor
- 78.- *Ni(II)-catalyzed Michael additions. Part 2: Dynamic kinetic resolution in the reduction of chiral α -hydrazino- β -ketoacid derivatives*
Tetrahedron, 58, (2002), pp. 5699-5708
 C. Marchi, E. Trepát, M. Moreno-Mañas, A. Vallribera and E. Molins
- 79.- *The B-I activation in o-carborane clusters: their fate towards B-H. Easy synthesis of $[7,10-C_2B_{10}H_{13}]^-$*
Journal of Organometallic Chemistry, 642, (2002), pp. 16-19
 C. Viñas, G. Barberà and F. Teixidor
- 80.- *Study of the o-carboranyl fragment as an uncommon substituent. Crystal structures of $[PdClMe(1,2-(PPh_2)_2-1,2-C_2B_{10}H_{10})] \cdot CH_2Cl_2$ and $[PdClMe(1,2-(P^iPr_2)_2-1,2-C_2B_{10}H_{10})]$*
Journal of Organometallic Chemistry, 645, (2002), pp. 39-46
 S. Paavola, F. Teixidor, C. Viñas and R. Kivekäs
- 81.- *Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarbocloso-dodecaborane. Crystal structures of $[PdBr_2(1,2-(PPh_2)_2-1,2-C_2B_{10}H_{10})] \cdot CH_2Cl_2$, $[PdBr_{1.133}Cl_{0.867}(1,2-(PPh_2)_2-1,2-C_2B_{10}H_{10})] \cdot CH_2Cl_2$ and $[PdBrCl_{0.541}Me_{0.459}(1,2-(PPh_2)_2-1,2-C_2B_{10}H_{10})] \cdot CHCl_3$*
Journal of Organometallic Chemistry, 657, (2002), pp. 187-193
 S. Paavola, F. Teixidor, C. Viñas and R. Kivekäs
- 82.- *Retention of the B(3)-X (X=Br, I) bond in closo-o-carborane derivatives after nucleophilic attack. The first synthesis of $[3-X-7-R-7,8-nido-C_2B_9H_{10}]$ (X= Br, I). Crystal structure of $[HNMe_3][3-I-7,8-nido-C_2B_9H_{11}]$*
Journal of Organometallic Chemistry, 657, (2002), pp. 217-223
 G. Barberà, C. Viñas, F. Teixidor, A.J. Welch and G.M. Rosair
- 83.- *Phosphine-boranes incorporating the carborane cluster*
Journal of Organometallic Chemistry, 657, (2002), pp. 224-231
 R. Núñez, C. Viñas, F. Teixidor, R. Sillanpää and R. Kivekäs
- 84.- *Modulation of the C-C distance in disubstituted 1,2- R_2 -o-carboranes. Crystal structure of closo-1,2-(SPh) $_2$ -1,2- $C_2B_{10}H_{10}$*
Journal of Organometallic Chemistry, 657, (2002), pp. 232-238
 J. Llop, C. Viñas, J.M. Oliva, F. Teixidor, M.A. Flores, R. Kivekäs and R. Sillanpää
- 85.- *Cobaltabisdicarbollide anion $[Co(C_2B_9H_{11})_2]^-$ as doping agent on intelligent membranes for ion capture*
Journal of Organometallic Chemistry, 657, (2002), pp. 239-246
 C. Masalles, F. Teixidor, S. Borrós and C. Viñas
- 86.- *Recent studies on $RR'S-C_2B_9H_{11}$ charge-compensated ligands. Crystal Structures of 10-(S(CH $_3$) $_2$)-7,8- $C_2B_9H_{11}$ and 10-(S(CH $_2$) $_4$)-7,8- $C_2B_9H_{11}$*

Journal of Organometallic Chemistry, 657, (2002), pp. 247-255
O. Tutusaus, F. Teixidor, R. Núñez, C. Viñas, R. Sillanpää and R. Kivekäs

