

BERG & BSRG peer-reviewed articles from 1994 to 2012

2012

Avner, B.S., Fialho, A.M., Chakrabarty, A.M., "Overcoming drug resistance in multi-drug resistant cancers and microorganisms: a conceptual framework", **Bioengineered Bugs**, 3(5), (2012)

Barbosa, H.S.C., Fernandes, T.G., Dias, T.P., Diogo, M.M., Cabral, J.M.S., "New insights into the mechanisms of embryonic stem cell self-renewal under hypoxia: A multifactorial analysis approach", **PLoS One**, 7(6): e38963 (2012)

Borlido, L., Azevedo, A.M., Sousa, A.G., Oliveira, P.H., Roque, A.C.A., Aires-Barros, M.R., "Fishing human monoclonal antibodies from a CHO cell supernatant with boronic acid magnetic particles", **J. Chromatogr. B**, 903, 163-70 (2012)

Canha, N., Felizardo, P., Menezes, J.C., Correia, M.J.N., "Multivariate near infrared spectroscopy models for predicting the oxidative stability of biodiesel: Effect of antioxidants addition", **Fuel**, 97, 352-357 (2012)

Caramujo, M.-J., de Carvalho, C.C.C.R., Silva, S.J., Carman, K.R., "Dietary carotenoids regulate astaxanthin content of copepods and modulate their susceptibility to UV light and copper toxicity", **Marine Drugs**, 10, 998-1018 (2012)

Carvalho, T., Augusto, V., Brás, A.R., Lourenço, N.M.T., Afonso, C.A.M., Barreiros, S., Correia, N.T., Vidinha, P., Cabrita, E.J., Dias, C.J., Dionísio, M., Roling, B., "Understanding the ion jelly conductivity mechanism", **J. Phys. Chem. B**, 116, 2664-2676 (2012)

Cavalheiro, J.M.B.T., de Almeida, M.C.M.D., da Fonseca, M.M.R., de Carvalho, C.C.C.R. Adaptation of *Cupriavidus necator* to conditions favoring polyhydroxyalkanoate production. **Journal of Biotechnology** 164, 309–317. 2012. doi:10.1016/j.jbiotec.2013.01.009

Chelinho, S., Moreira-Santos, M., Silva, C., Costa, C., Viana, P., Viegas, C.A., Fialho, A.M., Ribeiro, R., Sousa, J. P., "Semi-field testing of a bioremediation tool for atrazine contaminated soils: evaluating the efficacy on soil and aquatic compartments", **Environmental Toxicology and Chemistry**, 31(7), 1564-1572 (2012)

Coelho, M.B., Cabral, J.M.S., Karp, J.M., "Intraoperative stem cell therapy", **Annu. Rev. Biomed. Eng.**, 14, 325-349 (2012)

da Silva, D.F.C., Azevedo, A.M., Fernandes, P., Chu, V., Conde, J.P., Aires-Barros, M.R., "Design of a microfluidic platform for monoclonal antibody extraction using an aqueous two-phase system", **J. Chromatogr. A**, 1249, 1-7 (2012)

de Barros, D.P.C., Azevedo, A.M., Cabral, J.M.S., Fonseca, L.P., "Optimization of flavor esters synthesis by *fusarium solani* pisi cutinase", **J. Food Biochem.**, 36, 275-284 (2012)

de Carvalho, C.C.C.R., "Adaptation of *Rhodococcus erythropolis* cells for growth and bioremediation under extreme conditions", **Res. Microbiol.**, 163, 125-136 (2012)

de Carvalho, C.C.C.R., "Biofilms: new ideas for an old problem", **Recent Pat. Biotechnol.**, 6, 13-22 (2012)

de Carvalho, C.C.C.R., "Lipids of prokaryotic origin at the base of marine food webs", **Marine Drugs**, 10, 2698-2714 (2012)

de Carvalho, C.C.C.R., Caramujo, M.J., "Tumour metastasis as an adaptation of tumour cells to fulfil their phosphorus requirements", **Medical Hypotheses**, 78, 664-667 (2012)

Diogo, M.M., da Silva, C.L., Cabral, J.M.S., "Separation technologies for stem cell bioprocessing", **Biotechnol. Bioeng.**, 109, 2699-2709 (2012)

dos Santos, S.C., Mira, N.P., Moreira, A.S., Sá-Correia, I., "Quantitative- and phospho-proteomic analysis of the yeast response to the tyrosine kinase inhibitor imatinib", **OMICS: A Journal of Integrative Biology**, 16(10), 537-551 (2012)

dos Santos, S.C., Teixeira, M.C., Cabrito, T.R., Sá-Correia, I., "Yeast Toxicogenomics: genome-wide responses to chemical stresses with impact in Environmental Health, Pharmacology and Biotechnology", **Frontier in Genetics**, 3, 63 (2012)

Fialho AM, Salunkhe P, Manna SK, Mahali S, Chakrabarty AM, "Glioblastoma Multiforme: Novel Therapeutic Approaches" **ISRN Neurology**, Article ID 642345 (2012)

Fialho, A.M., Bernardes, N., Chakrabarty, A.M., "Recent patents on live bacteria and their products as potential anticancer agents", **Recent Patents on Anti-Cancer Drug Discovery**, 31-55 (2012)

Fialho, A.M., Chakrabarty, A.M., "Patent controversies and court cases: cancer diagnosis, therapy and prevention", **Cancer Biology Therapy**, 13 (13), (2012)

Figueiredo, R., Ramos, D.F., Moiteiro, C., Medeiros, M.A., Curto, M.J.M., de Menezes, J.C., Hernandez Pando, R., Silva, P.E.A., Costa, M.C., "Pharmacophore insights into *rpoB* gene mutations in *Mycobacterium tuberculosis* rifampicin resistant isolates", **Eur. J. Med. Chem.**, 47, 186-193 (2012)

Freitas, P.P., Cardoso, F.A., Martins, V.C., Martins, S.A.M., Loureiro, J., Amaral, J., Chaves, R. C., Cardoso, S., Fonseca, L.P., Sebastiao, A.M., Pannetier-Lecoeur, M., Fermon, C., "Spintronic platforms for biomedical applications", **Lab on a Chip**, 12, 546-557 (2012)

Gomes, G.A., Azevedo, A.M., Aires-Barros, M.R., Prazeres, D.M.F., "Validation and scale-up of plasmid DNA purification by phenyl-boronic acid chromatography", **J. Sep. Sci.**, 35, 3190-3196 (2012)

Gonçalves, G.A.L., Bower, D.M., Prazeres, D.M.F., Monteiro, G.A., Prather, K.L.J., "Rational engineering of Escherichia coli strains for plasmid biopharmaceutical manufacturing", **Biotechnol. J.**, 7, 251-261 (2012)

Guerreiro, J., Mira, N.P., Sá-Correia, I., "Adaptive response to acetic acid in the highly resistant species *Zygosaccharomyces bailii* revealed by quantitative proteomics", **PROTEOMICS**, 12: 2303-18 (2012)

Hakemeyer, C., Strauss, U., José, G.E., Folque, F., Menezes, J.C., "At-line NIR spectroscopy as effective PAT monitoring technique in mab cultivations during process development and manufacturing", **Talanta**, 90, 12-21 (2012)

Joskowiak, A., Stasio, N., Chu, V., Prazeres, D.M.F., Conde, J.P., "Integrated detection of intrinsic fluorophores in live microbial cells using an array of thin film amorphous silicon photodetectors", **Biosens. Bioelectron.**, 36, 242-249 (2012)

Jovanovic-Malinovska, R., Fernandes, P., Winkelhausen, E., Fonseca, L., "Galacto-oligosaccharides Synthesis from Lactose and Whey by β -Galactosidase Immobilized in PVA", **Appl. Biochem. Biotechnol.**, 168, 1197-1211 (2012)

Lewis, L.A., Astatke, M., Umekubo, P.T., Alvi, S., Saby, R., Afrose, J., Oliveira, P.H., Monteiro, G.A., Prazeres, D.M.F., "Protein-DNA interactions define the mechanistic aspects of circle formation and insertion reactions in IS2 transposition", **Mobile DNA**, 3, 1-24 (2012)

Lourenço, N. D., Lopes, J. A., Almeida, C. F., Sarraguça, M. C., Pinheiro, H. M., "Bioreactor monitoring with spectroscopy and chemometrics: a review", **Anal. Bioanal. Chem.**, 404(4), 1211-1237 (2012).

Lourenço, V., Lochmann, D., Reich, G., Menezes, J.C., Herdling, T., Schewitz, J., "A quality by design study applied to an industrial pharmaceutical fluid bed granulation", **Eur. J. Pharm. Biopharm.**, 81, 438-447 (2012)

Madeira, A., da Silva, C.L., dos Santos, F., Camafeita, E., Cabral, J.M.S., Sá-Correia, I., "Human Mesenchymal Stem Cell Expression program upon extended ex-vivo cultivation as revealed by 2-DE-Based quantitative proteomics", **PLOS One**, 7(8), (2012)

Madeira, A., da Silva, C.L., dos Santos, F., Camafeita, E., Cabral, J.M.S., Sá-Correia, I., "Human mesenchymal stem cell expression program upon extended ex-vivo cultivation, as revealed by 2-DE-Based quantitative proteomics", **PLoS ONE**, 7(8): 43523 (2012)

Madeira, P.P., Bessa, A., Alvares-Ribeiro, L., Aires-Barros, M.R., Reis, C. A., Rodrigues, A.E., Zaslavsky, B.Y., "Salt effects on solvent features of coexisting phases in aqueous polymer/polymer two-phase systems", **J. Chromatogr. A**, 1229, 38-47 (2012)

Marques, M.P.C., Fernandes, P., Cabral, J.M.S., Znidarsic-Plazl, P., Plaz, I., "Continuous steroid biotransformations in microchannel reactors", **New Biotechnol**, 29, 227-234 (2012)

Marques, M.P.C., Walshe, K., Doyle, S., Fernandes, P., de Carvalho, C.C.C.R., "Anchoring high-throughput screening methods to scaleup bioproduction of siderophores", **Process Biochem.**, 47, 416-421 (2012)

Martins, S.A.M., Trabuco, J.R.C., Monteiro, G.A., Chu, V., Conde, J.P., Prazeres, D.M.F. "Towards the miniaturization of GPCR-based live-cell screening assays", **Trends Biotechnol.**, 30, 566-574 (2012)

Martins, S.A.M., Trabuco, J.R.C., Monteiro, G.A., Prazeres, D.M.F., "GPCR screening and drug discovery: Challenges and latest trends", **European Pharm. Rev.**, 17, 57-62 (2012)

Matos, R.G., Fialho, A.M., Giloh, M., Schuster, G., Arraiano, C.M., "The rnb gene of Synechocystis PCC6803 encodes a RNA hydrolase displaying RNase II and not RNase R enzymatic properties", **PLoS One**, 7: e32690 (2012)

Mil-Homens, D., Bernardes, N., Fialho, A.M., "The antibacterial properties of docosahexaenoic omega-3 fatty acid against the Cystic Fibrosis multi-resistant pathogen Burkholderia cenocepacia", **FEMS Microbiology Letters**, 328: 61-69 (2012)

Mil-Homens, D., Fialho, A.M., "A BCAM0223 mutant of Burkholderia cenocepacia is deficient in hamagglutination, serum resistance, adhesion to epithelial cells and virulence", **PLoS One**, 7: e41747 (2012)

Moeltgen, C.V., Puchert, T., Menezes, J.C. Lochmann, D., Reich, G., "A novel in-line NIR spectroscopy application for the monitoring of tablet film coating in an industrial scale process", **Talanta**, 92, 26-37 (2012)

Napoleão P, Selas M, Freixo C, MotaCarmo M, Viegas-Crespo AM, Cruz Ferreira C, Pinheiro T. T lymphocytes alterations are associated with oxidized LDL, troponin T, white blood cells and C-reactive protein during acute myocardial infarction. **Clinical Hemorheology and Microcirculation** 2012; online (DOI:10.3233/CH-121665)

Nascimento, D.S., Valasques Junior, G., Fernandes, P., Ribeiro, G.C., Lima, D.M., Góes-Neto, A., Oliveira, R.Q., Figueiredo-Ribeiro, R de C., Assis, S.A., "Production, characterization and application of inulinase from fungal endophyte CCMB 328", **An. Acad. Bras. Cienc.**, 84, 443-454 (2012)

Nascimento, K.S., Cunha, A.I., Nascimento, K.S., Cavada, B.S., Azevedo, A.M., Aires-Barros, M.R., "An overview of lectins purification strategies", **J. Mol. Recognit.**, 25, 527-41 (2012)

Novo, P., Moulas, G., Prazeres, D.M.F., Chu, V., Conde, J.P., "Detection of ochratoxin A in wine and beer by chemiluminescence-based ELISA in a microfluidic structure with integrated optical detection", **Sensors Act. B: Chemical**, 176, 232-240 (2012)

Nunes, M.A., Fernandes, P.C.B., Ribeiro, M.H., "High-affinity water-soluble system for efficient naringinase immobilization in polyvinyl alcohol–dimethyl sulfoxide lens-shaped particles", **J. Mol. Recognit.**, 25, 580-594 (2012)

Oliveira, P.H., Boura, J., Abecasis, M.A., Gimble, J.M., da Silva, C.L., Cabral, J.M.S, "Impact of hypoxia and long-term cultivation on the genomic stability and mitochondrial performance of ex vivo expanded human stem/stromal cells" , **Stem Cell Research**, 9, 225-236 (2012)

Palma, M., Madeira, S.C, Mendes-Ferreira, A., Sá-Correia, I., "Impact of assimilable nitrogen availability in glucose uptake kinetics in *Saccharomyces cerevisiae* during alcoholic fermentation", **Microbial Cell Factories**, 11(1):99 (2012)

Pimenta, A.F.R., Baptista, A.C., Carvalho, T., Brogueira, P., Lourenço, N.M.T., Afonso, C.A.M., Barreiros, S., Vidinha, P., Borges, J.P., "Electrospinning of Ion Jelly fibers", **Mater. Lett.**, 83, 161-164 (2012)

Preisner, O.E., Menezes, J.C., Guiomar, R., Machado, J., Lopes, J.A., "Discrimination of *Salmonella enterica* serotypes by Fourier transform infrared spectroscopy", **Food Res. Int.**, 45, 1058-1064 (2012)

Raiado-Pereira, L., Carapeto, A.P., Botelho-do-Rego, A.M., Mateus, M., "Grafting hydrophobic and affinity interaction ligands on membrane adsorbers: A close-up view by X-ray photoelectron spectroscopy", **Sep. Purif. Technol.**, 93, 75-82 (2012)

Ramos, C.G., da Costa, P.J., Döring, G., Leitão, J.H., "The novel cis-encoded small RNA h2cR is a negative regulator of hfq2 in *Burkholderia cenocepacia*", **PLoS One**. 7(10):e47896 (2012)

Ramos, C.G., Grilo, A.M., da Costa, P.J., Leitão, J.H., "Experimental identification of small non-coding regulatory RNAs in the opportunistic human pathogen *Burkholderia cenocepacia*", **Genomics**. doi: 10.1016/j.ygeno.2012.10.006.

Remy, E., Cabrito, T.R., Baptista, R.A., Teixeira, M.C., Sá-Correia, I., Duque, P., "The Pht1;9 and Pht1;8 transporters mediate inorganic phosphate acquisition by the *Arabidopsis thaliana* root during phosphorus starvation", **New Phytologist**, 195: 356-71 (2012)

Ribeiro, S., Mairhofer, J., Madeira, C., Diogo, M.M., da Silva, C.L., Monteiro, G., Grabherr, R., Cabral, J.M., "Plasmid DNA size does affect nonviral gene delivery efficiency in Stem Cells", **Cellular Reprogramming**, 14, 130-137 (2012)

Rosa, P.A.J., Azevedo, A.M., Sommerfeld, S., Baecker, W., Aires-Barros, M.R., "Continuous aqueous two-phase extraction of human antibodies using a packed column", **J. Chromatogr. B**, 880, 148-156 (2012)

Santhagunam, A., Madeira, C., Cabral, J.M.S., "Genetically engineered stem cell-based strategies for articular cartilage regeneration", **Biotechnol. Appl. Biochem.**, 59, 121-131 (2012)

Székely, G., Bandarra, J., Heggie, W., Ferreira, F.C., Sellergren, B., "Design, preparation and characterization of novel molecularly imprinted polymers for removal of potentially genotoxic 1,3-diisopropylurea from API solutions", **Sep. Purif. Technol.**, 86, 190-198 (2012)

Székely, G., Bandarra, J., Heggie, W., Sellergren, B., Ferreira, F.C., "A hybrid approach to reach stringent low genotoxic impurity contents in active pharmaceutical ingredients: Combining molecularly imprinted polymers and organic solvent nanofiltration for removal of 1,3-diisopropylurea", **Sep. Purif. Technol.**, 86, 79-87 (2012)

Teixeira, M.C., Godinho, C.P., Cabrito, T.R., Mira, N.P., Sá-Correia, I., Increased expression of the yeast multidrug resistance ABC transporter Pdr18 leads to increased ethanol tolerance and ethanol production in high gravity alcoholic fermentation, **Microbial Cell Factories**, 11, 98 (2012)

Toledo, M.A.S., Janissen, R., Favaro, M.T.P., Cotta, M.A., Monteiro, G.A. Prazeres, D.M.F., Souza, A.P., Azzoni, A.R., "Development of a recombinant fusion protein based on the dynein light chain LC8 for non-viral gene delivery", **J. Controlled Release**, 159(2), 222-231 (2012)

Viegas, C.A., Costa, C., André, S., Viana, P., Ribeiro, R., Moreira-Santos, M., "Does S-metolachlor affect the performance of *Pseudomonas* sp. strain ADP as bioaugmentation bacterium for atrazine-contaminated soils?" **PLoS ONE**, 7(5), e37140 (2012)

Ynsa, M.D. , R. Minquin, R. Rajendran, T. Pinheiro, F. Watt. Consequences of fat diet in the distribution of minerals within pancreatic tissues of rats and rabbits. **Microscopy and Microanalysis** 2012;18:1060–1066 (doi: 10.1017/S1431927612001547)

2011

Abdulrehman D., Monteiro P.T., Teixeira M.C., Mira N.P., Lourenço A.B., dos Santos S.C., Cabrito T.R., Francisco A., Madeira S.C., Santos R., Oliveira, A.L., Sá-Correia I., Freitas A. T., "YEASTRACT: Providing a programmatic access to curated transcriptional regulatory associations in *Saccharomyces cerevisiae* through a web services interface." **Nucleic Acids Research**, 39, D136-140 (2011)

Andrade, P.Z., da Silva, C.L., dos Santos, F., Almeida-Porada, G., Cabral, J.M.S., "Initial CD34+ cell-enrichment of cord blood determines hematopoietic stem/progenitor cell yield upon ex vivo expansion", **J. Cell. Biochem.**, 112, 1822-1831 (2011)

Badenes, S.M., Lemos, F., Cabral, J.M.S., "Performance of a cutinase membrane reactor for the production of biodiesel in organic media", **Biotechnol. Bioeng.**, 108, 1279-1289 (2011)

Badenes, S.M., Lemos, F., Cabral, J.M.S., "Stability of cutinase, wild type and mutants, in AOT reversed micellar system - effect of mixture components of alkyl esters production, **J. Chem. Technol. Biotechnol.**, 86, 34-41 (2011)

Bernardino, S., Estrela, N., Ochoa-Mendes, V., Fernandes, P., Fonseca, L.P., "Optimization in the immobilization of penicillin G acylase by entrapment in xerogel particles with magnetic properties", **J. Sol-Gel Sci. Technol.**, 58, 545-556 (2011)

Borlido, L., Azevedo, A.M., Roque, A.C.A., Aires-Barros, M.R., "Potential of boronic acid functionalized magnetic particles in the adsorption of human antibodies under mammalian cell culture conditions", **J. Chromatogr. A**, 1218, 7821-7827 (2011)

Cabrito, T.R., Teixeira, M.C., Singh, A., Prasad, R., Sá-Correia, I., "The yeast ABC transporter Pdr18 (ORF YNR070w) controls plasma membrane sterol composition, playing a role in multidrug resistance", **Biochemical Journal**, 440, 195-202 (2011)

Carvalho, J.A., Azzoni, A.R., Prazeres, D.M.F., Monteiro, G.A., "Comparative analysis of antigen-targeting sequences used in DNA vaccines", **Mol. Biotechnol.**, 47, 94-94 (2011)

Correia, V.G., Bonifácio, V.D., Raje, V.P., Casimiro, T., Moutinho, G., da Silva, C.L., Pinho, M.G., Aguiar-Ricardo, A., "Oxazoline-based antimicrobial oligomers: synthesis by CROP using supercritical CO₂", **Macromol. Biosci.**, 11, 1128-1137 (2011)

Costa, E., de Carvalho, J., Casimiro, T., da Silva, C.L., Cidade, M., Aguiar-Ricardo, A., "Tailoring thermoresponsive microbeads in supercritical carbon dioxide for biomedical applications, **J. Supercrit. Fluid**, 56, 292-298 (2011)

Coutinho C.P., de Carvalho C.C.C.R., Madeira A., Pinto-de-Oliveira A., Isabel Sá-Correia I., "Burkholderia cenocepaciaphenotypic clonal variation during three and a half years of residence in the lungs of a cystic fibrosis patient". **Infection and Immunity**, 79: 2950-60 (2011)

Coutinho, C.P., de Carvalho, C.C.C.R., Madeira, A., Pinto-de-Oliveira, A., Sá-Correia, I., "Burkholderia cenocepacia clonal phenotypic variation during three and a half years of residence in the lungs of a cystic fibrosis patient", **Infection and Immunity**, 79, 2950-2960 (2011)

Coutinho, C.P., dos Santos, S.C., Madeira, A., Mira, N.P., Moreira, A.S., Sá-Correia, I., "Long-term colonization of the cystic fibrosis lung by Burkholderia cepacia complex bacteria: epidemiology, clonal variation and genome-wide expression alterations", *Frontiers in Cellular and Infection Microbiology*, 1, article 12 (2011)

de Barros, D.P.C., Fernandes, P., Cabral, J.M.S., Fonseca, L.P., "Synthetic application and activity of cutinase in an aqueous, miniemulsion model system: Hexyl octanoate synthesis", **Catal. Today**, 173, 95-102 (2011)

de Carvalho C.C.C.R., Marques, M.P.C., Fernandes, P., "Recent achievements on siderophore production and application", **Recent Pat. Biotechnol.**, 5, 183-198 (2011)

de Carvalho, C.C.C.R., "Enzymatic and whole cell catalysis: finding new strategies for old processes", **Biotechnol. Adv.**, 29, 75-83 (2011)

de Carvalho, C.C.C.R., Cruz, P.A., da Fonseca, M.M.R., Xavier-Filho, L., "Antimicrobial properties of the extract of *Abelmoschus esculentus*", **Biotechnol. Bioprocess Eng.**, 16, 971-977 (2011)

dos Santos, S.C., Sá-Correia, I., "A genome-wide screen identifies yeast genes required for protection against or enhanced cytotoxicity of the antimalarial drug quinine", **Molecular Genetics and Genomics**, 286(5-6), 333-326 (2011)

Emerit I, Antunes J, Silva JM, Freitas J, Pinheiro T, Filipe P. Clastogenic Plasma Factors in Psoriasis - Comparison of phototherapy and anti-TNF α treatments. **Photochem Photobiol** 2011; 87:1427-1432 (DOI: 10.1111/j.1751-1097.2011.00982.x)

Fernandes, P., Carvalho, F., Marques, M.P.C., "Miniaturization in Biotechnology: speeding up the development of bioprocesses", **Recent Pat. Biotechnol.**, 5, 160-173 (2011)

Fernandes-Platzgummer, A., Diogo, M.M., Baptista, R.P., Silva, C.L., Cabral, J.M.S., "Scale-up of mouse embryonic stem cell expansion in stirred bioreactors", **Biotechnol. Progr.**, 27, 1421-1432 (2011)

Ferreira, A.S., Silva, I.N., Oliveira, V.H., Cunha, R., Moreira, L.M., "Insights into the role of extracellular polysaccharides in Burkholderia adaptation to different environments", **Frontiers in Cellular and Infection Microbiology**, 1, article 16, 1-9 (2011)

Fialho, A.M., Chakrabarty, A.M., "Law-medicine interfacing: patenting of human genes and mutations", **Recent Patents on DNA Gene Sequence**, 5, 81-85 (2011)

Gil, F.N., Gonçalves, A.C., Jacinto, M.J., Becker, J.D., Viegas, C.A., "Transcriptional profiling in *Saccharomyces cerevisiae* relevant for predicting alachlor mechanisms of toxicity", **Environmental Toxicology and Chemistry**, 30, 2506-2518 (2011)

Gomes, A.G., Azevedo, A.M., Aires-Barros, M.R., Prazeres, D.M.F., "Studies on the adsorption of cell impurities from plasmid-containing lysates to phenyl boronic acid chromatographic beads", **J. Chromatogr. A**, 1218, 8629-8637 (2011)

Gonçalves, J.P., Francisco, A.P., Mira, N.P., Teixeira, M.C., Sá-Correia, I., Oliveira, A.L., Madeira, S.C., "TFRank: Network-based prioritization of regulatory associations underlying transcriptional responses", **Bioinformatics**, 27, 3149-57 (2011)

Guerrero-German, P., Montesinos-Cisneros, R.M., Prazeres, D.M.F., Tejeda-Mansir, A., "Purification of plasmid DNA from *Escherichia coli* ferments using anion-exchange membrane and hydrophobic chromatography", **Biotechnol. Appl. Biochem.**, 58, 68-74 (2011)

José, G.E., Folque, F., Menezes, J.C., Werz, S., Strauss, U., Hakemeyer, C., "Predicting mab product yields from cultivation media components, using NIR and 2D-fluorescence spectroscopies", **Biotechnol. Prog.**, 27, 1339-1346 (2011)

Joskowiak, A., Santos, M.S., Prazeres, D.M.F., Chu, V., Conde, J.P., "Integration of thin film amorphous silicon photodetector with lab-on-chip for monitoring protein fluorescence in solution and in live microbial cells", **Sens. Actuators B**, 156, 662-667 (2011)

Lança, A.S.C., de Sousa, K.F., Atouguia, J., Prazeres, D.M.F., Monteiro, G.A., Silva, M.S., "Trypanosoma brucei: Immunisation with plasmid DNA encoding invariant surface glycoprotein gene is able to induce partial protection in experimental African trypanosomiasis", **Exp. Parasitol.**, 127, 18-24 (2011)

Lima, D.M., Fernandes, P., Nascimento, D.S., Ribeiro, R.C.L.F., Assis, S.A., "Fructose syrup: A biotechnology asset", **Food Technol. Biotechnol.**, 49, 424-434 (2011)

Loureiro, J., Andrade, P.Z., Cardoso, S., da Silva, C.L., Cabral, J.M.S., Freitas, P.P., "Magnetoresistive chip cytometer", **Lab on a chip**, 11, 2255-2261 (2011)

Loureiro, J., Andrade, P.Z., Cardoso, S., da Silva, C.L., Cabral, J.M.S, Freitas, P.P., "Spintronic chip cytometer", **J. Appl. Phys.**, 109: 07B311 (2011)

Lourenço, A.B., Ascenso, J.R., Sá-Correia, I., "Metabolic insights into the yeast response to propionic acid based on high resolution ¹H NMR spectroscopy". **Metabolomics**, 7, 457-468 (2011)

Lourenço, N.M.T., Oesterreicher, J., Vidinha, P., Barreiros, S., Afonso, C.A.M., Cabral, J.M.S., Fonseca, L.P., "Effect of gelatin-ionic liquid functional polymers on glucose oxidase and horseradish peroxidase kinetics", **React. Funct. Polym.**, 71, 489-495 (2011)

Lourenço, V., Herdling, T., Reich, G., Menezes, J.C., Lochmann, D., "Combining microwave resonance technology to multivariate data analysis as a novel PAT tool to improve process understanding in fluid bed granulation", **Eur. J. Pharm. Biopharm.** 78, 513-521 (2011)

Madeira, A., Santos, P.M., Coutinho, C.P., Pinto-de-Oliveira, A., Sá-Correia, I., "Quantitative proteomics (2-D-DIGE) reveals molecular strategies employed by *Burkholderia cenocepacia* adapt to the airways of cystic fibrosis patients under antimicrobial therapy". **PROTEOMICS**, 11, 1313-1328 (2011)

Madeira, C., Loura, L.M.S., Aires-Barros, M.R., Prieto, M., "Fluorescence methods for lipoplex characterization", *Biochim. Biophys. Acta – Biomembr.*, 1808, 2694-2705 (2011)

Madeira, C., Ribeiro, S.C., Pinheiro, I.S.M., Martins, S.A.M., Andrade, P.Z., da Silva, C.L., Cabral, J.M.S., "Gene delivery to human bone marrow mesenchymal stem cells by microporation", **J. Biotech.**, 151, 130-136 (2011)

Marques, M.P.C., Fernandes, P., "Microfluidic devices: Useful tools for bioprocess intensification", **Molecules**, 16, 8368-8401 (2011)

Martins, D.C., Prazeres, D.M.F., Chu, V., Conde, J.P., "Label-free detection of DNA immobilization and hybridization by streaming current measurements in microchannels", **App. Physics Lett.**, 99: 183702 (2011)

Mendes, S., Farinha, A., Ramos, C.G., Leitão, J.H., Viegas, C.A., Martins, L.O., "Synergistic action of azoreductase and laccase leads to maximal decolourization and detoxification of model dye-containing wastewaters", **Bioresource Technology**, 102, 9852-9859 (2011)

Mil-Homens, D., Fialho, A.M., "Trimeric autotransporter adhesins in members of the *Burkholderia cepacia* complex: a multifunctional family of proteins implicated in virulence" **Frontiers in Cellular and Infection Microbiology**, 1, article 13 (2011)

Mira, N.P., Henriques S.F., Keller G., Matos R., Arraiano C., Teixeira M.C., Winge D.R. and Sá-Correia I., "Identification of a DNA-binding site for the transcription factor Haa1, required for *Saccharomyces cerevisiae* response to acetic acid stress", **Nucleic Acids Research**, 16, 6896-907 (2011)

