

## 2012

Publications in International journals (Includes Proceedings, Books and Book chapters)	135
Publications in International journals	111
Publications in National journals	4
Books and book chapters	14
Proceedings	10
Patents	7
Ph.D. theses	9
Master theses	28

## Publications in International journals

1. Porous and hybrid clay based materials for separation of hydrocarbons  
M.Pinto, J. Pires  
*Microporous and Mesoporous Materials* **2012**, *151*, 403–410  
<http://dx.doi.org/10.1016/j.micromeso.2011.10.002>
2. Synthesis of foam-shaped nanoporous zeolite material: a simple template-based method  
J.Pires, V. Saini  
*Journal of Chemical Education* **2012**, *89*, 276–279  
<http://dx.doi.org/10.1021/ed200191x>
3. Porous clay heterostructures with zirconium for the separation of hydrocarbon mixtures  
M. L. Pinto, J.Marques, J.Pires  
*Separation and Purification Technology* **2012**, *98*, 337-343  
<http://dx.doi.org/10.1016/j.seppur.2012.07.003>
4. Assessment of the binder amount of historical mortars by various techniques  
J. Miranda, A. P. Carvalho, J. Pires  
*Archaeometry* **2012**, *54*, 267-277  
<http://dx.doi.org/10.1111/j.1475-4754.2011.00627.x>
5. Porosity characterization of old Portuguese ceramic tiles  
T. P. Santos, M. F. Vaz, M. L. Pinto, A. P. Carvalho  
*Construction and Building Materials* **2012**, *28*, 104-110  
<http://dx.doi.org/10.1016/j.conbuildmat.2011.08.004>
6. Characterization of the different fractions obtained from the pyrolysis of rope industry waste  
M.Andrade, J. B. Parra, M. Haro, A. S. Mestre, A.P. Carvalho, C.O.Ania  
*Journal of Analytical and Applied Pyrolysis* **2012**, *95*, 31-37  
<http://dx.doi.org/10.1016/j.jaap.2012.01.002>
7. Dual role of copper on the reactivity of activated carbons from coal and lignocellulosic precursors  
M. Haro, B. Ruiz, M. Andrade, A. S. Mestre, J. B. Parra, A. P. Carvalho, C. O. Ania  
*Microporous and Mesoporous Materials* **2012**, *154*, 68-73  
<http://dx.doi.org/10.1016/j.micromeso.2011.07.005>

8. Strategies for copper bis(oxazoline) immobilization onto porous silica based materials  
A.R.Silva, H.Albuquerque, S.Borges, R. Siegel, L. Mafra, A.P.Carvalho, J. Pires  
*Microporous and Mesoporous Materials* **2012**, *158*, 26-38  
<http://dx.doi.org/10.1016/j.micromeso.2012.02.044>
9. Effect of the alcohol cosolvent in the removal of caffeine by activated carbons  
A.S. Mestre, S.C. R. Marques, A. P. Carvalho  
*Industrial & Engineering Chemical Research* **2012**, *51*, 9850-9857  
<http://dx.doi.org/10.1021/ie300695a>
10. Oxidovanadium(IV) acetylacetonate immobilized onto CMK-3 for heterogeneous epoxidation of geraniol  
S. Dorbes, C. Pereira, M. Andrade, D. Barros, A. M. Pereira, S. L. H. Rebelo J. P. Araújo, J. Pires, A. P. Carvalho, C. Freire  
*Microporous and Mesoporous Materials* **2012**, *160*, 67-74  
<http://dx.doi.org/10.1016/j.micromeso.2012.03.041>
11. Pt/carbon materials as bifunctional catalysts for n-decane hydroisomerization  
S.Fernandes, M. Andrade, C. O. Ania, A.Martin, J. Pires, A. P. Carvalho  
*Microporous and Mesoporous Materials* **2012**, *163*, 21-28  
<http://dx.doi.org/10.1016/j.micromeso.2012.06.041>
12. Modification of MCM-22 zeolite through sequential post-synthesis treatments. Implications on the acidic and catalytic behaviour  
V. Machado, J. Rocha, A.P. Carvalho, A. Martins  
*Applied Catalysis A: General* **2012**, *445*, 329-338  
<http://dx.doi.org/10.1016/j.apcat.2012.09.001>
13. Development of a powdered activated carbon in bar adsorptive micro-extraction for the analysis of morphine and codeine in human urine  
F. P. Gonçalves, N. R. Neng, A. S. Mestre, A. P. Carvalho, J. M. F. Nogueira  
*Journal of Chromatographic Science* **2012**, *50*, 574-581  
<http://dx.doi.org/10.1093/chromsci/bms051>
14. Determination of the heat effects involved during toluene vapor adsorption and desorption from microporous activated carbon  
T. Chafik, A. Darir, O. Achak, A. P. Carvalho, J. Pires  
*Comptes Rendus Chimie* **2012**, *15*, 474-481  
<http://dx.doi.org/10.1016/j.crci.2012.04.001>
15. A new cloning system based on the OprI lipoprotein for the production of recombinant bacterial cell wall-derived immunogenic formulations.  
A.P. Basto, J. Piedade, R. Ramalho, S. Alves, H. Soares, P. Cornelis, C. Martins, A. Leitão.  
*Journal of Biotechnology* **2012**, *157*, 50-63  
<http://dx.doi.org/10.1016/j.jbiotec.2011.11.006>

16. Mob1: defining cell polarity for proper cell division  
A.Tavares, J. Gonçalves, C. Florindo, A. Tavares, H. Soares  
*Journal of Cell Science* **2012**, *125*, 516-527  
<http://dx.doi.org/10.1242/jcs.096610>
17. The plasma membrane-enriched fraction proteome response during adaptation to hydrogen peroxide in *Saccharomyces cerevisiae*  
N. Pedroso, P. Gomes-Alves, H.S. Marinho, V.B. Brito, C. Boada, F. Antunes, E. Herrero, D. Penque, L. Cyrne  
*Free Radical Research* **2012**, *46*, 1267-1279  
<http://dx.doi.org/10.3109/10715762.2012.704997>
18. Biophysical properties of ergosterol-enriched lipid rafts in yeast and tools for their study: characterization of ergosterol/phosphatidylcholine membranes with three fluorescent membrane probes  
A.E.P. Bastos, H.S. Marinho, A.M. Cordeiro, A.M. Soure, R.F.M. de Almeida  
*Chemistry and Physics of Lipids* **2012**, *165*, 577-288  
<http://dx.doi.org/10.1016/j.chemphyslip.2012.06.002>
19. Cytotoxic effects of N'-formyl-2-(5-nitrothiophen-2-yl)benzothiazole-6-carbohydrazide in human breast tumor cells by Induction of oxidative stress  
J.R. Rodrigues, J. Charris, J. Camacho, A. Barazarte, N. Gamboa, F. Antunes  
*Anticancer Research* **2012**, *32*, 2721-2726  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84865692576&partnerID=MN8TOARS>
20. *Theoretical analysis of the kinetic performance of laboratory- and full-scale composting systems*  
M. Baptista, A. Silveira, F. Antunes  
*Waste Management Res.* **2012**, *30*, 700-707  
<http://dx.doi.org/10.1177/0734242X11433528>
21. The Expression of Tubulin Cofactor A (TBCA) Is Regulated by a Noncoding Antisense TbcA RNA during Testis Maturation  
S. Nolasco, J. Bellido, J. Gonçalves, A. Tavares, J.C. Zabala, H. Soares  
*PLoS One*, **2012**;7(8):e42536  
<http://dx.doi.org/10.1371/journal.pone.0042536>
22. Environmentally friendly approaches to the synthesis of new antibiotics from sugars  
N. M. Xavier, A. P. Rauter  
*Journal of Pure and Applied Chemistry* **2012**, *84*(3), 803-816  
<http://dx.doi.org/10.1351.PAC-CON-11-11-11>
23. Extraction of Volatile Oil from Aromatic Plants with Supercritical Carbon Dioxide: Experiments and Modeling  
J. P. Coelho, A. F. Cristino, P. G. Matos, A. P. Rauter, B. P. Nobre, R. L. Mendes, J. G. Barroso, A. Mainar, J. S. Urieta, J.M. N. A. Fareleira, H. Sovova, A. F. Palavra  
*Molecules* **2012**, *17*(9), 10550-10573  
<http://dx.doi.org/10.3390/molecules170910550>

