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"From Brazil to Europe: 10 years of Labex Program, EMBRAPA's laboratory without walls"

Main publications

► Natural resource management

Affholder, F.; Assad, E.D.; Bonnal, P., Silva, F.A.M. da, Forest, E., Madeira Netto, J., Scopel, E., Corbeels, M. 2006. Risques de stress hydrique sur les cultures dans les cerrados brésiliens du zonage régional à l'analyse des risques à l'échelle des exploitations familiales. **Cahiers Agricultures**. 15(5): 433-439.

Affholder F., Scopel E., Madeira Neto J. Capillon A. 2003. Diagnosis of the productivity gap using a crop model. Methodology and case study of small scale maize production in central Brazil. **Agronomie**. 23: 305-325.

Arvor D., Jonathan M., Meirelles M.S.P., Dubreuil V., Durieux L. 2011. Classification of MODIS EVI time series for crop mapping in the state of Mato Grosso, Brazil, International. **Journal of Remote Sensing**. iFirst, 2011: 1-25. <http://dx.doi.org/10.1080/01431161.2010.5317>

Arvor D., Meirelles M.S.P., Dubreuil V., Begue, A., Shimabukuru, Y. 2011. Analyzing The Agricultural Transition In Mato Grosso, Brazil, Using Satellite-Derived Indices. **Applied Geography**. 32(2011): 702-7013.

Bainville, S., Affholder, F., Fiquié, M., Madeira Netto, J. da S. Les transformations de l'agriculture familiale de la commune de Silvânia : une petite révolution agricole dans les cerrados brésiliens. **Cahiers Agricultures**. 14(1): 103-110. 2005.

Barros, I. de, Blazy, J.M., Rodrigues, G.S., Tournebize, R., Cinna, J.P. 2009. Emergy evaluation and economic performance of banana cropping systems in Guadeloupe (French West Indies). **Agriculture, Ecosystems and Environment**. 129: 437-449.

Bégué, A., Simões Meirelles, M. Editors; **International Journal of Agricultural and Environmental Information Systems** Special Issue: "Remote Sensing Data for Agricultural and Environmental Geographic Information Systems: 2012 (*in press*).

Calegario, F.F.; Buschinelli, C.C. de A.; Bueno, S.C.S.; Lino J.S.; Rodrigues, G.S. 2010. Environmental assessment of integrated fruit production practices for strawberry in São Bento do Sapucaí (SP, Brazil). **Acta Horticulturae**. 872: 231-237.

Ferraz R.P.D., Simões Meirelles M.S.P., Dubreuil V. 2012. Cálculo de Indicadores para a Avaliação do Processo de Expansão da Cultura Canavieira – Procedimentos metodológicos para a extração de dados multifontes. **Revista Brasileira de Cartografia** – RBC. (*in press*)

Ferraz R.P.D., Simões Meirelles M.S.P., Dubreuil V. 2012. Extração de Dados de Modelos espacializados Visando o Cálculo de Indicadores Para a Avaliação do Potencial de Sustentabilidade hídrica da Cultura Canavieira. **Revista Brasileira de Cartografia** – RBC. (*in press*).

Figueirêdo, M.C.B. de, Rodrigues, G.S.; Caldeira-Pires, A.; Rosa, M.F.; Aragão, F.A.S. de; Vieira, V.P.P.B.; Mota, F.S.B. 2010. Environmental performance evaluation of agro-industrial innovations - part 1: Ambitec-Life Cycle, a methodological approach for considering life cycle thinking. **Journal of Cleaner Production**. 18(14): 1366-1375.

Figueirêdo, M.C.B. de, Rodrigues, G.S.; Caldeira-Pires, A.; Rosa, M.F.; Aragão, F.A.S. de; Vieira, V.P.P.B.; Mota, F.S.B. 2010. Environmental performance evaluation of agro-industrial innovations - part 2: methodological approach for performing vulnerability analysis of watersheds. **Journal of Cleaner Production**. 18(14): 1376-1385.

Lagacherie, P., Baret F., Feret, J.-B., Madeira Netto, J., Robbez-Masson, J.-M., Estimation of soil clay and calcium carbonate using laboratory, field and airborne hyperspectral measurements. **Remote Sensing of Environment**. 112 (3) (2008): 825-835.