Mira, N.P., Madeira, A., Moreira, A.S., Coutinho, A.P., Sá-Correia, I., "Genomic expression analysis reveals strategies of *Burkholderia cenocepacia* adapt to the airways of cystic fibrosis patients and antimicrobial therapy", **PLOS One**, 6, e28831 (2011)

Monteiro, P.T., Dias, P.J., Ropers, D., Oliveira, A.L., Sá-Correia, I., Teixeira, M.C., Freitas, A.T., "Qualitative modeling and formal verification of the FLR1 gene mancozeb response in *Saccharomyces cerevisiae*", **IET Systems Biology**, 5, 308-316 (2011)

Nadais H., Barbosa M., Capela I., Arroja L., Ramos C.G., Grilo A., Sousa S.A., Leitão J.H., "Enhancing Wastewater Degradation and Biogas Production by Intermittent Operation of UASB Reactors". **Energy**. 36, 2146-68 (2011)

Nascimento, K.S., Yelo, S., Cavada, B.S., Azevedo, A.M., Aires-Barros, M.R., "Liquid-Liquid equilibrium data for aqueous two-phase systems composed of ethylene oxide propylene oxide copolymers", **J. Chem. Eng. Data**, 56, 190-194 (2011)

Novo, P., Prazeres, D.M.F., Chu, V., Conde, J.P., "Microspot-based ELISA in Microfluidics: Chemiluminescence and colorimetry detection using integrated thin-film hydrogenated amorphous silicon photodiodes", **Lab-on-a-Chip**, 11, 4063-4071 (2011)

Oliveira, P.H., Prather, K.J., Prazeres, D.M.F., Monteiro, G.A., "Mutation detection in plasmid-based biopharmaceuticals", **Biotechnol. J.**, 6, 378-391 (2011)

Pereira, A.T., Novo, P., Prazeres, D.M.F., Chu, V., Conde, J.P., "Heterogeneous immunoassays in microfluidic format using fluorescence detection with integrated amorphous silicon photodiodes", **Biomicrofluidics**, 5: 014102 (2011)

Pereira, F.B., Guimarães, P.M.R., Gomes, D.G., Mira, N.P., Teixeira, M.C., Sá-Correia, I., Domingues, L., "Identification of candidate genes for yeast engineering to improve bioethanol production in Very-High-Gravity and lignocellulosic biomass industrial fermentations", **Biotechnology for Biofuels**, 4, 57 (2011)

Puchert, T., Holzhauser, C.V., Menezes, J.C., Lochmann, D., Reich, G., "A new PAT/QbD approach for the determination of blend homogeneity: Combination of on-line NIRS analysis with PC Scores Distance Analysis (PC-SDA)", **Eur. J. Pharm. Biopharm.** 78, 173-182 (2011)

Puchert, T., Lochmann, D., Menezes, J.C., Reich, G., "A multivariate approach for the statistical evaluation of near-infrared chemical images using symmetry parameter image analysis (SPIA)", **Eur. J. Pharm. Biopharm.** 78, 117–124 (2011)

Rocha, J., Popescu, A.O., Borges, P., Mil-Homens, D., Moreira, L.M., Sá-Correia, I., Fialho, A.M., Frazão, C., "Burkholderia cepacia UDP-glucose dehydrogenase (BceC) structure and role of the Tyr10 in the final hydrolysis of UGDs thioester intermediate", **Journal of Bacteriology**, 193, 3978-3987 (2011)

Rodrigues, C.A.V., Diogo, M.M., da Silva, C.L., Cabral, J.M.S., "Microcarrier expansion of mouse embryonic stem cell-derived neural stem cells in stirred bioreactors", **Biotechnol. Appl. Biochem.**, 58, 231-242 (2011)

Rodrigues, C.A.V., Fernandes, T.G., Diogo, M.M., da Silva, C.L., Cabral, J.M.S., "Stem cell cultivation in bioreactors", **Biotechnol. Adv.**, 29, 815-829 (2011)

Rosa, P.A.J., Azevedo, A.M., Sommerfeld, S., Baecker, W., Aires-Barros, M.R., "Aqueous two-phase extraction as a platform in the biomanufacturing industry: Economical and environmental sustainability", **Biotechnol. Adv.**, 29, 559-567 (2011)

Sampaio, P.N., Sousa, L., Calado, C.R.C., Pais, M.S., Fonseca, L.P., "Use of chemometrics in the selection of a *Saccharomyces cerevisiae* expression system for recombinant cyprosin B production", **Biotechnol. Lett.**, 33, 2111-2119 (2011)

Santa, G.L.M., Bernardino, S.M.S.A., Magalhães, S., Mendes, V., Marques, M.P.C., Fonseca, L.P., Fernandes, P., "From inulin to fructose syrups using sol-gel immobilized inulinase", **Appl. Biochem. Biotechnol.**, 165, 1-12 (2011)

Santos, F.D., Andrade, P.Z., Abecasis, M.M., Gimble, J.M., Chase, L.G., Campbell, A.M., Boucher, S., Vemuri, M.C., Silva, C.L., Cabral, J.M.S., "Toward a clinical-grade expansion of mesenchymal stem cells from human sources: a microcarrier-based culture system under xeno-free conditions", **Tissue Eng. Part. C Methods**, 17, 1201-1210 (2011)

Silva, I.N., Ferreira, A.S., Becker, J.D., Zlosnik, J.E., Speert, D.P., He, J., Mil-Homens, D., Moreira, L.M., "Mucoïd morphotype variation of *Burkholderia multivorans* during chronic cystic fibrosis lung infection is correlated with changes in metabolism, motility, biofilm formation and virulence", **Microbiology**, 157, 3124-37 (2011)

Sousa, A.G., Andrade, P.Z., Pirzgalska, R.M., Galhoz, T.M., Azevedo, A.M., da Silva, C.L., Aires-Barros, M.R., Cabral, J.M.S., "A novel method for human hematopoietic stem/progenitor cell isolation from umbilical cord blood based on immunoaffinity aqueous two-phase partitioning", **Biotechnol. Lett.**, 33, 2373-2377 (2011)

Sousa, S.A., Ramos, C.G., Leitão, J.H., "Burkholderia cepacia complex: emerging multihost pathogens equipped with a wide range of virulence factors and determinants", **Internation Journal of Microbiology**, Article ID: 607575 (2011)

Székely, Gy., Bandarra, J., Heggie, W., Sellergren, B., Ferreira, F.C., "Organic solvent nanofiltration: A platform for removal of genotoxins from active pharmaceutical ingredients", **J. Membr. Sci.**, 381, 21-33 (2011)

Teixeira M.C., Mira N.P., Sá-Correia I., "A genome-wide perspective on the response and tolerance to food-relevant stresses in *Saccharomyces cerevisiae*". **Current Opinion in Biotechnology**, 22:150-156 (2011)

Teixeira, M.C., Cabrito, T.R., Hanif, Z.M., Vargas, R.C., Tenreiro, S., Sá-Correia, I., "Yeast response and tolerance to polyamine toxicity involving the drug:H⁺ antiporter Qdr3 and the transcription factors Yap1 and Gcn4". **Microbiology**, 157, 945-956 (2011)

Teplitski, M., Leitão, J.H., Sela, S., "Microbial ecology and global health", **Internation Journal of Microbiology**, 2011: 564701 (2011)

Tyagi, M., da Fonseca, M.M.R., de Carvalho, C.C.C.R., "Bioaugmentation and biostimulation strategies to improve the effectiveness of bioremediation processes", **Biodegradation**, 22, 231-241 (2011)

Vale, G., H. M. Santos, R.J. Carreira, L. Fonseca, M. Miro, V. Cerda, M. Reboiro-Jota, J.L. Capelo "An assessment of the ultrasonic probe-based enhancement of protein cleavage with immobilized trypsin" **Proteomics** 11(19) 3866–3876 (2011).

2010

Andrade, P.Z., dos Santos, F., Almeida-Porada, G., da Silva, C.L., Cabral, J.M.S., "Systematic delineation of optimal cytokine concentrations to expand hematopoietic stem/progenitor cells in co-culture with mesenchymal stem cells", **Mol. BioSyst.**, 6, 1207-1215 (2010)

Azevedo, A.M., Gomes, A.G., Borlido, L., Santos, I.S., Prazeres, D.M.F., Aires-Barros, M.R., "Capture of human monoclonal antibodies from a cell culture supernatant by phenyl boronate chromatography", **J. Mol. Recognit.**, 23, 569-576 (2010)

Badenes, S.M., Lemos, F., Cabral, J.M.S., "Assessing the use of cutinase reversed micellar catalytic system for the production of biodiesel from triglycerides", **J. Chem. Technol. Biotechnol.**, 85, 993-998 (2010)

Badenes, S.M., Lemos, F., Cabral, J.M.S., "Transesterification of oil mixtures catalyzed by microencapsulated cutinase in reversed micelles", **Biotechnol. Lett.**, 32, 399-403 (2010)

Bernardes N., Seruca R., Chakrabarty A.M., Fialho A.M., 2009, "Microbial-based therapy of cancer: current progress and future prospects", **Bioengineered Bugs**, 1 (3), 178-190 (2010)

Bernardino, S.M.S.A., Fernandes, P., Fonseca, L.P., "Improved specific productivity in cephalixin synthesis by immobilized PGA in silica magnetic micro-particles", **Biotechnol. Bioeng.**, 107, 753–762 (2010)

Borlido, L., Azevedo, A.M., Aires-Barros, M.R., "Extraction of human IgG in thermo-responsive aqueous two-phase systems: Assessment of structural stability by circular dichroism", **Sep. Sci. Technol.**, 45, 2171-2179 (2010)

Botelho-Cunha, V.A., Mateus, M., Petrus, J.C.C., de Pinho, M.N., "Tailoring the enzymatic synthesis and nanofiltration fractionation of galacto-oligosaccharides", **Biochem. Eng. J.**, 50, 29-36 (2010)

Cabeça, R., Martins, V., Ferraria, A.M., Botelho do Rego, A.M., Brogueira, P., Prazeres, D.M.F., Fonseca, L.P., Chu, V., Conde, J.P., "Patterned functionalization layer for sub-ml DNA solidphase immobilization and hybridization", **Sens. Actuator B-Chem.**, 149, 432-438 (2010)

Carvalho, J., Azzoni, A.R., Prazeres, D.M.F., Monteiro, G.A., "Comparative analysis of antigen targeting sequences used in DNA vaccines", **Mol. Biotechnol.**, 44, 204-212 (2010)

Carvalho, J., Rodgers, J., Atouguia, J., Prazeres, D.M.F., Monteiro, G.A., "DNA vaccines: A rational design against parasitic diseases", **Expert Rev. Vaccines**, 9, 175-191 (2010)

Chelinho S., Moreira-Santos M., Lima D., Silva C., Viana P., André S., Lopes I., Ribeiro R., Fialho A.M., Viegas C.A., Sousa J.P.. 2009. "Cleanup of atrazine contaminated soils: ecotoxicological study on the efficacy of a bioremediation tool with *Pseudomonas* ADP". **Journal of Soils and Sediments**, 10,568-578 (2010)

Conde, J.P., Jóskowiak, A., Lipovšek, B., Pimentel, A.C., Pereira, A.T., Santos, M., Krč, J., Topič, M., Prazeres, D.M.F., Chu, V., "Spectral selectivity constraints in fluorescence detection of biomolecules using amorphous silicon based detectors", **Physica Status Sol.**, 7, 1156-1159 (2010)

da Silva, C.L., Goncalves, R., dos Santos, F., Andrade, P.Z., Almeida-Porada, G., Cabral, J.M.S., "Dynamic cell-cell interactions between cord blood haematopoietic progenitors and the cellular niche are essential for the expansion of CD34(+), CD34(+) CD38(-) and early lymphoid CD7(+) cells", **J. Tissue Eng. Reg. Med.**, 4, 149-158 (2010)

de Barros, D.P.C., Fernandes, P., Cabral, J.M.S., Fonseca, L.P., “Operational stability of cutinase in organic solvent system: Model esterification of alkyl esters”, **J. Chem. Technol. Biotechnol.**, 85, 1553-1560 (2010)

de Barros, D.P.C., Fonseca, L.P., Cabral, J.M.S., Aschenbrenner, E.M., Weiss, C.K., Landfester, K., “Miniemulsion as efficient system for enzymatic synthesis of acid alkyl esters”, **Biotechnol. Bioeng.**, 106, 507–515 (2010)

de Barros, D.P.C., Lemos, F., Fonseca, L.P., Cabral, J.M.S., “Kinetic cutinase-catalyzed esterification of caproic acid in organic solvent system”, **J. Mol. Catal. B.: Enzym**, 66, 285-293 (2010)

de Carvalho, C.C.C.R., Fernandes, P., “Production of metabolites as bacterial responses to the marine environment”, **Mar. Drugs**, 8, 705-727 (2010)

de Sousa, F.B., Guerreiro, J.D.T., Ma, M., Anderson, D.G., Drum, C.L., Sinisterra, R.D., Langer, R., “Photo-response behavior of electrospun nanofibers based on spiropyran-cyclodextrin modified polymer”, **J. Mater. Chem.**, 20, 9910-9917 (2010)

Dias P.J., Seret M.L., Goffeau A., Sá-Correia I., Baret P.V., "Evolution of the 12-spanner Drug:H⁺ Antiporter DHA1 family in hemiascomycetous yeasts". **OMICS: a Journal of Integrative Biology**, 14(6), 701-710 (2010)

Dias P.J., Teixeira M.C., Telo J.P., Sá-Correia I., "Insights into the mechanisms of toxicity and tolerance to the agricultural fungicide mancozeb in yeast, as suggested by a chemogenomic approach", **OMICS: A Journal of Integrative Biology**, 14(2), 211-227 (2010)

dos Santos, F., Andrade, P.Z., Boura, J.S., Abecasis, M.M., da Silva, C.L., Cabral, J.M.S., “Ex-vivo expansion of human mesenchymal stem cells: a more effective cell proliferation kinetics and metabolism under hypoxia”, **J. Cell. Physiol.**, 223, 27-35 (2010)

Eibes, G., dos Santos, F., Andrade, P.Z., Boura, J.S., Abecasis, M.M.A., da Silva, C.L., Cabral, J.M.S., “Maximizing the ex vivo expansion of human mesenchymal stem cells using a microcarrier-based stirred culture system”, **J. Biotechnol.**, 146, 194-197 (2010)

Fernandes, P., “Enzymes in food processing - a condensed overview on strategies for better biocatalysts”, **Enzyme Res.**, vol. 2010, Article ID 862537, 19 pages (2010)

Fernandes, P., “Miniaturization in biocatalysis”, **Int. J. Mol. Sci.**, 11, 858-879 (2010)

Fernandes, T.G., Diogo, M.M., Fernandes-Platzgummer, A., da Silva, C.L., Cabral, J.M.S., “Different stages of pluripotency determine distinct patterns of proliferation, metabolism and lineage commitment of embryonic stem cells under hypoxia”, **Stem Cell Res.**, 5, 76-89 (2010)

Fernandes, T.G., Fernandes-Platzgummer, A.M., da Silva, C.L., Diogo, M.M., Cabral, J.M.S., "Kinetic and metabolic analysis of mouse embryonic stem cell expansion under serum-free conditions", **Biotechnol. Letters**, 32, 171-179 (2010)

Fernandes, T.G., Kwon, S.J., Bale, S.S., Lee, M.Y., Diogo, M.M., Clark, D.S., Cabral, J.M.S., Dordick, J.S., "Three-dimensional cell culture microarray for high-throughput studies of stem cell fate", **Biotechnol. Bioeng.**, 106, 106-118 (2010)

Ferreira A.S., Leitão J.H., Silva I.N., Pinheiro P.F., Sousa S.A., Ramos C.G., Moreira L.M., "Distribution of cepacian biosynthesis genes among environmental and clinical Burkholderia strains and role of cepacian exopolysaccharide in resistance to stress conditions". **Applied and Environmental Microbiology** 76, 441-450 (2010)

Gomes, A.G., Azevedo, A.M., Aires-Barros, M.R., Prazeres, D.M.F., "Clearance of host cell impurities from plasmid-containing lysates by boronate adsorption", **J. Chromatogr. A**, 1217, 2262-2266 (2010)

Kundu M., Thomas J., Fialho A.M., Kwan J.M., Moreira L., Mahfouz M., Das Gupta T.K., Chakrabarty A.M., "The anticancer activity of the N-terminal CARD-like domain of Arginine Deiminase (ADI) from *Pseudomonas aeruginosa*" **Letters in Drug Design & Discovery**, 6,403-412 (2010)

Leitão J.H., Sousa S.A., Ferreira A.S., Ramos C.G., Silva I.N., Moreira L.M., "Pathogenicity, virulence factors, and strategies to fight against *Burkholderia cepacia* complex pathogens and related species". **Applied Microbiology and Biotechnology**, 87, 31-40 (2010)

Lipovšek, B., Jóskowiak, A., Krč, J., Topič, M., Prazeres, D.M.F., Chu, V., Conde, J.P., "Characterisation of silicon-carbon alloy filters with different carbon composition for onchip fluorescence detection of biomolecules", **Sens. Actuator A-Phys.**, 163, 96-100 (2010)

Lourenço, N. D., Paixão, F., Pinheiro, H. M., Sousa, A., "Use of spectra in the visible and near-mid-UV range with PCA and PLS processing for suspended solids monitoring in municipal wastewater treatment plants", **Appl. Spectrosc.**, 64(9), 1061-1067 (2010).

Madeira S., Teixeira M.C., Sá-Correia I., Oliveira A.L., "Identification of Regulatory Modules in Time Series Gene Expression Data using a Linear Time Biclustering Algorithm", **IEEE/ACM Transactions on Computational Biology and Bioinformatics**, 7: 153-165 (2010)

Madeira, C., Mendes, R.D., Ribeiro, S.C., Boura, J.S, Aires-Barros, M.R., da Silva, C.L., Cabral, J.M.S., "Non-viral gene delivery to mesenchymal stem cells using cationic liposomes for gene and cell therapy", **J. Biomed. Biotechnol.**, vol. 2010, Article ID 735349, 12 pages (2010)

Madeira, C., Ribeiro, S., Turk, M.Z., Cabral, J.M.S., "Optimization of gene delivery to HEK293T cells by microporation using a central composite design methodology", **Biotechnol. Letters**, 32, 1393-1399 (2010)

Marques, M.P.C., Cabral, J.M.S., Fernandes, P., "A microwell platform for the scale-up of a multistep bioconversion to bench-scale reactors: Sitosterol side-chain cleavage", **Biotechnol. J.**, 5, 402-412 (2010)

Marques, M.P.C., Cabral, J.M.S., Fernandes, P., "Bioprocess scale-up: quest for the parameters to be used as criterion to move from microreactors to lab-scale", **J. Chem. Technol. Biotechnol.**, 85, 1184-1198 (2010)

Marques, M.P.C., Carvalho, F., de Carvalho, C.C.C.R., Cabral, J.M.S., Fernandes, P., "Steroid bioconversion: Towards green processes?", **Food Bioprod. Process.**, 88, 12-20 (2010)

Marques, M.P.C., de Carvalho, C.C.C.R., Cabral, J.M.S., Fernandes, P., "Scaling-up of complex whole-cell bioconversions in conventional and non-conventional media", **Biotechnol. Bioeng.**, 106, 619-626 (2010)

Marques, M.P.C., Fernandes, P., Cabral, J.M.S., Znidarsic-Plazl, P., Plazl, I., "On the feasibility of in situ steroid biotransformation and product recovery in microchannels", **Chem. Eng. J.**, 160, 708-714 (2010)

Marques, M.P.C., Fernandes, P., de Carvalho, C.C.C.R., "Lab-scale bioproduction of siderophores", **J. Biotechnol.**, 150, 424-424 (2010)

Martins, S.A.M., Prazeres, D.M.F., Fonseca, L.P., Monteiro, G.A., "Quantitation of non-amplified genomic DNA by bead-based hybridization and template mediated extension coupled to alkaline phosphatase signal amplification", **Biotechnol. Lett.**, 32, 229-234 (2010)

Martins, S.A.M., Prazeres, D.M.F., Fonseca, L.P., Monteiro, G.A., "Optimization of DNA hybridization on aminopropyl-controlled pore-glass particles: Detection of non-labeled targets by picogreen staining", **Anal. Lett.**, 43, 2694-2704 (2010)

Martins, V.C., Cardoso, F.A., Freitas, P.P., Fonseca, L.P., "Picomolar detection limit on a magnetoresistive biochip after optimization of a thiol-gold based surface chemistry", **J. Nanosci. Nanotechnol.**, 10, 5994-6002 (2010)

Martins, V.C., Germano, J., Cardoso, F.A., Loureiro, J., Cardoso, S., Sousa, L., Piedade, M., Fonseca, L.P., Freitas, P.P., "Challenges and trends in the development of a magnetoresistive biochip portable platform", **J. Magn. Magn. Mater.**, 322, 1655-1663 (2010)

Mil-Homens D., Rocha E.P.C., Fialho A.M., "Genome-wide analysis of DNA repeats of DNA repeats in Burkholderia cenocepaciaJ2315 identifies a novel adhesin-like gene unique to epidemic-associated strains of ET-12 lineage", **Microbiology**, 156, 1084-1096 (2010)

Mira N.P., Becker J.D., Sá-Correia I., "Genomic expression program involving the Haa1p-regulon in *Saccharomyces cerevisiae* response to acetic acid". **OMICS: a Journal of Integrative Biology**, 14(5), 587-601 (2010)

Mira N.P., Teixeira M.C., Sá-Correia I., "Adaptive response and tolerance to weak acids in *Saccharomyces cerevisiae*: a genome-wide view". **OMICS: a Journal of Integrative Biology**, 14(5), 525-540 (2010)

Mira, N.P., Palma, M., Guerreiro, J., Sá-Correia I., "Genome-wide identification of *Saccharomyces cerevisiae* genes required for tolerance to acetic acid". **Microbial Cell Factories**, 9:79 (2010)

Nascimento, K.S., Azevedo, A.M., Cavada, B.S., Aires-Barros, M.R., "Partitioning of *Canavalia brasiliensis* lectin in polyethylene glycol - sodium citrate aqueous two-phase systems", **Sep. Sci. Technol.**, 45, 2180-2186 (2010)

Nascimento, K.S., Rosa, P.A.J., Nascimento, K.S., Cavada, B.S., Azevedo, A.M., Aires-Barros, M.R., "Partitioning and recovery of *Canavalia brasiliensis* lectin by aqueous two-phase systems using design of experiments methodology", **Sep. Purif. Technol.**, 75, 48-54 (2010)

Nunes, M.A.P., Vila-Real, H., Fernandes, P.C.B., Ribeiro, M.H.L., "Immobilization of naringinase in PVA-alginate matrix using an innovative technique", **Appl. Biochem Biotechnol.**, 160, 2129-2147 (2010)

Oliveira, P.H., Prather, K.J., Prazeres, D.M.F., Monteiro, G.A., "Analysis of DNA repeats in bacterial plasmids reveals the potential for recurrent instability events", **Appl. Microbiol. Biotechnol.**, 87, 2157-2167 (2010)

Pereira, S., Fonseca, L.P., Capelo, J.L., Armas, T., Vilhena, F., Pinto, A.P., Gonçalves, M.L.S, Mota, A.M., "Comparative study between probe focussed sonication and conventional stirring in the evaluation of cadmium and copper in plants", **Anal. Bioanal. Chem.**, 398, 2315-2324 (2010)

Puchert, T., Lochmann, D., Menezes, J.C., Reich, G., "Near-infrared chemical imaging for counterfeit drug identification – A four-stage concept with a novel approach of data processing (linear image signature)", **J. Pharm. Biomed. Anal.**, 51,138-145 (2010)

Quinto, A.M., Menezes, J.C., "Design, construction, validation and control of sterile manufacturing facilities: An overview from the perspective of existing regulations", **Pharm. Eng.**, March/April, 1-9 (2010)

Raiado-Pereira, L., Prazeres, D.M.F., Mateus, M., "Hydrophobic interaction membrane chromatography for plasmid DNA purification: Design and optimization", **J. Sep. Sci.**, 33, 1175-1184 (2010)

Ramos C.G., Grilo A.M., Sousa S.A., Barbosa M.L., Nadais H., Leitão J.H., "A new methodology combining PCR, cloning, and sequencing of clones discriminated by RFLP for the study of microbial populations: application to an UASB reactor sample". **Applied Microbiology and Biotechnology** 85:801-806 (2010)

Ramos C.G., Sousa S.A., Grilo A.M., Eberl L., Leitão J.H., "The Burkholderia cenocepaciaK56-2 pleiotropic regulator Pbr, is required for stress resistance and virulence". **Microbial Pathogenesis** 48(5), 168-177 (2010)

Ribeiro, S.C., Mendes, R., Madeira, C., Monteiro, G., da Silva, C.L., Cabral, J.M.S., "A quantitative method to evaluate mesenchymal stem cell lipofection using real-time PCR", *Biotechnol. Prog.*, 26, 1501-1514 (2010)

Ribeiro, S.C., Monteiro, G.A., Prazeres, D.M.F., "Evidence for the in vivo expression of a distant downstream gene under the control of ColE1 replication origin", **Appl. Microbiol. Biotechnol.**, 86, 671-679 (2010)

Rocha J., Granja A.T., Sá-Correia I., Fialho A.M., Frazão C., "Cloning, expression, crystallization and preliminary crystallographic studies of UgdG, and UDP-glucose dehydrogenase from *Sphingomonas elodea* ATCC 31461" **Acta Crystallographica. Section F, Structural Biology and Crystallization Communications**, 66, 69-72 (2010)

Rocha J., Popescu A.O., Sá-Correia I., Fialho A.M., Frazão C., "Cloning, expression, purification, crystallization and preliminary crystallographic studies of BceC, a UDP-glucose dehydrogenase from *Burkholderia cepacia* IST408", **Acta Crystallographica. Section F, Structural Biology and Crystallization Communications**, 66, 269-271 (2010)

Rodrigues, C.A.V., Diogo, M.M., da Silva, C.L., Cabral, J.M.S., "Hypoxia enhances proliferation of mouse embryonic stem cell-derived neural stem cells", **Biotechnol. Bioeng.**, 106, 260-270 (2010)

Roma-Rodrigues C., Santos P.M., Benndorf D., Rapp E., Sá-Correia I., "Response of *Pseudomonas putida* KT2440 to phenol at the level of membrane proteome", **Journal of Proteomics**, 73(8): 1461-1478 (2010)

Rosa, P.A.J., Ferreira, I.F., Azevedo, A.M., Aires-Barros, M.R., "Aqueous two-phase systems: A viable platform in the manufacturing of biopharmaceuticals", **J. Chromatogr. A**, 1217, 2296-2305 (2010)

Sá-Correia I., Teixeira M.C., "Two-dimensional Electrophoresis-based Expression Proteomics: a microbiologist's perspective". **Expert Reviews in Proteomics**, 7(6), 943-953 (2010)

Sampaio, P.N., Calado, C.R.C., Sousa, L., Bressler, D.C., Pais, M.S., Fonseca, L.J.P., "Optimization of the culture medium composition using response surface methodology for new recombinant cyprosin B production in bioreactor for cheese production", **Eur. Food Res. Technol.**, 231, 339-346 (2010)

Santos M.R., Cosme A.M., Becker J.D., Medeiros J.M.C., Mata M.F., Moreira L.M., "Absence of functional TolC protein causes increased stress response gene expression in *Sinorhizobium meliloti*". **BMC Microbiology** 10(1): 180 (2010)

Sereewatthanawut, I., Ferreira, F.C., Ghazali, N.F., Livingston, A.G., "Enantioseparation via EIC-OSN: Process design and improvement of enantiomers resolvability and separation performance", **AIChE J.**, 56, 893-904 (2010)

Sousa S.A., Ramos C.G., Moreira L.M., Leitão J.H., "The hfq gene is required for stress resistance and full virulence of *Burkholderia cepaciato* the nematode *Caenorhabditis elegans*". **Microbiology** 156, 896-908 (2010)

Sousa, M., Brás, A.R., Veiga, H.I.M., Ferreira, F.C., Pinho, M.N., Correia, N.T., Dionisio, M., "Dynamical characterization of a cellulose acetate polysaccharide", **J. Phys. Chem. B**, 114, 10939-1095 (2010)

Teixeira M.C., Dias P.J., Monteiro P.T., Sala A., Oliveira A.L., Freitas A.T., Sá-Correia I., "Refining current knowledge on the yeast FLR1regulatory network by combined experimental and computational approaches". **Molecular Biosystems**, 6(12), 2471 – 2481 (2010)

Teixeira M.C., Raposo L.R., Palma M., Sá-Correia I., "Identification of genes required for maximal tolerance to high-glucose concentrations, as those present in industrial alcoholic fermentation media, through a chemogenomics approach", **OMICS: A Journal of Integrative Biology**, 14(2), 201-210 (2010)

Teles, F.S.R.R., Tavira, L.A.P.T., Fonseca, L.J.P., "Biosensors as rapid diagnostic tests for tropical diseases", **Crit. Rev. Clin. Lab. Sci.**, 47, 139-169 (2010)

Vale, G., Rodrigues, A., Rocha, A., Rial, R., Mota, A.M., Gonçalves, M.L., Fonseca L.P., Capelo J.L., "Ultrasonic assisted enzymatic digestion (USAED) coupled with high performance liquid chromatography and electrothermal atomic absorption spectrometry as a powerful tool for total selenium and selenium species control in Se-enriched food supplements", **Food Chem.**, 121, 268-274 (2010)

Velho S., Oliveira C., Paredes J., Sousa S., Leite M., Matos P., Milanezi F., Ribeiro A.S., Mendes N., Licastro D., Karhu A., Oliveira M.J., Ligtenberg M., Hamelin R., Carneiro F., Lindblom A., Peltomaki P., Castedo S., Schwartz Jr S., Jordan P., Aaltonen L.A., Hofstra R.M.W., Suriano G., E. Stupka, A.M. Fialho, R. Seruca, "Mized lineage kinase 3 gene mutations in mismatch repair deficient gastrointestinal tumours", **Human Molecular Genetics**, 19(4), 697-706 (2010)