- 87.- *Synthesis and characterisation of the exo-nido molybdacarborane complex $Mo(\eta^5-C_3H_5)(CO)_2(7,8-\eta^2-SCH_2CH_2S-7,8-nido-C_2B_9H_{10})$. Strong B-H-Mo 3-centre bonding*
Journal of Organometallic Chemistry, 663, (2002), pp. 221-226
G. Barberà, C. Viñas, F. Teixidor, G.M. Rosair and A.J. Welch
- 88.- *Electrochemically induced reversible solid state transformations: electrosynthesis of $Ag_2Cu_2O_4$ by room temperature oxidation of $Ag_2Cu_2O_3$*
Electrochemistry Communications, 4, (2002), pp. 684-689
D. Muñoz-Rojas, J. Oró, P. Gómez-Romero, J. Fraxedas and N. Casañ-Pastor
- 89.- *Comparison of sulphur and sulphur-oxygen ligands as ionophores for liquid-liquid extraction and facilitated transport of silver and palladium*
Journal of Membrane Science, 210, (2002), pp. 279-290
E. Lachowicz, B. Różanska, F. Teixidor, H. Meliani, M. Barboiu and N. Hovnanian
- 90.- *Micromechanical properties of carbon-silica aerogel composites*
Applied Physics A: Materials Science & Processing, 74, (2002), pp.119-122
M. Moner-Girona, E. Martínez, J. Esteve, A. Roig, R. Solanas and E. Molins
- 91.- *Iron oxide nanoparticles hosted in silica aerogels*
Applied Physics A: Materials Science & Processing, 74, (2002), pp. 591-597
Ll. Casas, A. Roig, E. Molins, J.M. Grenèche, J. Asenjo and J. Tejada
- 92.- *Synthesis, Characterization, and Electrical Properties of the Series of Oxides $Ag_xPb_{2-x}Cu_xO_6$ ($0.0 \leq x \leq 0.5$)*
Journal of Solid State Chemistry, 163, (2002), pp. 151-157
E.M. Tejada-Rosales, J. Oró-Solé and P. Gómez-Romero
- 93.- *Synthesis and structure of peptide-copper(II)-isocytosine ternary complexes*
Polyhedron, 21, (2002), pp.1197-1201
A. García-Raso, J.J. Fiol, B. Adrover, A. Caubet, E. Espinosa, I. Mata and E. Molins
- 94.- *Synthesis and characterization of new cyclometallated Pd(II) complexes with bridging or terminal imidato ligands. Crystal Structures of $[Pd(\eta^2\text{-succinimide})(\text{phpy})_2]$ and $[Pd(\text{azb})(\text{succinimide})(PPh_3)]$ ($\text{phpy} = 2\text{-phenylpyridine}$; $\text{azb} = \text{azobenzene}$)*
Polyhedron, 21, (2002), pp.1589-1596
J.L. Serrano, L. García, J. Pérez, E. Pérez, J. Vives, G. Sánchez, G. López, E. Molins and A.G. Orpen
- 95.- *Synthesis and crystal structure of the α polytype of HfNBr*
Solid State Sciences, 4, (2002), pp. 475-480
J. Oró-Solé, M. Vlassov, D. Beltrán-Porter, M.T. Caldés, V. Primo and A. Fuertes
- 96.- *Synthesis and structural characterisation of a new cobalt(II) pentanuclear complex with a tetranucleating pyrazole-derived ligand*
Inorganic Chemistry Communications, 5 (2), (2002), pp.130-133
J. Pons, F.J. Sanchez, J. Casabó, J. Rius, A. Alvarez-Larena and J. Ros
- 97.- *Half-sandwich ruthenium complexes for the controlled radical polymerisation of vinyl monomers*
Inorganic Chemistry Communications, 5 (11), (2002), pp. 941- 945
O. Tutusaus, S. Delfosse, F. Simal, A. Demonceau, A. F. Noels, R. Núñez, C. Viñas and F. Teixidor
- 98.- *Synthesis of S,N-chelating heterocyclic thionates of palladium(II). Crystal Structure of $cis-[Pd(\text{pym}2\text{S})(PPh_3)_2]$ ($\text{pym}2\text{S} = \text{pyrimidine-2-thionate}$)*
Transition Metal Chemistry, 27, (2002), pp. 105-109