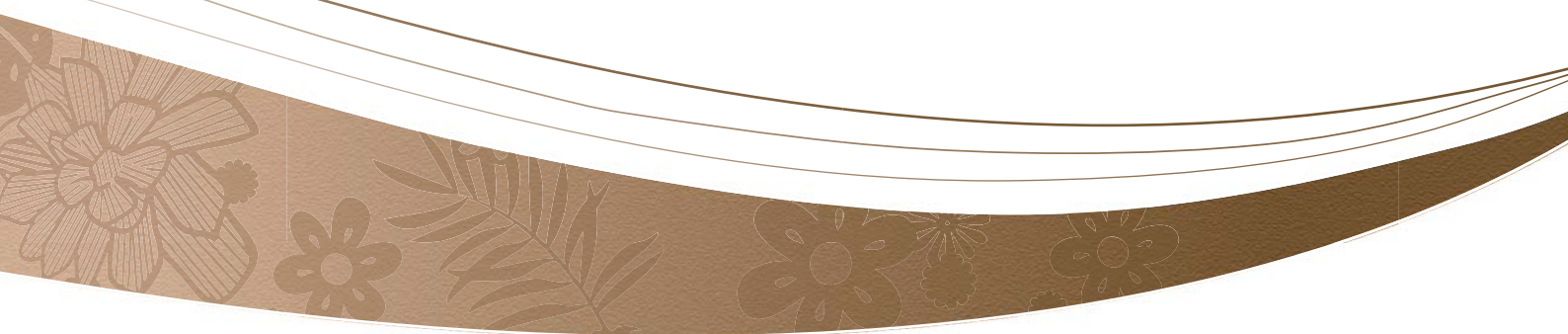
Pereira, J.M.; Lino, J.S.; Buschinelli, C.C. de A.; Barros, I. de; Rodrigues, G.S. 2010. Integrated farm environmental management and biodiversity conservation: a study in the Caratinga Biological Station (Minas Gerais, Brazil). **Pesquisa Agropecuária Tropical**. 40(4): 401-413.

Rodrigues, G.S., Rodrigues, I.A., Buschinelli, C.C. de A., Ligo, M.A., Pires, A.M., Frighetto, R.T., Irias, L.J.M. 2007. Socio-environmental impact assessment of oleaginous crops for biodiesel production in Brazil. **Journal of Technology Management and Innovation**. 2(2): 46-66.

Rodrigues, G.S., Buschinelli, C.C. de A., Santana, D.P., da Silva, A.G., Pastrello, B.M.C. 2008. Avaliação ambiental de práticas de manejo sítio específico aplicadas à produção de grãos na região de Rio Verde (GO). **Revista Brasileira de Agrociência**. 14(3): 58-66.

Rodrigues, G.S., Rodrigues, I.A., Buschinelli, C.C. de A., Ligo, M.A., Pires, A.M. 2009. Local Productive Arrangements for Biodiesel Production in Brazil – Environmental Assessment of Smallholder's Integrated Oleaginous Crops Management. **Journal of Agriculture and Rural Development in the Tropics and Subtropics**. 110(1): 61-73.

Rodrigues, G.S., Barros, I. de, Ehabe, E.E., Sama-Lang, P., Enjalric, F. 2009. Integrated indicators for performance assessment of traditional agroforestry systems in South West Cameroon. **Agroforestry Systems**. 77(1): 9-22.



Rodrigues, G.S., Rodrigues, I., Buschinelli, C.C. de A., de Barros, I. 2010. Integrated farm sustainability assessment for the environmental management of rural activities. **Environmental Impact Assessment Review**. 30(4): 229-239.

Santos, M.R.C. dos, Rodrigues, G.S. 2008. Socioenvironmental and sustainability assessment for technology innovations in peptens production in Brazil. **Journal of Technology Management and Innovation**. 3(3): 123-128.

► Agrifood technologies

Alves, R.E., Filgueiras, H.A.C, Almeida, A.S., Machado, F.L.C., Bastos, M.S.R., Lima, M.A.C., Terao, D., Silva, E.O., Santos, E.C., Pereira, M.E.C., Miranda, M.R.A. 2005. Postharvest use of 1-MCP to extend storage life of melon in Brazil - current research status. **Acta Horticulturae, Leuven**. 3(682): 2233-2237.