2009

Azevedo, A.M., Gomes, A.G., Rosa, P.A.J., Ferreira, I.F., Pisco, A.M.M.O., Aires-Barros, M.R., "Partitioning of human antibodies in polyethylene glycol - sodium citrate aqueous two-phase systems", **Sep. Purif. Technol.**, 65, 14-21 (2009)

Azevedo, A.M., Rosa, P.A.J., Ferreira, I.F., Aires-Barros, M.R., "Chromatography-free recovery of biopharmaceuticals through aqueous two-phase processing", **Trends Biotechnol.**, 27, 240-247 (2009)

Azevedo, A.M., Rosa, P.A.J., Ferreira, I.F., de Vries, J., Visser, T.J., Aires-Barros, M.R., "Downstream processing of human antibodies integrating an extraction capture step and cation exchange chromatography", **J. Chromatogr. B**, 887, 50-58 (2009)

Azevedo, A.M., Rosa, P.A.J., Ferreira, I.F., Pisco, A.M.M.O., de Vries, J., Korporaal, R., Visser, T. J., Aires-Barros, M.R., "Affinity-enhanced purification of human antibodies by aqueous two-phase extraction", **Sep. Purif. Technol.**, 65, 31-39 (2009)

Bernardino, S.M.S.A., Fernandes, P., Fonseca, L.P., "A new biocatalyst: Penicillin G acylase immobilized in sol-gel micro-particles with magnetic properties", **Biotechnol. J.**, 4, 695-702 (2009)

Cabeça, R., Rodrigues, M., Prazeres, D.M.F., Chu, V., Conde, J.P., "The effect of the shape of single, sub-ms voltage pulses on the rates of surface immobilization and hybridization of DNA", **Nanotechnology**, 20: 015503 (2009)

Cabrito T.R., Teixeira M.C., Duarte A.A., Duque P., Sá-Correia I., "Heterologous expression of a Tpo1 homolog from *Arabidopsis thaliana* confers resistance to the herbicide 2,4-D and other chemical stresses in yeast", **Applied Microbiology and Biotechnology**, 84, 927-936 (2009)

Calado, C.R.C., Brandão, M., Biscaia, J., Cabral, J.M.S., Fonseca, L.P., "Effect of Tween-80 on stability and secretion of hydrophobic tagged-cutinases", **Chem. Biochem. Eng. Q.**, 23, 411-417 (2009)

Cardoso, M.A.T., Antunes, S., Van Keulen, F., Ferreira, B.S., Geraldés, A., Cabral, J.M.S., Palavra, A.M.F., "SAS micronization of synthetic all trans-beta-carotene with tetrahydrofuran as solvent and carbon dioxide as antisolvent", **J. Chem. Technol. Biotechnol.**, 84, 215-222 (2009)

Carvalho, F., Marques, M.P.C., de Carvalho C.C.C.R., Cabral, J.M.S., Fernandes, P., "Sitosterol bioconversion with resting cells in liquid polymer based systems", **Bioresource Technol.**, 100, 4050-4053 (2009)

Carvalho, J., Prazeres, D.M.F., Monteiro, G.A., "Bringing DNA vaccines closer to commercial use", **iDrugs**, 12, 642-647 (2009)

Cattorini, S., Marques, M.P.C., Carvalho, F., Chheub, V., Cabral, J.M.S., Fernandes, P., "Lentikat[®]-based Biocatalysts: Effective Tools for Inulin Hydrolysis", **Chem. Biochem. Eng. Q.**, 23, 429-434 (2009)

Costa, L., Brissos, V., Lemos, F., Ribeiro, F.R., Cabral, J.M.S., "Enhancing the thermal stability of lipases through mutagenesis and immobilization on zeolites", **Bioprocess Biosyst. Eng.**, 32, 53-61 (2009)

Costa, L., Coelho, A., Lemos, F., Ribeiro, F.R., Cabral, J.M.S., "Modulating the acid strength of zeolite H-ZSM-5 to increase the selectivity in the racemization of 1-phenylethanol", **Appl. Catal. A: Gen.**, 354, 33-37 (2009)

Coutinho C.P., Sá-Correia I., Lopes J.A., 2009, "Use of Fourier transform infrared spectroscopy and chemometrics to discriminate clinical isolates of bacteria of the Burkholderiacepaciacomplex from different species and ribopatterns" **Analytical and Bioanalytical Chemistry**, 394(8); 2161-2171 (2009)

da Silva, C.L., Gonçalves, R., Porada, C.D., Ascensão, J.L., Zanjani, E.D., Cabral, J.M.S., Almeida-Porada, G., "Differences amid bone marrow and cord blood hematopoietic stem/progenitor cell division kinetics", **J. Cell. Physiol.**, 220, 102-111 (2009)

de Barros, D.P.C., Fonseca, L.P., Cabral, J.M.S., Weiss, C.K., Landfester, K., "Synthesis of alkyl esters by cutinase in miniemulsion and organic solvent media", **Biotechnol. J.**, 4, 674-683 (2009)

de Barros, D.P.C., Fonseca, L.P., Fernandes, P., Cabral, J.M.S., Mojovic L., "Biosynthesis of ethyl caproate and other short ethyl esters catalyzed by cutinase in organic solvent", **J. Mol. Catal. B: Enzym.**, 60, 178-185 (2009)

de Carvalho, C.C.C.R., Wick, L.Y., Heipieper, H.J., "Cell wall adaptations of planktonic and biofilm *Rhodococcus erythropolis* cells to growth on C5 to C16 n-alkane hydrocarbons", **Appl. Microbiol. Biotechnol.**, 82, 311-320 (2009)

Domingos S., Matos R.G., F.P. Reis, A.M. Fialho, A. Barbas, C.M. Arraiano, "Biochemical characterization of the RNAse II family of exoribonucleases from the human pathogens *Salmonella typhimurium* and *Streptococcus pneumoniae*", **Biochemistry** 48(50):11848-11857 (2009)

dos Santos S.C., Tenreiro S., Palma M., Becker J. and Sá-Correia I., "Transcriptomic profiling of the yeast response to quinine evidenced a glucose limitation response attributable to drug-induced inhibition of glucose uptake", **Antimicrobial Agents and Chemotherapy**, 53, 5213-5223 (2009)

dos Santos, S.C., Sá-Correia I., "Genome-wide identification of genes required for yeast growth under imatinib stress: vacuolar H⁺-ATPase function is an important target of this anticancer drug", **OMICS: A Journal of Integrative Biology**, 13: 185-198 (2009)

Fernandes, P., Marques, M.P.C., Carvalho, F., Cabral, J.M.S., "A simple method for biocatalyst immobilization using PVA-based hydrogel particles", **J. Chem. Technol. Biotechnol.**, 84, 561-564 (2009)

Fernandes, T.G., Diogo, M.M., Clark, D.S., Dordick, J.S., Cabral, J.M.S., "High-throughput cellular microarray platforms: applications in drug discovery, toxicology and stem cell research", **Trends Biotechnol.**, 27, 342-349 (2009)

Filipe P, Silva JN, Silva R, Cirne de Castro JL, Alves LC, Santos R, Pinheiro T. Stratum corneum is an effective barrier to TiO₂ and ZnO nanoparticle percutaneous absorption. **Skin Pharmacology and Physiology** 2009;22 (5):266-275 (DOI: 10.1159/000235554)

Freitas, S.S., Canário, S., Santos, J.A.L., Prazeres, D.M.F., "Alternatives for the intermediate recovery of plasmid DNA: Performance, economic viability and environmental impact", **Biotechnol. J.**, 4, 265-278 (2009)

Freitas, S.S., Santos, J.A.L., Prazeres, D.M.F., "Plasmid purification by hydrophobic interaction chromatography using sodium citrate in the mobile phase", **Sep. Purif. Technol.**, 65, 95-104 (2009)

Gomes, A.G., Azevedo, A.M., Aires-Barros, M.R., Prazeres, D.M.F., "Purification of plasmid DNA with aqueous two phase systems of PEG 600 and sodium citrate/ammonium sulphate", **Sep. Purif. Technol.**, 65, 22-30 (2009)

Gonçalves, I. C., Lopes, L., Pinheiro, H. M., Ferra, M. I., "Behaviour of different anaerobic populations on the biodegradation of textile chemicals", **J. Hazard. Mater.**, 172, 1236-1243 (2009).

Gonçalves V.M.F., Reis A., Domingues M.R.M., Lopes-da-Silva J.A., Fialho A.M., Moreira L.M., Sá-Correia I., Coimbra M.A., "Structural analysis of gellans produced by *Sphingomonas elodea* strains by electrospray tandem mass spectrometry", **Carbohydrate Polymers**, 77, 10-19 (2009)

Guerrero-Germán, P., Prazeres, D.M.F., Guzmán, R., Montesinos-Cisneros, R.M., Tejeda-Mansir, A., "Purification of plasmid DNA using tangential flow filtration and tandem anion-exchange membrane chromatography", **Bioprocess Biosyst. Eng.**, 32, 615-623 (2009)

Henriques, A.M., Madeira, C., Fevereiro, M., Prazeres, D.M.F., Aires-Barros, M.R., Monteiro, G.A., "Effect of cationic liposomes/DNA charge ratio on gene expression and antibody response of a candidate DNA vaccine against Maedi-Visna virus", **Int. J. Pharm.**, 377, 92-98 (2009)

Holden M.T., Seth-Smith H.M., Crossman L.C., Sebahia M., Bentley S.D., Cerdeño-Tárraga A.M., Thomson N.R., Bason N., Quail M.A., Sharp S., Cherevach I., Churcher C., Goodhead I., Hauser H., Holroyd N., Mungall K., Scott P., Walker D., White B., Rose H., Iversen P., Mil-Homens D., Rocha E.P., Fialho A.M., Baldwin A., Dowson C., Barrell B.G., Govan J.R., Vandamme P., Hart C.A., Mahenthiralingam E., Parkhill J. "The genome

of BurkholderiacenocepaciaJ2315, an epidemic pathogen of cystic fibrosis patients." **Journal of Bacteriology**, 191(1):261-277 (2009)

Kwan J.M., Fialho A.M., Hong C.S., Kundu M., Das Gupta T.K., Chakrabarty A.M. (2009) "Bacterial Proteins as Potential Drugs in the Treatment of Leukemia", **Leukemia Research**, 33, 1392-1399 (2009)

Lima D., Viana P., André S., Chelinho S., Costa C., Ribeiro R., Sousa J.P., Fialho A.M., Viegas C.A., "Evaluating a bioremediation tool for atrazine contamination soies in open soil microcosmos: the effectiveness of bioaugmentation and biostimulation approaches". **Chemosphere**, 74, 187 (2009)

Lourenço, N. D., Novais, J. M., Pinheiro, H. M., "Treatment of colored textile wastewater in SBR with emphasis on the biodegradation of sulfonated aromatic amines", **Water Practice & Technol.**, 4(3), 1-8 (2009).

Madeira, C., Estrela, N., Ferreira, J.A.B., Andrade, S.M., Costa S.M.B., Melo, E.P., "Fluorescence lifetime imaging microscopy and fluorescence resonance energy transfer from cyan to yellow fluorescent protein validates a novel method to cluster proteins on solid surfaces", **J. Biomed. Opt.**, 14: 044035 (2009)

Marques, M.P.C., Cabral, J.M.S., Fernandes, P., "High throughput in biotechnology: from shake-flasks to fully instrumented microfermentors", **Recent Pat. Biotechnol.**, 3, 124-140 (2009)

Marques, M.P.C., Carvalho, F., Magalhães, S., Cabral, J.M.S., Fernandes, P., "Screening for suitable solvents as substrate carriers for the microbial side-chain cleavage of sitosterol using microtitre plates", **Process Biochem.**, 44, 174-180 (2009)

Marques, M.P.C., Magalhães, S., Cabral, J.M.S., Fernandes, P., "Characterization of 24-well microtiter plate reactors for a complex multi-step bioconversion: from sitosterol to androstenedione", **J. Biotechnol.**, 141, 174-180 (2009)

Martins, S.A.M., Prazeres, D.M.F., Fonseca, L.P., Monteiro, G.A., "The role of probe-probe interactions on the hybridization of double stranded DNA targets onto DNA-modified magnetic microparticles", **Anal. Bioanal. Chem.**, 394, 1711-1716 (2009)

Martins, S.A.M., Prazeres, D.M.F., Fonseca, L.P., Monteiro, G.A., "Application of central composite design for DNA hybridization onto magnetic microparticles", **Anal. Biochem.**, 391, 17-23 (2009)

Martins, V.C., Cardoso, F.A., Germano, J., Cardoso, S., Sousa, L., Piedade, M., Freitas, P.P., Fonseca, L.P. "Femtomolar limit of detection with a magnetoresistive biochip", **Biosens. Bioelectron.**, 24, 2690-2695 (2009)

Mira N.P., Lourenço A., Fernandes A., Becker J., Sá-Correia I., "The RIM101 pathway has a role in *Saccharomyces cerevisiae* adaptive response and resistance to propionic acid and other weak acids", **FEMS Yeast Research**, 9, 202-216 (2009)

Oliveira, P.H., Prather, K.J., Prazeres, D.M.F., Monteiro, G.A., "Structural instabilities of plasmid biopharmaceuticals: Challenges and implications", **Trends Biotechnol.**, 27, 503-509 (2009)

Oliveira, P.H., Prazeres, D.M.F., Monteiro, G.A., "Deletion-formation mutations in plasmid expression vectors are unfavoured by runaway amplification conditions and differentially selected under kanamycin stress", **J. Biotechnol.**, 143, 231-238 (2009)

Paixão, L., Rodrigues, L., Martins, M., Couto, I., Fernandes P., de Carvalho, C.C.C.R., Monteiro, G., Sansonetty, F., Amaral, L., Viveiros, M., "Fluorometric determination of ethidium bromide efflux kinetics in *Escherichia coli*", **J. Biol. Eng.**, 3: 18 (2009)

Pereira L., Coelho A.V., Viegas C.A., dos Santos M.M.C., Robalo M.P., Martins, L.O. "Enzymatic biotransformation of the azo dye Sudan Orange G with bacterial CotA-laccase", **Journal of Biotechnology**, 139, 68-77 (2009)

Pereira L., Coelho A.V., Viegas C.A., Ganachaud C., Lacazio G., Tron T., Robalo M.P., Martins L.O., "On the mechanism of biotransformation of the anthraquinonic dye Acid Blue 62 by microbial laccase" **Advances Synthesis & Catalysis**, 351, 1857-1865 (2009)

Pereira, A.T., Pimentel, A.C, Chu, V., Prazeres, D.M.F., Conde, J.P., "Chemiluminescence detection of horseradish peroxidase using an integrated using an amorphous silicon thin film photosensor", **IEEE Sensors**, 9, 1282-1290 (2009)

Pimentel, A.C, Pereira, A.T., Prazeres, D.M.F., Chu, V., Conde, J.P., "Detection of fluorescently labeled biomolecules immobilized on a detachable substrate using and integrated amorphous silicon photodetector", **Appl. Phys. Lett.**, 94: 164106 (2009)

Pinotti, L.M., Fonseca, L.P., Prazeres, D.M.F., Rodrigues, D.S., Nuccia, E.R., Giordano, R.L.C., "Recovery and partial purification of penicillin G acylase from *E. coli* homogenate and *B. megaterium* culture medium using an expanded bed adsorption column", **Biochem. Eng. J.**, 44, 111-118 (2009)

Ribeiro, S.C., Monteiro, G.A., Prazeres, D.M.F., "Evaluation of the effect of non-B DNA structures on plasmid integrity via accelerated stability studies", **J. Pharm. Sci.**, 98, 1400-1408 (2009)

Rosa, P.A.J., Azevedo A.M., Sommerfeld, S., Mutter, M., Aires-Barros, M.R., Bäcker, W., "Application of aqueous two-phase systems to antibody purification: A multi-stage approach", **J. Biotechnol.**, 139, 306-313 (2009)

Rosa, P.A.J., Azevedo, A.M., Ferreira, I.F., Sommerfeld, S., Bäcker, W., Aires-Barros, M.R., "Downstream processing of antibodies: Single-stage versus multi-stage aqueous two-phase extraction", **J. Chromatogr. A**, 1216, 8741-8749 (2009)

Sá-Correia I., dos Santos S.C., Teixeira M.C., Cabrito T.R., Mira N.P., "Drug:H⁺ antiporters in chemical stress response in yeast", **Trends in Microbiology**, 17, 22-31 (2009)

Santos P.M., Sá-Correia I., "Adaptation to β -myrcene catabolism in *Pseudomonas* sp. M1: an expression proteomics analysis", **Proteomics**, 9, 5101-5111 (2009)

Santos P.M., Simões T., Sá-Correia I., "Insights into yeast adaptive response to the agricultural fungicide mancozeb: a toxicoproteomics approach", **Proteomics**, 19, 657-670 (2009)

Serro, A.P., Completo, C., Colaço, R., dos Santos, F., da Silva, C.L., Cabral, J.M.S., Araújo, H., Pires, E., Saramago, B., "A comparative study of titanium nitrides, TiN, TiNbN and TiCN, as coatings for biomedical applications", **Surf. Coat. Technol.**, 203, 3701-3707 (2009)

Silva, A.I., Mateus, M., "Development of a polysulfone hollow fiber vascular bio-artificial pancreas device for in vitro studies", **J. Biotechnol.**, 139, 236-249 (2009)

Silva, M.S., Prazeres, D.M.F., Lança, A., Atouguia, J., Monteiro, G.A., "Trans-sialidase from *Trypanosoma brucei* as a potential target for DNA vaccine development against African Trypanosomiasis", **Parasitol. Res.**, 105, 1223-1229 (2009)

Silva, T., Lima, P., Hageman, S., Fonseca, L.P., Calado, C.R.C., "Prediction of dynamic plasmid production by recombinant *Escherichia coli* fed-batch cultivations with a generalized regression neural network", **Chem. Biochem. Eng. Q.**, 23, 419-427 (2009)

Sousa, A., Sousa, F., Prazeres, D.M.F., Queiroz, J.A., "Histidine affinity chromatography of homooligonucleotides. Role of multiple interactions on retention", **Biomedical Chromatogr.**, 23, 745-753 (2009)

Sousa, F., Prazeres, D.M.F., Queiroz, J.A., "Binding and elution strategy for improved performance of arginine affinity chromatography in supercoiled plasmid DNA purification", **Biomedical Chromatogr.**, 23, 160-165 (2009)

Sousa, F., Prazeres, D.M.F., Queiroz, J.A., "Improvement of transfection efficiency by using supercoiled plasmid DNA purified from a clarified lysate with arginine affinity chromatography", **J. Gene Med.**, 11, 79-88 (2009)

Sousa, I.T., Ruiu, L., Lowe, C.R., Taipa, M.A., "Synthetic affinity ligands as a novel tool to improve protein stability", **J. Mol. Recognit.**, 22, 83-90 (2009)

Teixeira M.C., Raposo L.R., Mira N.P., Lourenço A.B., and Sá-Correia I., "Genome-wide identification of genes required for maximal tolerance to ethanol in yeast: important role of FPS1" **Applied and Environmental Microbiology**, 75: 5761-5772 (2009)

Teixeira M.C., Santos P.M., Rodrigues C., Sá-Correia I., "Teaching Expression Proteomics: from the wet-lab to the laptop", **Biochemistry and Molecular Biology Education**, 37, 279-286 (2009)

Temtem, M., Silva, L.M.C., Andrade, P.Z., dos Santos, F., da Silva, C.L., Cabral, J.M.S., Abecasis, M.M., Aguiar-Ricardo, A., "Supercritical CO₂ generating chitosan devices with controlled morphology. Potential application for drug delivery and mesenchymal stem cell culture", **J. Supercritical Fluids**, 48, 269-277 (2009)

Wu, M.L., Freitas, S.S., Monteiro, G.A., Prazeres, D.M.F., Santos, J.A.L., "Stabilization of naked and condensed plasmid DNA against degradation induced by ultrasounds and high shear vortices", **Biotechnol. Appl. Biochem.**, 53, 237-246 (2009)

2008

Azevedo, A.M., Rosa, P.A.J, Ferreira, I.F., Aires-Barros, M.R., "Integrated process for the purification of antibodies combining aqueous two-phase extraction, hydrophobic interaction chromatography and size-exclusion chromatography", **J. Chromatogr. A**, 1213, 154-161 (2008)

Baptista, R.P., Pedersen, S., Cabrita, G.J., Otzen, D.E., Cabral, J.M.S., Melo E.P., "Thermodynamics and mechanism of cutinase stabilization by trehalose", **Biopolymers**, 89, 538-547 (2008)

Brissos, V., Eggert, T., Cabral, J.M.S., Jaeger, K.E., "Improving activity and stability of cutinase towards the anionic detergent AOT by complete saturation mutagenesis", **Prot. Eng. Design Select.**, 21, 387-393 (2008)

Brissos, V., Melo, E.P., Martinho, J.M.G., Cabral, J.M.S., "Biochemical and structural characterisation of cutinase mutants in the presence of the anionic surfactant AOT", **Biochem. Biophys. Acta - Prot. Proteom.**, 1784, 1326-1334 (2008)

Cardoso, F.A., Germano, J., Ferreira, R., Cardoso, S., Martins, V.C., Freitas, P.P., Piedade, M.S., Sousa, L., "Detection of 130 nm magnetic particles by a portable electronic platform using spin valve and magnetic tunnel junction sensors", **J. Appl. Phys.**, 103, 07A310 (2008)

Cardoso, M.A.T., Cabral, J.M.S., Palavra, A.M.F., Geraldes, V., "CFD analysis of supercritical antisolvent (SAS) micronization of minocycline hydrochloride", **J. Supercritical Fluids**, 47, 247-258 (2008)

Cardoso, M.A.T., Monteiro, G.A., Cardoso, J.P., Prazeres, T.J.V., Figueiredo, J.M.F., Martinho, J.M.G., Cabral, J.M.S., Palavra, A.M.F., "Supercritical antisolvent micronization of minocycline hydrochloride", **J. Supercritical Fluids**, 44, 238-244 (2008)

Cardoso, M.A.T., Geraldes, V., Cabral, J.M.S., Palavra, A.M.F., "Characterization of minocycline powder micronized by a supercritical antisolvent (SAS) process", **J. Supercritical Fluids**, 46, 71-76 (2008)

Carvalho, M. C., Pereira, C., Gonçalves, I. C., Pinheiro, H. M., Santos, A. R., Lopes, A., Ferra, M. I., "Assessment of the biodegradability of a monosulfonated azo dye and aromatic amines", **International Biodeterioration and Biodegradation**, 62, 96-103 (2008).

Carvalho, R.H., Lemos, M.A.N.D.A., Lemos, F., Cabral, J.M.S., Ribeiro, F.R., "Electro-oxidation of phenol on zeolite/graphite composite electrodes - Part 3. Influence of the electrolyte and of nonelectroactive cations", **Catal. Today**, 133, 855-862 (2008)

Catarino, I., Minhalma, M., Beal, L.L., Mateus, M., de Pinho, M.N., "Assessment of saccharide fractionation by ultrafiltration and nanofiltration", **J. Membr. Sci.**, 312, 34-40 (2008)

Claudino, M.J.C., Soares, D., Marques, M.P.C., van Keulen, F., Cabral, J.M.S., Fernandes, P., "Immobilization of mycobacterial cells onto silicone - assessing the feasibility of the immobilized biocatalyst in the production of androstenedione from sitosterol", **Bioresource Technol.**, 99, 2304-2311 (2008)

Conde, J.P., Pimentel, A.C., Pereira, A.T., Gouvêa, A., Prazeres, D.M.F., Chu, V., "Detection of molecular tags with an integrated amorphous silicon photodetector for biological applications," **J. Non-Cryst. Solids**, 354, 2594-2597 (2008)

Cosme A.M., Becker A., Santos M.R., Sharypova L.A., Santos P.M., Moreira L.M. "The outer membrane protein TolC from *Sinorhizobium meliloti* affects protein secretion, polysaccharide biosynthesis, antimicrobial resistance and symbiosis". **Molecular Plant-Microbe Interactions**, 21, 947-57(2008)

Costa, L., Brissos, V., Lemos, F., Ribeiro, F.R., Cabral, J.M.S., "Comparing the effect of immobilization methods on the activity of lipase biocatalysts in ester hydrolysis", **Bioproc. Biosys. Eng.**, 31, 323-327 (2008)

Costa, L., Brissos, V., Lemos, F., Ribeiro, F.R., Cabral, J.M.S., "Following multi-component reactions in liquid medium using spectral band-fitting techniques", **Appl. Spectroscopy**, 62, 932-935 (2008)

Costa, L.F.A., Lemos, F., Ribeiro, F.R., Cabral, J.M.S., "Zeolite screening for the racemization of 1-phenylethanol", **Catal. Today**, 133, 625-631 (2008)

Diogo, M.M., Henrique D., Cabral, J.M.S., "Optimization and integration of expansion and neural commitment of mouse embryonic stem cells", **Biotechnol. Appl. Biochem.**, 49, 105-112 (2008)

Fernandes, T.G., Kwon, S.J., Lee, M.Y., Clark, D.S., Cabral, J.M.S., Dordick, J.S., "An on-chip, cell-based microarray immunofluorescence assay for high-throughput analysis of target proteins", **Anal. Chem.**, 80, 6633-6639 (2008)

Ferreira, I.F., Azevedo, A.M., Rosa, P.A.J., Aires-Barros, M.R., "Purification of human immunoglobulin G by thermoseparating aqueous two-phase systems", **J. Chromatogr. A**, 1195, 94-100 (2008)

Fialho A.M., Moreira L.M., Granja A.T., Popescu A.O., Hoffmann K., Sá-Correia I., "Occurrence, production and applications of gellan: current state and perspectives". **Applied Microbiology Biotechnology**, 79, 889-900 (2008)

Frias, A.M., Porada, C.D., Crapnell, K.B., Cabral, J.M.S., Zanjani, E.D., Almeida-Porada, G., "Generation of functional natural killer and dendritic cells in a human stromal-based serum-free culture system designed for cord blood expansion", **Exp. Hematol.**, 36, 61-68 (2008)

Gonçalves, D., Prazeres, D.M.F., Chu, V., Conde, J.P., "Amorphous silicon thin-film transistors gated through an electrolyte solution", **IEEE Electron Device Lett.**, 29, 1030-1033 (2008)

Gonçalves, D., Prazeres, D.M.F., Chu, V., Conde, J.P., "Detection of DNA and proteins using amorphous silicon ion-sensitive thin-film field effect transistors", **Biosens. Bioelectron.**, 24, 545-551 (2008)

Gouvêa, A., Pereira, A.T., Pimentel, A.C., Prazeres, D.M.F., Chu, V., Conde, J.P., "Colorimetric detection of molecular recognition reactions with an enzyme biolabel using a thin-film amorphous silicon photodiode on a glass substrate", **Sensors Actuators B: Chemical**, 135, 102-107 (2008)

Leitão J.H., Sousa S.A., Cunha M.V., Salgado M.J., Melo-Cristino J., Barreto M.C. and Sá-Correia I., "Variation of the antimicrobial susceptibility profiles of Burkholderia cepacia complex clonal isolates obtained from

chronically infected cystic fibrosis patients: a five-year survey in the major Portuguese treatment center". **European Journal of Clinical Microbiology & Infectious Diseases**, 27, 1101-1111 (2008)

Lienqueo, M.E., Salazar, O., Calado, C.R.C., Fonseca, L.P., Cabral, J.M.S., "Influence of tryptophan tags on the purification of cutinase, secreted by a recombinant *Saccharomyces cerevisiae*, using cationic expanded bed adsorption and hydrophobic interaction chromatography", **Biotechnol. Lett.**, 30, 1353-1358 (2008)

Lourenço, N. D., Menezes, J. C., Pinheiro, H. M., Diniz, D., "Development of PLS calibration models from UV-VIS spectra for TOC estimation at the outlet of a fuel park wastewater treatment plant", **Environ. Tech.**, 29, 891-898 (2008).

Lourenço, N. D., Menezes, J. C., Pinheiro, H. M., Diniz, D., "Fuel park wastewater monitoring with UV-VIS spectra and partial least squares", **Maced. J. Chem. Chem. Eng.**, 27, 19-23 (2008).