J.L. Serrano, J. Pérez, G. Sánchez, J.F. Martínez, G. López and E. Molins

- 99.- *Pertraction of silver with octylphenylsulfide as carrier in a hollow fiber contactor*
Desalination, 148, (2002), pp. 263-265
R. Kertész, S. Schlosser and F. Teixidor
- 100.- *Cis-[1,2-Bis(diisopropylphosphino-kP)-1,2-dicarba-closo-dodecaborane]-dichloroplatinum(II) dichloromethane hemisolvate*
Acta Crystallographica, C58, (2002), pp. 237-239
S. Paavola, F. Teixidor, C. Viñas and R. Kivekäs
- 101.- *2-Methyl-1-phenylsulfanyl-1,2-dicarba-closo-dodecaborane(12)*
Acta Crystallographica, C58, (2002), pp. 570-571
R. Kivekäs, M. A. Flores, C. Viñas and R. Sillanpää
- 102.- *Electroquímica de $Ag_2Cu_2O_3$ y síntesis de $Ag_2Cu_2O_4$*
Boletín de la Sociedad Española de Cerámica y Vidrio, 41 (1), (2002), pp. 55-58
D. Muñoz-Rojas, E.M^a Tejada-Rosales, P. Gómez-Romero and N. Casañ-Pastor
- 103.- *Síntesis, estructura y propiedades de transporte de nuevos óxidos complejos de cobre, plata y plomo*
Boletín de la Sociedad Española de Cerámica y Vidrio, 41 (1), (2002), pp. 59-64
E.M. Tejada-Rosales, J. Oró-Solé and P. Gómez-Romero
- 104.- *Estudios de materiales de cátodos híbridos y ánodos vítreos. Caracterización en celdas de ion litio*
Boletín de la Sociedad Española de Cerámica y Vidrio, 41 (1), (2002), pp. 115-121
A.K. Cuentas-Gallegos, M.R. Palacín, M.T. Colomer, J.R. Jurado and P. Gómez-Romero
- 105.- *Annealing of electrophoretic $YBa_2Cu_3O_7$ coatings on polycrystalline substrates by zonal laser fusion*
Boletín de la Sociedad Española de Cerámica y Vidrio, 41 (1), (2002), pp. 185-189
E. Tejada-Rosales, S. Ondoño-Castillo, C. Díez, G. de la Fuente and N. Casañ-Pastor
- 106.- *A Thermally and Electrochemically Switchable Molecular Array Based on a Manganese Schiff Base Complex*
Advanced Functional Materials, 12 (5), (2002), pp. 347-351
D. Ruiz-Molina, K. Wurst, D. N. Hendrickson, C. Rovira and J. Veciana
- 107.- *Fluorine Segregation Controls the Solid-State Organization and Electronic Properties of Ni and Au Dithiolene Complexes: Stabilization of a Conducting Single-Component Gold Dithiolene Complex*
Advanced Functional Materials, 12 (10), (2002), pp. 693-698
O.J. Dautel, M. Fourmigué, E. Canadell and P. Auban-Senzier