24. Microalgae of different phyla display antioxidant, metal chelating and acetylcholinesterase inhibitory activities  
L. Custodio, T. Justo, L. Silvestre, A. Barradas, C. V. Duarte, H. Pereira, L. Barreira, A. P. Rauter, F. Albericio, J. Varela  
*Food Chemistry* **2012**, 131(1), 134-140  
<http://dx.doi.org/10.1016/j.foodchem.2011.08.047>
25. Non-toxic *Salviasclareoides* Brot. extracts as a source of functional food ingredients: phenolic profile, antioxidant activity and prion binding properties.  
A.P. Rauter, C. Dias, A. Martins, I. Branco, N. R. Neng, J. M. Nogueira, M. Goulart, F. V.M. Silva, J. Justino, C. Trevitt, J. P. Waltho  
*Food Chemistry* **2012**, 132(4), 1930-1935  
<http://dx.doi.org/10.1016/j.foodchem.2011.12.028>
26. The marine halophytes *Carpobrotus edulis* L. and *Arthrocnemum macrostachyum* L. are potential sources of nutritionally important PUFAs and metabolites with antioxidant, metal chelating and anticholinesterase inhibitory activities  
L. Custodio, A. C. Ferreira, H. Pereira, L. Silvestre, C. Vizetto-Duarte, L. Barreira, A. P. Rauter, F. Albericio, J. Varela  
*Botanica Marina*, **2012**, 55(3), 281-288  
<http://dx.doi.org/10.1515/bot-2012-0098>
27. Facile synthesis of oxo-/thioxopyrimidines and tetrazoles C-C linked to sugars as novel non-toxic antioxidant acetylcholinesterase inhibitors  
J. A. Figueiredo, M. I. Ismael, J. M. Pinheiro, A. M. S. Silva, J. Justino, F. M. S. Silva, M. Goulart, D. Mira, M. E. M. Araújo, R. Campoy, A. P. Rauter  
*Carbohydr. Res.* **2012**, 347(1), 47-54  
<http://dx.doi.org/10.1016/j.carres.2011.11.006>
28. Acidity and Hydrophobicity of Several New Potential Antitubercular Drugs: Isoniazid and Benzimidazole Derivatives.  
C. Rafols, E. Bosh, R. Ruiz, K. J. Box, M. Reis, C. Ventura, S. Santos, M. E. M. Araújo, F. Martins.  
*Journal of Chemical and Engineering Data* **2012**, 57, 330–338  
<http://dx.doi.org/10.1021/je200827u>
29. Polyphenols as Acetylcholinesterase Inhibitors. Structural specificity and impact on human disease  
L. B. Roseiro, A. P. Rauter, M. L. M. Serralheiro.  
*Nutrition & Aging* **2012**, 1(2), 99-111  
<http://dx.doi.org/10.3233/NUA-2012-0006>
30. Acetylcholinesterase inhibition, antioxidant activity and toxicity of *Peumus boldus* water extracts on HeLa and Caco-2 cell lines  
P. L. Falé, F. Amaral, P. J. Amorim Madeira, M. Sousa Silva, M. H. Florêncio, F. N. Frazão, M.L.M. Serralheiro  
*Food Chem. Toxicol.* **2012**, 50, 2656–2662  
<http://dx.doi.org/10.1016/j.fct.2012.04.049>
31. Reactions of aminoguanidine with  $\alpha$ -dicarbonyl compounds studied by electrospray ionization mass spectrometry.  
M. A. Saraiva, C. M. Borges, M. H. Florêncio  
*Eur. J. Mass Spectrom.* **2012**, 18, 385-97  
<http://dx.doi.org/10.1255/ejms.1191>

32. The versatility of immobilized Mo complexes in organic transformations – epoxidation and metathesis reactions  
P. D. Vaz, C. D. Nunes  
*Curr. Org. Chem.* **2012**, *16*, 89-114  
<http://dx.doi.org/10.2174/138527212798993176>
33. Photocatalytic degradation of rhodamine B using Mo heterogeneous catalysts under aerobic conditions  
N. U. Silva, T. G. Nunes, M. S. Saraiva, M. S. Shalamzari, P. D. Vaz, O. C. Monteiro, C. D. Nunes  
*Applied Catal. B: Environm.* **2012**, *113-114*, 180-191  
<http://dx.doi.org/10.1016/j.apcatb.2011.11.036>
34. Marine sponge melanin: a new source of an old biopolymer  
M. Araújo, J. R. Xavier, C. D. Nunes, P. D. Vaz, M. Humanes  
*Struct. Chem.* **2012**, *23*, 115-122  
<http://dx.doi.org/10.1007/s11224-011-9843-7>
35. Structural preferences and isomerism in nickel(II) and copper(II) complexes with 3 hydroxypicolinic acid  
B.-M. Kukovec, P. D. Vaz, M. J. Calhorda, Z. Popović  
*Polyhedron* **2012**, *39*, 66-75  
<http://dx.doi.org/10.1016/j.poly.2012.03.040>
36. A new Mo(II) functionalized oligosilsesquioxane  
N. L. Dias Filho, F. C. M. Portugal, J. M. F. Nogueira, P. Brandão, V. Felix, P. D. Vaz, C. D. Nunes, L. F. Veiros, M. J. Villa de Brito, M. J. Calhorda  
*Organometallics* **2012**, *31*, 4495-4503  
<http://dx.doi.org/10.1021/om3003043>
37. Clays in organic synthesis – preparation and catalytic applications  
C. I. Fernandes, C. D. Nunes, P. D. Vaz  
*Curr. Org. Synth.* **2012**, *9*, 670-694  
<http://dx.doi.org/10.2174/157017912803251756>
38. Exploring C–H...O hydrogen bonds in dihydrocoumarin from combined vibrational spectroscopy and DFT calculations  
Mariela M. Nolasco, Patrícia M. Vaz, Pedro D. Vaz, Paulo J.A. Ribeiro-Claro  
*ChemPhys Lett*, *551*, **2012**, 86–91  
<http://dx.doi.org/10.1016/j.cplett.2012.09.032>
39. Valid internal standard technique for arson detection based on GC-MS  
P. A. S. Salgueiro, C. M. F. S. Borges, R. J. N. Bettencourt da Silva  
*J. Chromatogr. A* **2012**, *1257*, 189-194  
<http://dx.doi.org/10.1016/j.chroma.2012.08.015>
40. Optimization of time-course experiments for kinetic model discrimination.  
N.F. Lages, C. Cordeiro, M. Sousa Silva, A. Ponces Freire, A. E. N. Ferreira  
*PLoS One* **2012**, *7(3)*: e32749  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0032749>