Madeira, C., Loura, L.M.S., Prieto, M., Fedorov, A., Aires-Barros, M.R., "Effect of ionic strength and presence of serum on lipoplexes structure monitored by FRET", **BMC Biotechnol.**, 8: 20 (2008)

Marques, M.P.C., Cabral, J.M.S., Fernandes, P., "Online oxygen monitoring system - non-conventional steroid fermentations in microtiter plates", **Bioforum Europe**, 9, 42-43 (2008)

Martins, S., Prazeres, D.M.F., Monteiro, G.A., "Chemiluminescent bead-based hybridization assay for the detection of genomic DNA from *E. coli* in purified plasmid samples", **Anal. Bioanal. Chem.**, 391, 2179-2187 (2008)

Monteiro P., Mendes N., Teixeira M.C., d'Orey S., Tenreiro S., Mira N.P., Pais H., Francisco A., Carvalho A., Lourenço A.R., Sá-Correia I., Oliveira A.L., Freitas A.T., "YEASTRACT-DISCOVERER: new tools to improve the analysis of transcriptional regulatory associations in *Saccharomyces cerevisiae*". **Nucleic Acids Research**, Database Issue, 36: D132-D136 (2008)

Naguleswaran A., Fialho A.M., Chaudhari A., Hong C.S., Chakrabarty A.M., Sullivan Jr. W.J., "Azurin-like protein blocks invasion of *Toxoplasma gondii* through potential interaction with parasite surface antigen SAG1", **Antimicrobial Agents and Chemotherapy**, 52, 402-408 (2008)

Oliveira, P.H., Lemos, F., Monteiro, G.A., Prazeres, D.M.F., "Recombination frequency in plasmid DNA containing direct repeats - predictive correlation with repeat and intervening sequence length", **Plasmid**, 60, 159-165 (2008)

Pimentel, A.C, Prazeres, D.M.F., Chu, V., Conde, J.P., "Fluorescence detection of DNA using an amorphous silicon p-i-n photodiode", **J. Applied Physics**, 104, 054913 (2008)

Prazeres, D.M.F., "Prediction of diffusion coefficients of plasmids", **Biotechnol. Bioeng.**, 99, 1040-1044 (2008)

Ribeiro, S.C., Oliveira, P.H., Prazeres, D.M.F., Monteiro, G.A., "High frequency plasmid recombination mediated by 28 bp direct repeats", **Mol. Biotechnol.**, 40, 252-260 (2008)

Sampaio, P.N., Fortes, A.M., Cabral, J.M.S., Pais, M.S., Fonseca, L.P., "Production and characterization of recombinant cyprosin B in *Saccharomyces cerevisiae* (W303-1A) strain", **J. Biosci. Bioeng.**, 105, 305-312 (2008)

Santos, A.M., Fedorov, A., Martinho, J.M.G., Baptista, R.P., Taipa, M.A., Cabral, J.M.S., "Orientation of cutinase adsorbed onto PMMA nanoparticles probed by tryptophan fluorescence", **J. Phys. Chem. B**, 112, 3581-3585 (2008)

Sousa S.A., Moreira L.M., Leitão J.H., "Functional analysis of the *Burkholderia cenocepacia* J2315 BceA protein with phosphomannose isomerase and GDP-D-mannose pyrophosphorylase activities", **Applied Microbiology Biotechnology**, 80, 1015-1022 (2008)

Sousa S.A., Ramos C.G., Almeida L., Meirinhos-Soares L., Wopperer J., Schwager S., Eberl L., Leitão J.H., "*Burkholderia cenocepacia* J2315 acyl carrier protein: a potential target for antimicrobials development", **Microbial Pathogenesis**, 45, 331-336 (2008)

Sousa, F., Prazeres, D.M.F., Queiroz, J.A., "Affinity chromatography approaches for overcoming the challenges of purifying plasmid DNA", **Trends Biotechnol.**, 26, 518-525 (2008)

Sousa, F., Prazeres, D.M.F., Queiroz, J.A., "Specific recognition of supercoiled plasmid DNA by arginine affinity chromatography", **Anal. Biochem.**, 374, 432-434 (2008)

Taipa, M.A., "Immunoassays: Biological tools for high throughput screening and characterisation of combinatorial libraries", **CCHTS**, 11, 325-335 (2008)

Teixeira M.C., Dias P.J., Simões T., Sá-Correia I., "Yeast adaptation to mancozeb involves the up-regulation of FLR1 under the coordinate control of Yap1, Rpn4, Pdr3 and Yrr1", **Biochemical Biophysical Research Communications**, 367, 249-255 (2008)

Teles, F.R.R., Fonseca, L.P., "Applications of polymers for biomolecule immobilization in electrochemical biosensors", **Mat. Sci. Eng. C**, 28, 1530-1543 (2008)

Teles, F.R.R., Fonseca, L.P., "Trends in DNA biosensors", *Talanta*, 77, 606-623 (2008)

Vale, G., Mota, A., Fonseca, L., Capelo, J.L., "Ultrasonic assisted enzymatic digestion -USAED- for total elemental determination and elemental speciation: a tutorial", **Talanta**, 75, 872-884 (2008)

Vale, G., Pereira, S., Mota, A., Fonseca, L., Capelo, J.L., "Enzymatic probe sonication as a tool for solid-liquid extraction for total selenium determination by electrothermal-atomic absorption spectrometry", **Talanta**, 74,198-205 (2008)

Vidinha, P., Augusto, V., Nunes, J., Lima, J.C., Cabral, J.M.S., Barreiros S., "Probing the microenvironment of sol-gel entrapped cutinase: The role of added zeolite NaY", **J. Biotechnol.**, 135, 181-189 (2008)

Vidinha, P., Barreiros, S., Cabral, J.M.S., Nunes, T.G., Fidalgo, A., Ilharco, L.M., "Enhanced biocatalytic activity of ORMOSIL-encapsulated cutinase: The matrix structural perspective", **J. Phys. Chem. C**, 112, 2008-2015 (2008)

Vidinha, P., Lourenço, N.M.T., Pinheiro, C., Brás, A.R., Carvalho, T., Silva, T.S., Mukhopadhyay, A., Romão, M.J., Parola, J., Dionísio, M., Cabral J.M.S., Afonso, C.A.M., Barreiros, S., "Ion Jelly: a tailor-made conducting material for smart electrochemical devices", **Chem. Commun.**, 44, 5842–5844 (2008)

Vojinović, V., Cabral, J.M.S., Fonseca, L.P., "Ex-situ bioprocess monitoring techniques", **Chemical Industry & Chemical Engineering Quarterly**, 13, 1-15 (2008)

Zlosnik J.E.A., Hird T., Fraenkel M., Moreira L.M., Henry D.A., Speert D.P., "Differential mucoid exopolysaccharide production by members of the Burkholderia cepacia complex", **Journal of Clinical Microbiology**, 46, 1470-1473 (2008)

2007

Abranches, E., Bekman, E., Henrique, D., Cabral, J. M. S., "Expansion of mouse embryonic stem cells on microcarriers", **Biotechnol. Bioeng.**, 96, 1211-1221 (2007)

Aragão D., Fialho A.M., Marques A.R., Mitchell E.P., Sá-Correia I., Frazão C. "The complex of *Spingomonas elodea* ATCC 31461 Glucose-1-phosphate uridylyltransferase with glucose-1-phosphate reveals a novel quaternary structure, unique among Nucleoside Diphosphate-sugar pyrophosphorylase members", **Journal of Bacteriology**, 189, 4520-4528, 2007.

Azevedo, A. M. Rosa, P. A. J., Ferreira, I. F., Aires-Barros, M. R., "Optimisation of aqueous two-phase extraction of human antibodies", **J. Biotechnol.**, 132, 209-217 (2007)

Azzoni, A. R., Ribeiro, S. C., Monteiro, G. A., Prazeres, D. M. F., "The impact of polyadenylation signals on plasmid nuclease-resistance and transgene expression", **J. Gene Med.**, 9, 392-402 (2007)

Carapuça, E., Azzoni, A. R., Prazeres, D. M. F., Monteiro, G. A., Mergulhão, F. J. M., "Time-course determination of plasmid content in eukaryotic and prokaryotic cells using real-time PCR", **Mol. Biotechnol.**, 37, 120-126 (2007)

Carvalho, A. S. L., Ferreira, B. S., Neves-Petersen, M. T., Petersen, S. B., Aires-Barros, M. R., Melo, E. P., "Thermal denaturation of HRP2: pH-dependent conformational changes", **Enzyme Microb. Technol.**, 40, 696-703 (2007)

Carvalho, R. H., Lemos, F., Cabral, J. M. S., Ramôa Ribeiro, F., "Influence of the presence of NaY zeolite on the activity of horseradish peroxidase in the oxidation of phenol", **J. Mol. Catal. B: Enzym.**, 44, 39-47 (2007)

Carvalho, R. H., Lemos, F., Lemos, M. A. N. D. A. Cabral, J. M. S., Ramôa Ribeiro, F., "Electro-oxidation of phenol on a new type of zeolite/graphite biocomposite electrode with horseradish peroxidase", **J. Mol. Catal. A**, 278, 47-52 (2007)

Catana, R., Eloy, M., Rocha, J. R., Ferreira, B. S., Cabral, J. M. S., Fernandes, P., "Stability evaluation of an immobilized enzyme system for inulin hydrolysis", **Food Chem.**, 101, 260-266 (2007)

Chaudhari A., Mahfouz M., Fialho A.M., Yamada T., Granja A.T., Zhu Y., Hashimoto W., Schlarb-Ridley B., Cho W., Das Gupta T., Chakrabarty A.M., "Cupredoxin-Cancer Interrelationship: Azurin Binding with EphB2, Interference of EphB2 Tyrosine Phosphorylation and Inhibition of Cancer Growth" **Biochemistry**, 46, 1799-1810, 2007.

Chen, Z., Franco, C. F., Baptista, R. P., Cabral, J. M. S., Coelho, A. V., Rodrigues Jr, C. J. Melo, E. P., "Purification and identification of cutinases from *Colletotrichum kahawae* and *Colletotrichum gloeosporioides*", **Appl. Microbiol. Biotechnol.**, 73, 1306-1313 (2007)

Costa, M. J. L., Pedro, L., de Matos, A. P. A., Aires-Barros, M. R., Belo, J. A., Goncalves, J., Ferreira, G. N. M., "Molecular construction of bionanoparticles: chimaeric SIV p17-HIV 1 p6 nanoparticles with minimal viral protein content", **Biotechnol. Appl. Biochem.**, 48, 35-43 (2007)

Cunha M.V., Pinto-de-Oliveira A., Meirinhos-Soares L., Salgado M.J., Melo-Cristino J., Correia S., Barreto C., Sá-Correia I., "Exceptionally high representation of *Burkholderia cepacia* among *B. cepacia* complex isolates recovered from the Major Portuguese Cystic Fibrosis Center", **Journal of Clinical Microbiology**, 45, 1628-1633, 2007.

de Carvalho, C. C. C. R., Marques, M. P. C., Fernandes, P., da Fonseca, M. M. R., "Degradation of hydrocarbons and alcohols by *Rhodococcus erythropolis* DCL14: a comparison in scale performance", **Biocat. Biotrans.**, 25, 144-150 (2007)

Dias, A. I., Feliciano, A. S., Cabral, J. M. S., Prazeres, D. M. F., "Chemical synthesis and crystallization of the dipeptide AcPhelleNH₂ in TTAB/heptane/octanol reversed micelles", **J. Colloid Int. Sci.**, 305, 198-201 (2007)

Duarte, D., Fortes, A. G., Prazeres, D. M. F., Marcos, J. C., "Preparation of plasmid DNA polyplexes from alkaline lysates by a two-step aqueous two-phase extraction process", **J. Chromatog. A**, 1164, 105-112(2007)

Fernandes, A. M., Fernandes, T. G., Diogo, M. M., Lobato da Silva C., Henrique D., Cabral, J. M. S., "Mouse embryonic stem cell expansion in a microcarrier-based stirred culture system", **J. Biotechnol.**, 132, 227-236 (2007)

Fernandes, P., Cabral, J. M. S., "Phytosterols: applications and recovery methods", **Bioresource Technol.**, 98, 2325-2350 (2007)

Ferreira A.S., Leitão J.H., Sousa S.A., Cosme A.M., Sá-Correia I., Moreira L.M. "Functional Analysis of *Burkholderia cepacia* *bceD* and *bceF* Genes Encoding a Phosphotyrosine Phosphatase and a Tyrosine Autokinase: Role in Exopolysaccharide Biosynthesis and Biofilm Formation", **Applied and Environmental Microbiology**, 73, 524-534, 2007.

Fialho A.M., Chakrabarty A.M., "Recent Patents on Bacterial Proteins as Potential Anticancer Agents" **Recent Patents on Anti-Cancer Drug Discovery**, 3, 224-234, 2007.

Fialho A.M., das Gupta T.K., Chakrabarty A.M., "Designing promiscuous drugs: Look at what nature made!", **Letters in Drug Design & Discovery**, 4, 40-43, 2007.

Fialho A.M., Stevens F.J., das Gupta T.K., Chakrabarty A.M., "Beyond host-pathogen interactions: microbial defense strategy in the host environment", **Current Opinion in Biotechnology**, 18, 279-286, 2007.

Freitas, S. S., Azzoni, A. R., Santos, J. L., Monteiro, G. A., Prazeres, D. M. F., "On the stability of plasmid DNA vectors during cell culture and purification", **Mol. Biotechnol.**, 36, 151-158 (2007)

Granja A.T., Popescu A., Marques A.R., Sá-Correia I., Fialho A.M., "Biochemical characterization and phylogenetic analysis of UDP-glucose dehydrogenase from the gellan gum producer *Sphingomonas elodea* ATCC 31461" **Applied Microbiology and Biotechnology**, 76, 1319-1327, 2007.

Henriques, A. M., Fevereiro, M., Prazeres, D. M. F., Monteiro, G. A., "Development of a candidate DNA vaccine against Maedi-Visna virus", **Vet. Immunol. Immunopathol.**, 119, 222-232 (2007)

Lienqueo, M. E., Salazar, O., Henriquez, K., Calado, C. R. C., Fonseca, L. P., Cabral, J. M. S., "Prediction of retention time of cutinases tagged with hydrophobic peptides in hydrophobic interaction chromatography", **J. Chromat. A**, 1154, 460–463 (2007)

Madeira, C., Loura, L., Prieto, M., Fedorov, A., Aires-Barros, M. R., "Liposome complexation efficiency monitored by FRET: effect of charge ratio, helper lipid and plasmid size", **Eur. Biophys. J. Biophys.**, 36, 609-620 (2007)

Marques, M. P. C., de Carvalho, C. C. R., Claudino, M. J. C., Cabral, J. M. S., Fernandes, P., "On the feasibility of the microscale approach for a multi-step biotransformation: sitosterol side-chain cleavage", **J. Chem. Technol. Biotechnol.**, 82, 856-863 (2007)

Melo, E. P., Fernandes, A. T., Durão, P., Martins, L. O., "Insight into stability of Cot-A laccase from the spore coat of *Bacillus subtilis*", **Biochem. Soc. Trans.**, 35, 1579-1582 (2007)

Mergulhão, F. J. M., Monteiro, G. A., "Analysis of factors affecting the periplasmic production of recombinant proteins in *Escherichia coli*", **J. Microbiol. Biotechnol.**, 17, 1236-1241 (2007)

Monteiro, G. A., Prazeres, D. M. F., "Design and production of DNA vaccines", **Bioforum Europe**, 12/07, 20-22 (2007)

Neves-Petersen, M. T., Klitgaard, S., Carvalho, A. S. L., Petersen, S. B., Aires-Barros, M. R., Melo, E. P., "Photophysics and photochemistry of horseradish peroxidase A2 upon UV illumination", **Biophys. J.**, 92, 2016-2017 (2007)

Otzen, D. E., Giehm, L., Baptista, R. P., Kristensen, S. R., Melo, E. P., Pedersen, S., "Aggregation as the basis for complex behaviour of cutinase in different denaturants", **Biochim. Biophys. Acta**, 1774, 323-333 (2007)

Pimentel, A. C., Pereira, A. T., Chu, V., Prazeres, D. M. F., Conde, J. P., "Detection of chemiluminescence using an amorphous silicon photodiode", **IEEE Sensors Lett.**, 7, 415-416 (2007)

Pistor, P., Prazeres, D. M. F., Chu, V., Conde, J. P., "pH sensitive photoresistor based on poly (para- phenylene-vinylene)", **Sensors Actuators B: Chemical**, 123, 153-157 (2007)

Prazeres, D. M. F., Monteiro, G. A., "Produção de vacinas de DNA", **Engenharia Química: Indústria, Ciência e Tecnologia**, 7, 34-39 (2007)

Roque, A. C. A., Silva, C. S. O., Taipa, M. A., "Affinity-based methodologies and ligands for antibody purification: Advances and Perspectives", **J. Chromat. A**, 1160, 44-55 (2007)

Rosa, P. A. J., Azevedo, A. M., Aires-Barros, M. R., "Application of central composite design to the optimisation of aqueous two-phase extraction of human antibodies", **J. Chromat. A**, 1141, 50-60 (2007)

Rosa, P. A. J., Azevedo, A. M., Ferreira, I. F., de Vries, J., Korporaal, R., Verhoef, H. J., Visser, T. J., Aires-Barros, M. R., "Affinity partitioning of human antibodies in aqueous two-phase systems", **J. Chromat. A**, 1162, 103-113 (2007)

Santos P.M., Roma V., Benndorf D., von Bergen M., Harms H., Sá-Correia I., "Mechanistic insights into the global response to phenol in the phenol-biodegrading strain *Pseudomonassp.* M1, revealed by quantitative proteomics", **OMICS: A Journal of Integrative Biology**, 11, 233-251, 2007.

Santos P.M., Sá-Correia I., "Characterization of the unique organization and co-regulation of a gene cluster required for phenol and benzene catabolism in *Pseudomonassp.* M1". **Journal of Biotechnology**, 131, 371-378, 2007.

Sousa S.A., Moreira L.M., Wopperer J., Eberl L., Sá-Correia I., Leitão J.H., "The *Burkholderia cepacia* bceA gene encodes a protein with phosphomannose isomerase and GDP-D-mannose pyrophosphorylase activities", **Biochemical and Biophysical Research Communications**, 353, 200-206, 2007.

Sousa S.A., Ulrich M., Bragonzi A., Burke M., Worlitzch D., Leitão J.H., Meisner C., Eberl L., Sá-Correia I., Döring G., "Virulence of *Burkholderia cepacia* complex strain in gp91 phox^{-/-} mice", **Cellular Microbiology**, 9, 2817-2825, 2007.

Sousa, F., Prazeres, D. M. F., Queiroz, J. A., "Circular dichroism investigation of the effect of plasmid DNA structure on retention in histidine chromatography", **Arch. Biochem. Biophys.**, 467, 154-162 (2007)

Sousa, F., Prazeres, D. M. F., Queiroz, J. A., "Dynamic binding capacity of plasmid DNA in histidine-agarose chromatography", **Biomedical Chromatog.**, 21, 993-998 (2007)

Teixeira M.C., Duque P., Sá-Correia I., "Environmental Genomics: mechanistic insights into toxicity of and resistance to the herbicide 2,4-D", **Trends in Biotechnology**, 25: 363-370, 2007.

Teles, F. F., Prazeres, D. M. F., Lima-Filho, J. L., "Electrochemical detection of a dengue-related oligonucleotide sequence using ferrocenium as a hybridization indicator", **Sensors**, 7, 2510-2518 (2007)

Vargas R.C., García-Salcedo R., Tenreiro S., Teixeira M.C., Fernandes A.R., Ramos J. and Sá-Correia I., "*Saccharomyces cerevisiae* multidrug resistance transporter Qdr2 is implicated in potassium uptake, providing a physiological advantage to quinidine-stressed cells", **Eukaryotic Cell**, 6, 134-142, 2007.

Viseu, M. I., Melo, E. P., Carvalho, T. I., Correia, R. F., Costa, S. M. B., "Unfolding kinetics of β -Lactoglobulin induced by surfactant and denaturant: A stopped-flow/fluorescence study", **Biophys. J.**, 93, 601-3612 (2007)

Vojinovic, V., Carvalho, R., Lemos, F., Cabral, J. M. S., Fonseca, L. P., Ferreira, B. S., "Kinetics of soluble and immobilized horseradish peroxidase-mediated oxidation of phenolic compounds", **Biochem. Eng. J.**, 35, 126-135 (2007)

2006

Abranches, E., O'Neill, A., Cabral, J. M. S., Schaffer, D. V., "Development of quantitative PCR methods to analyse neural progenitor cell culture state", **Biotechnol. Appl. Biochem.**, 44, 1-8 (2006)

Adrega, T., Prazeres, D. M. F., Chu, V., Conde, J. P., "Thin-Film silicon MEMS DNA sensors", **J. Non-Crystalline Sol.**, 352, 1999-2003 (2006)

Alenquer M., Tenreiro S., Sá-Correia I., Adaptive response to the antimalarial drug artesunate in yeast involves Pdr1p/Pdr3p-mediated transcriptional activation of the resistance determinants *TPO1* and *PDR5*. **FEMS Yeast Research**, 6, 1130-1139, 2006.

Almeida, C. F., Calado, C. R. C., Bernardino, S. A., Cabral, J. M. S., Fonseca, L. P., "A flow injection analysis system for on-line monitoring of cutinase activity at outlet of an expanded bed adsorption column almost in real time", **J. Chem. Technol. Biotechnol.**, 81, 1678-1684 (2006)

Amblar M., Barbas A., Fialho A.M., Arraiano C.M., "Characterization of the functional domains of *Escherichia coli* RNase II", **Journal of Molecular Biology**, 360, 921-933, 2006.

Angelova, B., Fernandes, P., Spasova, D., Mutafov, S., Pinheiro, H. M., Cabral, J. M. S., "Scanning electron microscopy investigations on bis(2-Ethylhexyl)phthalate treated *Mycobacterium* cells", **Microsc. Res. Tech.**, 69, 613-617 (2006)

Aragão D., Marques A.R., Frazão C., Enguita F.J., Carrondo M.A., Fialho A.M., Sá-Correia I., E.P. Mitchell, "Cloning, expression, purification, crystallization and preliminary structure determination of glucose-1-phosphate uridylyltransferase (UgpG) from *Sphingomonas elodea* ATCC 31461 bound to glucose-1-phosphate", **Acta Crystallographica**, F62, 930-934, 2006.

Boutros, M., Brás, L. P., Huber, W., "Analysis of cell-based RNAi screens", **J. Chem. Technol. Biotechnol.**, 7, R66 (2006)

Brás, L. P., Menezes, J. C., "Dealing with gene expression missing data", **IEE Proc. Syst. Biol.**, 153, 105-119 (2006)

Carvalho, R. H., Lemos, F., Lemos, M. A. N. D. A., Cabral, J. M. S., Ribeiro, F. R., "Electro-oxidation of phenol on zeolite/graphite composite electrodes: Part 1. Electrochemical behaviour over NaY zeolite", **J. Mol. Catal. A: Chemical**, 248, 48-52 (2006)

Carvalho, R. H., Lemos, F., Lemos, M. A. N. D. A., Vojinovic, V., Fonseca, L. P., Cabral, J. M. S., "Kinetic modelling of phenol co-oxidation using horseradish peroxidase", **Bioprocess Biosystems Eng.**, 29, 99-108 (2006)

Carvalho, R. H., Lemos, M. A. N. D. A., Lemos, F., Cabral, J. M. S., Ribeiro, F. R., "Electro-oxidation of phenol on zeolite/graphite composite electrodes. Part 2. Influence of zeolite type and composition", **J. Mol. Catal. A: Chemical**, 253, 170-175 (2006)

Chaudhari A., Fialho A.M., Ratner D., Gupta P., Hong C.S., Kahali S., Yamada T., Haldar K., Murphy S., Cho W., Chauhan V.S., das Gupta T.K., Chakrabarty A.M., "Azurin, *Plasmodium falciparum* and HIV/AIDS: Inhibition of parasitic and viral growth by azurin", **Cell Cycle**, 5, 1642-1648, 2006.

Chen, L. Y., Ferreira, J. A. B., Costa, S. M. B., Cabrita, G. J. M., Otzen, D. E., Melo, E. P., "Compaction of ribosomal protein S6 by sucrose occurs only under native conditions", **Biochem.**, 45, 2189-2199 (2006)

de Assis, S. A., Ferreira, B. S., Fernandes, P., Trevisan, H. C., Cabral, J. M. S., Oliveira, O. M. M. F., "Production of low methoxyl pectin using immobilized pectinmethylesterase silica from acerola (*Malpighia glabra* L.)", **J. Chem. Technol. Biotechnol.**, 81, 706-709 (2006)

Díaz, E. G., Catana, R., Ferreira, B. S., Luque, S., Fernandes, P., Cabral, J. M. S., "Towards the development of a membrane reactor for enzymatic inulin hydrolysis", **J. Memb. Sci.**, 273, 152-158 (2006)

Fernandes, P., "Applied microbiology and biotechnology in the conservation of stone cultural heritage materials", **Appl. Microbiol. Biotechnol.**, 73, 291-296 (2006)

Fernandes, P., Cabral, J. M. S., "Microlitre/millilitre shaken bioreactors in fermentative and biotransformation processes - a review", **Biocatal. Biotrans.**, 24, 237-252 (2006)

Ferreira, A. P., Menezes, J. C., "Monitoring a complex medium fermentation with sample-sample two-dimensional FT-NIR correlation spectroscopy", **Biotechnol. Prog.**, 22, 866-872 (2006)

Ferreira, B. S., "Biotecnologia industrial", **Boletim de Biotecnologia**, 85, 3-7 (2006)

Freitas, S. S., Santos, J. A. L., Prazeres, D. M. F., "Optimization of isopropanol and ammonium sulphate precipitation steps in the purification of plasmid DNA", **Biotechnol. Prog.**, 22, 1179-1186 (2006)

Gonçalves, R., Lobato da Silva, C., Cabral, J. M. S., Zanjani, E. D., Almeida-Porada, G., "A Stro-1⁺ human universal stromal feeder layer to expand/maintain human bone marrow hematopoietic stem/progenitor cells in a serum-free culture system", **Exp. Hematology**, 34, 1353-1359 (2006)

Gonçalves, R., Lobato da Silva, C., Ferreira, B. S., Lemos, M. A. N. D. A., Lemos, F., Almeida-Porada, G., Cabral, J. M. S., "Kinetic analysis of the *ex-vivo* expansion of human hematopoietic stem/progenitor cells", **Biotechnol. Lett.**, 28, 335-340 (2006)

Gonçalves, T., Prazeres, D. M. F., Chu, V., Conde, J. P., "Label-free electronic detection of biomolecules using a-Si:H Field-effect devices", **J. Non-Crystalline Sol.**, 352, 2007-2010 (2006)

Hong C.S., Yamada T., Hashimoto W., Fialho A.M., das Gupta T.K., Chakrabarty A.M., "Disrupting the entry barrier and attacking brain tumors: The role of the Neisseria H.8 epitope and the Laz protein", **Cell Cycle**, 5, 1633-1641, 2006.

Jaumot, J., Menezes, J. C., Tauler, R., "Quality assessment of the results obtained by multivariate curve resolution analysis of multiple runs of gasoline blending processes", **J. Chemometrics**, 20, 54-67 (2006)

Lobato da Silva, C., Gonçalves, R., Lemos, M. A. N. D. A., Lemos, F., Almeida-Porada, G., Cabral, J. M. S., "Ex-vivo expansion and differentiation of human hematopoietic stem/progenitor cells supported by human stromal-based culture systems", **Actas de Bioquímica**, 7, 21-31 (2006)

Lopes, V. V., Pinheiro, C. C., Menezes, J. C., "Determination of state-space model uncertainty using bootstrap techniques", **J. Process Control**, 16, 685-692 (2006)

Lourenço, N. D., Chaves, C. L., Menezes, J. C., Pinheiro, H. M., Diniz, D., "A espectroscopia ultravioleta-visível na prevenção de descargas não-conformes de águas residuais industriais", **Engenharia Química**, 4, 56-62 (2006)

Lourenço, N. D., Chaves, C. L., Novais, J. M., Menezes, J. C., Pinheiro, H. M., Diniz, D., "UV spectra analysis for water quality monitoring in a fuel park wastewater treatment plant", **Chemosphere**, 65, 786-791 (2006)

Martins, V., Ferreira, H. A., Fonseca, L. P., Freitas, P. P., Cabral, J. M. S., "Biossensores magnetoresistivos e nanomarcadores magnéticos - Monitorização de microorganismos patogénicos em água", **Boletim de Biotecnologia**, 83, 11-21 (2006)

Mendes N.D., Casimiro A.C., Santos P.M., Sá-Correia I., Oliveira A.L., Freitas A.T., "MUSA: A parameter free algorithm for the identification of biologically significant motifs", **Bioinformatics**, 22, 2996-3002, 2006.

Minhalma, M., Beal, L. L., Catarino, I., Mateus, M., de Pinho, M. N., "Optimization of saccharide fractionation using nanofiltration/ultrafiltration", **Desalination**, 199, 337-339 (2006)

Passarinha, L. A., Diogo, M. M., Queiroz, J. A., Monteiro, G. A., Fonseca, L. P., Prazeres, D. M. F., "Production of ColE1 type plasmid by *Escherichia coli* DH5a cultured under non-selective conditions", **J. Microb. Biotechnol.**, 16, 20-24 (2006)

Pedersen, S., Nesgaard, L. Baptista, R. P., Melo, E. P. Kristensen, S. R., Otzen, D. E., "pH-dependent aggregation of cutinase is efficiently suppressed by 1,8-ANS", **Biopolymers**, 83, 619-629 (2006)

Rocha, J. R., Catana, R., Ferreira, B. S., Cabral, J. M. S., Fernandes, P., "Design and characterization of an enzyme system for inulin hydrolysis", **Food Chem.**, 95, 77-82 (2006)

Rodrigues, M. L., Archer, M., Martel, P., Miranda, S., Thomaz, M., Enguita, F. J., Baptista, R. P., Melo, E. P., Sousa, N., Cravador, A., Carrondo, M. A., "Crystal structures of the free and sterol-bound forms of beta-cinnamomin", **Biochim. Biophys. Acta**, 1764, 110-121 (2006)

Rodríguez, V. B., Alameda, E. J., Gallegos, J. F. M., Requena, A. R., López, A. I. G., Cabral, J. M. S., Fernandes, P., Fonseca, L. J. P., "Modification of the activity of an α -amylase from *Bacillus licheniformis* by several surfactants", **Electronic J. Biotechnology**, 9, 567-571 (2006)

Ruiu, L., Roque, A. C. A., Taipa, M. A., Lowe, C. R., "De novo design, synthesis and screening of a combinatorial library of complementary ligands directed towards the surface of cutinase from *Fusarium solani pisi*", **J. Mol. Recognit.**, 19, 372-378 (2006)

Silva, A. I., Norton-de-Matos, A., Brons, I. G., Mateus, M., "An overview on the development of a bio-artificial pancreas as a treatment of insulin-dependent Diabetes Mellitus", **Med. Res. Rev.**, 26, 181-222 (2006)

Silva, C. S. O, Baptista, R.P., Santos, A. M., Martinho, J. M., Cabral, J. M. S., Taipa, M. A., "Adsorption of human IgG on to poly(N-isopropylacrylamide)-based polymer particles", **Biotechnol. Lett.**, 28, 2019-2025 (2006)

Simões T., Mira N.P., Fernandes A.R., Sá-Correia I., "The SPI1 gene, encoding a glycosylphosphatidylinositol (GPI)-anchored cell wall protein, plays a prominent role in the development of yeast resistance to lipophilic weak acids food preservatives", **Applied and Environmental Microbiology**, 72, 7168-7175, 2006.

Sousa, F., Freitas, S. S., Azzonni, A., Prazeres, D. M. F., Queiroz, J. A., "Selective purification of supercoiled plasmid DNA from clarified cell lysates with a single histidine-chromatography step", **Biotechnol. App. Biochem.**, 45, 131-140 (2006)

Teixeira M.C., Fernandes A.R., Mira N.P., Becker J.D., Sá-Correia I., "Early transcriptional response of *Saccharomyces cerevisiae* to stress imposed by the herbicide 2,4-dichlorophenoxyacetic acid", **FEMS Yeast Research**, 6, 230-248, 2006.