E.- ORGANIC MATERIALS

- 108.- *Spontaneous resolution under supramolecular control*
Chemical Society Reviews, 31, (2002), pp. 342-356
L. Pérez-García and D.B. Amabilino
- 109.- *An Enantiopure Molecular Ferromagnet*
Angewandte Chemie International Edition, 41 (4), (2002), pp. 586-589
M. Minguet, D. Luneau, E. Lhotel, V. Villar, C. Paulsen, D. B. Amabilino and J. Veciana
- 110.- *Radical para-Benzoic Acid Derivatives: Transmission of Ferromagnetic Interactions through Hydrogen Bonds at Long Distances*
Chemistry European Journal, 8 (16), (2002), pp. 3635-3645
D. Maspoch, L. Catala, P. Gerbier, D. Ruiz-Molina, J. Vidal-Gancedo, K. Wurst, C. Rovira and J. Veciana
- 111.- *Spontaneous resolution and absolute configuration of a coordination polymer formed by Mn^{II} and a ferrocene-based bisnitronyl nitroxide radical*
Chemical Communications, (2002), pp. 2342-2343
C. Sporer, K. Wurst, D.B. Amabilino, D. Ruiz-Molina, H. Kopacka, P. Jaitner and J. Veciana
- 112.- *New Molecular Conductors Based on ETEDT-TTF Trihalides: From Single Crystals to Conducting Layers of Nanocrystals*
Chemistry Materials, 14, (2002), pp. 3295-3304
M. Mas-Torrent, E. Ribera, V. Tkacheva, I. Mata, E. Molins, J. Vidal-Gancedo, S. Khasanov, L. Zorina, R. Shibaeva, R. Wojciechowski, J. Ulanski, K. Wurst, J. Veciana, V. Laukhin, E. Canadell, E. Laukhina and C. Rovira
- 113.- *Barbier-Type Diastereoselective Allylation of α -Amino Aldehydes with an Enantiopure 2-Sulfynylallyl Building Block*
The Journal of Organic Chemistry, 67 (1), (2002), pp. 308-311
F. Márquez, R. Montoro, A. Llebaria, E. Lago, E. Molins and A. Delgado
- 114.- *Isolation and Characterization of Four Isomers of a C₆₀ Bisadduct with a TTF Derivative. Study of Their Radical Ions*
The Journal of Organic Chemistry, 67 (2), (2002), pp. 566-575
M. Mas-Torrent, R. Rodríguez-Mias, M. Solà, M.A. Molins, M. Pons, J. Vidal-Gancedo, J. Veciana and C. Rovira
- 115.- *New Accelerated Strategy for the Synthesis of Poly(Ether Ketone) Dendrons*
The Journal of Organic Chemistry, 67 (3), (2002), pp. 1004-1007
M.A. Abramov, R. Shukla, D.B. Amabilino and W. Dehaen
- 116.- *Dynamic Kinetic Resolution of Racemic α -Aryl- α -oxoesters. Enantioselective Synthesis of β -Arylpiperidines*
The Journal of Organic Chemistry, 67 (15), (2002), pp.5343-5351
M. Amat, M. Cantó, N. Llor, C. Escolano, E. Molins; E. Espinosa and J. Bosch
- 117.- *1,1',3,3',6,6',8,8'-Octachloro-9,9'-bifluorenylidene and Perchloro-9,9'-bifluorenylidene, Two Exceedingly Twisted Ethylenes*
The Journal of Organic Chemistry, 67 (21), (2002), pp. 7175-7178
E. Molins, C. Miravittles, E. Espinosa and M. Ballester
- 118.- *Interesting transport and magnetic properties in a new family of molecular materials based on the organic donor BET-TTF and the perrhenate anion*
Journal of Materials Chemistry, 12, (2002), pp. 432-441
S. Khasanov, A. Pérez-Benitez, B.Zh. Narymbetov, L. Zorina, R.P. Shibaeva, J. Singleton, A.-K. Klehe, V. Laukhin, J. Vidal-Gancedo, J. Veciana, E. Canadell and C. Rovira

- 119.- *Characterization of the Fermi surface of (BEDO-TTF)₅[CsHg(SCN)₄]₂ by magnetoresistance measurements and tight-binding band structure calculations*
Journal of Materials Chemistry, 12, (2002), pp. 483-488
 R.B. Lyubovskii, S.I. Pesotskii, M. Gener, R. Rousseau, E. Canadell, J.A.A.J. Perenboom, V.I. Nizhankovskii, E.I. Zhilyaeva, O.A. Bogdanova and R.N. Lyubovskaya
- 120.- *Racemic and enantiomerically pure phenyl α -nitronyl nitroxide radicals: influence of chirality on solution and solid state properties*
Journal of Materials Chemistry, 12, (2002), pp. 570-578
 M. Minguet, D.B. Amabilino, J. Vidal-Gancedo, K. Wurst and J. Veciana
- 121.- *Rigidified tetrathiafulvalene-[60]fullerene assemblies: towards the control of through-space orientation between both electroactive units*
Journal of Materials Chemistry, 12, (2002), pp. 2137-2159
 D. Kramer, M. Carious, S.-G. Liu, E. Levillain, J. Veciana, C. Rovira, A. Gorges and P. Hudhomme
- 122.- *Dinaphtho[2',3':5,6][1,4]dithiino[2,3-b:2,3-e]pyridine, its 16-butyl derivative and dinaphtho[2',3':5,6][1,4]dioxo[2,3-b:2,3-e]pyridine: novel heterocycles as electron donor compounds*
New Journal of Chemistry, 26, (2002), pp. 1308-1313
 C. Troya, A. Vidal, E. Brillas, J. Rius, X. Torrelles, C. Alemán, J. Casanovas and L. Juliá
- 123.- *Nonlinear optical properties of polychlorotriphenylmethyl radicals: towards the design of "super-octupolar" molecules*
Chemical Physics Letters, 363, (2002), pp. 245-251
 I. Ratera, S. Marcen, S. Montant, D. Ruiz-Molina, C. Rovira, J. Veciana, J.-F. Létard and E. Freysz
- 124.- *Asymmetric synthesis of amathamides A and B: novel alkaloids isolated from *Amathia wilsoni**
Tetrahedron: Asymmetry, 13, (2002), pp. 2261-2266
 M. Ramírez, G. Aguirre, R. Somanathan and E. Molins
- 125.- *Proton-Conducting Polymers Based on Benzimidazoles and Sulfonated Benzimidazoles*
Journal of Polymer Science: Part A: Polymer Chemistry, 40 (21), (2002), pp. 3703-3710
 J.A. Asensio, S. Borrós and P. Gómez-Romero
- 126.- *Quasi-three-dimensional network of molecular interactions and electronic structure of a new organic semiconductor, ET(NCS)_{0.77}*
Acta Crystallographica, B58, (2002), pp. 148-152
 O.N. Kazheva, E. Canadell, G.G. Aleksandrov, N.D. Kushch and O.A. Dyachenko
- 127.- *Crystal and electronic structure of a new metallic modification of (ET)₂[KHg(SCN)₄]*
Acta Crystallographica, B58, (2002), pp. 471-476
 N. Kazheva, E. Canadell, G.G. Aleksandrov, N.D. Kushch and O.A. Dyachenko
- 128.- *Electronic localization in an Extreme 1-D conductor: the organic salt (TTDM-TTF)₂[Au(mnt)₂]*
The European Physical Journal B, 29, (2002), pp. 27-33
 E.B. Lopes, H. Alves, E. Ribera, M. Mas-Torrent, P. Auban-Senzier, E. Canadell, R.T. Henriques, M. Almeida, E. Molins, J. Veciana, C. Rovira and D. Jérôme
- 129.- *Rare-Earth Elements in Molecular Conductors: Crystal and Electronic Structures*
Journal of Solid State Chemistry, 168, (2002), pp. 457-463
 O.N. Kazheva, N.D. Kushch, O.A. Dyachenko and E. Canadell