41. The glyoxalase pathway in protozoan parasites  
M. Sousa Silva, A. Ferreira, R. Gomes, A. Tomas, A. Ponces Freire, C. Cordeiro  
*International Journal of Medical Microbiology* **2012**, *302*, 225-229  
*Special issue "Molecular Principles of Parasitism" (Invited review)*  
<http://www.sciencedirect.com/science/article/pii/S1438422112000331>
42. The proteome response to amyloid protein expression in vivo.  
R. A. Gomes, C. Franco, G. Da Costa, S. Planchon, J. Renaut, F. Pinto, M. Sousa Silva, A. V.Coelho, A. Ponces Freire, C. Cordeiro  
*PLoS One*, **2012**, *7(11)*: e50123  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0050123>
43. Capsular Complexes of Nonpolar Guests with Octa Amine Host Detected in the Gas Phase  
J. P. Da Silva, R. Kulasekharan, C. Cordeiro, S. Jockusch, N. J. Turro, V. Ramamurthy,  
*Organic Letters* **2012**, *14(2)*, 560-563  
<http://pubs.acs.org/doi/abs/10.1021/ol203139v>
44. alpha-Synuclein aggregation in the saliva of familial transthyretin amyloidosis: a potential biomarker  
A.Guerreiro, G. da Costa, R. A. Gomes, C. Ribeiro-Silva, S. Gilberto, E. Mateus, E.Monteiro, E. Barroso, A. V. Coelho, A. P. Freire, C. Cordeiro  
*Amyloid* **2012**, *19(2)*, 74-80  
<http://informahealthcare.com/doi/abs/10.3109/13506129.2012.668500>
45. Iminoboronates: a new strategy for reversible protein modification.  
P. M. Cal, J. B. Vicente, E. Pires, A. V. Coelho, L. F. Veiros, C. Cordeiro, P. M. Gois  
*Journal of the American Chemical Society* **2012**, *134(24)*, 10299-305  
<http://pubs.acs.org/doi/abs/10.1021/ja303436y>
46. Group A streptococci clones associated with invasive infections and pharyngitis in Portugal present differences in emm types, superantigen gene content and antimicrobial resistance.  
Friaes, F. R. Pinto, C. Silva-Costa, M. Ramirez, J. Melo-Cristino  
*BMC Microbiology* **2012**, *12(1)*, 280  
<http://www.biomedcentral.com/content/pdf/1471-2180-12-280.pdf>
47. Decrease in Pneumococcal Co-Colonization following Vaccination with the Seven-Valent Pneumococcal Conjugate Vaccine.  
C. Valente, J. Hinds, F. Pinto, S. D. Brugger, K. Gould, K. Muhlemann, H. de Lencastre, R. Sa-Leão  
*PLoS One* **2012**, *7(1)*, e30235  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0030235>
48. PD-1 and its ligand PD-L1 are progressively up-regulated on CD4 and CD8 T-cells in HIV-2 infection irrespective of the presence of viremia  
R. Tendeiro, R. B. Foxall, A. P. Baptista, F. Pinto, R. S. Soares, R. Cavaleiro, E. Valadas, P. Gomes, R. M. M. Victorino, A. E. Sousa  
*AIDS* **2012**, *26(9)*, 1065-1071  
<http://journals.lww.com/aidsonline/pages/articleviewer.aspx?year=2012&issue=06010&article=00002&type=abstract>

49. Mining GO annotations for improving annotation consistency  
D. Faria, A. Schlicker, C. Pesquita, H. Bastos, A. E. Ferreira, M. Albrecht, A. O. Falção  
*PLoS One* **2012**, 7(7), e40519  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0040519>
50. Hydroxy(thio)pyrone and hydroxy(thio)pyridinone iron chelators: physico-chemical properties and anti-oxidant activity  
S. Chaves, S. Canario, M. P. Carrasco, L. Mira, M. A. Santos  
*Journal of Inorganic Biochemistry* **2012**, 114, 38-46  
DOI:10.1016/j.jinorgbio.2012.04.019  
<http://www.sciencedirect.com/science/article/pii/S0162013412001390>
51. Elemental Composition of Four Farmed Fish Produced In Portugal  
H. M. Lourenço, C. Afonso, P. Anacleto, M.F. Martins, M.L. Nunes, A.R. Lino  
*International Journal of Food Science and Nutrition* **2012**, 63, 853-859  
DOI: 10.3109/09637486.2012.681632  
<http://informahealthcare.com/doi/abs/10.3109/09637486.2012.681632>
52. Interaction Between *Plectranthus barbatus* Herbal Tea Components and Acetylcholinesterase: Binding and Activity Studies  
P.L.V. Falé, L. Ascensão, M.L.M. Serralheiro, P. Haris  
*Food and Function* **2012**, 3, 1176-1184  
DOI: 10.1039/C2FO30032J
53. Unveiling the Mechanisms of Catalytic Oxidation Reactions Mediated by Oxo- Molybdenum Complexes: A Computational Overview  
M. J. Calhorda, P. J. Costa  
*Curr. Org. Chem.* **2012**, 16, 65-72  
<http://dx.doi.org/10.2174/138527212798993095>
54. Evaluation of the binding ability of tetraaza[2]arene[2]triazine receptors anchoring Lalanine units for aromatic carboxylate anions  
A.I. Vicente, J. M. Caio, J. Sardinha, C. Moiteiro, R. Delgado, V. Felix  
*Tetrahedron* **2012**, 68, 670-680  
<http://dx.doi.org/10.1016/j.tet.2011.10.090>
55. Pharmacophore insights into rpoB gene mutations in *Mycobacterium tuberculosis* rifampicin resistant isolates  
R. Figueiredo, D. F. Ramos, C. Moiteiro, M. A. Medeiros, M. J. Marcelo Curto, J. C. Menezes, R. H. Pando, P. E. A. Silva, M. C. Costa  
*European Journal of Medicinal Chemistry* **2012**, 47, 186-193  
<http://dx.doi.org/10.1016/j.ejmech.2011.10.041>
56. Turning the game around: toxicity in a nudibranch-sponge predator-prey association  
J. Cruz, H. Gaspar, G. Calado  
*Chemoecology* **2012**, 22, 47-53  
<http://dx.doi.org/10.1007/s00049-011-0097-z>

57. Electronic structure and properties of camphorimine Cu(I) coordination polymers  
M. F. N. N. Carvalho, T. A. Fernandes, A. M. Galvão, N. A. G. Bandeira, M. J. Calhorda, A. M. Botelho do Rego  
*J. Pol. Sci. Part A: Pol. Chem.* **2012**, *50*, 1102-1110  
<http://dx.doi.org/10.1002/pola.25866>
58. Reversibility of Prion Misfolding: Insights from Constant-pH Molecular Dynamics Simulations.  
D. Vila-Vicosa, S.R.R. Campos, A.M. Baptista, M. Machuqueiro  
*J. Phys. Chem. B* **2012**, *116*, 8812-8821  
<http://dx.doi.org/10.1021/jp3034837>
59. Carbon/Nutrien balance in relation to biomass production and halogenated compounds content in the read alga *Asparagopsis taxiformis* (Bonnemaisoniaceae)  
L. Mata, H. Gaspar, R. Santos  
*Journal of Applied Phycology*, **2012**, *48*, 248-253  
<http://dx.doi.org/10.1111/j.1529-8817.2011.01083.x>
60. Syntheses and photophysical properties of new iminopyrrolyl boron complexes and their application in efficient single-layer non-doped OLEDs prepared by spin coating  
D. Suresh, C. S. B. Gomes, P. T. Gomes, R. E. Di Paolo, A. L. Macanita, M. J. Calhorda, A. Charas, J. Morgado and M. T. Duarte  
*Dalton Trans.* **2012**, *41*, 8502–8505  
<http://dx.doi.org/10.1039/C2DT30487B>
61. 1,1'-Bis(diphenylphosphino)ferrocene bridging two mono(cyclopentadienyl) cobalt moieties: synthesis, structure, electrochemistry and DFT studies  
V. Rosa, S. Realista, A. Mourato, L. M. Abrantes, J. Henriques, M. J. Calhorda, T. Aviles, M. G. B. Drew, V. Felix  
*J. Organomet. Chem.* **2012**, *712*, 52-56  
<http://dx.doi.org/10.1016/j.jorganchem.2012.04.012>
62. Electronic structure of ytterbium bis -indenyl and -cyclopentadienyl  $\alpha$ -diimines complexes: a DFT and MS-CASPT2 investigation  
N. A. G. Bandeira, C. Daniel, A. Trifonov, M. J. Calhorda  
*Organometallics* **2012**, *31*, 4693–4700  
<http://dx.doi.org/10.1021/om300081j>
63. Photophysical properties of iminopyrrolyl boron complexes: a DFT interpretation  
M. J. Calhorda, D. Suresh, P. T. Gomes, R. E. Di Paolo, A. L. Macanita  
*Dalton Trans.* **2012**, *41*, 13210 – 13217  
<http://dx.doi.org/10.1039/C2DT31104F>
64. Cooperative spin transition in a mononuclear Mn(III) complex  
P. N. Martinho, B. Gildea, M. M. Harris, T. Lemma, A. D. Naik, H. Muller-Bunz, T. E. Keyes, Y. Garcia, G. G. Morgan  
*Angew. Chem. Int. Ed.*, **2012**, *51*, 11995-11999  
<http://dx.doi.org/10.1002/anie.201205573>