Alves, R.E., Filgueiras, H.A.C., Mosca, J.L., Silva S.M. Menezes, J.B. 2008. Postharvest Physiology and Biochemistry of Some Non-Traditional American Tropical Fruits. **Acta Horticulturae. (ISHS) 768**: www.actahort.org/books/768/768_50.htm

Ares, G., Deliza, R., Barreiro, C., Giménez, A., Gámbaro, A. 2010. Comparison of two sensory profiling techniques based on consumer perception. **Food Quality and Preference**, v.21, p.417 - 426.

Ares, G. Ginon, E., Issanchou, S. & Deliza, R. 2012. French consumers' environmentally sustainable behaviour: Influence of socio-demographic characteristics. **Science of the Total Environment**. (submitted).

Barouh, N., Piombo, G., Goli, T., Barea, B., Pina, M., Lago, R. C. A., Villeneuve, P., Enzymatic production of conjugated linoleic acid monoacylglycerols from dehydrated isomerized castor bean oil. **Journal of Food Lipids**, v. 15, p. 13-27, 2008.

Cabral Neto, O., Rosenthal, A., Gaspar, A. Modificações físico-químicas na carne in natura bovina decorrentes da alta pressão hidrostática. **Brazilian Journal of Food Technology** (Online). , v.14, p.91 - 100, 2011.

Cambon, E., Gouzou, F., Pina, M., Barea, B., Barouh, N., Lago, R. C. A., Ruales, J., Tsai, S., Villeneuve, P. Comparison of the Lipase Activity in Hydrolysis and Acyl Transfer Reactions of Two Latex Plant Extracts from Babaco (*Vasconcellea X Heilbornii* Cv.) and *Plumeria rubra*: Effect of the Aqueous Microenvironment. **Journal of Agriculture & Food Chemistry**, v. 54, n. 7, p. 2726-2731, 2006.

Cavalcanti, E. D. C., Maciel Fabio M, Villeneuve, P, Lago, R. C. A., Machado Olga L T, Freire D M G . Acetone powder from dormant seeds of *Ricinus communis* L. **Applied Biochemistry and Biotechnology**, v. 136, p. 57-65, 2007.

Djioua, T., Charles, F., Lopez-Lauri, E., Filgueiras, H.A.C., Coudret, A., Ducamp-Collin, M., Sallanon, H. 2009. Improving the storage of minimally processed mangoes (*Mangifera indica* L.) by hot water treatments. **Postharvest Biology and Technology**. 52: 221 – 226.

Ferreira, E. H. R, Nogueira, A. R.M., Masson, L.M.P, Rosenthal, A., Souza, M. L. M., Massaguer, P. R. Termorresistência de fungos filamentosos isolados de néctares de frutas envasados assepticamente. **Brazilian Journal of Food Technology** (Online). , v.14, p.1 - 8, 2011.

Ferreira, E.H. R, Rosenthal, A., Calado, V., Saraiva, J., Mendo, S. *Byssochlamys nivea* inactivation in pineapple juice and nectar using high pressure cycles. **Journal of Food Engineering**, v.95, p.664 - 669, 2009.

Filgueiras, H.A.C., Charles, F. 2007. Amélioration de la conservation des fruits et légumes frais : utilisation des atmosphères modifiées combinées au froid. **Revue Générale du Froid** 1070 (jan-fev): 46-54.

Freitas, D. G.C., Correa, F. M., Souza, A.L.S., Alcantara, M., Godinho, J.G., Pereira, P.C.C.A., Deliza, R. 2011. Delineamento experimental para aumento da eficiência de provadores treinados. **Brazilian Journal of Food Technology** (Online), v.14, p.65 - 71.



Masson, L. M.P., Rosenthal, A., Calado, V.M.A., Deliza, R., Tashima, L., Effect of ultra-high pressure homogenization on viscosity and shear stress of fermented dairy beverage. **Lebensmittel-Wissenschaft + Technologie / Food Science + Technology**, v.44, p.495 - 501, 2011.

Mathias, S.P., Rosenthal, A., Gaspar, A., Deliza, R., Slongo, AP, Vicente, J., Masson, L.M.P., Barbosa, C. 2010. Alterações oxidativas (cor e lipídios) em presunto de peru tratado por Alta Pressão Hidrostática (APH). **Ciência e Tecnologia de Alimentos** (Impresso). 30: 852-857.