Teixeira M.C., Monteiro P., Jain P., Tenreiro S., Fernandes A.R., Mira N.P., Alenquer M., Freitas A.T., Oliveira A.L., Sá-Correia I., "The YEASTRACT database: a tool for the analysis of transcriptional regulatory associations in *Saccharomyces cerevisiae*", **Nucleic Acids Research**, Database Issue, 34, D446-D451, 2006.

Valente, C. A., Monteiro, G. A., Cabral, J. M. S., Fevereiro, M., Prazeres, D. M. F., "Optimization of the primary recovery of human interferon alpha 2b from *Escherichia coli* inclusion bodies", **Protein Expr. Purif.**, 45, 226-234, (2006)

Vidinha, P., Augusto, V., Almeida, M., Fonseca, I., Fidalgo, A., Ilharco, L., Cabral, J. M. S., Barreiros, S., "Sol-gel encapsulation: an efficient and versatile immobilization technique for cutinase in nonaqueous media", **J. Biotechnol.**, 121, 23-33, (2006)

Vojinovic, V., Bertin, L., Cabral, J. M. S., Fonseca, L. P., "Horseradish peroxidase combined with oxidase enzymes a valuable bioanalytical tool: Lactate oxidase a case study", **Eng. Life Sci.**, 6, 181-186, (2006)

Vojinovic, V., Cabral, J. M. S., Fonseca, L. P., "Real-time bioprocess monitoring part I: *In-situ* sensors", **Sensors and Actuators B: Chemical**, 114, 1083-1091, (2006)

Vojinovic, V., Esteves, F. M. F., Cabral, J. M. S., Fonseca, L. P., "BENZYMATIC analytical microreactors for glucose, lactate, ethanol, galactose and L-amino acid monitoring in cell culture media", **Anal. Chim. Acta**, 565, 240-249, (2006)

2005

Fernandes A.R., Mira N.P., Vargas R.C., Canelhas I., Sá-Correia I., "*Saccharomyces cerevisiae* adaptation to weak acids involves the transcription factor Haa1p and of Haa1p-regulated genes", **Biochemical and Biophysical Research Communications**, 337, 95-103, 2005.

Hiraoka Y., Granja A.T., Fialho A.M., Schlarb-Ridley B., Das Gupta T.K., Chakrabarty A.M., Yamada T., "Human cytochrome c enters murine J7774 cells and causes G1 and G2/M cell cycle arrest and induction of apoptosis" **Biochemical and Biophysical Research Communications**, 338, 1284-1290, 2005.

Silva E., Marques A.R., Fialho A.M., Granja A.T., Sá-Correia I., "Proteins Encoded by *Sphingomonas elodea* ATCC 31461 rmlA and ugpG genes, involved in gellan gum biosynthesis, exhibit both dTDP- and UDP-Glucose pyrophosphorylase activities", **Applied and Environmental Microbiology**, 71, 4703-4712, 2005.

Strino F., Nahmany A., Rosen J., Kemp G.J.L., Sá-Correia I., Nyholm P-G, "Conformation of the exopolysaccharide of *Burkholderia cepacia* predicted with molecular mechanics (MM3) using genetic algorithm search", **Carbohydrate Research**, 340, 1019-1024, 2005.

Teixeira M.C., Santos P.M., Fernandes A.R., Sá-Correia I., "A proteome analysis of yeast response to the herbicide 2,4-dichlorophenoxyacetic acid", **Proteomics**, 5, 1889-1901, 2005.

Tenreiro S., Vargas R.C., Teixeira M.C., Magnani C., Sá-Correia I., "The yeast multidrug transporter Qdr3 (Ybr043c): localization and role as a determinant of resistance to quinidine, barbiturates, cisplatin and bleomycin", **Biochemical and Biophysical Research Communications**, 327, 952-959, 2005.

Vieira P.A., Garcia A.P., Sá-Correia I., "Functional and topological analysis of *Burkholderia cenocepacia* priming glucosyltransferase BceB, involved in the biosynthesis of the cepacian exopolysaccharide", **Journal of Bacteriology**, 187, 5013-5018, 2005.

Viegas C.A., Cabral M.G., Teixeira M.C., Neumann G., Heipieper H.J., Sá-Correia I., Yeast adaptation to 2,4-dichlorophenoxyacetic acid involves increased membrane fatty acid saturation degree and decreased *OLE1* transcription, **Biochemical and Biophysical Research Communications**, 330: 271-278, 2005.

Yamada T., Fialho, Punj V., Bratescu L., Das Gupta T., Chakrabarty A.M., "Internalization of bacterial redox protein azurin in mammalian cells: entry domain and specificity", **Cellular Microbiology**, 7: 1418-1431, 2005.

Angelova, B., Fernandes, P., Cruz, A., Pinheiro, H. M., Mutafov, S., Cabral, J. M. S., "Hydroxylation of androstenedione by resting *Rhodococcus* sp. cells in organic media", **Enzyme Microb. Technol.**, 37, 718-722 (2005)

Azevedo, A. M., Prazeres, D. M. F., Cabral, J. M. S., Fonseca, L. P., "Ethanol biosensors based on alcohol oxidase", **Biosens. Bioelectron.**, 21, 235-247 (2005)

Brás, L. P., Bernardino, S. A., Lopes, J. A., Menezes, J. C., "Multiblock PLS as an approach to compare and combine NIR and MIR spectra in calibrations of soybean flour", **Chemom. Intell. Lab. Syst.**, 75, 91-99 (2005)

Carvalho, A. S. L., Neves-Petersen, M. T., Petersen, S. B., Aires-Barros, M. R., Melo, E. P., "Formation of a misfolded conformation during refolding of HSPA1 in the presence of calcium", **Biochim. Biophys. Acta**, 1747, 99-107 (2005)

Carvalho, C. C. R. de, Marques, M. P. C., Fernandes, P., Fonseca, M. M. R. da, "A simple imaging method for biomass determination", **J. Microb. Meth.**, 60, 135-140 (2005)

Catana, R., Ferreira, B. S., Cabral, J. M. S., Fernandes, P., "Immobilization of inulinase for sucrose hydrolysis", **Food Chem.**, 91, 517-520 (2005)

Chen, L. Y., Cabrita, G. J. M., Otzen, D. E., Melo, E. P., “ Stabilization of the ribosomal protein S6 by trehalose is counterbalanced by the formation of a putative off-pathway species” **J. Mol. Biol.**, 351, 402-416 (2005)

Diogo, M. M., Queiroz, J. A., Prazeres, D. M. F., “ Chromatography of plasmid DNA”, **J. Chrom. A**, 1069, 3-22 (2005)

Faber, A., Ferreira, G. N. M., Silva, S. N., Rueff, J., Gaspar, J., “ Multiplex PCR-single-base extension genotyping of multiple glutathione S-transferase polymorphisms”, **Biotechnol. Appl. Biochem.**, 41, 9-15 (2005)

Felício, C. C., Brás, L. P., Lopes, J. A., Cabrita, L., Menezes J. C., “ Comparison of PLS algorithms in gasoline and gas oil parameter monitoring with MIR and NIR”, **Chemom. Intell. Lab. Syst.**, 78, 74-80 (2005)

Ferreira, A. P., Alves, T. P., Menezes, J. C., “Monitoring complex media fermentations with near-infrared spectroscopy: Comparison of different variable selection methods”, **Biotechnol. Bioeng.**, 91, 474-481 (2005)

Ferreira, A. P., Vieira, L. M., Cardoso, J. P., Menezes, J. C., “ Evaluation of a new annular capacitance probe for biomass monitoring in industrial pilot-scale fermentations”, **J. Biotechnol.**, 116, 403-409 (2005)

Fixe, F., Branz, H., Louro, N., Chu, V., Prazeres, D. M. F., Conde, J. P., “ Electric-field assisted immobilization and hybridization of DNA oligomers on thin-film microchips”, **Nanotechnology**, 16, 2061-2071 (2005)

Fixe, F., Chu, V., Prazeres, D. M. F., Conde, J. P., “ Single base mismatch detection by microsecond voltage pulses in addressable DNA microarrays”, **Biosens. Bioelectron.**, 21, 888-893 (2005)

Garcia, S., Vidinha, P., Arvana, H., Gomes da Silva, M. D. R., Ferreira, M. O., Cabral, J. M. S., Macedo, E. A., Harper, N., Barreiros, S., “Cutinase activity in supercritical and organic media: water activity, solvation and acid-base effects”, **J. Supercritical Fluids**, 35, 62-69 (2005)

Lopes, V. V., Menezes, J. C., “Inferential sensor design in the presence of missing data: a case study”, **Chemom. Intell. Lab. Syst.**, 78, 1-10 (2005)

Madeira, C., Fedorov, A., Aires-Barros, M. R., Prieto, M., Loura, L. M. S., “ Photophysical behavior of a dimeric cyanine dye (BOBO-1) within cationic liposomes”, **Photochem. Photobiol.**, 81, 1450-1459 (2005)

Mergulhão, F. J. M., Summers, D. K., Monteiro, G. A., “ Recombinant protein production in *Escherichia coli*”, **Biotechnol. Adv.**, 23, 177-202 (2005)

Moreira, K. A., Diogo, M., Prazeres, D. M. F., Filho, J. L. L., Porto, A. L. F., “Purification of plasmid (pVaxLacZ) by Hydrophobic Interaction Chromatography”, **Brazilian Arch. Biol. Technol.**, 48, 113-117 (2005)

Rodrigues, L. O., Marques, J. L., Cardoso, J. P., Menezes, J. C., “ From lab to plant: a scale-independent NIR calibration to monitor an ionic exchange column”, **Chemom. Intell. Lab. Syst.**, 75, 101-108 (2005)

Rodrigues, L. O., Marques, J. L., Cardoso, J. P., Menezes, J. C., “A PAT application on an API crystallisation process”, **J. Process Analytical Technology**, 2, 12-17 (2005)

Roque, A. C. A., Taipa, M. A., Lowe, C. R., “ An artificial protein L for the purification of immunoglobulins and Fab-fragments by affinity chromatography”, **J. Chromat. A**, 1064, 157-167, (2005)

Roque, A. C. A., Taipa, M. A., Lowe, C. R., “ Synthesis and screening of a rationally designed combinatorial library of affinity ligands mimicking protein L from *Peptostreptococcus magnus*”, **J. Molecular Recognition**, 18, 213-224, (2005)

Silva, C. M., Carneiro, F., O'Neill, A., Fonseca, L. P., Cabral, J. M. S., Guebitz, G., Cavaco-Paulo, A., “Cutinase - A new tool for biomodification of synthetic fibers”, **J. Polym. Sci.: Polym. Chem.**, 43, 2448-2450, (2005)

da Silva, C. L., Gonçalves, R., Crapnell, K. B., Cabral, J. M. S., Zanjani, E. D., Almeida-Porada, G., “A human stromal-based serum free culture system supports the *ex vivo* expansion/maintenance of bone marrow and cord blood hematopoietic stem/progenitor cells”, **Exp. Hematol.**, 33, 828–835 (2005)

Silva, F. A., Costa, M. J. L., Corte-Real S., Goncalves, J., “ Cell type-specific targeting with Sindbis pseudotyped lentiviral vectors displaying anti-CCR5 single chains antibodies”, **Hum. Gene Ther.**, 16, 223-234, (2005)

Sousa, F., Tomaz, C. T., Prazeres, D. M. F., Queiroz, J. A., “ Separation of supercoiled and open circular plasmid DNA isoforms by chromatography with a histidine-agarose support”, **Anal. Biochem.**, 343, 183-185, (2005)

Teles, F. F., Prazeres, D. M. F., Lima-Filho, J. L., “ Trends in Dengue Diagnosis”, **Rev. Med. Virol.**, 15, 287-302, (2005)

Trindade, I. P., Diogo, M. M., Prazeres, D. M. F., Marcos, J. C., “ Purification of plasmid DNA vectors by aqueous two-phase extraction and hydrophobic interaction chromatography”, **J. Chrom. A**, 1082, 176-184, (2005)

Vojinovic, V., Calado, C. R., Silva, A. I., Mateus, M., Cabral, J. M. S., Fonseca, L. P., “Micro-analytical GO/HRP bioreactor for glucose determination and bioprocess monitoring”, **Biosens. Bioelectron.**, 10, 1955-1961, (2005)

Wendhausen, R., Frigato, M., Fernandes, P., Carvalho, C. C. C. R., Cruz, A., Pinheiro, H. M., Cabral, J. M. S., “Chrysolite as a support for the immobilisation of *Mycobacterium* sp. NRRL B-3805 cells for the bioconversion of **b-sitosterol in an organic–aqueous two-liquid phase system**”, **J. Mol. Catal. B: Enzym.**, 32, 61-65, (2005)

2004

Cabral M.G., Sá-Correia I., Viegas C.A., "Adaptative responses in yeast to the herbicide 2-methyl-4-chlorophenoxyacetic acid at the level of intracellular pH homeostasis", **Journal of Applied Microbiology**, 96, 603-612, 2004.

Cunha M.V., Sousa S.A., Leitão J.H., Moreira L.M., Videira P.A., Sá-Correia I., "Studies on the involvement of the exopolysaccharide produced by cystic fibrosis-associated isolates of the *Burkholderia cepacia* complex in biofilm formation and in persistence of respiratory infections", **Journal of Clinical Microbiology**, 42, 3052-3058, 2004.

Moreira L.M., Hoffmann K., Albano H., Becker A., Niehaus K. and Sá-Correia I., "The gellan gum biosynthetic genes gelC and gelE encode two separate polypeptides homologous to the activator and the kinase domains of tyrosine autokinases", **Journal of Molecular Microbiology and Biotechnology**, 8, 43-57, 2004.

Papaefthimiou C., Cabral M.G., Mixailidou C., Viegas C.A., Sá-Correia I., Theophilidis G., "Comparison of two screening bioassays, based on the frog sciatic nerve and yeast cells, for the assessment of herbicide toxicity", **Environmental Toxicology and Chemistry**, 23, 1211-1218, 2004.

Santos P.M., Benndorf D., Sá-Correia I., "Insights in *Pseudomonas putida*KT2440 response to phenol-induced stress by quantitative proteomics" **Proteomics**, 4, 2640-2652, 2004.

Silva E., Fialho A.M., Sá-Correia I., Burns R.G., Shaw L.J., "Combined bioaugmentation and biostimulation to clean-up soil contaminated with high concentrations of atrazine", **Environmental Science and Technology**, 38, 632-637, 2004.

Teixeira M.C., Telo J.P., Duarte N.F., Sá-Correia I., "The herbicide 2,4-dichlorophenoxyacetic acid induces the generation of free-radicals and associated oxidative stress responses in yeast", **Biochemical and Biophysical Research Communications**, 324, 1101-1107, 2004.

Vargas R.C., Tenreiro S., Teixeira M.C., Fernandes A.R., Sá-Correia I., "*Saccharomyces cerevisiae* multidrug transport Qdr2p (Yil121wp): localization and function as a quinidine resistance determinant", **Antimicrobial Agents and Chemotherapy**, 48, 2531-2537, 2004.

Velasco I., Tenreiro S., Calderon I.L., and André B. " *Saccharomyces cerevisiae* Aqr1 is an internal-membrane transporter involved in excretion of amino acids". **Eukaryotic Cell**, 3, 1492-1503, 2004.

Almeida, C. F., Cabral, J. M. S., Fonseca, L. P., “ Flow Injection Analysis System for on-line cutinase activity assay”, **Anal. Chim. Acta**, 502, 115-124, (2004)

Azevedo, A. M., Cabral, J. M. S., Gibson, T. D., Fonseca, L. P., “ Operation and performance of analytical packed-bed reactors with an immobilised alcohol oxidase”, **J. Mol. Catal. B: Enzym.**, 28, 45-53, (2004)

Azevedo, A. M., Cabral, J. M. S., Prazeres, D. M. F., Gibson, T. D., Fonseca, L. P., “Thermal and operational stabilities of *Hansenula polymorpha* alcohol oxidase”, **J. Mol. Catal. B: Enzym.**, 27, 37-45, (2004)

Azevedo, A. M., Vojinovic, V., Cabral, J. M. S., Gibson, T. D., Fonseca, L. P., “ Operational stability of immobilised horseradish peroxidase in mini-packed bed bioreactors”, **J. Mol. Catal. B: Enzym.**, 28, 121-128, (2004)

Calado, C. R. C., Ferreira, B. S., da Fonseca, M. M. R., Cabral, J. M. S., Fonseca, L. P., “Integration of the production and the purification processes of cutinase secreted by a recombinant *Saccharomyces cerevisiae* SU50 strain”, **J. Biotechnol.**, 109, 147-158 (2004)

Cao, X. J., Wu, X. Y., Fonseca, L. J. P., Cabral, J. M. S., Marcos, J. C., “ Production of 6-aminopenicillanic acid in aqueous two-phase systems by recombinant *Escherichia coli* with intracellular penicillin acylase”, **Biotechnol. Lett.**, 26, 97-101 (2004)

Carvalho, A. S. L., Santos, A. M., Neves-Petersen, M. T., Petersen, S. B., Aires-Barros, M. R., Melo, E. P., “Conformational States of HSPA1 Induced by Thermal Unfolding: Effect of Low Molecular Weight Solutes”, **Biopolymers**, 75, 173-186 (2004)

Carvalho, C. C. R. de, Cruz, A., Angelova, B., Fernandes, P., Pons, M. N., Pinheiro, H. M., Cabral, J. M. S., Fonseca, M. M. R. da, “ Behaviour of *Mycobacterium* sp. NRRL B-3805 whole cells in aqueous, organic-aqueous and organic media studied by fluorescence microscopy”, **Appl. Microb. Biotech.**, 64, 695-701 (2004)

Carvalho, C. C. R. de, Cruz, A. A. R. L., Pons, M. N., Pinheiro, H. M. R. V., Cabral, J. M. S., Fonseca, M. M. R. da, Ferreira, B. S., Fernandes, P., “*Mycobacterium* sp., *Rhodococcus erythropolis*, and *Pseudomonas putida* behavior in the presence of organic solvents”, **Microsc. Res. Tech.**, 64, 215-222 (2004)

Cruz, A., Angelova, B., Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., “ Study of key operational parameters for the side-chain cleavage of sitosterol by free mycobacterial cells in bis-(2-ethylhexyl) phthalate”, **Biocatal. Biotrans.**, 22, 189-194 (2004)

Cruz, A., Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., “ Solvent partitioning and whole-cell sitosterol bioconversion activity in aqueous-organic two-phase systems”, **Enzyme Microb. Technol.**, 34, 342-353 (2004)

de Assis, S. A., Ferreira, B. S., Fernandes, P., Trevisan, H. C., Cabral, J. M. S., Oliveira, O. M. M. F., "Gellatin immobilized pectinmethylesterase for production of low methoxyl pectin", **Food Chem.**, 86, 333-337 (2004)

de Assis, S. A., Fernandes, P., Ferreira, B. S., Trevisan, H. C., Cabral, J. M. S., Oliveira, O. M. M. F., "Screening of supports for the immobilization of pectinmethylesterase from acerola (*Malpighia glabra* L.)", **J. Chem. Technol. Biotechnol.**, 79, 277-280 (2004)

Ferreira, B. S., Abranches, E., Gonçalves, R., Lobato da Silva, C., Cabral, J. M. S., "Bioengenharia de Células Estaminais", **Boletim de Biotecnologia**, 78, 13-25 (2004)

Ferreira, B. S., Calado, C. R. C., van Keulen, F., Fonseca, L. P., Cabral, J. M. S., da Fonseca, M. M. R., "Recombinant *Saccharomyces cerevisiae* strain triggers acetate production to fuel biosynthetic pathways", **J. Biotechnol.**, 109, 159-167 (2004)

Fixe, F., Dufva, M., Telleman, P., Christensen, C. B. V., "One-step immobilization of aminated and thiolated DNA onto poly(methylmethacrylate) (PMMA) substrates", **Lab-on-Chip**, 4, 191-195 (2004)

Fixe, F., Dufva, M., Telleman, P., Christensen, C. B. V., "Functionalization of poly(methyl methacrylate) (PMMA) as a substrate for DNA microarrays", **Nucleic Acids Res.**, 32, e9 (2004)

Fixe, F., Chu, V., Prazeres, D. M. F., Conde, J. P., "An on-chip thin film photodetector for the quantification of DNA probes and targets in microarrays", **Nucleic Acids Res.**, 32, e70 (2004)

Fixe, F., Branz, H., Louro, N., Chu, V., Prazeres, D. M. F., Conde, J. P., "Immobilization and hybridization by single sub-millisecond electric field pulses, for pixel-addressed DNA microarrays", **Biosens. Bioelectron.**, 19, 1591-1597 (2004)

Frias, A., Crapnell, K. B., Porada, C., Cabral, J. M. S., Zanjani, E. D., Almeida-Porada, G., "**Ex-vivo generation and expansion of both lymphoid and myeloid lineages from human cord blood (CB) HSC using a serum-free human mesenchymal stem cell based culture system**", *Blood*, 104, 789A-790A (2004)

Garcia, S., Lourenco, N. M. T., Lousa, D., Sequeira, A. F., Mimoso, P., Cabral, J. M. S., Afonso, C. A. M., Barreiros, S., "A comparative study of biocatalysis in non-conventional solvents: ionic liquids, supercritical fluids and organic media", **Green Chem.**, 6, 466-470, (2004)

Kerr, S., Calé, C., Cabral, J. M. S., van Keulen, F., "Factors enhancing lycopene production by a new *Mycobacterium aurum* mutant", **Biotechnol. Lett.**, 26, 103-108, (2004)

Lopes, J. A., Costa, P. F., Alves, T. P., Menezes, J. C., "Chemometrics in bioprocess engineering: process analytical technology (PAT) applications", **Chemom. Intell. Lab. Syst.**, 74, 269-275 (2004)

Lopes, J. A., Menezes, J. C., "Multivariate monitoring of fermentation processes with non-linear modelling methods", **Anal. Chim. Acta**, 515, 101-108 (2004)

Mergulhão, F. J. M., Taipa, M. A., Cabral, J. M. S., Monteiro, G. A., " Evaluation of bottlenecks in proinsulin secretion by *Escherichia coli*", **J. Biotechnol.**, 109, 31-43 (2004)

Mergulhão, F. J. M., Monteiro, G. A., Cabral, J. M. S., Taipa, M. A., " Design of bacterial vector systems for the production of recombinant proteins in *Escherichia coli*", **J. Microb. Biotechnol.**, 14, 1-14 (2004)

Mergulhão, F. J. M., Monteiro, G. A., " Secretion capacity limitations of the Sec pathway in *Escherichia coli*", **J. Microb. Biotechnol.**, 14, 128-133 (2004)

Prazeres, D. M. F., Ferreira, G. N. M., " Design of flowsheets for the recovery and purification of plasmids for gene therapy and DNA vaccination", **Chem. Eng. Proc.**, 43, 615-630 (2004)

Ribeiro, S. C., Monteiro, G. A., Prazeres, D. M. F., " The role of polyadenylation signal secondary structures on the resistance of plasmid vectors to nucleases", **J. Gene Med.**, 6, 565-573 (2004)

Roque, A. C. A., Lowe, C. R., Taipa, M. A., " Antibodies and genetically engineered related molecules: production and purification", **Biotechnol. Prog.**, 20, 639-654, (2004)

Roque, A. C. A., Taipa, M. A., Lowe, C. R., " A new method for the screening of solid-phase combinatorial libraries for affinity chromatography", **J. Molecular Recognition**, 17, 262-267, (2004)

Sá-Pereira, P., Carvalho, A. S. L., Costa-Ferreira, M., Aires-Barros, M. R., " Thermostabilization of *Bacillus subtilis* CCMI 966 3 xylanases with trehalose. Study of deactivation kinetics", **Enzyme Microb. Technol.**, 34, 278-282, (2004)

Serralha, F. N., Lopes, J. M., Lemos, F., Ramôa Ribeiro, F., Prazeres, D. M. F., Aires-Barros, M. R., Cabral, J. M. S., " Application of factorial design to the study of an alcoholysis transformation promoted by cutinase immobilized on NaY zeolite and Accurel PA6", **J. Mol. Catal. B: Enzym.**, 27, 19-27, (2004)

Silva, C., Cabral, J. M. S., van Keulen, F., " Isolation of a ***b*-carotene overproducing soil bacterium *Sphingomonas sp.***", **Biotechnol. Lett.**, 26, 257-262, (2004)

Staebler, A., Cruz, A., van der Goot, W., Pinheiro, H. M., Cabral, J. M. S., Fernandes, P., "Optimization of androstenedione production in an organic-aqueous two-liquid phase system", **J. Mol. Catal. B: Enzym.**, 29, 19-23, (2004)

Valente, C. A., Cabral, J. M. S., Prazeres, D. M. F., Monteiro, G. A., " Translational features of human interferon alpha 2b production in *Escherichia coli*", **Appl. Environ. Microbiol.**, 70, 5033-5036, (2004)

Vidinha, P., Harper, N., Micaelo, N. M., Lourenço, N. M. T., da Silva, M. D. R. G., Cabral, J. M. S., Afonso, C. A. M., Soares, C. M., Barreiros, S., "Effect of immobilization support, water activity, and enzyme ionization state on cutinase activity and enantioselectivity in organic media", **Biotechnol. Bioeng.**, 85, 442-449, (2004)

Vojinovic, V., Azevedo, A. M., Martins, V. C. B., Cabral, J. M. S., Gibson, T. D., Fonseca, L. P., "Assay of H₂O₂ by HRP catalysed co-oxidation of phenol-4-sulphonic acid and 4-aminoantipyrine: Characterisation and optimisation", **J. Mol. Catal. B: Enzym.**, 28, 129-135, (2004)

2003

Abranches, E., Bekman, E., Henrique, D., Cabral, J. M. S., "Expansion and neural differentiation of embryonic stem cells in adherent and suspension cultures", **Biotechnol. Lett.**, 25, 725-730, (2003)

Alves, J. R. F., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., "Optimisation of penicillin acylase extraction by AOT/isooctane reversed micellar systems", **Biochem. Eng. J.**, 15, 81-86, (2003)

Baptista, R. P., Chen, L. Y., Paixão, A., Cabral, J. M. S., Melo, E. P., "A novel pathway to enzyme deactivation: The cutinase model", **Biotechnol. Bioeng.**, 82, 851-857 (2003)

Baptista, R. P., Santos, A. M., Fedorov, A., Martinho, J. M. G., Pichot, C., Elaïssari, A., Cabral, J. M. S., Taipa, M. A., "Activity, conformation and dynamics of cutinase adsorbed on polymethyl(meth)acrylate particles", **J. Biotechnol.**, 102, 241-249 (2003)

Cabral M.G., Viegas C.A., Teixeira M.C. and Sá-Correia I., "Toxicity of chlorinated phenoxyacetic acid herbicides in the experimental eukaryotic model *Saccharomyces cerevisiae*: role of pH and of growth phase and size of the yeast cell population", **Chemosphere**, 51, 47-54, 2003.

Cabrita, G. J. M., Ferreira, B. S., Silva, C. A. M. L., Gonçalves, R. M., Almeida-Porada, G., Cabral, J. M. S., "Hematopoietic stem cells: from the bone to the bioreactor", **Trends Biotechnol.**, 21, 233-240 (2003)

Calado, C. R. C., Almeida, C., Cabral, J. M. S., Fonseca, L. P., "Development of a fed-batch cultivation strategy for the enhanced production and secretion of cutinase by a recombinant *Saccharomyces cerevisiae* SU50 strain", **J. Biosci. Bioeng.**, 96, 141-148 (2003)

Carvalho, A. S. L., Melo, E. P., Ferreira, B. S., Neves-Petersen, M. T., Petersen, S. B., Aires-Barros, M. R., "Heme and pH-dependent stability of an anionic horseradish peroxidase", **Arch. Biochem. Biophys.**, 415, 257-267 (2003)

Carvalho, C. C. R. de, Fonseca, M. M. R. da, " A Simple Method to Observe Organic Solvent Drops with a Standard Optical Microscope", **Microsc. Res. Tech.**, 60, 465-466 (2003)

Carvalho, C. C. R. de, Fonseca, M. M. R. da, " Towards the bio-production of *trans*-carveol and carvone from limonene: induction after cell growth on limonene and toluene", **Tetrahedron: Asymmetry**, 14, 3925-3931 (2003)

Carvalho, C. C. R. de, Pons, M.-N., Fonseca, M. M. R. da, " Principal Components Analysis as a Tool to Summarise Biotransformation Data: Influence on Cells of Solvent Type and Phase Ratio", **Biocatal. Biotrans.**, 21, 305-314 (2003)

Cunha M.V., Leitão J.H., Mahenthalingam E., Vandamme P., Lito L., Barreto C., Salgado M.J., Sá-Correia I., "Molecular analysis of *Burkholderia cepacia* complex isolates from a Portuguese cystic fibrosis center: a seven-year study", **Journal of Clinical Microbiology**, 41, 4113-4120, 2003.

Cunha, M. T., Costa, M. J. L., Calado, C. R. C., Fonseca, L. P., Aires-Barros, M. R., Cabral, J. M. S., "Integration of production and aqueous two-phase systems extraction of extracellular *Fusarium solani pisi* cutinase fusion proteins", **J. Biotechnol.**, 100, 55-64 (2003)

Diogo, M. M., Prazeres, D. M. F., Pinto, N. G., Queiroz, J. A., " Hydrophobic interaction chromatography of homo-oligonucleotides on derivatized Sepharose CL-6B using and relating two different models for describing the effect of salt and temperature on retention", **J. Chrom. A**, 1006, 137-148 (2003)

Diogo, M. M., Queiroz, J. A., Prazeres, D. M. F., " Assessment of purity and quantification of plasmid DNA in process solutions using high-performance hydrophobic interaction chromatography", **J. Chrom. A**, 998, 109-117 (2003)

Fernandes A.R., Sá-Correia I. "Transcription patterns of *PMA1* and *PMA2* genes and activity of plasma membrane H⁺-ATPase in *Saccharomyces cerevisiae* during diauxic growth and stationary phase", **Yeast**, 20, 207-219, 2003.