65. Template assembly of spin crossover 1D nanowires  
P. N. Martinho, T. Lemma, G. Picardi, B. Gildea, R. J. Forster, T. E. Keyes, G. Redmond, G. G. Morgan  
*Angew. Chem. Int. Ed.*, **2012**, *51*, 12597-12601  
<http://dx.doi.org/10.1002/anie.201205122>
66. Inducing hysteretic spin crossover in solution  
P. N. Martinho, Y. Ortin, B. Gildea, C. Gandolfi, G. McKerr, B. O'Hagan, M. Albrecht, G. G. Morgan  
*Dalton Trans.* **2012**, *41*, 7461-7463  
<http://dx.doi.org/10.1039/C2DT12036D>
67. Molecular Interaction of Rifabutin on Model Lung Surfactant Monolayers  
M. Pinheiro, M. Lucio, S. Reis, J. L.F.C. Lima, J. M. Caio, C. Moiteiro, M. T. Martin-Romero, L. Camacho, J. J. Giner-Casares  
*J. Phys. Chem. B* **2012**, *116*, 11635-11645  
<http://dx.doi.org/10.1021/jp303725j>
68. Biomimetic membrane rafts stably supported on unmodified gold  
J. T Marques, R. F. M de Almeida., A. S. Viana  
*Soft Matter* **2012**, *8*, 2007-2016  
<http://dx.doi.org/10.1039/c2sm06738b>
69. Electrocrystallisation of (Perylene)<sub>2</sub> [Pd(mnt)<sub>2</sub>]  
M L. Afonso, R. A. Silva, L. C. Pereira, R. R. Freitas, E. B. Lopes, M. Matos, R. T. Henriques, A. S. Viana, M. Almeida.  
*Physica Status Solidi c* **2012**, *9*, 1123-1126  
<http://dx.doi.org/10.1002/pssc.201100632>
70. Self-assembled Monolayers of MetalloPorphyrin and n-Alkane Phosphonates on electrochemically modified HOPG  
J. F. Cabrita, A. S. Viana, A. Mourato, Franz-Peter Montforts, L. M. Abrantes.  
*Catalysis Today* **2012**, *187*, 70-76  
<http://dx.doi.org/10.1016/j.cattod.2011.11.015>
71. Ferromagnetic order in aged Co-doped TiO<sub>2</sub> anatase nanopowders  
A.J. Silvestre, L.C.J. Pereira, M.R. Nunes, O.C. Monteiro,  
*Journal of Nanoscience and Nanotechnology* **2012**, *12*, 6850-6854  
<http://dx.doi.org/10.1166/jnn.2012.4550>
72. Synthesis of titanate nanostructures using amorphous precursor material and their adsorption/photocatalytic properties  
E.K. Ylhainen, M.R. Nunes, A.J. Silvestre, O.C. Monteiro  
*Journal of Materials Science* **2012**, *47*, 4305-4312  
<http://dx.doi.org/10.1007/s10853-012-6281-x>
73. Synthesis of nanocrystalline ZnS using biologically generated sulfide  
J. P. da Costa, A. V. Girão, J. P. Lourenço, O. C. Monteiro, T. Trindade, M. C. Costa  
*Hydrometallurgy* **2012**, *117*, 57-63  
<http://dx.doi.org/10.1016/j.hydromet.2012.02.005>

74. Influence of the sodium/proton replacement on the structural, morphological and photocatalytic properties of titanate nanotubes  
V. Bem, M. C. Neves, M. R. Nunes, A. J. Silvestre, O. C. Monteiro  
*Journal of Photochemistry and Photobiology A - Chemistry* **2012**, 232, 50-56  
<http://dx.doi.org/10.1016/j.jphotochem.2012.02.002>
75. Synthesis, optical, and photocatalytic properties of a new visible-light-active ZnFe<sub>2</sub>O<sub>4</sub>-TiO<sub>2</sub> nanocomposite material  
E. Moreira, L. A. Fraga, M. H. Mendonca, O.C. Monteiro  
*Journal of Nanoparticle Research* **2012**, 14, No 937,  
<http://dx.doi.org/10.1007/s11051-012-0937-y>
76. Electrochemical mineralization of anaerobically digested olive mill wastewater  
M. R. Gonçalves, I. P. Marques, J. P. Correia  
*Water Research* **2012**, 46, 4217-4225  
<http://dx.doi.org/10.1016/j.watres.2012.05.019>
77. One-pot approach for amine deposition on nanostructured gold through in situ dithiocarbamate linkages  
Almeida, V. C. Ferreira, M. F. Montemor, L. M. Abrantes, A. S. Viana,  
*Electrochimica Acta* **2012**, 833, 11-320  
<http://dx.doi.org/10.1016/j.electacta.2012.08.021>
78. Polyelectrolyte-assisted noncovalent functionalization of carbon nanotubes with ordered self-assemblies of a water-soluble porphyrin  
S. M. Andrade, P. Raja, V.K. Saini, A. S. Viana, P. Serp, S. M. Costa  
*Chemphyschem* **2012**, 13, 3622-3631.  
<http://dx.doi.org/10.1002/cphc.201200428>
79. Antibody Oriented Immobilization on Gold using the Reaction between Carbon Disulfide and Amine and Its Application in Immunosensing  
Y. Niu, A. I. Matos, L. M. Abrantes, A. S. Viana, G. Jin  
*Langmuir* **2012**, 28, 17718–17725  
<http://dx.doi.org/10.1021/la303032f>
80. Metal insertion into phosphonic acid terminated porphyrins immobilized on TiO<sub>2</sub> electrodes  
M. Erbacher, A. S. Viana, L. M. Abrantes, F.-P. Montforts  
*Journal of Porphyrins and Phtalocyanins* **2012**, 16, 351–358  
DOI: 10.1142/S1088424612500411
81. Applications of fluorescence lifetime spectroscopy and imaging to lipid domains in vivo.  
A.E. P. Bastos, S. Scolari, M. Stockl, R. F. M. de Almeida.  
*Methods Enzymol.* **2012**, 504, 57-81.  
<http://dx.doi.org/10.1016/B978-0-12-391857-4.00003-3>