- 130.- *The First Mixed Valence Radical Cation Salts of BEDT-TTF with the Photochromic Metal Mononitrosyl Complexes $[RuNOX_5]^{2-}$ ($X=Br, Cl$) as Counterions*
Journal of Solid State Chemistry, 168, (2002), pp. 514-523
 I.Yu. Shevyakova, L.V. Zorina, S.S. Khasanov, L.I. Buravov, V.A. Tkacheva, R.P. Shibaeva, E.B. Yagubskii and E. Canadell
- 131.- *Two New Families of Charge Transfer Solids Based on $[M(mnt)_2]^{f+}$ and the Donors BMDT-TTF and EDT-TTF: Conducting and Magnetic Properties*
Journal of Solid State Chemistry, 168, (2002), pp. 563-572
 M. Mas-Torrent, H. Alves, E.B. Lopes, M. Almeida, K. Wurst, J. Vidal-Gancedo, J. Veciana and C. Rovira
- 132.- *A New Conducting Molecular Solid Based on the Magnetic $[Ni(dmf)_6]^{2+}$ Cation and on $[Ni(dsit)_2]^{2-}$ ($dsit=1,3$ -dithiole-2-thione-4,5-diselenolate) Showing an Unprecedented Anion Packing*
Journal of Solid State Chemistry, 168, (2002), pp. 653-660
 S. Curreli, P. Deplano, M.L. Mercuri, L. Pilia, A. Serpe, F. Bigoli, M.A. Pellinghelli, E. Coronado, C.J. Gómez-García and E. Canadell
- 133.- *Synthesis improvement, crystal structure and a charge-transfer complex of a sulphur dioxide-containing TTF derivative*
Synthetic Metals, 128, (2002), pp. 155-159
 M. Mas-Torrent, J. Llacay, K. Wurst, V. Laukhin, J. Vidal-Gancedo, J. Veciana and C. Rovira
- 134.- *Crystal and electronic structures of the radical cation salt based on EDT-TTF and the photochromic nitroprusside anion, $(EDT-TTF)_3[Fe(CN)_5NO]$*
Synthetic Metals, 128, (2002), pp. 325-332
 L.V. Zorina, M. Gener, S.S. Khasanov, R.P. Shibaeva, E. Canadell, L.A. Kushch and E.B. Yagubskii
- 135.- *Molecular conductors based on radical cation hydrated halides: new crystal phase of the $(BEDT-TTF)_3Br_2 \cdot 2H_2O$ organic metal*
Synthetic Metals, 131, (2002), pp. 41-48
 S.S. Khasanov, L.V. Zorina, R.P. Shibaeva, S.I. Pesotskii, M.V. Kartsovnik, L.F. Veiros and E. Canadell
- 136.- *Crystal and electronic structures of new molecular semiconductors with trinitroresorcinol anions*
Physica E, 13, (2002), pp. 1268-1270
 O.N. Kazheva, E. Canadell, G.V. Shilov, G.G. Abashev, A.G. Tenishev and O.A. Dyachenko
- 137.- *A comparative analysis of mono- and disaccharide benzyl fucopyranosides*
Acta Crystallographica, C58, (2002), pp.0537-0539
 M. Brito.Arias, E. Durán-Páramo, I. Mata and E. Molins
- 138.- *The crystal structure of the molecular complex of 2',6'-dimethoxyflavone with picric acid: Alternating p -stacking and hydrogen-bonding interactions*
Journal of Chemical Crystallography, 31 (7-8), (2001, © 2002), pp. 393-398
 E. Lago, E. Molins, C. Miravittles and J.-C. Wallet