Fernandes, A.R., Durão P.J., Santos P.M., Sá-Correia I., "Activation and significance of vacuolar H⁺-ATPase in *Saccharomyces cerevisiae* adaptation and resistance to the herbicide 2,4-dichlorophenoxyacetic acid (2,4-D)", **Biochemical and Biophysical Research Communications**, 312, 1317-1324, 2003.

Fernandes, P., Cruz, A., Angelova, B., Pinheiro, H. M., Cabral, J. M. S., " Microbial conversion of steroid compounds: recent developments", **Enzyme Microb. Technol.**, 32, 688-705 (2003)

Fernandes, P., Ferreira, B. S., Cabral, J. M. S., " Solvent tolerance in bacteria: role of efflux pumps and cross-resistance with antibiotics", **Int. J. Antimicrob. Agents**, 2, 211-216 (2003)

Ferreira, B. S., Calado, C. R. C., van Keulen, F., Fonseca, L. P., Cabral, J. M. S., da Fonseca, M. M. R., "Towards a cost effective strategy for cutinase production by a recombinant *Saccharomyces cerevisiae*: strain physiological aspects", **Appl. Microb. Biotech.**, 61, 69-76 (2003)

Ferreira, H. A., Graham, D. L., Freitas, P. P., Cabral, J. M. S., " Biodetection using magnetically labeled biomolecules and arrays of spin valve sensors", **J. Appl. Phys.**, 93, 7281-7286 (2003)

Ferreira-Dias, S., Correia, A. C., Fonseca, M. M. R. da, " Response surface modelling of glycerolysis catalysed by *Candida rugosa* lipase immobilised in different polyurethane foams for the production of partial glycerides", **J. Mol. Catal. B: Enzym.**, 21, 71-81 (2003)

Fixe, A., Cabeça, R., Prazeres, D. M. F., Ferreira, G. N. M., Chu, V., Conde, J. P., " Electric field pulse assisted covalent immobilization of DNA in the nanosecond time scale", **Appl. Phys. Lett.**, 83, 1465-1467 (2003)

Freitas, P. P., Ferreira, H., Graham, D., Clarke, L., Amaral, M., Martins, V., Fonseca, L., Cabral, J. S., "Magneto-resistive biochips", **Europhysics News**, 34, 224-226 (2003)

Gonçalves, A. M. D., Aires-Barros, M. R., Cabral, J. M. S., " Interaction of an anionic surfactant with a recombinant cutinase from *Fusarium solani pisi*: a spectroscopic study", **Enzyme Microb. Technol.**, 32, 868-879 (2003)

Graham, D. L., Ferreira, H. A., Freitas, P. P., Cabral, J. M. S., " High sensitivity detection of molecular recognition using magnetically labelled biomolecules and magneto-resistive sensors", **Biosen. Bioelectron.**, 18, 483-488 (2003)

Kabelitz N., Santos P.M., Heipieper H.J., "Effect of aliphatic alcohols on growth and degree of saturation of membrane lipids in *Acinetobacter calcoaceticus*", **FEMS Microbiology Letters**, 220, 223-227, 2003.

Leirião, P. R. S., Fonseca, L. J. P., Taipa, M. A., Cabral, J. M. S., Mateus, M., " Horseradish peroxidase immobilized through its carboxylic groups onto a polyacrylonitrile membrane. Comparison of enzyme performances with inorganic beaded supports", **Appl. Biochem. Biotechnol.**, 110, 1-10 (2003)

Lobato da Silva, C., Gonçalves, R., Lemos, F., Lemos, M. A. N. D. A., Zanjani, E. D., Almeida-Porada, G., Cabral, J. M. S., " Modelling of *ex vivo* expansion/maintenance of hematopoietic stem cells", **Bioprocess Biosystems Eng.**, 25, 365-369 (2003)

Lopes, J. A., Menezes, J. C., "Industrial Fermentation End-Product Modelling with Multilinear PLS", **Chemom. Intell. Lab. Syst.**, 68, 75-81 (2003)

Madeira, C., Loura, L., Aires-Barros, R., Fedorov, A., Prieto, M., " Characterization of DNA/Lipid Complexes by Fluorescence Resonance Energy Transfer ", **Biophys. J.**, 85, 3106-3119 (2003)

Marques A.R., Coutinho P.M., Videira P.A., Fialho A.M., Sá-Correia I., "Sphingomonas paucimobilis beta-glucosidase Bgl1: a member of a new bacterial subfamily in family 1 of glycoside hydrolases", **Biochemical Journal**, 370, 793-804, 2003.

Marques A.R., Ferreira P.B., Sá-Correia I., Fialho A.M., "Characterization of the *ugpG* gene encoding a UDP-glucose pyrophosphorylase from the gellan gum producer *Sphingomonas paucimobilis* ATCC 31461", **Molecular Genetics and Genomics**, 268, 816-824, 2003.

Martinho, J. M. G., Santos, A. M., Fedorov, A., Baptista, R. P., Taipa, M. A., Cabral, J. M. S., "Fluorescence of the single tryptophan of cutinase: Temperature and pH effect on protein conformation and dynamics", **Photochem. Photobiol.**, 78, 15-22 (2003)

Martins, S. A. M., Prazeres, D. M. F., Cabral, J. M. S., Monteiro, G. A., "Comparison of real-time PCR and hybridization assays for the detection of *Escherichia coli* genomic DNA in process samples and pharmaceutical-grade plasmid DNA products", **Anal. Biochem.**, 322, 127-129 (2003)

Melo, E. P., Baptista, R. P., Cabral, J. M. S., "Improving cutinase stability in aqueous solution and in reverse micelles by media engineering", **J. Mol. Catal. B: Enzym.**, 22, 299-306 (2003)

Melo, E. P., Chen, L. Y., Cabral, J. M. S., Fojan, P., Petersen, S. B., Otzen, D. E., "Trehalose favors a cutinase compact intermediate off-folding pathway", **Biochem.**, 42, 7611-7617 (2003)

Melo, E. P., Costa, S. M. B., Cabral, J. M. S., Fojan, P., Petersen, S. B., "Cutinase-AOT interactions in reverse micelles: the effect of 1-hexanol", **Chem. Phys. Lipids**, 124, 37-47 (2003)

Mergulhão, F. J. M., Monteiro, G. A., Larsson, G., Bostrom, M., Farewell, A., Nystrom, T., Cabral, J. M. S., Taipa, M. A., "Evaluation of inducible promoters on the secretion of a ZZ-proinsulin fusion protein in *Escherichia coli*", **Biotechnol. Appl. Biochem.**, 38, 87-93 (2003)

Mergulhão, F. J. M., Monteiro, G. A., Larsson, G., Sandén, A. M., Farewell, A., Nystrom, T., Cabral, J. M. S., Taipa, M. A., "Medium and copy number effects on the secretion of human proinsulin in *Escherichia coli* using the universal stress promoters *uspA* and *uspB*", **Appl. Microbiol. Biotechnol.**, 61, 495-501 (2003)

Moreira L.M., Videira P.A., Sousa S.A., Leitão J.H., Cunha M.V., Sá-Correia I., "Identification and physical organization of the gene cluster involved in the biosynthesis of *Burkholderia cepacia* complex exopolysaccharide", **Biochemical and Biophysical Research Communications**, 312, 323-333, 2003.

Sá-Pereira, P., Paveia, H., Costa-Ferreira, M., Aires-Barros, M. R., "A new look at xylanases: An overview of purification strategies", **Mol. Biotechnol.**, 24, 257-282 (2003)

Simões T., Teixeira M.C., Fernandes A.R., Sá-Correia I., "Adaptation of *Saccharomyces cerevisiae* to the herbicide 2,4-dichlorophenoxyacetic acid, mediated by Msn2p- and Msn4p-regulated genes: important role of *SPI1*", **Applied and Environmental Microbiology**, 69, 4019-4028, 2003.

Sist P., Cescutti P., Sveerlavaj S., Urbani R., Leitão J.H., Sá-Correia I., Rizzo R., "Macromolecular and solution properties of Cepacian: the exopolysaccharide produced by a strain of *Burkholderia cepacia* isolated from a cystic fibrosis patient", **Carbohydrate Research**, 338, 1861-1867, 2003.

Sousa, A. C. C., Mateus, M., "Application of factorial design to microfiltration performance. Study of electrostatic and hydrodynamic effects", **Chem. Eng. Res. Des.**, 81, 271-276 (2003)

Tavares I.M., Leitão J.H., Sá-Correia I., "Chromosomal organization and transcription analysis of genes in the vicinity of *Pseudomonas aeruginosa glmM* gene encoding phosphoglucosamine mutase", **Biochemical and Biophysical Research Communications**, 302, 363-371, 2003.

Vasconcelos, J. M. T., Rodrigues, J. M. L., Orvalho, S. C. P., Alves, S. S., Mendes, R. L., Reis, A., "Effect of contaminants on mass transfer coefficients in bubble column and airlift contactors", **Chem. Eng. Sci.**, 58, 1431-1440 (2003)

Videira P.A., Fialho A.M., Marques A.R., Coutinho P.M., Sá-Correia, I., "Cloning and sequence analysis of the *ces 10* gene encoding a *Sphingomonas paucimobilis* esterase", **Applied Microbiology and Biotechnology**, 61, 517-522, 2003.

2002

Alves, S. S., Maia, C. I., Vasconcelos, J. M. T., "Experimental and modelling study of gas dispersion in a double turbine stirred tank", **Chem. Eng. Sci.**, 57, 487-496 (2002)

Alves, S. S., Maia, C. I., Vasconcelos, J. M. T., Serralheiro, A. J., "Bubble size in aerated stirred tanks", **Chem. Eng. J.**, 89, 109-117 (2002)

Amaral, J., Ingañas, M., Cabral, J. M. S., Prazeres, D. M. F., "Study on the scale-up of human IgG3 purification using protein A affinity chromatography", **Bioseparation**, 10, 139-143 (2002)

Calado, C. R. C., Cabral, J. M. S., Fonseca, L. P., "Effect of *Saccharomyces cerevisiae* fermentation conditions on expanded bed adsorption of heterologous cutinase", **J. Chem. Technol. Biotechnol.**, 77, 1231-1237 (2002)

Calado, C. R. C., Mannesse, M., Egmond, M., Cabral, J. M. S., Fonseca, L. P., "Production of wild type and peptide fusion cutinases by recombinant *Saccharomyces cerevisiae* MM01 strains", **Biotechnol. Bioeng.**, 78, 692-698 (2002)

Calado, C. R. C., Monteiro, S. M. S., Cabral, J. M. S., Fonseca, L. P., " Effect of pre-fermentation on the production of cutinase by a recombinant *Saccharomyces cerevisiae*", **J. Biosci. Bioeng.**, 93, 354-359 (2002)

Calado, C. R. C., Taipa, M. A., Cabral, J. M. S., Fonseca, L. P., " Optimization of culture conditions and characterization of cutinase produced by recombinant *Saccharomyces cerevisiae*", **Enzyme Microb. Technol.**, 31, 161-170 (2002)

Carneiro-da-Cunha, M. G., Rocha, J. M. S., Cabral, J. M. S., Gil, M. H., Garcia, F. A. P., "Covalent immobilisation of lipase on different supports", **Lat. Am. Appl. Res.**, 32, 69-72 (2002)

Carvalho, C. C. R. de, Fonseca, M. M. R. da, " Influence of Reactor Configuration on the Production of Carvone from Carveol by Whole Cells of *Rhodococcus erythropolis* DCL14", **J. Mol. Catal. B: Enzym.**, 19-20, 377-387 (2002)

Carvalho, C. C. R. de, Fonseca, M. M. R. da, " Maintenance of cell viability in the biotransformation of (-)-carveol with whole cells of *Rhodococcus erythropolis*", **J. Mol. Catal. B: Enzym.**, 19-20, 389-398 (2002)

Carvalho, C. C. R. de, van Keulen, F., Fonseca, M. M. R. da, " Modelling the bio-kinetic resolution of diastereomers present in unequal initial amounts", **Tetrahedron: Asymmetry**, 13, 1637-1643 (2002)

Chaves, A. C., Silveira, E., Bezerra, R. P., Moreira, K. A., Lucena-Silva, N. L. C., Abath, F. G. C., Porto, A. L. F., Cabral, J. M. S., Lima, J. L., " Influence of partition parameters on a recombinant antigen of *Schistosoma mansoni* expressed on *E. coli* using poly(ethylene glycol)-hydroxypropyl starch aqueous two-phase system", **World J. Microb. Biotech.**, 18, 645-648 (2002)

Cruz, A., Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., " Effect of phase composition on the whole-cell bioconversion of **b-sitosterol in biphasic media**", **J. Mol. Catal. B: Enzym.**, 19, 371-375 (2002)

Cunha, M. T., Aires-Barros, M. R., "Large scale extraction of proteins", **Mol. Biotechnol.**, 20, 29-40 (2002)

Dias, A. C. P., Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., " Isolation of a biodegradable sterol-rich fraction from industrial wastes", **Bioresource Technol.**, 82, 253-260 (2002)

Diogo, M. M., Queiroz, J. A., Prazeres, D. M. F., " Hydrophobic interaction chromatography of homo-oligonucleotides on derivatized sepharose CL-6B. Application of the solvophobic theory", **J. Chromat. A**, 944, 119-128 (2002)

Diogo, M. M., Queiroz, J. A., Prazeres, D. M. F., " Studies on the retention of plasmid DNA and *Escherichia coli* nucleic acids by hydrophobic interaction chromatography", **Bioseparation**, 10, 211-220 (2002)

Felder T., Bogengruber E., Tenreiro S., Ellinger A., Sá-Correia I., Briza P., "Dtr1p, a multidrug resistance transporter of the major facilitator superfamily, plays an essential role in spore wall maturation in *Saccharomyces cerevisiae*", **Eukaryotic Cell**, 1, 799-810, 2002.

Fernandes, P., Vidinha, P., Ferreira, T., Silvestre, H., Cabral, J. M. S., Prazeres, D. M. F., "Use of free and immobilized *Pseudomonas putida* cells for the reduction of a thiophene derivative in organic media", **J. Mol. Catal. B: Enzym.**, 19, 353-361 (2002)

Ferreira, B. S., van Keulen, F., Fonseca, M. M. R. da, "A microporous membrane interface for the monitoring of dissolved and volatile compounds by mass spectrometry", **J. Memb. Sci.**, 208, 49-56 (2002)

Fonseca, L. P., Cabral, J. M. S., "An integrated downstream processing strategy for the recovery and partial purification of penicillin acylase from crude media", **J. Chem. Technol. Biotechnol.**, 77, 1176-1185 (2002)

Fonseca, L. P., Cabral, J. M. S., "Penicillin acylase release from *Escherichia coli* cells by mechanical cell disruption and permeabilization", **J. Chem. Technol. Biotechnol.**, 77, 159-167 (2002)

Gonçalves, I., Henriques, A., Raimundo, A., Picanço, I., Reis, A., Correia Jr., E., Santos, E., Nogueira, P., Osório-Almeida, L., "Fetal hemoglobin elevation in Hb Lepore heterozygotes and its correlation with **b-globin cluster linked determinants**", **Am. J. Hematol.**, 69, 95-102 (2002)

Graham, D. L., Ferreira, H. A., Bernardo, J., Freitas, P. P., Cabral, J. M. S., "Single magnetic microsphere placement and detection on-chip using current line designs with integrated spin valve sensors: Biotechnological applications", **J. Appl. Phys.**, 91, 7786-7788 (2002)

Léon, R., Prazeres, D. M. F., Molinari, F., Cabral, J. M. S., "Microbial stereoselective oxidation of 2-methyl-1,3-propanediol to (*R*)-**b-hydroxyisobutyric acid in aqueous/organic biphasic systems**", **Biocatal. Biotrans.**, 20, 201-207 (2002)

Lopes, J. A., Menezes, J. C., Westerhuis, J. A., Smilde, A. K., "Multiblock PLS analysis of an industrial pharmaceutical process", **Biotechnol. Bioeng.**, 80, 419-427 (2002)

Marcos, J. C., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., "Application of surface response analysis to the optimization of penicillin acylase purification in aqueous two-phase systems", **Enzyme Microb. Technol.**, 31, 1006-1014 (2002)

Pedro, A. J. E., Fevereiro, P. S., Serralheiro, M. L., Aires-Barros, M. R., "Study of the stability of *Vaccinium myrtillus* peroxidases in reversed micellar systems", **Biocatal. Biotrans.**, 20, 129-135 (2002)

Qin, Y., Cabral, J. M. S., "Properties and new applications of urease", **Biocatal. Biotrans.**, 20, 1-14 (2002)

Ribeiro, S. C., Monteiro, G. A., Cabral, J. M. S., Prazeres, D. M. F., " Isolation of plasmid DNA from cell lysates by aqueous two-phase systems", **Biotechnol. Bioeng.**, 78, 376-384 (2002)

Rodrigues, A., Cabral, J. M. S., Taipa, M. A., " Immobilization of *Chromobacterium viscosum* lipase on Eugragit S-100: coupling, characterization and kinetic application in organic and biphasic media", **Enzyme Microb. Technol.**, 31, 133-141 (2002)

Sá-Correia I., Fialho A. M., Videira P.A., Moreira L. M., Marques A. R., Albano H., "Gellan gum biosynthesis in *Sphingomonas paucimobilis* ATCC 31461: genes, enzymes and exopolysaccharide production engineering", **Journal of Industrial Microbiology and Biotechnology**, 29, 170-176, 2002.

Sá-Correia I., Tenreiro S., "The multidrug resistance transporters of the major facilitator superfamily, six years after disclosure of *Saccharomyces cerevisiae* genome sequence", **Journal of Biotechnology**, 98, 215-226, 2002.

Santanta F.M.C., Pinto T., Fialho A.M., Sá-Correia I., Empis J., "Bacterial removal of quinolizidine alkaloids and other carbon sources from a *Lupinus albus* aqueous extract", **Journal of Agricultural and Food Chemistry**, 50, 2318-2323, 2002.

Sá-Pereira, P., Costa-Ferreira, M., Aires-Barros, M. R., " Enzymatic properties of a neutral endo-1,3(4)-b-xylanase Xyl II from *Bacillus subtilis*", **J. Biotechnol.**, 94, 265-275 (2002)

Sá-Pereira, P., Mesquita, A., Duarte, J. C., Aires-Barros, M. R., Costa-Ferreira, M., "Rapid production of thermostable cellulase-free xylanase by a strain of *Bacillus subtilis* and its properties", **Enzyme Microb. Technol.**, 30, 924-933 (2002)

Serralha, F. N., Lopes, J. M., Aires-Barros, M. R., Prazeres, D. M. F., Cabral, J. M. S., Lemos, F., Ramôa Ribeiro, F., " Stability of a recombinant cutinase immobilized on zeolites", **Enzyme Microb. Technol.**, 31, 29-34 (2002)

Sousa, A. C., Cabral, J. M. S., Mateus, M., " Microfiltration of cutinase and *Escherichia coli* cell fragment suspensions. The role of the electrolyte environment on the development of dynamic cake layers", **J. Memb. Sci.**, 207, 171-187 (2002)

Tambourgi, D. V., Silva, M. S., Billington, S. J., de Andrade, R. M., Magnoli, F. C., Songer, J. G., Van Den Berg, C. W., " Mechanism of induction of complement susceptibility of erythrocytes by spider and bacterial sphingomyelinases", **Immunology**, 107, 93-101 (2002)

Teixeira M.C. Sá-Correia I., "*Saccharomyces cerevisiae* resistance to chlorinated phenoxyacetic acid herbicides involves Pdr1p-mediated transcriptional activation of *TPO1* and *PDR5* genes", **Biochemical Biophysical Research Communications**, 292, 530-537, 2002.

Tenreiro S., Nunes P.A., Viegas C.A., Neves M.S., Teixeira M.C, Cabral M.G., Sá-Correia I., " *AQR1* gene (ORF *YNL065w*) encodes a plasma membrane transporter of the Major Facilitator Superfamily that confers Resistance to Short-chain Monocarboxylic Acids and Quinidine in *Saccharomyces cerevisiae*", **Biochemical and Biophysical Research Communications**, 292, 741-748, 2002.

Vasconcelos, J. M. T., Orvalho, S. P., Alves, S. S., " Gas-liquid mass transfer to single bubbles: effect of surface contamination", **AIChE J.**, 48, 1145-1154 (2002)

2001

Azevedo, A. M., Fonseca, L. P., Graham, D. L., Cabral, J. M. S., Prazeres, D. M. F., " Behaviour of horseradish peroxidase in AOT reversed micelles", **Biocatal. Biotrans.**, 19, 213-233 (2001)

Azevedo, A. M., Prazeres, D. M. F., Cabral, J. M. S., Fonseca, L. P., " Stability of free and immobilised peroxidase in aqueous mixtures of organic solvents", **J. Mol. Catal. B: Enzym.**, 15, 147-153 (2001)

Becker J.D., Moreira L.M., Kapp D., Frosch S.C., Pühler A., Perlick A.M., The nodulin VfeNOD18 is an ATP-binding protein in infected cells of *Vicia faba* L. nodules, **Plant Molecular Biology**, 47, 749-759, 2001.

Borreguero, I., Carvalho, C. M. L., Cabral, J. M. S., Sinisterra, J. V., Alcántara, A. R., "Enantioselective properties of *Fusarium solani pisi* cutinase on transesterification of acyclic diols: Activity and stability evaluation", **J. Mol. Catal. B: Enzym.**, 11, 613-622 (2001)

Cabral M.G., Viegas C.A., Sá-Correia I., Mechanisms underlying the acquisition of resistance to octanoic-acid-induced-death following exposure of *Saccharomyces cerevisiae* to mild stress imposed by octanoic acid or ethanol, **Archives of Microbiology**, 175, 301-307, 2001.

Cabral, J. M. S., " *Ex vivo* expansion of hematopoietic stem cells in bioreactors", **Biotechnol. Lett.**, 23, 741-751 (2001)

Calado, C. R. C., Hamilton, G. E., Fonseca, L. P., Cabral, J. M. S., Lyddiatt, A., " Direct product sequestration of a recombinant cutinase from batch fermentations of *Saccharomyces cerevisiae*", **Bioseparation**, 10, 87-97 (2001)

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., " A continuous membrane bioreactor for ester synthesis in organic media: I. Operational characterization and stability", **Biotechnol. Bioeng.**, 72, 127-135 (2001)

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., “ A continuous membrane bioreactor for ester synthesis in organic media: II. Modeling of MBR continuous operation”, **Biotechnol. Bioeng.**, 72, 136-143 (2001)

Cruz, A., Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., “ Whole-cell bioconversion of **b-sitosterol** in aqueous-organic two-phase systems”, **J. Mol. Catal. B: Enzym.**, 11, 579-585 (2001)

Diogo, M. M., Ribeiro, S. C., Queiroz, J. A., Monteiro, G. A., Perrin, P., Tordo, N., Prazeres, D. M. F., “Production, purification and analysis of an experimental DNA vaccine against rabies”, **J. Gene Medicine**, 3, 577-584 (2001)

Domingues, M. F., Queiroz, J. A., Cabral, J. M. S., Fonseca, L. P., “ Production of cellulases in batch culture using a mutant strain of *Trichoderma reesei* growing on soluble carbon source”, **Biotechnol. Lett.**, 23, 771-775 (2001)

Fernandes A. R. and Sá-Correia I., The activity of plasma membrane H⁺-ATPase is strongly stimulated during *Saccharomyces cerevisiae* adaptation to growth under higher copper stress accompanying intracellular acidification, **Yeast**, 18, 511-521, 2001.

Ferreira-Dias, S., Correia, A. C., Baptista, F. O., Fonseca, M. M. R. da, “ Contribution of response surface design to the development of glycerolysis systems catalysed by commercial immobilised lipases”, **J. Mol. Catal. B: Enzym.**, 11, 699-711 (2001)

Fort S., Coutinho P.M., Schülein M., Nardin R., Cottaz S., Driguez H., The rational design of an iminosugar inhibitor able to mimic substrate distortion occurring during retaining-cellulase hydrolysis. **Tetrahedron Letters** 42, 3443-3446, 2001.

Henrissat B. Coutinho P., Classification of glycoside hydrolases and glycosyltransferases from hyperthermophiles, **Methods in Enzymology**, 330, 183-201, 2001.

Henrissat B., Coutinho P.M., Davies G.J., A census of carbohydrate-active enzymes in the genome of *Arabidopsis thaliana*. **Plant Molecular Biology**, 47, 55-72, 2001.

Léon, R., Prazeres, D. M. F., Fernandes, P., Molinari, F., Cabral, J. M. S., “ A multiphasic hollow fiber reactor for the whole-cell bioconversion of 2-methyl-1,3-propanediol to (R)-**b-hydroxyisobutyric acid**”, **Biotechnol. Prog.**, 17, 468-473 (2001)

Llanes, N., Fernandes, P., León, R., Cabral, J. M. S., Pinheiro, H. M., “ Conversion of **b-sitosterol** by *Mycobacterium* sp. NRRL B-3805 cells immobilized on celite supports”, **J. Mol. Catal. B: Enzym.**, 11, 523-530 (2001)

Lobato, C., Gonçalves, R., Lemos, M. A. N. D. A., Lemos, F., Brown, R., McNiece, I. K., Cabral, J. M. S., Zanjani, E. D., Almeida-Porada, M. G., "Stromal based serum culture system supports ex-vivo expansion/maintenance of bone marrow (BM) and cord blood (CB) hematopoietic stem cells", **Blood**, 98, 654a (2001)

Melo, E. P., Faria, T. Q., Martins, L. O., Gonçalves, A. M., Cabral, J. M. S., "Cutinase unfolding and stabilization by trehalose and mannosylglycerate", **Proteins: Structure, Function and Genetics**, 42, 542-552 (2001)

Mergulhão, F. J. M., Monteiro, G. A., Cabral, J. M. S., Taipa, M. A., "A quantitative ELISA for monitoring the secretion of ZZ-fusion proteins using SpA domain as immunodetection reporter system", **Mol. Biotechnol.**, 19, 239-244 (2001)

Neves, A. A., Vieira, L. M., Menezes, J. C., "Effects of preculture variability on clavulanic acid fermentation", **Biotechnol. Bioeng.**, 72, 628-633 (2001)

Nunes P.A., Tenreiro S., Sá-Correia I., Resistance and adaptation to quinidine in *Saccharomyces cerevisiae*: role of *QDR1* gene (ORF YIL120w), encoding a plasma membrane transporter of the Major Facilitator Superfamily required for multidrug resistance", **Antimicrobial Agents and Chemotherapy**, 45, 1528-1534, 2001.

Oliveira, A. C., Rosa, M. F., Aires-Barros, M. R., Cabral, J. M. S., "Enzymatic esterification of ethanol and oleic acid - a kinetic study", **J. Mol. Catal. B: Enzym.**, 11, 999-1005 (2001)

Oliveira, A. C., Rosa, M. F., Cabral, J. M. S., Aires-Barros, M. R., "Effect of extraction and enzymatic esterification on glucose consumption by two *Saccharomyces cerevisiae* strains: comparative study", **J. Chem. Technol. Biotechnol.**, 76, 285-290 (2001)

Osório, N. M., Ferreira-Dias, S., Gusmão, J. H., Fonseca, M. M. R. da, "Response surface modelling of the production of **w-3 polyunsaturated fatty acids enriched fats by a commercial immobilized lipase**", **J. Mol. Catal. B: Enzym.**, 11, 677-686 (2001)

Queiroz, J. A., Tomaz, C. T., Cabral, J. M. S., "Hydrophobic interaction chromatography of proteins", **J. Biotechnol.**, 87, 143-159 (2001)

Serralha, F. N., Lopes, J. M., Lemos, F., Prazeres, D. M. F., Aires-Barros, M. R., Cabral, J. M. S., Ramôa Ribeiro, F., "Kinetics and modelling of an alcoholysis reaction catalyzed by cutinase immobilized on NaY zeolite", **J. Mol. Catal. B: Enzym.**, 11, 713-718 (2001)

Serralha, F. N., Lopes, J. M., Vieira Ferreira, L. F., Lemos, F., Prazeres, D. M. F., Aires-Barros, M. R., Cabral, J. M. S., Ramôa Ribeiro, F., "Conformational changes induced by immobilization of a recombinant cutinase on zeolites", **Catalysis Lett.**, 73, 63-66 (2001)

Stazi, S. R., Fevereiro, P. S., Sermanni, G. G., Aires-Barros, M. R., “ Oxidative polymerization and partial dechlorination of 2,4,6-trichlorophenol by a mixture of peroxidase isozymes from *Vaccinium mirtyllus*”, **J. Chem. Technol. Biotechnol.**, 76, 210-214 (2001)

Tecelão, C. S. R., van Keulen, F., Fonseca, M. M. R. da, “ Development of a reaction system for the selective conversion of (-)-*trans*-carveol to (-)-carvone with whole cells of *Rhodococcus erythropolis* DCL14”, **J. Mol. Catal. B: Enzym.**, 11, 719-724 (2001)

Teles, F. R. R., Cabral, J. M. S., Santos, J. A. L., “ Enzymatic degreasing of a solid waste from the leather industry by lipases”, **Biotechnol. Lett.**, 23, 1159-1163 (2001)

Tenreiro S., Fernandes A.R., Sá-Correia I., Transcriptional activation of *FLR1* gene during *Saccharomyces cerevisiae* adaptation to growth with benomyl: role of Yap1 and Pdr3p, **Biochemical and Biophysical Research Communications**, 280, 216-222, 2001.

Videira P.A., Fialho A.M., Geremia R.A., Breton C., Sá-Correia I., Biochemical characterisation of beta-1-4-glucuronosyltransferase GelK in the gellan gum producing strain *Sphingomonas paucimobilis* ATCC31461, **Biochemical Journal**, 358, 457-464, 2001.

2000

Abdallah B.S., Simões T., Fernandes A.R., Strauss J., Seiboth B., Sá-Correia I. and Kubicek C.P., Glucose does not activate the plasma-membrane-bound-H⁺-ATPase but affects pmaA transcript abundance in *Aspergillus nidulans*, **Archives of Microbiology**, 174, 340-345, 2000.