82. The photophysics of a Rhodamine head labeled phospholipid in the identification and characterization of membrane lipid phases.  
B. M. Castro, R. F. M. de Almeida, A. Fedorov, M. Prieto.  
*Chem. Phys. Lipids* **2012**, *165*, 311-319.  
<http://dx.doi.org/10.1016/j.chemphyslip.2012.02.007>
83. [RuII(h5-C5H5)(bipy)(PPh3)]+, a promising large spectrum antitumor agent: cytotoxic activity and interaction with Human Serum Albumin  
A.I. Tomaz, T. Jakusch, T. S. Morais, F. Marques, R. F. M. de Almeida, F. Mendes, E. A. Enyedy, I. Santos, J. Costa Pessoa, T. Kiss, M. H. Garcia.  
*J. Inorg. Biochem.* **2012**, *117*, 261-269.  
<http://dx.doi.org/10.1016/j.jinorgbio.2012.06.016>
84. Solubility of Nicotinic Acid in Water, Ethanol, Acetone, Diethyl ether, Acetonitrile, and Dimethyl Sulfoxide  
E. M. Gonçalves, M. E. Minas da Piedade  
*Journal of Chemical Thermodynamics* **2012**, *47*, 362-371  
<http://dx.doi.org/10.1016/j.jct.2011.11.023>
85. A General Strategy for the Experimental Study of the Thermochemistry of Protic Ionic Liquids: Enthalpy of Formation and Vaporisation of 1-Methylimidazolium Ethanoate  
J. Vitorino, C. E. S. Bernardes, M. E. Minas da Piedade  
*Physical Chemistry Chemical Physics* **2012**, *14*, 4440-4446  
<http://dx.doi.org/10.1039/C2CP40213K>
86. Direct Experimental Observation of the Aggregation of Dipolar Organic Molecules Into 100-200 nm Clusters in Aqueous Solution  
D. Hagemeyer, J. Ruesing, T. Fenske, H.-W. Klein, C. Schmuck, W. Schrader, M. E. Minas da Piedade, M. Eppl  
*RSC Advances* **2012**, *2*, 4690-4696  
<http://dx.doi.org/10.1039/c2ra01352e>
87. Polymorphism in 4'-Hydroxyacetophenone: A Molecular Dynamics Simulation Study  
C. E. S. Bernardes, M. E. Minas da Piedade, J. N. Canongia Lopes  
*Journal of Physical Chemistry B* **2012**, *116*, 5179-5184  
<http://dx.doi.org/10.1021/jp300341f>
88. Crystallization of 4'-Hydroxyacetophenone from Water: Control of Polymorphism via Phase Diagram Studies  
C. E. S. Bernardes, M. E. Minas da Piedade  
*Crystal Growth & Design* **2012**, *12*, 2932-2941  
<http://dx.doi.org/10.1021/cg300134z>
89. Heat Capacity and Thermodynamics of Solid and Liquid Pyridine-3-carboxylic Acid (Nicotinic Acid) in the Temperature Range 296 K to 531 K  
A. Joseph, C. E. S. Bernardes, M. E. Minas da Piedade  
*Journal of Chemical Thermodynamics* **2012**, *55*, 23-28  
<http://dx.doi.org/10.1016/j.jct.2012.06.010>

90. Characterization of PE-g-HEMA Films Prepared by Gamma Irradiation Through Nuclear Microprobe Techniques  
L. M. Ferreira, J. P. Leal, P. A. Rodrigues, L. C. Alves, A. N. Falção, M. H. Gil  
*Radiation Physics and Chemistry* **2012**, *81*, 1319-1323  
<http://dx.doi.org/10.1016/j.radphyschem.2012.01.045>
91. Catalytic Oxidation of Methane on KCl-MCl<sub>x</sub> (M=Li, Mg, Co, Cu, Zn) Eutectic Molten Salts.  
G. Lopes, A. C. Ferreira, J. P. Leal, J. B. Branco  
*Journal of Molecular Liquids* **2012**, *171*, 1-5  
<http://dx.doi.org/10.1016/j.molliq.2012.04.001>
92. A Review on Prediction Methods for Molar Enthalpies of Vaporization of Hydrocarbons: The ELBA Method as the Best Answer  
R. C. Santos, J. P. Leal  
*Journal of Physical and Chemical Reference Data* **2012**, *41*, 043101  
<http://dx.doi.org/10.1063/1.4754596>
93. Static Headspace Analysis using Polyurethane Phases - Application to roasted coffee volatiles characterization  
C. Rodrigues, F.C.M. Portugal, J.M.F. Nogueira  
*Talanta*, **2012**, *89*, 521-525  
<http://dx.doi.org/10.1016/j.talanta.2011.12.010>
94. Recovery of High Purity Plumbagin from *Drosera intermedia*  
T. Grevenstuk, S. Gonçalves, J.M.F. Nogueira, M.G. Bernardo-Gil, A. Romano  
*Industrial Crops and Products* **2012**, *35*, 257-260  
<http://dx.doi.org/10.1016/j.indcrop.2011.07.003>
95. Extração sortive em barra de agitação (SBSE): uma metodologia inovadora para microextração estática.  
J.M.F. Nogueira  
*Scientia Chromatographica* 4(4), 2012, 1-11.  
DOI: 10.4322/sc.2012.019
96. Phenol Electrooxidation on Fe-Co<sub>3</sub>O<sub>4</sub> Thin Film Electrodes in Alkaline Medium  
M.A.M. Cartaxo, K. Ablad, J. Douch, Y. Berghoute, M. Hamdani, M. H. Mendonca, J.M.F. Nogueira, M.I.S. Pereira  
*Chemosphere*, **2012**, *86*, 341-347.  
<http://dx.doi.org/10.1016/j.chemosphere.2011.09.040>
97. European Pennyroyal (*Mentha pulegium*) from Portugal: Chemical composition of essential oil and antioxidant and antimicrobial properties of extracts and essential oil  
B. Teixeira, A. Marques, C. Ramos, I. Batista, C. Serrano, O. Matos, N.R. Neng, J.M.F. Nogueira, J.A. Saraiva, M.L. Nunes  
*Industrial Crops and Products* **2012**, *36*, 81-87.  
<http://dx.doi.org/10.1016/j.indcrop.2011.08.011>

98. Development of a Bar Adsorptive Micro-extraction-Large Volume Injection-Gas Chromatography-Mass Spectrometric Method for Pharmaceuticals and Personal Care Products in Environmental Water Matrices  
N.R. Neng, J.M.F. Nogueira  
*Analytical and Bioanalytical Chemistry* **2012**, *402*, 1355-1364.  
<http://dx.doi.org/10.1007/s00216-011-5515-0>
99. Combining Stir Bar Sorptive Extraction and Large Volume Injection-Gas Chromatography-Mass Spectrometry for the Determination of Benzotriazole UV Stabilizers in Wastewater Matrices  
Carpinteiro, M. Ramil, I. Rodriguez, J.M.F. Nogueira  
*Journal of Separation Science* **2012**, *35*, 459-467  
<http://dx.doi.org/10.1002/jssc.201100448>
100. Antioxidant and Antibacterial Activity of Essential Oil and Extracts of Bay Laurel *Laurus nobilis* Linnaeus (Lauraceae) from Portugal  
C. Ramos, B. Teixeira, I. Batista, O. Matos, C. Serrano, N.R. Neng, J.M.F. Nogueira, M.L. Nunes, A. Marques  
*Natural Product Research* **2012**, *26*, 518-529.  
<http://dx.doi.org/10.1080/14786419.2010.531478>
101. Anticholinesterasic and Antioxidant Activity of Essential Oils from *Hedychium gardnerianum* Sheppard ex Ker-Gawl  
M. Arruda, H. Viana, N. Rainha, N.R. Neng, J. Rosa, J.M.F. Nogueira, M.C. Barreto  
*Molecules* **2012**, *17*, 3082-3092  
<http://dx.doi.org/10.3390/molecules17033082>
102. Novel Sorption-Based Methodologies for Static Microextraction Analysis: A review on SBSE and related techniques  
J.M.F. Nogueira  
*Analytical Chimica Acta* **2012**, *757*, 1-10  
<http://dx.doi.org/10.1016/j.aca.2012.10.033>
103. Comparison of the Selectivity of Different Sorbent Phases for Bar Adsorptive Microextraction (BA $\mu$ E) - Application to trace level analysis of fungicides in real matrices  
C. Almeida, J.M.F. Nogueira  
*Journal of Chromatography A* **2012**, *1265*, 7-16  
<http://dx.doi.org/10.1016/j.chroma.2012.09.047>
104. Ultrasound Speeds and Molar Isentropic Compressions of Aqueous 1-Propoxypropan-2- ol Mixtures from T=283.15 to 303.15)K. Influence of Solute Structure.  
M.S. Lampreia, A.F.S. Santos, M.L.C.J. Moita, A.O.Figueiras  
*Journal of Chemical Thermodynamics* **2012**, *45*, 75-82  
<http://dx.doi.org/10.1016/j.jct.2011.09.008>
105. Solution Enthalpies of Hydroxylic Compounds: Study of Solvent Effects Through Quantitative Structure Property Relationships.  
M. Reis, L. Moreira, N. Nunes, R. Leitão, F. Martins  
*Journal of Thermal Analysis and Calorimetry* **2012**, *108*, 761-767  
<http://dx.doi.org/10.1007/s10973-011-1975-x>