Lago, R. C. A., Castor and jatropha oils: production strategies - A review. **Oléagineux, Corps Gras & Lipides (OCL)**, v. 16, p. 241-247, 2009.

Pina, M., Severino, L. S., Beltrao, N. E. M., Villeneuve, P., Lago, R. C. A., Des nouvelles voies de valorisation pour redynamiser la filière ricin au Brésil. **Cahiers d'Agriculture**, Montpellier, France, v. 14, n. 1, p. 169-171, 2005.

Salman, A., Goupil, P., Filgueiras, H., Charles, F., Ledoigt, G., Sallanon, H. 2008. Controlled atmosphere and heat shock affect PAL1 and HSP90 mRNA accumulation in fresh-cut endive (*Cichorium intybus L.*). **European Food Research and Technology**. 227: 721-726.

Salman, A., Filgueiras, H., Cristescu, S., Lopez-Lauri, F., Harren, F., Sallanon, H. 2009. Inhibition of wound-induced ethylene does not prevent red discoloration in fresh-cut endive (*Cichorium intybus L.*). **European Food Research and Technology**. 228: 651-657.

Sant'ana, A. S., Dantigny, P., Tahara, A. C., Rosenthal, A., Massaguer, P. R., Use of a logistic model to assess spoilage by *Byssoschlamys fulva* in clarified apple juice. **International Journal of Food Microbiology**, v.137, p.299 - 302, 2010.

Slongo, A. P., Rosenthal, A., Camargo, L.M. A. Q., Deliza, R., Mathias, S. P., Aragão, G. M. F., Modeling the growth of lactic acid bacteria in sliced ham processed by high hydrostatic pressure. **Lebensmittel-Wissenschaft + Technologie / Food Science and Technology**, v.42, p.303 - 306, 2009.

Swaroop, K., De Jonge, J., Wentholt, M.T.A., Deliza, R., Andrade, J.C., Cnossen, H.J., Luijckx, N.B.L., Frewer, L.J. 2011. Consumer perceptions of risks of chemical and microbiological contaminants associated with food chains. **International Journal of Consumer Studies**, 2011 (in press).

Villeneuve, P., Turon, F., Caro, Y., Escoffier, R., Barea, B., Barouh, N., Lago, R. C. A., Piombo, G., Pina, M., Lipase-catalyzed synthesis of canola phytosterols oleate esters as cholesterol lowering agents. **Enzyme and Microbial Technology**, Amsterdam, v. 37, n. 1, p. 150-155, 2005.

Villeneuve, P., Barouh, N., Barea, B., Piombo, G., Figueroa-Espinoza, M. C., Turon, F., Pina, M., Lago, R. C. A., Chemoenzymatic synthesis of structured triacylglycerols with conjugated linoleic acid (CLA) in central position. **Food Chemistry**, v. 100, p. 1443-1452, 2007.

Villeneuve, P., Lago, R. C. A., Barouh, N., Barea, B., Piombo, G., Dupre, J. Y.; Guillou, A. L., Pina, M., Production of conjugated linoleic acid (CLA) isomers by dehydration and isomerization of castor bean oil. **Journal of the American Oil Chemists' Society**, Chicago, Ill USA, v. 82, n. 4, p. 261-269, 2005.

Brevet (Dépôt d'un privilège d'Invention)
Aranda, D.A.G., Antunes, O.A.C., Freire, D.M.G., Lago, R.C.A., Cavalcanti, E.A.C., Souza, J.S., **Production des acides gras catalysés par lipases non purifiées de semences ou fruits végétaux pour l'estérification ensuite par la catalyse acide.** Produção de ácidos graxos catalisada por lipases não purificadas de sementes ou frutos vegetais para subsequente esterificação por catálise ácida. PI 0603824-7, 19/09/2006

►Molecular plant-microorganism interactions

Amaral A.M. do, Rudd J.J., Antoniw J, Hammond-Kosack K.E. 2012. Defining the predicted protein secretome of the fungal wheat leaf pathogen *Mycosphaerella graminicola*. **PLoS One**, submitted.