Azevedo, A. M., Fonseca, L. P., Prazeres, D. M. F., “ Kinetic and stability studies of penicillin acylase in reversed micelles”, **Biocatal. Biotrans.**, 17, 401-415 (2000)

Baptista, R. P., Cabral, J. M. S., Melo, E. P., “ Trehalose delays the reversible but not the irreversible thermal denaturation of cutinase”, **Biotechnol. Bioeng.**, 70, 699-703 (2000)

Cabral, P. M. P., Lima-Costa, M. E., Cabral, J. M. S., “ A structured growth model for *Cynara cardunculus* cell suspension”, **Bioprocess Eng.**, 23, 199-203 (2000)

Carvalho, C. C. R. de, van Keulen, F., Fonseca, M. M. R. da, “ Biotransformation of limonene-1,2-epoxide to limonene-1,2-diol by *Rhodococcus erythropolis* cells. An introductory approach to selective hydrolysis and separation of products”, **Food Technol. Biotechnol.**, 38, 181-185 (2000)

Carvalho, C. C. R. de, van Keulen, F., Fonseca, M. M. R. da, “ Production and recovery of limonene-1,2-diol and simultaneous resolution of a diastereomeric mixture of limonene-1,2-epoxide with whole cells of *Rhodococcus erythropolis* DCL14”, **Biocatal. Biotrans.**, 18, 223-235 (2000)

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., “ An integrated model for enzymatic reactions in reversed micellar systems: nominal and effective concentrations”, **Langmuir**, 16, 3082-3092 (2000)

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., “ Kinetics of cutinase catalyzed transesterification in AOT reversed micelles: Modelling of a batch stirred tank reaction”, **J. Biotechnol.**, 81, 1-13 (2000)

Carvalho, C. M. L., Cabral, J. M. S., “Reverse micelles as reaction media for lipases”, **Biochimie**, 82, 1063-1085 (2000)

Carvalho, C. M. L., Cunnah, P., Aires-Barros, M. R., Cabral, J. M. S., “ Performance of a membrane bioreactor for enzymatic transesterification: characterization and comparison with a batch stirred tank reactor”, **Biocatal. Biotrans.**, 18, 31-57 (2000)

Cescutti P., Bosco M., Picotti F., Impalloment G., Leitão J.H., Richau J. and Sá-Correia I., Structural study of the exopolysaccharide produced by a clinical isolate of *Burkholderia cepacia*, **Biochemical and Biophysical Research Communications**, 273, 1088-1094, 2000.

Chaves, A. C., Lucena-Silva, N., Abath, F. G. C., Pereira, V. R. A., Lima-Filho, J. L., Porto, A. L. F., Cabral, J. M. S., “ Liquid-liquid extraction of a *Schistosoma mansoni* recombinant protein from an *Escherichia coli* extract in aqueous two-phase system”, **Bioprocess Eng.**, 23, 435-438 (2000)

Costa, M. J. L., Cunha, M. T., Cabral, J. M. S., Aires-Barros, M. R., “ Scale-up of recombinant cutinase whole broth extraction with PEG-phosphate aqueous two phase system”, **Bioseparation**, 9, 231-238 (2000)

Cunha, M. T., Cabral, J. M. S., Tjerneld, F., Aires-Barros, M. R., “ Effect of salts and surfactants on the partitioning of *Fusarium solani pisi* cutinase in aqueous two-phase systems of thermoseparating ethylene oxide/propylene oxide random copolymer and hydroxypropyl starch”, **Bioseparation**, 9, 203-209 (2000)

Diogo, M. M., Queiroz, J. A., Monteiro, G. A., Martins, S. A. M., Ferreira, G. N. M., Prazeres, D. M. F., “Purification of a cystic fibrosis plasmid vector for gene therapy using hydrophobic interaction chromatography”, **Biotechnol. Bioeng.**, 68, 576-583 (2000)

Diogo, M. M., Ribeiro, S., Queiroz, J. A., Monteiro, G. A., Perrin, P., Tordo, N., Prazeres, D. M. F., “Scale-up of hydrophobic interaction chromatography for the purification of a DNA vaccine against rabies”, **Biotechnol. Lett.**, 22, 1397-1400 (2000)

Domingues, F. C., Queiroz, J. A., Cabral, J. M. S., Fonseca, L. P., “ The influence of culture conditions on mycelial structure and cellulase production by *Trichoderma reesei* Rut C-30”, **Enzyme Microb. Technol.**, 26, 394-401 (2000)

Feliciano, A. S., Dias, A. I. J., Prazeres, D. M. F., “ The effect of stirring and seeding on the AcPheLeuNH₂ synthesis and crystallization in a reversed micellar system”, **Enzyme Microb. Technol.**, 27, 264-269 (2000)

Fernandes A.R., Prieto M. and Sá-Correia I., Modification of plasma membrane lipid order and H⁺-ATPase activity as part of the response of *Saccharomyces cerevisiae* cultivation under mild and high copper stress, **Archives of Microbiology**, 173, 262-268, 2000.

Ferreira, B. S., van Keulen, F., Fonseca, M. M. R. da, “ On-line monitoring of dissolved gases using microporous membrane inlet and mass spectrometry”, **Food Technol. Biotechnol.**, 38, 63-67 (2000)

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., “ Anion-exchange purification of plasmid DNA using expanded bed adsorption”, **Bioseparation**, 9, 1-6 (2000)

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., “ Studies on the batch adsorption of plasmid DNA on to anion-Exchange chromatographic supports”, **Biotechnol. Prog.**, 16, 416-424 (2000)

Ferreira, G. N. M., Monteiro, G. A., Prazeres, D. M. F., Cabral, J. M. S., “ Downstream processing of plasmid DNA for gene therapy and DNA vaccine applications”, **Trends Biotechnol.**, 18, 380-388 (2000)

Giordano, R. L. C., Giordano, R. C., Prazeres, D. M. F., Cooney, C. L., “ Analysis of a Taylor-Poiseuille vortex flow reactor - II: Reactor modelling and performance assessment using glucose-fructose isomerization as test reaction”, **Chem. Eng. Sci.**, 55, 3611-3626 (2000)

Gonçalves, A. M., Serro, A. P., Aires-Barros, M. R., Cabral, J. M. S., “ Effects of ionic surfactants used in reversed micelles on cutinase activity and stability”, **Biochim. Biophys. Acta**, 1480, 92-106 (2000)

Léon, R., Molinari, F., Prazeres, D. M. F., Cabral, J. M. S., “ Organic media selection for the extraction of **b-hydroxyisobutyric acid produced by microbial biotransformation**”, **J. Chem. Technol. Biotechnol.**, 75, 617-624 (2000)

Liu H.L., Doleyres Y., Coutinho P.M., Ford C., Reilly P.J., Replacement and deletion mutations in the catalytic domain and belt region of *Aspergillus awamori* glucoamylase to enhance thermostability, **Protein Engineering**, 13(9), 655-659, 2000.

Melo, E. P., Fojan, P., Cabral, J. M. S., Petersen, S. B., “ Dynamic light scattering of cutinase in AOT reversed micelles”, **Chem. Phys. Lipids**, 106, 181-189 (2000)

Melo, E. P., Taipa, M. A., Castellar, M. R., Costa, S. M. B., Cabral, J. M. S., “ A spectroscopy analysis of thermal stability of the *Chromobacterium viscosum*”, **Biophys. Chem.**, 87, 111-120 (2000)

Mergulhão, F. J. M., Monteiro, G. A., Kelly, A. G., Taipa, M. A., Cabral, J. M. S., “ Recombinant human proinsulin: A new approach in gene assembly and protein expression”, **J. Microbiol. Biotechnol.**, 10, 690-693 (2000)

Moreira L. M., Becker J. D., Pähler A., and Becker A., The *Sinorhizobium meliloti*ExpE1 protein secreted by a type I secretion system involving ExpD1 and ExpD2 is required for biosynthesis or secretion of the exopolysaccharide galactoglucan. **Microbiology**, 146, 2237-2248, 2000.

Neves, A. A., Pereira, D. A., Vieira, L. M., Menezes, J. C., “ Real-time monitoring biomass concentration in *Streptomyces clavuligerus* cultivations with industrial media using a capacitance probe”, **J. Biotechnol.**, 84, 45-52 (2000)

Oliveira, A. C., Rosa, M. F., Aires-Barros, M. R., Cabral, J. M. S., “ Enzymatic esterification of ethanol by an immobilised *Rhizomucor miehei* lipase in a perforated disc bioreactor”, **Enzyme Microb. Technol.**, 26, 446-450 (2000)

Porto, A. L. F., Sarubbo, L. A., Lima-Filho, J. L., Aires-Barros, M. R., Cabral, J. M. S., Tambourgi, E. B., “Hydrodynamics and mass transfer in aqueous two-phase protein extraction using a continuous perforated rotating disc contactor”, **Bioprocess Eng.**, 22, 215-218 (2000)

Ribeiro, S., Monteiro, G. A., Martinho, G., Cabral, J. M. S., Prazeres, D. M. F., “ Quantitation of plasmid DNA in aqueous two phase systems by fluorescence analysis”, **Biotechnol. Lett.**, 22, 1101-1104 (2000)

Richau J., Leitão J.H., Correia M., Lito L., Salgado M.J., Barreto C., Cescutti P. and Sá-Correia I. Sá-Correia, Molecular typing and exopolysaccharide biosynthesis of *Burkholderia cepacia* isolates from a Portuguese Cystic Fibrosis Center, **Journal of Clinical Microbiology**, 38, 1651-1655, 2000.

Richau J.A., Leitão J.H. and Sá-Correia I., Enzymes leading to the nucleotide sugar precursors for exopolysaccharide synthesis in *Burkholderia cepacia*, **Biochemical and Biophysical Research Communications**, 276, 71-76, 2000.

Serralha, F. N., Lopes, J. M., Lemos, F., Prazeres, D. M. F., Aires-Barros, M. R., Rocha, J., Cabral, J. M. S., Ramôa-Ribeiro, F., “ Titanosilicates as supports for an enzymatic alcoholysis reaction”, **React. Kinet. Catal. Lett.**, 69, 217-222 (2000)

Taipa, M. A., Kaul, R. H., Mattiasson, B., Cabral, J. M. S., “ Recovery of a monoclonal antibody from hybridoma culture supernatant by affinity precipitation with Eudragit S-100”, **Bioseparation**, 9, 291-298 (2000)

Tavares I.M., Jolly L., Pompeo F., Leitão J.H., Fialho A.M., Sá-Correia I. and Mengin-Lecreux D., Identification of the *Pseudomonas aeruginosa* glmM gene encoding phosphoglucosamine mutase, **Journal of Bacteriology**, 182, 4453-4457, 2000.

Tenreiro S., Rosa P.C., Viegas C.A. and Sá-Correia I., Expression of AZR1 gene (ORF YGR224w), encoding a plasma membrane transporter of the Major Facilitator Superfamily, is required for adaptation to acetic acid and resistance to azoles in *Saccharomyces cerevisiae*, **Yeast**, 16, 1469-1481, 2000.

Vasconcelos, J. M. T., Orvalho, S. C. P., Rodrigues, A. M. A. F., Alves, S., "The effect of blade shape on the performance of six-bladed disk turbine impellers", **Ind. Eng. Chem. Res.**, 39, 203-213 (2000)

Videira P., Cortes L.L., Fialho A.M. and Sá-Correia I., Identification of the pgmG gene, encoding a bifunctional protein with phosphoglucomutase and phosphomannomutase activities, in the gellan gum producing strain *Shingomonas paucimobilis* ATCC 31461, **Applied and Environmental Microbiology**, 66, 2252-2258, 2000.

1999

Azevedo, A. M., Fonseca, L. P., Prazeres, D. M. F., "Stability and stabilisation of penicillin acylase", **J. Chem. Technol. Biotechnol.**, 74, 1110-1116 (1999)

Bayer E.A., Coutinho P.M. and Henrissat B., Cellulosome-like sequences in *Archaeoglobus fulgidus*: an enigmatic vestige of cohesin and dockerin domains, **FEBS Letters**, 463, 277-280, 1999.

Brôco N., Tenreiro S., Viegas C.A. and Sá-Correia I., *FLR1* gene (ORF YBR008c) is required for benomyl and methotrexate resistance in *Saccharomyces cerevisiae* and its benomyl-induced-expression is dependent on Pdr3 transcriptional regulator, **Yeast**, 15, 1595-1608, 1999.

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., "Cutinase: From molecular level to bioprocess development", **Biotechnol. Bioeng.**, 66, 17-34 (1999)

Carvalho, C. M. L., Cabral, J. M. S., Aires-Barros, M. R., "Cutinase stability in AOT reversed micelles: system optimization using the factorial design methodology", **Enzyme Microb. Technol.**, 24, 569-576 (1999)

Carvalho, C. M. L., Melo, E. P., Costa, S. M. B., Cabral, J. M. S., Aires-Barros, M. R., "A steady-state fluorescence study of cutinase microencapsulated in AOT reversed micelles at optimal stability conditions", **Biotechnol. Lett.**, 21, 673-681 (1999)

Chambel A., Viegas C.A. and Sá-Correia I., Effect of cinnamic acid on the growth and on plasma membrane H⁺-ATPase activity of *Saccharomyces cerevisiae*, **International Journal of Food Microbiology**, 50, 173-179, 1999.

Chaves, A. C., Abath, F. G. C., Lima-Filho, J. L., Cabral, J. M. S., Lucena-Silva, N., "Studies on growth kinetics and plasmid stability of a recombinant *Escherichia coli* expressing a *Schistosoma mansoni* antigen", **Bioprocess Eng.**, 21, 355-361 (1999)

Diogo, M. M., Queiroz, J. A., Monteiro, G. A., Prazeres, D. M. F., " Separation and analysis of plasmid denatured forms using hydrophobic interaction chromatography", **Anal. Biochem.**, 275, 122-124 (1999)

Diogo, M. M., Silva, S., Cabral, J. M. S., Queiroz, J. A., " Hydrophobic interaction chromatography of *Chromobacterium viscosum* lipase on polypropylene glycol immobilised on Sepharose", **J. Chromat. A** , 849, 413-419 (1999)

Fernandes A. R. and Sá-Correia I., "Comparative effects of *Saccharomyces cerevisiae* cultivation under copper stress on the activity and kinetic parameters of plasma-membrane-bound H⁺-ATPases *PMA1* and *PMA2*", **Archives of Microbiology**, 171, pp 273-278, 1999.

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., " Development of process flow sheets for the purification of supercoiled plasmids for gene therapy applications", **Biotechnol. Prog.**, 15, 725-731 (1999)

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., " Monitoring of plasmid DNA production and purification for gene therapy applications", **Pharmacy Pharmac. Commun.**, 5, 57-59 (1999)

Fialho A.M., Martins L.O., Donval M-L., Leitão J.H., Ridout M.J., Jay A.J., Morris V.J. and Sá-Correia I., Structures and properties of gellan polymers produced by *Sphingomonas paucimobilis* ATCC 31461 from lactose compared with those produced from glucose and from cheese whey, **Applied and Environmental Microbiology**, 65, 2485-2491, 1999.

Fonseca, L. P., Cabral, J. M. S., "Optimization of a pseudo-affinity process for penicillin acylase purification", **Bioprocess Eng.**, 20, 513-524 (1999)

Gonçalves, A. M., Schacht, E., Matthijs, G., Aires-Barros, M. R., Cabral, J. M. S., Gil, M. H., "Stability studies of a recombinant cutinase immobilized to dextran and derivatized silica supports", **Enzyme Microb. Technol.**, 24, 60-66 (1999)

Krieger, N., Taipa, M. A., Melo, E. H. M., Lima-Filho, J. L., Aires-Barros, M. R., Cabral, J. M. S., "Purification of a *Penicillium citrinum* lipase by chromatographic processes", **Bioprocess Eng.**, 20, 59-65 (1999)

Marcos, J. C., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., " Partial purification of penicillin acylase from *Escherichia coli* in poly(ethylene glycol)-sodium citrate aqueous two-phase systems", **J. Chromat. B**, 734, 15-22 (1999)

Mateus, D. M. R., Alves, S. S., Fonseca, M. M. R. da, “ Diffusion in cell-free and cell immobilising **k-carrageenan gel beads with and without chemical reaction**”, **Biotechnol. Bioeng.**, 63, 625-631 (1999)

Mergulhão, F. J. M., Kelly, A. G., Monteiro, G. A., Taipa, M. A., Cabral, J. M. S., “ Troubleshooting in gene splicing by overlap extension: A stepwise method”, **Mol. Biotechnol.**, 12, 285-287 (1999)

Molinari, F., Gandolfi, R., Aragozzini, F., Léon, R., Prazeres, D. M. F., “ Biotransformations in two-liquid phase systems: production of phenylacetaldehyde by oxidation of 2-phenylethanol with acetic acid bacteria”, **Enzyme Microb. Technol.**, 25, 729-735 (1999)

Molinari, F., Villa, R., Aragozzini, F., Léon, R., Prazeres, D. M. F., “ Enantioselective oxidation of (*RS*)-2-phenyl-1-propanol to (*S*)-2-phenylpropanoic acid with *Gluconobacter oxydans*: simplex optimization of the biotransformation”, **Tetrahedron: Asymmetry**, 10, 3003-3009 (1999)

Monteiro, G. A., Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., “ Analysis and use of endogenous nuclease activities in *Escherichia coli* lysates during the primary isolation of plasmids for gene therapy”, **Biotechnol. Bioeng.**, 66, 189-194 (1999)

Morão, A., Maia, C. I., Fonseca, M. M. R. da, Vasconcelos, J. M. T., Alves, S. S., “ Effect of antifoam addition on gas-liquid mass transfer in stirred fermenters”, **Bioprocess Eng.**, 20, 165-172 (1999)

Morna-Gomes, A., Serralheiro, M. L. M., Fevereiro, P. S., Aires-Barros, M. R., “ Application of factorial design to the optimization of peroxidase activity in reverse micelles of bis(2-ethylhexyl)sodium sulfosuccinate/isooctane”, **Appl. Biochem. Biotechnol.**, 82, 27-36 (1999)

Noites, I. S., O’Kennedy, R. D., Levy, M. S., Abidi, N., Keshavarz-Moore, E., “ Rapid quantitation and monitoring of plasmid DNA using an ultrasensitive DNA-binding dye”, **Biotechnol. Bioeng.**, 66, 195-201 (1999)

Prazeres, D. M. F., Ferreira, G. N. M., Monteiro, G. A., Cooney, C. L., Cabral, J. M. S., “Large scale production of pharmaceutical-grade plasmid DNA for gene therapy: problems and bottlenecks”, **Trends Biotechnol.**, 17, 169-174 (1999)

Queiroz, J. A., Garcia, F. A. P., Cabral, J. M. S., “Purification of a *Chromobacterium viscosum* lipase by hydrophobic interaction chromatography”, **Isolation and Purification**, 3, 1-7 (1999)

Serralheiro, M. L. M., Cabral, J. M. S., “ Irreversible thermoinactivation of **α -chymotrypsin in buffer and water miscible organic solvent. Comparison with a reverse micellar system**”, **J. Mol. Catal. B: Enzym.**, 7, 191-205 (1999)

Serralheiro, M. L. M., Cabral, J. M. S., “ Thermal stability of **a-chymotrypsin, native and chemically modified, inside reverse micelles during peptide synthesis**”, **Biocatal. Biotrans.**, 17, 3-19 (1999)

Serralheiro, M. L. M., Prazeres, D. M. F., Cabral, J. M. S., “ Continuous production and simultaneous precipitation of a dipeptide in a reversed micellar membrane reactor”, **Enzyme Microb. Technol.**, 24, 507-513 (1999)

Tavares I.M., Leitão J.H., Fialho A.M. and Sá-Correia I., Pattern of changes in the activity of enzymes of GDP-D-mannuronic acid synthesis and in the level of transcription of *algA*, *algC* and *algD* genes accompanying the loss and emergence of mucoidy in *Pseudomonas aeruginosa*, **Research in Microbiology**, 150, 105-116, 1999.

1998

Almeida, M. C., Venâncio, A., Teixeira, J. A., Aires-Barros, M. R., “ Cutinase purification on poly(ethylene glycol)-hydroxypropyl starch aqueous two-phase systems”, **J. Chromat. B**, 711, 151-159 (1998)

Carmelo V., Santos R., Viegas C.A. and Sá-Correia I., Modification of *Saccharomyces cerevisiae* thermotolerance following rapid exposure to acid stress, **International Journal of Food Microbiology**, 42, 225-230, 1998.

Carvalho, C. M. L., Aires-Barros, M. R., Cabral, J. M. S., “ Cutinase structure, function and biocatalysis applications”, **Electronic J. Biotechnol.**, 1, (1998)

Carvalho, C. M. L., Cabral, J. M. S., Aires-Barros, M. R., “ Kinetics and modelling of transesterification reactions catalysed by cutinase in AOT reversed micelles”, **J. Mol. Catal. B: Enzym.**, 5, 361-365 (1998)

Castellar, M. R., Aires-Barros, M. R., Cabral, J. M. S., Iborra, J. L., “ Effect of zeolite addition on ethanol production from glucose by *Saccharomyces bayanus*”, **J. Chem. Technol. Biotechnol.**, 73, 377-384 (1998)

Cunha, M. T., Tjerneld, F., Cabral, J. M. S., Aires-Barros, M. R., “ Effect of electrolytes and surfactants on the thermoseparation of an ethylene oxide-propylene oxide random copolymer in aqueous solution”, **J. Chromat. B**, 711, 53-60 (1998)

Diogo, M. M., Cabral, J. M. S., Queiroz, J. A., “ Preliminary study on hydrophobic interaction chromatography of *Chromobacterium viscosum* lipase on polypropylene glycol immobilized on Sepharose”, **J. Chromat. A**, 796, 177-180 (1998)

Fernandes A.R., Peixoto F.P. and Sá-Correia I., Activation of the H⁺-ATPase in the plasma membrane of cells of *Saccharomyces cerevisiae* grown under mild copper stress, **Archives of Microbiology**, 171, 6-12, 1998.

Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., “ Influence of some operational parameters on the bioconversion of sitosterol with immobilized whole cells in organic medium”, **J. Mol. Catal. B: Enzym.**, 5, 307-310 (1998)

Ferreira, B. S., Fernandes, H. L., Reis, A., Mateus, M., “ Microporous hollow fibres for carbon dioxide absorption: mass transfer model fitting and the supplying of carbon dioxide to microalgal cultures”, **J. Chem. Technol. Biotechnol.**, 71, 61-70 (1998)

Ferreira, B. S., van Keulen, F., Fonseca, M. M. R. da, “ Novel calibration method for mass spectrometers for on-line gas analysis: Set-up for the monitoring of a bacterial fermentation”, **Bioprocess Eng.**, 19, 289-296 (1998)

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., “ Purification of supercoiled plasmid DNA using chromatographic processes”, **J. Molecular Recognition**, 11, 250-251 (1998)

Fonseca, L. J. P., Patrício, I. M., Cabral, J. M. S., “ Preliminary studies on continuous recovery and purification of the penicillin acylase under pseudo-affinity conditions using phenyl-Sepharose gel”, **J. Molecular Recognition**, 11, 252-254 (1998)

Fontes, N., Almeida, M. C., Peres, C., Garcia, S., Grave, J., Aires-Barros, M. R., Soares, C. M., Cabral, J. M. S., Maycock, C. D., Barreiros, S., “ Cutinase activity and enantioselectivity in supercritical fluids”, **Ind. Eng. Chem. Res.**, 37, 3189-3194 (1998)

Giordano, R. C., Giordano, R. L. C., Prazeres, D. M. F., Cooney, C. L., “ Analysis of a Taylor-Poiseuille vortex flow reactor - I: Flow patterns and mass transfer characteristics”, **Chem. Eng. Sci**, 53, 3635-3652 (1998)

Gonçalves, A. P. V., Cabral, J. M. S., Aires-Barros, M. R., “ Analysis of a BSTR for triglyceride hydrolysis with an immobilised cutinase”, **J. Mol. Catal. B: Enzym.**, 5, 35-38 (1998)

Jay A.J., Colquhoun I.J., Ridout M.J., Brownsey G.J., Morris V.J., Fialho A.M., Leitão J.H. and Sá-Correia I., Analysis of structure and function of gellans with different substitution patterns, **Carbohydrate Polymers**, 35, 179-188, 1998.

León, R., Fernandes, P., Pinheiro, H. M., Cabral, J. M. S., “ Whole-cell biocatalysis in organic media”, **Enzyme Microb. Technol.**, 23, 483-500 (1998)

Lopes, J. P., Menezes, J. C., “Faster development of fermentation processes. Early stages process diagnostics”, **AIChE Symp. Series**, 94, 391-396 (1998)

Lupi F.M., Fernandes H.M.L. and Sá-Correia I., Increase of copper toxicity to growth of *Chlorella vulgaris* with increase of light intensity, **Microbial Ecology**, 35, 193-198, 1998.

Marcos, J. C., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., "Variation of penicillin acylase partition coefficient with phase volume ratio in poly(ethylene glycol)-sodium citrate aqueous two-phase systems", **J. Chromat. B**, 711, 295-299 (1998)

Melo, E. P., Carvalho, C. M. L., Aires-Barros, M. R., Costa, S. M. B., Cabral, J. M. S., "Deactivation and conformational changes of cutinase in reverse micelles", **Biotechnol. Bioeng.**, 58, 380-386 (1998)

Monteiro G.A. and Sá-Correia I., In vivo activation of yeast plasma membrane H⁺-ATPase by ethanol: effect on the kinetic parameters and involvement of the carboxyl-terminus regulatory domain, **Biochimica et Biophysica Acta**, 1370, 310-316, 1998.

Oliveira, A. C., Rosa, M. F., Cabral, J. M. S., Aires-Barros, M. R., "Improvement of alcoholic fermentations by simultaneous extraction and enzymatic esterification of ethanol", **J. Mol. Catal. B: Enzym.**, 5, 29-33 (1998)

Prazeres, D. M. F., Schluep, T., Cooney, C. L., "Preparative purification of supercoiled plasmid DNA using anion-exchange chromatography", **J. Chromat. A**, 806, 31-45 (1998)

Qin, Y., Cabral, J. M. S., "Influence of Nernst-Planck diffusion on hollow-fiber mass-transfer processes", **AIChE J.**, 44, 1529-1541 (1998)

Qin, Y., Cabral, J. M. S., "Lumen mass transfer in hollow-fiber membrane processes with nonlinear boundary conditions", **AIChE J.**, 44, 836-848 (1998)

Qin, Y., Cabral, J. M. S., "Theoretical analysis on the design of hollow fiber modules and modules cascades for the separation of diluted species", **J. Memb. Sci.**, 143, 197-205 (1998)

Serra, M. C. C., Fonseca, M. M. R. da, Calado, J. C. G., Palavra, A. M. F., "Solubility of propene in water and in a mineral medium for the cultivation of a *Xanthobacter* strain", **J. Solution Chemistry**, 27, 455-461 (1998)

Serralha, F. N., Lopes, J. M., Lemos, F., Prazeres, D. M. F., Aires-Barros, M. R., Cabral, J. M. S., Ramôa Ribeiro, F., "Zeolites as supports for an enzymatic alcoholysis reaction", **J. Mol. Catal. B: Enzym.**, 4, 303-311 (1998)

Taipa, M. A., Kaul, R., Mattiasson, B., Cabral, J. M. S., "Preliminary studies on the purification of a monoclonal antibody by affinity precipitation with Eudragit S-100", **J. Molecular Recognition**, 11, 240-242 (1998)

van Keulen, F., Correia, C. N., Fonseca, M. M. R. da, "Solvent selection for the biotransformation of terpenes by *Pseudomonas putida*", **J. Mol. Catal. B: Enzym.**, 5, 295-299 (1998)

Vasconcelos, J. M. T., Alves, S. S., Nienow, A. W., Bujalski, W., "Scale-up of mixing in gassed multi-turbine agitated vessels", **Can. J. Chem. Eng.**, 76, 398-404 (1998)

Viegas C.A., Almeida P.F., Cavaco M. and Sá-Correia I., The H⁺-ATPase in the plasma membrane of *Saccharomyces cerevisiae* is activated during growth latency in octanoic acid-supplemented medium following the decrease in intracellular pH and cell viability, **Applied and Environmental Microbiology**, 64, 779-783, 1998.

1997

Alves, S. S., Vasconcelos, J. M. T., Barata, J., " Alternative compartment models of mixing in tall tanks agitated by multi-Rushton turbines", **Chem. Eng. Res. Des. (Part A)**, 75, 334-338 (1997)

Cabral, J. M. S., Aires-Barros, M. R., Pinheiro, H., Prazeres, D. M. F., " Biotransformation in organic media by enzymes and whole cells", **J. Biotechnol.**, 59, 133-143 (1997)

Carmelo V. and Sá-Correia I., *HSP26* gene transcription is strongly induced during *Saccharomyces cerevisiae* growth at low pH, **FEMS Microbiology Letters**, 149, 85-88, 1997.

Carmelo V., Santos H., and Sá-Correia I., Effect of extracellular acidification on the activity of plasma membrane ATPase and on the cytosolic and vacuolar pH of *Saccharomyces cerevisiae*, **Biochimica Biophysica Acta**, 1325, 63-70, 1997.