106. Silver (I) Activated Quaternization of Tertiary Amines by Alkyl Iodides: Overall Analysis Coupling Homogeneous and Heterogeneous Processes.  
M. Soledade C. S. Santos and Ester F. G. Barbosa  
*Journal of Molecular Catalysis: A-Chemical* **2012**, *356*, 106-113  
<http://dx.doi.org/10.1016/j.molcata.2011.12.031>
107. Densities and refractive indices for the ternary mixture methanol/propan-1-ol/acetonitrile.  
F. Martins, R. Elvas Leitão, M. C. Ventura, L. Pinheiro, N. Nunes.  
*Journal of Molecular Liquids* **2012**, *170*, 30-36  
<http://dx.doi.org/10.1016/j.molliq.2012.03.015>
108. Volumetric study of (3-ethoxypropan-1-amine + water) mixtures between (283.15 and 303.15)K  
M. L. C. J. Moita, L. M. V. Pinheiro, A. F. S. Santos, I. M. S. Lampreia  
*Journal of Chemical & Engineering Data* **2012**, *57*, 2290–2295  
<http://dx.doi.org/10.1021/je3003578>
109. Polarity of Some [NR<sub>1</sub>R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>]<sup>+</sup>[Tf<sub>2</sub>N]<sup>-</sup> Ionic Liquids in Ethanol: Preferential Solvation versus Solvent–Solvent Interactions.  
M. L. C. J. Moita, A. F.S. Santos, J.F.C.C. Silva, I.M.S. Lampreia  
*Journal of Chemical & Engineering Data* **2012**, *57*, 2702-2709  
<http://dx.doi.org/10.1021/je300563k>
110. Dipole moments of isomeric alkoxyalcohols in cyclohexane. Comparison of Hedestrand and Frohlich procedures with a new formula  
T. P. Iglesias, A. F. S. Santos, F. J. V. Santos, M. L. C. J. Moita, I. M. S. Lampreia, J. C. R. Reis  
*PhysChemChemPhys*. **2012**, *14*, 16400-16408, **Top 10%**  
<http://dx.doi.org/10.1039/C2CP42301D>
111. QSPR Modelling of Lipophilicity and Antitubercular Activity of Thiobenzanilide Derivatives.  
L. Pinheiro, M. L. Moita, S. Borges, M. Reis, I. Sousa, S. Santos, C. Ventura, F. Martins  
*Chemicke Listy* **2012**, *106*, s874, (ISSN 1803-2389)

## Publications in National Peer Reviewed Journals

112. O Programa Ciência 2007 no CQB - das moléculas aos nanomateriais e a biomedicina,  
P. D. Vaz, C.D. Nunes, O.C. Monteiro, A. S. Viana, R. F. M Almeida, P. Lima,  
*Boletim da Sociedade Portuguesa de Química* **2012**, *126*, 43-50.
113. Ponto de Fusão  
J. P. Leal  
*WikiCiências* **2012**, *3(6)*, 650  
[http://wikiciencias.casadasciencias.org/index.php/Ponto\\_de\\_Fus%C3%A3o](http://wikiciencias.casadasciencias.org/index.php/Ponto_de_Fus%C3%A3o)
114. Ponto de Ebulição  
J. P. Leal  
*WikiCiências* **2012**, *3(6)*, 652

[http://wikiciencias.casadasciencias.org/index.php/Ponto\\_de\\_ebuli%C3%A7%C3%A3o](http://wikiciencias.casadasciencias.org/index.php/Ponto_de_ebuli%C3%A7%C3%A3o)

115. Tabela Periódica dos Elementos

J. P. Leal

*WikiCiências* **2012**, 3(7), 667

[http://wikiciencias.casadasciencias.org/index.php/Tabela\\_Per%C3%B3dica\\_dos\\_Elementos](http://wikiciencias.casadasciencias.org/index.php/Tabela_Per%C3%B3dica_dos_Elementos)

## Books and Book chapters

116. Specialist Periodical Reports: Carbohydrate Chemistry - Chemical and Biological Approaches, Vol. 37, A. Pilar Rauter, T. K. Lindhorst, Editors, The Royal Society of Chemistry: Cambridge, **2012**.

117. Specialist Periodical Reports: Carbohydrate Chemistry - Chemical and Biological Approaches, Vol. 38, A. Pilar Rauter, T. K. Lindhorst, Editors, The Royal Society of Chemistry: Cambridge, **2012**.

118. Advanced Methods for the Removal of Acetaminophen from Water Ana P. Carvalho, Ana A.S. Mestre, Marta Haro, Conchi O. Ania *in* Acetaminophen: Properties, clinical uses and adverse effects, (A. Javaherian, P. Latifpour, Eds), Nova Science Publishers, New York, **2012**, Chapter 4, pp. 57-105.

119. CCTa

H. Soares, S. Nolasco, J. Gonçalves

*Encyclopedia of Signaling Molecules* (S. Choi, Editor) **2012**, Springer, pp. 282-288,

<http://dx.doi.org/10.1007/978-1-4419-0461-4>

120. TBCCD1

J. Gonçalves, H. Soares

*Encyclopedia of Signaling Molecules* (S. Choi, Editor) **2012**, Springer, pp. 1831-1835

<http://dx.doi.org/10.1007/978-1-4419-0461-4>

121. TIBAL induced rearrangement: synthesis of gem-difluorocarbogalactose.

J. Sardinha, A. P. Rauter, M. Sollogoub, Y. Bleriot

*Carbohydrate Chemistry - Proven Synthetic Methods* (Ed. P. Kovac), Vol. 1, CRC Press - Taylor & Francis: Boca Raton, Florida, **2012**; Chapter 14, pp. 129-136

122. Pyranose-fused butenolides: An expedient preparation from furanose synthons.

N. M. Xavier, S. Kopitzki, A. P. Rauter.

*Carbohydrate Chemistry: Proven Methods* (P. Kovac, Ed.) Vol. 1, P. Kovac, CRC Press Taylor & Francis: Boca Raton, Florida, **2012**; Chapter 15, pp. 137-158.

123. Applications of tandem mass spectrometry: from structural analysis to fundamental studies

P. J. A. Madeira, M. H. Florêncio

*Tandem mass spectrometry-Applications and Principles*, Ed. Jeevan K. Prasain, Intech, **2012**. ISBN: 979-953-307-210-3; Ch. 1.