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

- 139.- *Nanoindentation: Toward the sensing of atomic interactions*
Proceedings of the National Academy of Sciences USA, 99 (8), (2002), pp. 5228-5232
J. Fraxedas, S. Garcia-Manyes, P. Gorostiza and F. Sanz
- 140.- *Geometry of the Valence Transition Induced Surface Reconstruction of Sm(0001)*
Physical Review Letters, 88 (13), (2002), pp. 136102-1 – 136102-4
E. Lundgren, J.N. Andersen, R. Nyholm, X. Torrelles, J. Rius, A. Delin, A. Grechnev, O. Eriksson, C. Konvicka, M. Schmid and P. Varga
- 141.- *Novel Sb Induced Reconstruction of the (113) surface of Ge*
Physical Review Letters, 88 (22), (2002), pp. 226102-1 – 226102-4
A. Hirnet, K. Schroeder, S. Blügel, X. Torrelles, M. Albrecht, B. Jenichen, M. Gierer and W. Moritz
- 142.- *Designed Self-Doped Titanium Oxide Thin Films for Efficient Visible-Light Photocatalysis*
Advanced Materials, 14 (19), (2002), pp. 1399-1402
I. Justicia, P. Ordejón, G. Canto, J. L. Mozos, J. Fraxedas, G. Battiston, R. Gerbasi and A. Figueras
- 143.- *Perspectives on Thin Molecular Organic Films*
Advanced Materials, 14 (22), (2002), pp. 1603-1614
J. Fraxedas
- 144.- *Resolution of site-specific bonding properties of C₆₀ adsorbed on Au(111)*
Journal of Chemical Physics, 116 (2), (2002), pp. 832-836
C. Rogero, J.I. Pascual, J. Gómez-Herrero and A.M. Baró
- 145.- *Vibrational spectroscopy on single C₆₀ molecules: The role of molecular orientation*
Journal of Chemical Physics, 117 (21), (2002), pp. 9531-9534
J.I. Pascual, J. Gómez-Herrero, D. Sánchez-Portal and H.-P. Rust
- 146.- *Angle-resolved photoemission study and first-principles calculation of the electronic structure of GaTe*
Physical Review B, 65, (2002), pp.115201-1 – 115201-8
J.F. Sánchez-Royo, J. Pellicer-Porres, A. Segura, V. Muñoz-Sanjosé, G. Tobías, P. Ordejón, E. Canadell and Y. Huttel
- 147.- *Optical and magneto-optical properties of Fe nanoparticles*
Physical Review B, 65, (2002), pp. 205413-1 – 205413-9
J.L. Menéndez, B. Bescós, G. Armelles, R. Serna, J. Gonzalo, R. Doole, A.K. Petford-Long and M.I. Alonso
- 148.- *A standardless X-ray diffraction method for the quantitative analysis of multiphase mixtures. II. Application to non-infinitely thick samples*
Journal of Applied Crystallography, 35, (2002), pp. 600-605
E. Gómez, T. Sanfeliu and J. Rius
- 149.- *Processing of microporous VPI-5 molecular sieve by using supercritical CO₂: stability and adsorption properties*
Microporous and Mesoporous Materials, 54, (2002), pp. 127-137
J. García-Carmona, M. A. Fanovich, J. Llibre, R. Rodríguez-Clemente and C. Domingo
- 150.- *Thin films of hydroxy-TEMPO-substituted TTF and of its charge-transfer complex with TCNQ*
New Journal of Chemistry, 26, (2002), pp. 915-919
H. Casellas, D. de Caro, L. Valade and J. Fraxedas

