

4. Publications

4.1. Journals

4.1.1. Published

New Materials and Compounds:

• **Nuclear Solid State Physics Using Ion Beams**

Alfonso, J.E., Martín, M.J., Volkov, V., Zaldo, C., Aguiló, M., da Silva, M.F., Soares, J.C., Photoconductive Bi₁₂MO₂₀-type films prepared by pulsed laser deposition, *J. Mater. Res.* **14** (11) (1999) 4409.

Alves, E., da Silva, M. F., Soares, J. C., Bartels, J., Vianden, R., Abernathy, C.R., Pearton, S. J., RBS lattice site location and damage recovery studies on Er implanted GaN, *MRS Internet J. Nitride Semicond. Res.* **4S1**, G11.2 (1999).

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Alves, L.C., Alves, E., Grime, G.W., Silva, M.F., Soares, J.C., Nuclear Microbeam Study of Advanced Materials for Fusion Reactor Technology, *Nucl. Inst. and Meth.* **B 158** (1999) 671.

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Araújo, J.P., Correia, J.G., Wahl, U., Marques, J.G., Alves, E., Amaral, V.S., Lourenço, A.A., Galindo, V., von Papen, T., Senateur, J.P., Weiss, F., Vantomme, A., Langouche, G. Melo, A.A., da Silva, M.F., Soares, J.C., Sousa, J.B., and ISOLDE Collaboration, Stability studies of Hg implanted YBa₂Cu₃O_{6+x}, *Nucl. Inst. and Meth.* **B 147** (1999) 244.

Araújo, J.P., Correia, J.G., Wahl, U., Marques, J.G., Alves, E., Amaral, V.S., Lourenço, A.A., Galindo, V., von Papen, T., Senateur, J.P., Weiss, F., Vantomme, A., Langouche, G. Melo, A.A., da Silva, M.F., Soares, J.C., Sousa, J.B., and ISOLDE Collaboration, Stability and diffusion of Hg implanted site and stability of Hg implanted YBa₂Cu₃O_{6+x}, *Nucl. Inst. and Meth.* **B 148** (1999) 807.

Barradas, N.P., Smith, R., Simulated annealing analysis of nuclear reaction analysis measurements of polystyrene systems, *J. Phys. D: Appl. Phys.* **32** (1999) 2964-2971.

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- **Condensed Matter Physics**

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- **Solid State Chemistry and Physics**

Arcon, D., Lappas, A., Margadaonna, S., Prassides, K., Ribera, E., Veciana, J., Rovira, C., Henriques, R.T., Almeida, M., Magnetic Behaviour of a Two Leg Organic Spin-Ladder Compound, *Physical Review B* **60** (1999) 4191-4194.

Beierlein, U., Dumas, J., Schlenker, C., Groult, D., Labbé, P., Balthes, E., Steep, E., Bonfait, G., Transport properties and CDW instabilities of the Quasi-Two-dimensionnal Conductors $(\text{PO}_2)_4(\text{WO}_3)_{2m}$ ($m=5$), *Journal de Physique IV*, **9**, 375 (1999).

Belo, D., Morgado, J., Lopes, E.B., Santos, I.C., Gama, V., Henriques, R.T., Almeida, M., Synthesis and Characterization of Charge Transfer Salts based on $\text{Au}(\text{dcdmp})_2$ and TTF type Donors, *Synthetic Metals* **102** (1999) 1751-1752.

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Casaca, A., Bonfait, G., Galindo, V., Sénateur, J.P., Feinberg, D., Angular dependence of the activation energies in YBCO-PBCO multilayers, *Journal of Low Temperature Physics* **117** (5/6) (1999) 1459.

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Martín-Martín, A., Pereira, L. C. J., Dervenagas, P., Lander, G. H., Rebizant, J., Wastin, F., Spirlet, J. C., Neutron-Diffraction Studies of Single Crystals of $\text{U}_2\text{T}_2\text{In}$ ($T = \text{Ni}, \text{Pd}, \text{Pt}$), *Physical Review B* **59** (1999) 11818-11825.

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Environmental Sciences:

• Health and Environmental Studies Using Ion Beam Techniques

Martín, J.E., Garcia-Tenorio, R., Respaldiza, M.A., Ontalba, M.A., Bolivar, J.P., da Silva, M.F., TTPIXE analysis of phosphate rocks and phosphogypsum, *Appl. Rad. Isotopes* **50** (1999) 445-449.

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• **Atmospheric
Elemental
Dispersion**

Freitas, M.C., Reis, M.A., Alves, L.C., Wolterbeek, H. Th., Distribution in Portugal of some pollutants in the lichen *Parmelia sulcata*, *Environmental Pollution* **106** (1999) 229-235.

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• **Environmental
Analytical
Chemistry**

Araújo, M.F., Análise não-destrutiva de um machado por espectrometria de fluorescência de raios-X, dispersiva de energias, in Nótula sobre um "machado" de apêndices encontrado em Vale Branquinho (Sobral do Campo, Castelo Branco), Vilaça, R., Gabriel, S., *Revista Portuguesa de Arqueologia* **2** (1) (1999) 127-142.

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**Inorganic
Chemistry,
Radiochemistry
and
Radiopharmacy:**

• **Inorganic and
Organometallic
Chemistry**

Campello, M. P., Domingos, A., Galvão, A., Pires de Matos, A., Santos, I., Derivative Chemistry of $UCl_2(Bpz_4)_2$: Stability of Complexes Containing the Fragments "U(Bpz₄)₂" and "U(HBpz₃)₂", *J. Organomet. Chem.* **579** (1999) 5-17.

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• **Radiopharmaceutical Development**

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Neves, M., Gano, L., Ribeiro, M.J., Santos, A.C., Marchi, A., Pedroso de Lima J.J., Synthesis, characterization and biodistribution of oxo complexes of technetium-99m with biguanide and N1 substituted ligands, *Nuclear Medicine and Biology* **26** (1999) 79-83.

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4.2. Conference Proceedings

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