124. High resolution mass spectrometry using FTICR and Orbitrap instruments  
P. J. A. Madeira, P. C. Alves, C. M. Borges  
*Fourier Transform / Book 3*, Eds. Dr. Salih Mohammed Salih Mansour Al-Dulaimi, Intech, **2012**. ISBN: 979-953-307-869-3; Ch. 2.
125. Regioselective debenzoylation of C-glycosylpropene  
L. Cipolla, B. La Ferla, A. P. Rauter, F. Nicotra  
*Carbohydrate Chemistry: Proven Methods* (Ed. P. Kovac) Vol. 1, CRC Press - Taylor & Francis: Boca Raton, Florida, **2012**; Chapter 17, pp. 167-174.
126. Triterpene/steroid glycoconjugates: natural occurrence, synthesis and biological activities.  
S. Schwarz, N. M. Xavier, R. Csuk, A. P. Rauter.  
*Carbohydrate Chemistry – Chemical and Biological Approaches* (A. P. Rauter, T. K. Lindhorst, Eds.); Vol 37, The Royal Society of Chemistry: Cambridge, **2012**; pp. 326-366.  
<http://dx.doi.org/10.1039/9781849732765-00326>
127. An overview of key routes for the transformation of sugars into carbasugars and related compounds  
R. G. Soengas, J. M. Otero, A. M. Estevez, A. P. Rauter, V. Cachatra, J. C. Estevez, R. J. Estevez  
*Carbohydrate Chemistry – Chemical and Biological Approaches* (A. P. Rauter, T. K. Lindhorst, Eds.); Vol 38, The Royal Society of Chemistry: Cambridge, **2012**; pp. 263-302.  
<http://dx.doi.org/10.1039/9781849734769-00263>
128. Synthesis of carbohydrate-based artificial siderophores and their biological applications  
M. M. Andrade, A. P. Rauter  
*Carbohydrate Chemistry – Chemical and Biological Approaches* (A. P. Rauter, T. K. Lindhorst, Eds.); Vol 38, The Royal Society of Chemistry: Cambridge, **2012**; pp. 398-415.  
<http://dx.doi.org/10.1039/9781849734769-00398>
129. Women in Chemistry: My Experience  
Maria José Calhorda  
Women, Science and Globalization: What's up? (Isabel Lousada and Maria José Lousada, Eds.), Amonet, **2012**

## Proceedings

130. Phenolic compounds from plant biomass: Added-value products for increased Biorrefinery sustainability  
L. B. Roseiro, A. I. Martins, L. C. Duarte, A. P. Rauter, Proceedings of the 1st Iberoamerican Congress on Biorrefineries, Mexico, **2012**, pp 685-691.
131. New Extractants for Separation of Platinum-group Metals from Chloride Solutions and their Application to Recycling Processes  
P. Paiva, G. I. Carvalho, A.-L. Schneider, M. C. Costa, A. M. Costa, A. F. Assunção, C. A. Nogueira  
*Proceedings of the 4th International Conference on Engineering for Waste and Biomass Valorisation* (Eds. A. Nzihou, F. Castro) **2012**, Vol. 4, 1617-1622, Porto, Portugal, September.



132. Microalgae of different phyla display antioxidant, metal chelating and acetylcholinesterase inhibitory activities  
L. Custodio, T. Justo, L. Silvestre, A. Barradas, C. Vizetto-Duarte, H. Pereira, L. Barreira, A. P. Rauter, F. Albericio, J. Varela,  
*Planta Medica*, **2012**, *78*, 1052-1052.  
WOS:000307042800082
133. Brown macroalgae produce anti-leukemia compounds  
C. Vizetto-Duarte, D. Santos, L. Custodio, L. Barreira, H. Pereira, A. P. Rauter, F. Albericio, J. Varela  
*Planta Medica*, **2012**, *78*, 1146-1146.  
WOS:000307042800509
134. Formation of Biomimetic Membrane Rafts on Bare and Modified Gold  
Joaquim M.T. Marques, Ana S. Viana and Rodrigo F.M. de Almeida  
*Biophysical Journal* **2012**, *102*, p28a  
<http://dx.doi.org/10.1016/j.bpj.2011.11.180>
135. Sterol Properties Required for Microdomain Formation: From Model Systems to Living Yeast and Mammalian Cells.  
A.E. P. Bastos, A. Khmelinskaia, S. Scolari, R. Malho, A. Herrmann, H. S. Marinho, R. F.M. de Almeida.  
*Biophysical Journal* **2012**, *102*, Supplement 1, Page 298a.  
<http://dx.doi.org/10.1016/j.bpj.2011.11.1651>
136. A Simple Biophysical Experiment to Introduce Ratiometric Measurements and Microplate Fluorimetry in the Laboratory Class.  
R. F. M. de Almeida, J. T. M. Marques.  
*Biophysical Journal* **2012**, *102*, Supplement 1, Page 211a.  
<http://dx.doi.org/10.1016/j.bpj.2011.11.1152>
137. Sphingolipid-Enriched Microdomains in the Plasma Membrane of *Saccharomyces Cerevisiae*: Ergosterol-Free «Lipid Rafts» in the Gel Phase.  
F. Aresta-Branco, A. M. Cordeiro, H. S. Marinho, L. Cyrne, F. Antunes, R. F.M. de Almeida.  
*Biophysical Journal* **2012**, *102*, Supplement 1, Page 27a.  
<http://dx.doi.org/10.1016/j.bpj.2011.11.175>.
138. Metabolic states induced by feeding/fasting influence insulin-induced excitability and levels of insulin receptor in hippocampal but not cerebellar neurons.  
P. A. Lima, P. C. Costa, M. Mondragão, F. M. Alves, G. Costa, D. Hardy, A. Jalil, D. Ogden, C. Auger.  
*8th FENS Forum of Neuroscience* **2012**, e-book, p. 229. Presentation Code: 30.15 Abstract Number: 3243.
139. The Effectiveness of Materials Disclosure Depends on the Web Platform Choice?  
M. Varela, J. P. Leal  
*EduLearn12 Proceedings*; L. Gomez Chova, D. Marti Belenguer, I. Candel Torres, Editors, International Association of Technology, Education and Development IATED, Valencia, **2012**; pp. 6709-6710; ISBN 978-84-695-3491-5  
<http://library.iated.org/view/VARELA2012EFF>

## Patents

1. *Processo de produção de carvão activado a partir de material de cortiça*

Ana S. Mestre, Ana P. Carvalho, Patricia Correia, Susana P. Silva, Patent number: 20121000085416, 2012

2. *Método de obtenção de produtos naturais antioxidantes e antiproliferativos, extracto sólido natural e sólido remanescente extractado assim obtidos e respectiva utilização*

L. B. Roseiro, L. J. Duarte, D. L. Oliveira, R. M. Roque, M. G. Gil, A. I. Martins, C. Sepulveda, J. M. Almeida, M. M. Meireles, A. P. Rauter PT105731 (submitted 28-05-2012).

3. *N-Alkylcarbamoyl)methyl enulosides and related pyranosides containing an alfa,beta, gamma, delta - unsaturated ester, their preparation and their efficacy as antibacterial agents*

N. M. Xavier, A. P. Rauter, Y. Queneau, J. Justino, A. Neves, M. Goulart  
PCT/IB2012/050125 (submitted 10-01-2012, pub. date: 19-07-2012).

4. *Sugar derivatives having tensioactive and antimicrobial activity*

A. P. Rauter, A. Martins, J. Caio, J. P. Pais, P. Serra, M.- S. Santos, A. Pelerito, J. P. Gomes, J. Justino, R. Dias, R. Tenreiro  
PCT/IB2012/050123 (submitted 10-01-2012, pub. date: 19- 07-2012).

5. *New C-glycosylpolyphenol antidiabetic agents, effect on glucose tolerance and interaction with beta-amyloid. Therapeutic applications of the synthesized agent(s) and of Genista tenera ethyl acetate extracts containing some of those agents*

A.P. Rauter, A. Jesus, A. Martins, C. Dias, Rogerio Ribeiro, M.- P. Macedo, J. Justino, H. Mota-Filipe, R. Pinto, B. Sepodes, M. Medeiros, J. Barbero, C. Aioldi, F. Nicotra  
PT106202 (submitted 09-03-2012).