- 151.- *Structure investigation of the topmost layer of a thin ordered alumina film grown on NiAl(110) by low temperature scanning tunneling microscopy*
Chemical Physics Letters, 359, (2002), pp. 41-47
G. Ceballos, Z. Song, J.I. Pascual, H.-P. Rust, H. Conrad, M. Bäumer and H.-J. Freund
- 152.- *Adsorption and growth of benzene on Ag(110)*
Surface Science, 502-503, (2002), pp. 1-6
J.I. Pascual, J.J. Jackiw, Z. Song, P.S. Weiss, H. Conrad and H.-P. Rust
- 153.- *Study of adsorption processes of model drugs at supercritical conditions using partial least squares regression*
Analytica Chimica Acta, 452, (2002), pp. 311-319
C. Domingo, J. García-Carmona, M.A. Fanovich and J. Saurina
- 154.- *A new interpretation and practical aspects of the direct-methods modulus sum function. VIII*
Acta Crystallographica, A58, (2002), pp. 21-26
J. Rius, X. Torrelles, C. Miravittles, J.M. Amigó and M.M. Reventós
- 155.- *Optical functions of chalcopyrite $CuGa_xIn_{1-x}Se_2$ alloys*
Applied Physics A: Materials Science & Processing, 74, (2002), pp. 659-664
M.I. Alonso, M. Garriga, C.A. Durante Rincón, E. Hernández and M. León
- 156.- *Real examples of surface reconstructions determined by direct methods*
Journal of Physics: Condensed Matter, 14, (2002), pp. 4075-4086
X. Torrelles, J. Rius, A. Hirnet, W. Moritz, M. Pedio, R. Felici, P. Rudolf, M. Capozzi, F. Boscherini, S. Heun, B.H. Mueller and S. Ferrer
- 157.- *Microscopic and optical investigation of Ge nanoislands on silicon substrates*
Nanotechnology, 13, (2002), pp. 81-85
Z.F. Krasil'nik, P. Lytvyn, D.N. Lobanov, N. Mestres, A.V. Novikov, J. Pascual, M.Ya. Valakh and V.A. Yukhymchuc
- 158.- *Thin Films of Molecular Metals: TTF-TCNQ*
Journal of Solid State Chemistry, 168, (2002), pp. 384-389
J. Fraxedas, S. Molas, A. Figueras, I. Jiménez, R. Gago, P. Auban-Senzier and M. Goffman
- 159.- *Mechanical properties of visible light-cured resins reinforced with hydroxyapatite for dental restoration*
Dental Materials, 18 (1), (2002), pp. 49-57
R. W. Arcís, A. López-Macipe, M. Toledano, E. Osorio, R. Rodríguez-Clemente, J. Murtra, M.A. Fanovich and C. Domingo
- 160.- *Epitaxial growth of AlN on sapphire (0001) by sputtering: a structural, morphological and optical study*
Journal of Crystal Growth, 242, (2002), pp. 116-123
Y. Huttel, H. Gomez, A. Cebollada, G. Armelles and M.I. Alonso
- 161.- *Oxide thin film deposition on eutectic substrates*
Thin Solid Films, 405, (2002), pp. 87-91
J. Santiso, V. Laukhin, G. Garcia, A. Figueras, Ll. Balcells, J. Fontcuberta, J.I. Peña, R.I. Merino and V.M. Orera
- 162.- *Titanium(IV) oxide thin films obtained by a two-step soft-solution method*
Thin Solid Films, 411, (2002), pp. 185-191
A.M. Peiró, E. Vigil, J. Peral, C. Domingo, X. Domènech and J.A. Ayllón
- 163.- *Optical investigation of CdSe/ZnSe quantum nanostructures*
Semiconductor Science and Technology, 17, (2002), pp. 173-177

M.Ya Valakh, S.V. Ivanov, N. Mestres, J. Pascual, T.V. Shubina, S.V. Sorokin, V.V. Streltchuk, G. Pozina, and B. Monemar