Arango, Rafael E., Togawa, Roberto C., Carpentier, Sebastien C., Roux, Nicolas, Hekkert, Bas L., Kema, Gert H. J., Souza, Manoel T. . Genome-wide BAC-end sequencing of *Musa acuminata* DH Pahang reveals further insights into the genome organization of banana. **Tree Genetics & Genomes** (Print), p. 1, 2011.

Berri, S., Abbruscato, P., Favier-Rampant, O., Brasileiro, A.C.M., Fumasoni, I., Satoh, K., Kikuchi, S., Mizzi, L., Morandini, P., Pé, M.E., Piffanelli, P. Characterization of WRKY coregulatory networks in rice and Arabidopsis. **BMC Plant Biology (Online)**. 9: 120, 2009.

Capdeville, G., Souza Júnior, M.T., Szinay, D., Diniz, L., Wijnker, E., Swennen, R., Kema, G.H.J., De Jong, H. 2009. The potential of high-resolution BAC-FISH in banana breeding. **Euphytica (NLD)**. 166(3): 441-443.

Carpentier, S. C.; Vertommen, A.; Swennen, R.; Witters, E.; Fortes, C.; Souza, M.T.; Panis, B. Sugar-Mediated Acclimation: The Importance of Sucrose Metabolism in Meristems. **Journal of Proteome Research** (Print), v. 9, p. 5038-5046, 2010.

Dita, M.A., Waalwijk, C., Buddenhagen, I.W., Souza Jr, M.T. Kema, G.H.J. 2010. A molecular diagnostic for tropical race 4 of the banana fusarium wilt pathogen. **Plant Pathology**. 59: 348-357.

Dita, M. A., Waalwijk, C., Paiva, L. V., Souza Junior, M. T., Kema, G. A Greenhouse Bioassay for the Fusarium oxysporum f. sp. cubense x *Musa acuminata* (Cavendish subgroup) Interaction. **Acta Horticulturae**, v. 897, p. 377-380, 2011.

Garcia, S. A. L., Talebi, R., Ferreira, C. F., Vroh, I., Paiva, L. V., Kema, G, Souza Junior, M. T. Identification and Validation of EST-derived Molecular Markers, TRAP and VNTRs, for Banana Research. **Acta Horticulturae**, v. 897, p. 69-80, 2011.

Garcia, S.A.L., Van der Lee, T.A.J., Ferreira, C.E, Te Lintel Hekkert, B., Zapater, M.-E., Goodwin, S.B., Guzman, M., Kema, G.H.J., Souza Jr, M.T. Variable number of tandem repeat markers in the genome sequence of *Mycosphaerella fijiensis*, the causal agent of black leaf streak disease of banana (*Musa* spp). **Genetics and Molecular Research**, v. 9, p. 2207-2212, 2010.

Khroyratty, S.S.S., Souza Junior, M.T., Jauferally Fakim, Y. Structural analysis of catalase from two *Musa* accessions, FHIA18 and Williams, and from *Ravenala madagascariensis*. **Silico Biology** (Online). 8: 0032, 2008.

Lescot M., et al., 2008. Insights into the *Musa* genome: Syntenic relationships to rice and between *Musa* species. **BMC Genomics**. 9: 58.

Miller R.N.G., Bertioli D.J., Baurens F.C., Santos C.M.R., Alves P.C., Martins N., Togawa R.C., Souza M., Pappas Junior G. 2008. Analysis of non-TIR NBS-LRR resistance gene analogs in *Musa acuminata* Colla: Isolation, RFLP marker development, and physical mapping. **BMC Plant biology**. 8(15): 15.



Miller, R.N.G., Bertioli, D.J., Baurens, F.C., Quirino, B.F., Ciampi, A.Y., Santos, C.M.R., Martins, N.F., Souza Jr., M.T. and Pappas Jr., G.J. 2009. Understanding Plant Responses To Biotic Stress: Ongoing Research In *Musa*. **Acta Horticulturae** (ISHS) 828: 255-272.

Périn, C., Rebouillat, J., Brasileiro, A.C.M., Dievart, A., Gantet, P., Breitler, J.C., Johnson, A.A.T., Courtois, B., Ahmadi, N., Raissac, M., Luquet, D., Conte, M., This, D., Pati, P., Le, Q.H. 2007. Novel insights into the genomics of rice root adaptive development. In: Brar DS, Mackill DJ, Hardy B. (Orgs.). In **Rice Genetics V**, Manila: World Scientific Publishing and Los Banos, p. 117-141.