6. *Synthesis and anticholinesterase activity of purine nucleosides and resulting antitumor activity*

S. Schwarz, A. P. Rauter, M. Goulart, J. Justino, B. Siewert, R. Csuk,  
PT106660 (submitted 22-11-2012).

7. *Process for the complete treatment of effluents of the olive oil mills in two steps,*

I.P. Marques, J. P. Correia, M. R. Gonçalves, Patente number 2011 10000 51051  
(submitted 29-07-2012).

## Ph.D. and MSc. Theses

### Ph.D. Theses

1. *Modulation of fatty acid synthase and plasma membrane microdomains by hydrogen peroxide.*

Ana Isabel Ayres de Mendonça Cardoso Matias

Ph.D. thesis, UL, **2012**

2. *Biological Activities of Plectharnus barbatus Aqueous Extracts. In vitro and in vivo Studies of Activity, Bioavailability and Metabolism.*

Ph.D. thesis, UL, **2012**

3. Synthesis, characterization and catalytic studies of new Mo(II) and W(II) complexes and new supporting materials

Maria Miguel Vasconcellos Dias

Ph.D. thesis, UL, **2012**

4. Conceção de novos materiais para catálise heterogénea e outras aplicações

Marta Susana Pontes Saraiva

Ph.D. thesis, UL, **2012**

5. Application of Ionizing Radiation to Persistent Organicpollutants Decomposition

Rita Lourenço Paiva de Melo

Ph.D. thesis, UL, **2012**

6. Ceramide and alkyl ether lipids interactions with lipid rafts. Effects on membrane biophysical properties, cell death receptor organization and apoptosis induction.

Bruno Miguel Mota Castro

Ph.D. thesis, UL, **2012**

7. Desenvolvimento de Novas Metodologias Analíticas Conducentes a Monotorização de Poluentes Orgânicos Prioritários em Matrizes Aquosas

Nuno da Rosa Neng

Ph.D. thesis, UL, **2012**

8. Complexos Organometálicos de Tc(I) / Re(I) para Imagiologia Molecular de Tecidos Neoplásicos

Carolina Maria Candeias de Moura

Ph.D. thesis, ITN, **2012**

9. Re and <sup>99m</sup>Tc organometallic Complexes for Targeting Nitric Oxide Synthese

Bruno Luís Jesus Pinto de Oliveira

Ph.D. thesis, ITN, **2012**

## **MSc Theses**

1. Valorização de resíduos de biomassa. Preparação de carvões activados para remoção de poluentes orgânicos

Maria del Mar Pascual Diaz

MSc. Thesis, FCT-UNL, **2012**

2. Remoção de contaminantes orgânicos em águas utilizando subprodutos da indústria da cortiça

Sílvia Santos José

MSc. Thesis, FCUL, **2012**

3. Estudo das alterações no comportamento catalítico do zeólito MCM-22 por modificação controlada da porosidade

Vanessa Lisa Jessen Alipio Machado

MSc. Thesis, ISEG, **2012**

4. Adsorção de ibuprofeno e ácido clofibríco em carvões activados

Patrick Leão Montalvão Figueiredo

MSc. Thesis, FCT-UNL, **2012**

5. Efeito da administração de enzimosomas de superóxido dismutase na lesão de reperfusão do fígado. Estudos num modelo animal de isquemia/reperfusão.

Filipa Sobreira Pires Salavessa Fontes

MSc. Thesis, FCUL, **2012**

6. Estudo dos mecanismos moleculares regulados pelo H<sub>2</sub>O<sub>2</sub> nas células endoteliais num contexto tumoral

Ana Correia Bagulho

MSc. Thesis, FCUL, **2012**

7. Searching for potential antibiotic agents of natural and synthetic origin and their interaction with amyloid fibril formation systems

Catarina Alexandra dos Santos Dias

MSc. Thesis, FCUL, **2012**, Euromaster in Chemistry (Chemistry, Health and Nutrition)

8. Quimica exploratória para o desenvolvimento de novos agentes antimicrobianos a partir de açúcares

Vasco Cachatra

MSc. Thesis, FCUL, **2012**, Euromaster in Chemistry (Chemistry, Health and Nutrition)

9. Síntese de derivados da xilose com potencial aplicação como agentes antimicrobianos

Patricia Serra

MSc. Thesis, FCUL, **2012**, Euromaster in Chemistry (Chemistry, Health and Nutrition)

10. Síntese de um potencial inibidor da s-secretase e sua interação com o enzima

Rita Pereira

MSc. Thesis, UBI, **2012**.

11. Nutrientes e suplementos nutricionais em vegetais e frutos frequentemente usados na dieta: estudo por espectrometria de massa do resveratrol nas uvas

Tiago Filipe Pinto Jorge

MSc. Thesis, FCUL, **2012**

12. Previsão da acidez, de compostos fenólicos por métodos computacionais – contribuição para o esclarecimento da função antioxidante

Jose Manuel Santos Nunes

MSc. Thesis, FCUL, **2012**

13. Correlação da função antioxidante com a energia de ligação O-H em compostos fenólicos

Ana Rita Raimundo Gomes

MSc. Thesis, FCUL, **2012**

14. Caracterização Cinética e Estrutural do Sintase do Óxido Nítrico de *Leishmania infantum*

Fabio Sabino

MSc. Thesis, FCUL, **2012**

15. Drug screening of bisnaphthalimidopropyl derivatives on Trypanosoma brucei

Patricia Varela Martins

MSc. Thesis, FCUL, **2012**

16. Efeitos dos interactuantes da TTR na toxicidade e agregação da transtiretina na polineuropatia amiloidótica familiar

Daniel Fonseca

MSc. Thesis, FCUL, **2012**

17. Pesquisa computacional de motivos de redes celulares associados a virulência de Streptococcus pneumoniae

Rui Catarino

MSc. Thesis, FCUL, **2012**

18. Actividades Inibitorias de Colinesterases e Antioxidante de Extractos de Plantas utilizadas como “chás”.

Catarina Ataíde Rocha Ferreira

MSc. Thesis, Universidade Lusófona de Humanidades e Tecnologias, **2012**

19. Avaliação in silico da tioredoxina redutase como alvo para terapia anti-tumoral

Ana Sofia Cardoso Capacho

MSc. Thesis, FCUL, **2012**

20. Studies on Cytotoxic Activity of Organometallic Complexes of Mo(II) with  $\alpha$ -Diimines

Soraia Raquel Maciel Martins

MSc. Thesis, FCUL, **2012**

21. Resistência a corrosão localizada do aço inoxidável no betão

Filipa João Lopes Feliciano

MSc. Thesis, FCUL, **2012**

22. Influência do pré-tratamento na ação anticorrosiva dos revestimentos híbridos de sol-gel aplicados na liga EN AW-6063

Edna Fernandes Moreira

MSc. Thesis, FCUL, **2012**

23. Development of new approaches for micro-extraction: Application of microfluidic devices and novel sorption-based polymers

Marta P.B. Mourão

MSc. Thesis, FCUL, **2012**

24. Modelação e Previsão da Performance e das Propriedades do Papel.

Sonia C.B. S. A. Diogo

MSc. Thesis, ISEC, **2012**

25. Teor Crítico de Cloretos para Iniciação da Corrosão do Aço no Betão.

Angela E. L. Amaral.

MSc. Thesis, ISEL, **2012**

26. Formulação de Concentrados, para a Preparação de Soluções de Limpeza e Desinfecção, a Partir de Excedentes Industriais.

Ana Carina P. Reguengos

MSc. Thesis, FCUL, **2012**

27. Validação de Limpeza de Equipamentos: Determinação de tracos de substancia activa contaminante por TOC.

Andreia F. B. Costa

MSc. Thesis, FCUL, **2012**

28. Chemical Behaviour of Nitriles in the Presence of Titanocene Monochloride and Application in the Synthesis of Beta-lactams.

Ana Sofia B. S. Cortez

MSc. Thesis, FCUL, **2012**