- 164.- *Effect of strain and ordering on the band-gap energy of InGaP*
Materials Science and Engineering, B88, (2002), pp. 139-142
J. Novák, S. Hasenöhrl, R. Kúdela, M. Kucera, M.I. Alonso and M. Garriga
- 165.- *Strain-driven alloying: effect on sizes, shape and photoluminescence of GeSi/Si(001) self-assembled islands*
Materials Science and Engineering, B89, (2002), pp. 62-65
A.V. Novikov, B.A. Andreev, N.V. Vostokov, Yu.N. Drozdov, Z.F. Krasilnik, D.N. Lobanov, L.D. Moldavskaya, A.N. Yablonskiy, M. Miura, N. Usami, Y. Shiraki, M.Ya Valakh, N. Mestres and J. Pascual
- 166.- *Thin films of Sr₂FeMoO₆ grown by pulsed laser deposition: preparation and characterization*
Surface and Interface Analysis, 33 (2002), pp. 676-680
J. Santiso, A. Figueras and J. Fraxedas
- 167.- *Miniaturization of a Mössbauer Spectrometer Using a Piezotransducer and a Solid State Detector*
Hyperfine Interactions, 141/142, (2002), pp. 125-129
Ll. Casas, E. Molins and A. Roig
- 168.- *Infrared Investigation of Implantation Damage in 6H-SiC*
Materials Science Forum, Vols. 389-393, (2002), pp. 859-862
J. Camassel, H.Y. Wang, J. Pernot, P. Godignon, N. Mestres and J. Pascual
- 169.- *Highly-Doped Implanted pn Junction for SiC Zener Diode Fabrication*
Materials Science Forum, Vols. 389-393, (2002), pp. 1317-1320
P. Godignon, X. Jordà, R. Nipoti, G. Cardinali and N. Mestres
- 170.- *Thin Single Crystals of Organic Insulators, Metals, and Superconductors by Confined Electrocrystallization*
Advanced Functional Materials, 12 (2), (2002), pp. 123-128
A. Deluzet, S. Perruchas, H. Bengel, P. Batail, S. Molas and J. Fraxedas
- 171.- *Controlled Molecular Alignment in Phthalocyanine Thin Films on Stepped Sapphire Surfaces*
Advanced Functional Materials, 12 (6+7), (2002), pp. 455-460
J.O. Ossó, F. Schreiber, V. Kruppa, H. Dosch, M. Garriga, M.I. Alonso and F. Cerdeira

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

- 172.- *Simple PVC-PPy electrode for pH measurement and titrations*
Analytical and Bioanalytical Chemistry, 372, (2002), pp. 513-518
C. Masalles, S. Borrós, C. Viñas and F. Teixidor
- 173.- *La cristalización: Pasado, presente y futuro*
Boletín Real Sociedad Española Historia Natural (Sec. Geología), 97 (1-4), (2002), pp.17-25
R. Rodríguez, J. Gómez and C. Domingo
- 174.- *Control of the rhombohedral-scalenohedral calcite transition by adjusting the solution electrical conductivity during carbonation of slaked lime*
Chemical Engineering Transactions, 1, (2002), pp. 521-526
J. García, J. Gómez and R. Rodríguez
- 175.- *DELOS crystallization: A novel cost-efficient technique for the production of nano- and micron-sized solid particles of industrial interest*
Chemical Engineering Transactions, 1, (2002), pp. 861-866
N. Ventosa, S. Sala and J. Veciana
- 176.- *Production of stearic acid as crystalline fine powders through the DELOS method. Comparison with a conventional solution crystallization technique*
Chemical Engineering Transactions, 1, (2002), pp. 867-872
S. Sala, N. Ventosa and J. Veciana
- 177.- *Structural study of electrochemically-synthesized $Ag_2Cu_2O_4$. A novel oxide sensitive to irradiation*
Crystal Engineering, 5, (2002), pp. 459-467
D. Munoz-Rojas, J. Fraxedas, J. Oró, P. Gómez-Romero and N. Casañ-Pastor
- 178.- *Novel Cu(III) Bis-1,2-diselenolene complex with a highly extended 3D framework through Na^+ coordination*
Crystal Engineering Communications, 4 (93), (2002), pp. 564-567
X. Ribas, J. Dias, J. Morgado, K. Wurst, M. Almeida, J. Veciana and C. Rovira
- 179.- *Anisotropic optical properties of single crystalline PTCDAs studied by spectroscopic ellipsometry*
Organic Electronics, 3, (2002), pp. 23-31
M.I. Alonso, M. Garriga, N. Karl, J.O. Ossó and F. Schreiber