Carvalho, C. M. L., Serralheiro, M. L. M., Cabral, J. M. S., Aires-Barros, M. R., " Application of factorial design to the study of transesterification reactions using cutinase in AOT-reversed micelles", **Enzyme Microb. Technol.**, 21, 117-123 (1997)

Cunha, M. T., Cabral, J. M. S., Aires-Barros, M. R., " Quantification of phase composition in aqueous two-phase systems of Breox/phosphate and Breox/Reppal PES 100 by isocratic HPLC", **Biotechnol. Tech.**, 11, 351-353 (1997)

Esquível, M. M., Bandarra, N. M., Fontan, I., Bernardo-Gil, M. G., Batista, I., Nunes, M. L., Empis, J. A., "Supercritical carbon dioxide extraction of sardine *Sardina pilchardus* oil", **Lebensmittel-Wissenschaft und Technologie**, 30, 715-720 (1997)

Feliciano, A. S., Cabral, J. M. S., Prazeres, D. M. F., " Quantitative structure activity relationships in the synthesis of AcXYNH₂ dipeptides by **a-chymotrypsin in reversed micelles**", **Enzyme Microb. Technol.**, 21, 284-290 (1997)

Feliciano, A. S., Cabral, J. M. S., Prazeres, D. M. F., " Solubility studies and synthesis of AcPheLeuNH₂ in reversed micellar systems", **Biocatal. Biotrans.**, 14, 219-234 (1997)

Ferreira, G. N. M., Cabral, J. M. S., Prazeres, D. M. F., “ A comparison of gel filtration chromatographic supports for plasmid purification”, **Biotechnol. Tech.**, 11, 417-420 (1997)

Gonçalves, A. P. V., Lopes, J. M., Lemos, F., Ramôa-Ribeiro, F., Prazeres, D. M. F., Cabral, J. M. S., Aires-Barros, M. R., “ Effect of the immobilization support on the hydrolytic activity of a cutinase from *Fusarium solani pisi*”, **Enzyme Microb. Technol.**, 20, 93-101 (1997)

Krieger, N., Taipa, M. A., Aires-Barros, M. R., Melo, E. H. M., Lima-Filho, J. L., Cabral, J. M. S., “Purification of *Penicillium citrinum* lipase using AOT reversed micelles”, **J. Chem. Technol. Biotechnol.**, 69, 77-85 (1997)

Krieger, N., Taipa, M. A., Melo, E. H. M., Lima-Filho, J. L., Aires-Barros, M. R., Cabral, J. M. S., “Kinetic characterization of the *Penicillium citrinum* lipase in AOT/isooctane-reversed micelles”, **Appl. Biochem. Biotechnol.**, 67, 87-95 (1997)

Leitão J.H. and Sá-Correia I., Effect of growth-inhibitory concentrations of copper on alginate biosynthesis in highly mucoid *Pseudomonas aeruginosa*, **Microbiology**, 143, 481-488, 1997.

Leitão J.H. and Sá-Correia I., Oxygen-dependent up-regulation of transcription of alginate genes, algA, algC and algD, in *Pseudomonas aeruginosa*, **Research in Microbiology**, 148, 37-43, 1997.

Melo, E. P., Aires-Barros, M. R., Costa, S. M. B., Cabral, J. M. S., “ Thermal unfolding of proteins at high pH range studied by UV absorbance”, **J. Biochem. Biophys. Methods**, 34, 45-59 (1997)

Molinari, F., Aragozzini, F., Cabral, J. M. S., Prazeres, D. M. F., “ Continuous production of isovaleraldehyde through extractive bioconversion in a hollow-fiber membrane bioreactor”, **Enzyme Microb. Technol.**, 20, 604-611 (1997)

Moreira L. M., da Costa M. S. and Sá-Correia I., Comparative genomic analysis of isolates belonging to the six species of the genus *Thermus* using pulsed-field gel electrophoresis and ribotyping, **Archives of Microbiology**, 168, 92-101, 1997.

Moreira L.M. and Sá-Correia I., Megaplasms in *Thermus oshimai* isolates from two widely separated geographical areas: restriction fragment profiling and DNA homology, **Archives of Microbiology**, 168, 473-479, 1997.

Oliveira, A. C., Rosa, M. F., Cabral, J. M. S., Aires-Barros, M. R., “ Immobilization of *Saccharomyces cerevisiae* cells and *Rhizomucor miehei* lipase for the production and extractive biocatalysis of ethanol”, **Bioprocess Eng.**, 16, 349-353 (1997)

Pissarra, P. N., Nielsen, J., “Thermodynamics of metabolic pathways for penicillin production: Analysis of thermodynamic feasibility and free energy changes during fed-batch cultivation”, **Biotechnol. Prog.**, 13, 156-165 (1997)

Porto, A. L. F., Lima-Filho, J. L., Aires-Barros, M. R., Cabral, J. M. S., Tambourgi, E. B., "Extraction of recombinant cytochrome b₅ from disrupted *Escherichia coli* cells with an aqueous two-phase system in a continuous perforated rotating disc contactor", **Biotechnol. Tech.**, 11, 641-643 (1997)

Prazeres, D. M. F., "A theoretical analogy between multistage ultrafiltration and size-exclusion chromatography", **Chem. Eng. Sci.**, 52 (6), 953-960 (1997)

Qin, Y., Cabral, J. M. S., "Lumen mass transfer in hollow-fiber membrane processes with constant wall resistances", **AIChE J.**, 43, 1975-1988 (1997)

Richau J.A., Choquenot D., Fialho A.M. and Sá-Correia I., Emergence of Cu⁺⁺-tolerant mutants defective in gellan synthesis in Cu⁺⁺-stressed cultures of *Sphingomonas paucimobilis*, **Research in Microbiology**, 148, 251-261, 1997.

Richau J.A., Choquenot D., Fialho A.M., Moreira L.M. and Sá-Correia I., The Biosynthesis of the Exopolysaccharide Gellan Results in the Decrease of *Sphingomonas paucimobilis* Tolerance to Copper (Cu²⁺), **Enzyme and Microbial Technology**, 20, 510-515, 1997.

Sarmiento, M. J., Pires, M. J., Cabral, J. M. S., Aires-Barros, M. R., "Liquid-liquid extraction of a recombinant protein, cytochrome b₅, from an impure extract using aqueous two-phase systems", **Bioprocess Eng.**, 16, 295-297 (1997)

Sebastião, M. J., Martel, P., Baptista, A., Petersen, S. B., Cabral, J. M. S., Aires-Barros, M. R., "Predicting the partition coefficients of a recombinant cutinase in polyethylene glycol/phosphate aqueous two-phase systems", **Biotechnol. Bioeng.**, 56, 248-257 (1997)

Vasconcelos, J. M. T., Nienow, A. W., Martin, T., Alves, S. S., McFarlane, C. M., "Alternative ways of applying the hydrogen peroxide steady state method of *K_La* measurement", **Chem. Eng. Res. Des. (Part A)**, 75, 467-472 (1997)

Viegas C.A. and Sá-Correia I., Effects of low temperatures (9-33°C) and pH (3.3-5.7) in the loss of *Saccharomyces cerevisiae* viability by combining lethal concentrations of ethanol with octanoic and decanoic acids, **International Journal of Food Microbiology**, 34, 267-277, 1997.

1996

Alves, S. S., Vasconcelos, J. M. T., "Optimisation of agitation and aeration in fermenters", **Bioprocess Eng.**, 14, 119-123 (1996)

Belo, I., Santos, J. A. L., Cabral, J. M. S., Mota, M., " Optimization study of *Escherichia coli* TB1 cell disruption for cytochrome b₅ recovery in small-scale bead mill", **Biotechnol. Prog.**, 12, 201-204 (1996)

Cabral, J. M. S., Aires-Barros, M. R., "Biocatalysis in organic media by cutinase immobilized in reversed micelles and zeolites", **Chimia**, 50, 420-421 (1996)

Carmelo V., Bogaerts P. and Sá-Correia I., Activity of Plasma Membrane H⁺-ATPase and Expression of *PMA1* and *PMA2* Genes in *Saccharomyces cerevisiae* Cells Grown at Optimal and Low pH, **Archives of Microbiology**, 166, 315-320, 1996.

Carneiro-da-Cunha, M. G., Aires-Barros, M. R., Tambourgi, E. B., Cabral, J. M. S., " Continuous extraction of a recombinant cutinase from *Escherichia coli* disrupted cells with reversed micelles using a perforated rotating disc contactor", **Bioprocess Eng.**, 15, 253-256 (1996)

Carneiro-da-Cunha, M. G., Melo, E. P., Cabral, J. M. S., Aires-Barros, M. R., " Liquid-liquid extraction of a recombinant cutinase from fermentation media with AOT reversed micelles", **Bioprocess Eng.**, 15, 151-157 (1996)

Castellar, M. R., Taipa, M. A., Cabral, J. M. S., " Kinetic and stability characterization of *Chromobacterium viscosum* lipase and its comparison with *Pseudomonas glumae* lipase", **Appl. Biochem. Biotechnol.**, 61, 299-314 (1996)

Costa, M. E. L., van Gulik, W. M., ten Hoopen, H. J. G., Pais, M. S. S., Cabral, J. M. S., " Protease and phenol production of *Cynara cardunculus* L. cell suspension in a chemostat", **Enzyme Microb. Technol.**, 19, 493-500 (1996)

Cunnah, P., Aires-Barros, M. R., Cabral, J. M. S., " Esterification and transesterification catalysed by cutinase in reverse micelles of CTAB for the synthesis of short chain esters", **Biocatal. Biotrans.**, 14, 125-146 (1996)

Fonseca, L. P., Cabral, J. M. S., "Evaluation of affinity and pseudo-affinity adsorption processes for penicillin acylase purification", **Bioseparation**, 6, 293-302 (1996)

Gonçalves, A. P. V., Cabral, J. M. S., Aires-Barros M. R., " Immobilization of a recombinant cutinase by entrapment and by covalent binding: kinetic and stability studies", **Appl. Biochem. Biotechnol.**, 60, 217-228 (1996)

Gonçalves, A. P. V., Lopes, J. M., Lemos, F., Ribeiro, F. R., Prazeres, D. M. F., Cabral, J. M. S., Aires-Barros, M. R., “ Zeolites as supports for enzymatic hydrolysis reactions. Comparative study of several zeolites”, **J. Mol. Catal. B: Enzym.**, 1, 53-60 (1996)

Leitão J.H., Alvim T. and Sá-Correia I., Ribotyping of *Pseudomonas aeruginosa* isolates from Patients and Water Springs and Genome Fingerprinting of Variants concerning Mucoity, **FEMS Immunology and Medical Microbiology**, 13, 287-292, 1996.

Lima-Costa, M. E., van Gulik, W. M., ten Hoopen, H. J. G., Pais, M. S. S., Cabral, J. M. S., “Protease and phenol production of *Cynara cardunculus* L. cell suspension in a chemostat”, **Enzyme Microb. Technol.**, 19, 493-500 (1996)

Martins L.O., Fialho A.M., Rodrigues P.L. and Sá-Correia I., Gellan Gum Production and Activity of Biosynthetic Enzymes in *Sphingomonas paucimobilis* Mucoity and Non-mucoity Variants, **Biotechnology and Applied Biochemistry**, 24, 47-54, 1996.

Mateus, D. M. R., Alves, S. S., Fonseca, M. M. R. da, “ Model for the production of L-tryptophan from L-serine and indole by immobilized cells in a three-phase liquid-impelled loop reactor”, **Bioprocess Eng.**, 14, 151-158 (1996)

Mateus, D. M. R., Fonseca, M. M. R. da, Alves, S. S., “ Hydrodynamics and mass transfer in a liquid-impelled loop reactor”, **Ind. Eng. Chem. Res.**, 35, 4559-4565 (1996)

Melo, E. P., Costa, S. M. B., Cabral, J. M. S., “ Denaturation of a recombinant cutinase from *Fusarium solani pisi* in AOT - iso-octane reverse micelles: a steady-state fluorescence study”, **Photochem. Photobiol.**, 63, 169-175 (1996)

Moreira L.M., Nobre M.F., Sá-Correia I. and da Costa M.S., Genomic typing and fatty acid composition of *Rhodothermus marinus*, **Systematic and Applied Microbiology**, 19, 83-90, 1996.

Morgado, M. A. P., Cabral, J. M. S., Prazeres, D. M. F., “ Phospholipase A₂-catalysed hydrolysis of lecithin in a continuous reversed-micellar membrane bioreactor”, **J. A. O. C. S.**, 73, 337-346 (1996)

Pinto-Sousa, A. M., Cabral, J. M. S., Aires-Barros, M. R., “ Stability of a *Fusarium solani pisi* recombinant cutinase in phosphatidylcholine reversed micelles”, **Biotechnol Lett.**, 18, 583-586 (1996)

Pires, M. J., Aires-Barros, M. R., Cabral, J. M. S., “ Liquid-liquid extraction of proteins with reversed micelles”, **Biotechnol. Prog.**, 12, 290-301 (1996)

Pissarra, P. N., Nielsen, J., Bazin, M. J., “ Pathway kinetics and metabolic control analysis of a high-yielding strain of *Penicillium chrysogenum* during fed batch cultivations”, **Biotechnol. Bioeng.**, 51, 168-176 (1996)

Prazeres, D. M. F., "Optimal design of a number of membrane reactors in series using Michaelis-Menten one-substrate reversible kinetics", **Biotechnol. Tech.**, 10, 313-318 (1996)

Qin, Y., Cabral, J. M. S., "Comparison between supported gas membrane process and supported liquid membrane process for the separation of NH_3 from aqueous media containing NH_3 and CO_2 ", **J. Chem. Technol. Biotechnol.**, 67, 323-328 (1996)

Qin, Y., Cabral, J. M. S., "Hollow fiber supported liquid membrane process for the selective separation of NH_3 from aqueous media containing NH_3 and CO_2 ", **J. Chem. Technol. Biotechnol.**, 65, 137-148 (1996)

Qin, Y., Cabral, J. M. S., Wang, S.C., "Hollow-fiber gas-membrane process for removal of NH_3 from solution of NH_3 and CO_2 ", **AIChE J.**, 42, 1945-1956 (1996)

Queiroz, J. A., Garcia, F. A. P., Cabral, J. M. S., "Hydrophobic interaction chromatography of *Chromobacterium viscosum* lipase on polyethylene glycol immobilized on Sepharose", **J. Chromat. A.**, 734, 213-219 (1996)

Ramôa-Ribeiro, F., Gonçalves, A. P. V., Lemos, F., Prazeres, D. M. F., Cabral, J. M. S., Aires-Barros, M. R., Lopes, J. M., "Zeolites as supports for enzymatic hydrolysis reactions. Comparative study of several zeolites", **J. Mol. Catal. B: Enzym.**, 1, 53-60 (1996)

Rodrigues, M. F., Gil, M. G. B., "Vapor-liquid equilibrium data of **a-pinene + b-pinene + limonene at 80 kPa and 101 kPa**", **J. Chem. Eng. Data**, 41, 581-585 (1996)

Rosa M.F. and Sá-Correia I., Intracellular Acidification does not account for Inhibition of *Saccharomyces cerevisiae* Growth in the Presence of Ethanol, **FEMS Microbiology Letters**, 135, 271-274, 1996.

Santana F.M.C., Fialho A.M., Sá-Correia I. and Empis J.M.A., Isolation of bacterial strains capable of using lupanine, the predominant quinolizidine alkaloid in white lupin, as sole carbon and energy source", **Journal of Industrial Microbiology**, 17, 110-115, 1996.

Santos, J. A. L., Belo, I., Mota, M., Cabral, J. M. S., "Freeze/thawing and sonication of *Escherichia coli* TB1 cells for cytochrome b_5 recovery", **Bioseparation**, 6, 81-89 (1996)

Sebastião, M. J., Cabral, J. M. S., Aires-Barros, M. R., "Improved purification protocol of a *Fusarium solani* recombinant cutinase by phase partitioning in aqueous two-phase systems of polyethylene glycol and phosphate", **Enzyme Microb. Technol.**, 18, 251-260 (1996)

Vasconcelos, J. M. T., Barata, J. M., Alves, S. S., "Transitional mixing in multiple-turbine agitated tanks", **Chem. Eng. J.**, 63, 53-58 (1996)

1995

Alves, J. R. S., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., "Separation and purification of penicillin acylase from *Escherichia coli* using AOT reverse micelles", **Biotechnol. Tech.**, 9, 265-270 (1995)

Alves, J. R. S., Fonseca, L. P., Ramalho, M. T., Cabral, J. M. S., "Assay of penicillin acylase in organic media", **Biotechnol. Tech.**, 9, 729-730 (1995)

Alves, S. S., Vasconcelos, J. M. T., "Mixing in gas-liquid contactors agitated by multiple turbines in the flooding regime", **Chem. Eng. Sci.**, 50, 2355-2357 (1995)

Carmelo V., Bogaerts P. and Sá-Correia I., Effects of extracellular acidification on the activity of yeast plasma membrane H⁺-ATPase and expression of *PMA1* and *PMA2* genes, **Yeast**(special issue), 11, S426, 1995.

Fernandes, P., Cabral, J. M. S., Pinheiro, H. M., "Bioconversion of a hydrocortisone derivative in an organic-aqueous two-liquid phase system", **Enzyme Microb. Technol.**, 17, 163-167 (1995)

Ferreira-Dias, S., Fonseca, M. M. R. da, "Glycerolysis of olive oil: batch operational stability of *Candida rugosa* lipase immobilized in hydrophilic polyurethane foams", **Bioprocess Eng.**, 13, 311-315 (1995)

Ferreira-Dias, S., Fonseca, M. M. R. da, "Production of monoglycerides by glycerolysis of olive oil with immobilized lipases: effect of the water activity", **Bioprocess Eng.**, 12, 327-337 (1995)

Ferreira-Dias, S., Fonseca, M. M. R. da, "The effect of substrate hydrophobicity on the kinetic behaviour of immobilized *Candida rugosa* lipase", **Biocatal. Biotrans.**, 13, 99-110 (1995)

Kennedy, J. F., Cabral, J. M. S., "Immobilisation of biocatalysts by metal-link chelation processes", **Artif. Cells, Blood Subs. Immob. Biotech.**, 23, 231-252 (1995)

Leitão J.H. and Sá-Correia I., Growth-phase-dependent Alginate Synthesis, Biosynthetic Enzymes and Expression of Alginate Genes in *Pseudomonas aeruginosa*, **Archives of Microbiology**, 163, 217-222, 1995.

Mateus, M., Cabral, J. M. S., "Modeling membrane filtration of protein and cell-suspensions in a vortex flow filtration system", **AIChE J.**, 41, 764-772 (1995)

Melo, E. P., Aires-Barros, M. R., Cabral, J. M. S., "Triglyceride hydrolysis and stability of a recombinant cutinase from *Fusarium solani* in AOT-isooctane reversed micelles", **Appl. Biochem. Biotechnol.**, 50, 45-56 (1995)

Melo, E. P., Costa, S. M. B., Cabral, J. M. S., “ Structural effect of reversed micelles of AOT over a recombinant cutinase from *Fusarium solani pisi*. A steady-state fluorescence study”, **Ann. N. Y. Acad. Sci.**, 750, 85-88 (1995)

Melo, E. P., Ivanova, M. G., Aires-Barros, M. R., Cabral, J. M. S., Verger, R., “ Glyceride synthesis catalyzed by cutinase using the monomolecular film technique”, **Biochem.**, 34, 1615-1621 (1995)

Melo, N. S., Cabral, J. M. S., Fevereiro, M. P., “ Extracellular peroxidases from cell suspension cultures of *Vaccinium myrtillus*. Purification and characterization of two cationic enzymes”, **Plant Sci.**, 106, 177-184 (1995)

Mendes, R. L., Coelho, J. A. P., Fernandes, H. L., Marrucho, I. J., Cabral, J. M. S., Novais, J. M., Palavra, A. M. F., “ Applications of supercritical CO₂ extraction to microalgae and plants”, **J. Chem. Technol. Biotechnol.**, 62, 53-59 (1995)

Mendes, R. L., Fernandes, H. L., Coelho, J. P., Reis, E. C., Cabral, J. M. S., Novais, J. M., Palavra, A. F., “Supercritical CO₂ extraction of carotenoids and other lipids from *Chlorella vulgaris*”, **Food Chemistry**, 53, 99-103 (1995)

Moreira L.M., da Costa M.S. and Sá-Correia I., Plasmid RFLP Profiling and DNA Homology in *Thermus* isolated from Hot Spring of Different Geographical Areas, **Archives of Microbiology**, 164, 7-15, 1995.

Morgado, M. P., Cabral, J. M. S., Prazeres, D. M. F., “ Hydrolysis of lecithin by phospholipase A₂ in mixed reversed micelles of lecithin and sodium dioctyl sulfosuccinate”, **J. Chem. Technol. Biotechnol.**, 63, 181-189 (1995)

Nabais, A. M. A., Cardoso, J. P., “Ultrafiltration of fermented broths and solvent extraction of antibiotics”, **Bioprocess Eng.**, 13, 215-221 (1995)

Nabais, A. M. A., Fonseca, M. M. R. da, “The effect of solid medium composition on growth and sporulation of *Streptomyces clavuligerus*: spore viability during storage at +4°C”, **Biotechnol. Tech.**, 9, 361-364 (1995)

Prazeres, D. M. F., “Concentration of BSA using a superabsorbent polymer: process evaluation”, **J. Biotechnol.**, 39, 157-164 (1995)

Prazeres, D. M. F., “Optimal design of N CSTRs in series using Michaelis-Menten one-substrate reversible reaction”, **Biocatal. Biotrans.**, 13, 43-52 (1995)

Prazeres, D. M. F., “Optimal design of N membrane reactors in series using Michaelis-Menten kinetics”, **Can. J. Chem. Eng.**, 73, 931-934 (1995)

Queiroz, J. A., Garcia, F. A. P., Cabral, J. M. S., “ Hydrophobic interaction chromatography of *Chromobacterium viscosum* lipase”, **J. Chromat. A**, 707, 137-142 (1995)

Queiroz, J. A., Garcia, F. A. P., Cabral, J. M. S., “ Partitioning of *Chromobacterium viscosum* lipases in aqueous two-phase systems”, **Bioseparation**, 5, 307-311 (1995)

Ribeiro, M. A., Gil, M. G. B., “Solubilities of triolein in supercritical CO₂”, **J. Chem Eng. Data**, 40, 1188-1192 (1995)

Ribeiro, M. H. L., Prazeres, D. M. F., Cabral, J. M. S., Fonseca, M. M. R. da, “ Adsorption studies for the separation of L-tryptophan from L-serine and indole in a bioconversion medium”, **Bioprocess Eng.**, 12, 95-102 (1995)

Rodrigues, M. F., Gil, M. G. B., “Vapour-liquid equilibrium of binary mixtures of limonene with **a-pinene and b-pinene at reduced pressures**”, **J. Chem. Eng. Data**, 40, 1193-1195 (1995)

Rosa M.F., Viegas C.A. and Sá-Correia I., Toxicity of ethanol and octanoic acid and the intracellular acidification in *Saccharomyces cerevisiae*, **Yeast**(special issue), 11, S592, 1995.

Sebastião, M. J., Cabral, J. M. S., Aires-Barros, M. R., “ Simultaneous quantification of polymer and salt in polyethylene glycol/phosphate aqueous two-phase systems by HPLC”, **Biotechnol. Tech.**, 9, 503-508 (1995)

Setti, L., Fevereiro, M. P., Melo, E. P., Pifferi, P. G., Cabral, J. M. S., Aires-Barros, M. R., “Superactivity of peroxidase solubilized in reverse micellar systems”, **Appl. Biochem. Biotechnol.**, 55, 207-218 (1995)

Taipa, M. A., Liebeton, K., Costa, J. V., Cabral, J. M. S., Jaeger, K.- E., “ Lipase from *Chromobacterium viscosum*: Biochemical characterization indicating homology to the lipase from *Pseudomonas glumae*”, **Biochim. Biophys. Acta**, 1256, 396-402 (1995)

Vasconcelos, J. M. T., Alves, S. S., Barata, J. M., “ Mixing in gas-liquid contactors agitated by multiple turbines”, **Chem. Eng. Sci.**, 50, 2343-2354 (1995)

Viegas C.A. and Sá-Correia I., Toxicity of Octanoic Acid in *Saccharomyces cerevisiae* at Temperatures between 8.5 and 30°C, **Enzyme and Microbial Technology**, 17, 826-831, 1995.

Viegas C.A., Sebastião P.B., Nunes A.G. and Sá-Correia I., Activation of Plasma Membrane H⁺-ATPase and Expression of *PMA1* and *PMA2* Genes in Cells of *Saccharomyces cerevisiae* Grown at Supra-optimal Temperatures, **Applied and Environmental Microbiology**, 61, 1904-1909, 1995.

1994

Caldeira, J. C. G., Cabral, J. M. S., "Extraction of a steroid 1,2 dehydrogenase by sonication of *Arthrobacter simplex* cells", **Bioseparation**, 4, 271-278 (1994)

Carneiro-da-Cunha, M. G., Aires-Barros, M. R., Tambourgi, E. B., Cabral, J. M. S., "Recovery of a recombinant cutinase with reversed micelles in a continuous perforated rotating disc contactor", **Biotechnol. Tech.**, 8, 413-418 (1994)

Carneiro-da-Cunha, M. G., Cabral, J. M. S., Aires-Barros, M. R., "Studies on the extraction and back-extraction of a recombinant cutinase in a reversed micelles extraction process", **Bioprocess Eng.**, 11, 203-208 (1994)

Dias, A. C. P., Cabral, J. M. S., Pinheiro, H. M., "Sterol side-chain cleavage with immobilized *Mycobacterium* cells in water-immiscible organic solvents", **Enzyme Microb. Technol.**, 16, 708-714 (1994)

Fonseca, L. P., Caldeira, J. C. G., Cabral, J. M. S., "Improvement in the polyethylene glycol-cibacron blue purification method", **J. Chromat. A.**, 668, 61-64 (1994)

Lupi F.M., Fernandes H.M.L., Tomé M.M., Sá-Correia I. and Novais J.M., Influence of the Nitrogen Source and Photoperiod on Exopolysaccharide Synthesis by the Microalga *Botryococcus braunii*, **Enzyme and Microbial Technology**, 16, 546-550, 1994.

Martins L.O. and Sá-Correia I., Temperature Profiles of Gellan Gum Synthesis and Activities of Biosynthetic Enzymes, **Biotechnology and Applied Biochemistry**, 20, 385-395, 1994.

Mendes, R. L., Fernandes, H. L., Coelho, J. A. P., Cabral, J. M. S., Palavra, A. M. F., Novais, J. M., "Supercritical carbon dioxide extraction of hydrocarbons from the microalga *Botryococcus braunii*", **J. Appl. Phycol.**, 6, 289-293 (1994)

Menezes, J. C., Alves, S. S., Lemos, J. M., Azevedo, S. F., "Mathematical modelling of industrial pilot-plant penicillin-G fed-batch fermentations", **J. Chem. Technol. Biotechnol.**, 61, 123-138 (1994)

Monteiro G.A., Supply P., Goffeau A. and Sá-Correia I., The in vivo Activation of *Saccharomyces cerevisiae* Plasma Membrane H⁺-ATPase by Ethanol Depends on the Expression of the *PMA1* Gene but not of *PMA2* Gene, **Yeast**, 10, 1439-1446, 1994.

Pinto-Sousa, A. M. C., Cabral, J. M. S., Aires-Barros, M. R., "Ester synthesis by a recombinant cutinase in reversed micelles of a natural phospholipid", **Biocatalysis**, 9, 169-179 (1994)

Pires, M. J. L., Cabral, J. M. S., "Liquid-liquid extraction of a recombinant protein with reverse micelles", **J. Chem. Technol. Biotechnol.**, 61, 219-224 (1994)

Pires, M. J. L., Martel, P., Baptista, A., Petersen, S. B., Willson, R. C., Cabral, J. M. S., "Improving protein extraction yield in reversed micellar systems through surface charge engineering", **Biotechnol. Bioeng.**, 44, 773-780 (1994)

Pires, M. J., Cabral, J. M. S., "Thermal stability of a *Desulfovibrio gigas* periplasmic hydrogenase in reverse micelles", **Appl. Biochem. Biotechnol.**, 48, 137-147 (1994)

Prazeres, D. M. F., Cabral, J. M. S., "Enzymatic membrane bioreactors and their applications", **Enzyme Microb. Technol.**, 16, 738-750 (1994)

Prazeres, D. M. F., Garcia, F. A. P., Cabral, J. M. S., "Continuous lipolysis in a reversed micellar membrane bioreactor", **Bioprocess Eng.**, 10, 21-27 (1994)

Qin, Y., Cabral, J. M. S., "Kinetic studies of the urease-catalyzed hydrolysis of urea in a buffer-free system", **Appl. Biochem. Biotechnol.**, 49, 217-240 (1994)

Rosa M.F. and Sá-Correia I., Limitations to the Use of Extracellular Acidification for the Assessment of Plasma Membrane H⁺-ATPase Activity and Ethanol Tolerance in Yeasts, **Enzyme and Microbial Technology**, 16, 808-812, 1994.

Sarmiento, M. J., Pires, M. J. L., Cabral, J. M. S., Aires-Barros, M. R., "Liquid-liquid extraction of a recombinant protein, cytochrome b₅, with aqueous-two phase systems of polyethylene glycol and potassium phosphate salts", **J. Chromat. A**, 668, 117-120 (1994)

Sebastião, M. J., Cabral, J. M. S., Aires-Barros, M. R., "Partitioning of recombinant *Fusarium solani pisi* cutinase in polyethylene glycol-aqueous salt solution two-phase systems", **J. Chromat. A**, 668, 139-144 (1994)

Serralheiro, M. L. M., Prazeres, D. M. F., Cabral, J. M. S., "Dipeptide synthesis and separation in a reversed micellar membrane reactor", **Enzyme Microb. Technol.**, 16, 1064-1073 (1994)

Serralheiro, M. L., Cabral, J. M. S., "Synthesis of AcPheLeuNH₂ by α -chymotrypsin in TTAB reversed micelles: application of response surface methodology to the optimization of the system", **Biotechnol. Bioeng.**, 43, 1031-1042 (1994)

Taipa, M. A., Moura-Pinto, P., Cabral, J. M. S., "Identification and characterization of *Chromobacterium viscosum* lipase", **Biotechnol. Tech.**, 8, 27-32 (1994)

van Keulen, F., Fonseca, M. M. R. da, "Batch cultivation of *Xanthobacter* Py2 on 1-pentene: growth yield and cell activity for the degradation of 1,2-epoxyhexane", **Biotechnol. Lett.**, 16, 989-994 (1994)

Vicente, L. C., Aires-Barros, M. R., Empis, J. M. A., “Stability and proteolytic activity of papain in reverse micellar and aqueous media: a kinetic and spectroscopic study”, **J. Chem. Technol. Biotechnol.**, 60, 291-297 (1994)

Videira, M. M., Aires-Barros, M. R., “Liquid-liquid extraction of clavulanic acid using an aqueous two phase system of polyethylene glycol and potassium phosphate”, **J. Chromat. A**, 668, 237-240 (1994)

Viegas C.A., Supply P., Capioux E., van Dyck L., Goffeau A. and Sá-Correia I., Regulation of the Expression of the H⁺-ATPase Genes *PMA1* and *PMA2* during Growth and Effects of Octanoic Acid in *Saccharomyces cerevisiae*, **Biochimica Biophysica Acta**, (Gene Structure & Expression) 1217, 74-80, 1994.