Romero Santos C.M., Martins N.F., Melo de Araújo M.M., da Silva F.R., Togawa R.C., Souza Jr. M.T. 2009. Screening of the DATAMusa Database for Orthologs of Genes Known to Be Related to Biotic and Abiotic Stresses to Identify and Characterise Candidate Genes. **Acta Horticulturae** (ISHS) 828: 341-352.

Togawa, R., Santos, C. R., Miller, R. N. G., Souza Junior, M. T., Martins, N. F., DATAMusa- a Database for Ortholog Genes from *Musa*. **Tree & Forestry Science and Biotechnology**, v. 4, p. 83-87, 2010.

Waalwijk, C, Dita, M. A., Buddenhagen, I. W., Paiva, L. V., Souza Junior, M. T., Kema, G. A. Detection Method for the Tropical Race 4 of the banana pathogen *Fusarium oxysporum* f. sp. cubense. **Acta Horticulturae**, v. 897, p. 339-344, 2011.

► Other publications

Arraes, P., Vieira, L.F., Contini, E. 2005. Brasil no Coração da Ciência Mundial. **Agroanalysis (Especial: Ciência e Tecnologia)**. 25(4): E15-E16, Abril 2005. Fundação Getúlio Vargas, São Paulo.

Contini, E. 2003. Agriculture brésilienne : état des lieux et grands enjeux. Cafés-débats à Marciac. Cahier N. 29. www.agrobiosciences.org/article.php3?id_article=0778
Contini, E. 2003. O Cobiçado mercado Europeu. **Revista Agroanalysis**. 23(6). Setembro de 2003: 28-30.

Contini, E. 2004. Agricultura e Política Agrícola na União Européia. **Revista de Política Agrícola XIII (1, Jan/Fev/Mar): 30-46**, MAPA. Brasília.

Contini, E., Caldas, R.de A. 2003. Escola de Competitividade. **Revista Agroanalysis**. Dec-Jan 2003: 72-73.

Contini, E., Reifschneider, F, Savidan, Y. 2003. Os Donos do Conhecimento no Mundo. **Revista Ciencia Hoje 40(199): 97**, Sociedade Brasileira para o Progresso da Ciência, SP.

Contini, E. 2003. Velha Europa, novos Alimentos. **Revista Agroanalysis**. FGV. Rio de Janeiro, Abril de 2003: 41-42.

Hartwich, F, Gonzalez, C., Vieira, L.F. 2005. Public-Private Partnerships for Innovation-led growth in Agrichains: A Useful Tool for Development in Latin America? **ISNAR Discussion Paper 1**. IFPRI/ISNAR Division. Washington, DC. (Sept. 2005).

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The 'Lattes' platform of the National Council of Scientific and Technological Development (Brazil) is a freely-available database of *curriculum vitae* and institutions which is a reference for all fields of knowledge (www.cnpq.br).

- **Amaral, Alexandre M. do**
<http://lattes.cnpq.br/4398504738216684>
- **Arcuri, Pedro B.**
<http://lattes.cnpq.br/0075797281676195>
- **Brasileiro, Ana C. M.**
<http://lattes.cnpq.br/2085645655663481>
- **Contini, Elisio**
<http://lattes.cnpq.br/5452189619541174>
- **Deliza, Rosires**
<http://lattes.cnpq.br/5127472125418977>
- **Lago, Regina C. A.**
<http://lattes.cnpq.br/8583234625127987>
- **Netto, José Madeira da S.**
<http://lattes.cnpq.br/3953731166035813>
- **Rodrigues, Geraldo S.**
<http://lattes.cnpq.br/9430311933773535>
- **Rosenthal, Amauri**
<http://lattes.cnpq.br/1329532290735502>
- **Simões, Margaret S. P.**
<http://lattes.cnpq.br/0134693605452082>
- **Souza Jr., Manoel Teixeira**
<http://lattes.cnpq.br/6796259458334447>
- **Vieira, Luís F.**
<http://lattes.cnpq.br/5106130733427800>