



# Scientific Production

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**Lasers Technology**

ASSUMPCAO, T.A.A. de; KASSAB, L.R.P.; GOMES, A.S.L.; ARAUJO, C.B. de; WETTER, N.U. Influence of the heat treatment on the nucleation of silver nanoparticles in Tm<sup>3+</sup> doped PbO-GeO<sub>2</sub> glasses. **Applied Physics B - Lasers and Optics**, v. 103, n. 1, p. 165-169, 2011.

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BRINGEL, FABIANA de A. *Morphofunctional evaluation of human skin preserved in glycerol and exposure to gamma radiation: a study in athymic mice.*

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LARROZA, ELIANE G. *Characterization of cirrus clouds over São Paulo metropolitan city (MSP) by elastic lidar.*

LOPES, FÁBIO J. da S. *CALIPSO satellite validation using an elastic backscattering lidar system and the AERONET sunphotometer data.*

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MENDES NETO, TEÓFILO *Microstructural study and magnetic*

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PINHEIRO, ALESSANDRO de S. *Assessment of toxicity and genotoxicity of the reactive azo dyes remazol black B and remazol orange 3R and effectiveness of electron beam irradiation in the reduction of color and toxic effects.*

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SACRAMENTO, JOSÉ M.N. *Tools to improve the assertiveness of the lines of research at research institutes: the example of IPEN.*

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SILVA, ERIC A.B. da *Characterization and application of two extrapolation chambers in standard X radiation beams.*

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ARAUJO, MICHEL M. *Ionizing, heat and microwave processing effects on folic acid degradation.*

BOTTARO, MARCIO *Ion chamber-electrometer measurement system for radiation protection tests in X-ray equipments for international procedures.*

BRANDALISE, MICHELE *Preparation and characterization of electrocatalysts based on palladium for electro-oxidation of alcohols in alkaline medium.*

CAMPOS, LUIZA M. de P. *Study of nanostructured clays application in photoactivated restorative resins, used in dentistry.*

CANTINHA, REBECA da S. *Study of the response from the snail *Biomphalaria glabrata* (Say, 1818) facing stressor environmental stimuli, with focus on the protein HSP70.*

CATTARUZZI, ELIANA B. *Analysis on the consumer disposition to afford the cost of food processed by ionizing radiation.*

CORDEIRO, MOACIR R. *Investigation of hyperfine interactions in Zn(1-x)MT(x)O, where MT=(V, Cr, Mn, Fe, Co, Ni, Cu) by means of perturbed angular 'gamma-gamma' correlation technique.*

COSTA, RENATA F. *Development of methods for the purification of  $^{67}\text{Ge}$  e  $^{68}\text{Ge}$  for biomolecules labeling.*

CUNHA, CECILIO A. da *Development of Cr<sub>2</sub>Cr<sub>2</sub>-25(Ni20Cr) nanostructured coatings.*

FUKUMORI, DAVID T. *Development and study of thermoluminescent materials based on aluminium oxide for dosimetry application.*

JAKUTIS NETO, JONAS *Lasers de Nd:YLF de baixo ganho operando na transição de quase-três níveis e em lasers Raman.*

LAMEIRA, VANESSA *Ecotoxicological study of effects of the pharmaceuticals dipyrone sodium and paracetamol to aquatic organisms.*

LIMA, MARINA F. *Kinetic and allometric models for dosimetry using radiopharmaceuticals labeled with lanthanides.*

LOPES, DANIEL T. *Multi-signal analysis and experimental characterization of travelling-wave tubes for microwave amplifiers.*

MACHADO, LEANDRO M. *Micromachining of dielectrics with femtosecond laser pulses.*

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MATOS, BRUNO R. de *Morphology-electrical properties relations in nafion composite electrolytes for high temperature fuel cell.*

MATTIOLI, SANDRA R. *Guidelines for implementation of an environmental management system in the nuclear fuel cycle: a case study of USEXA-CEA.*

METAIRON, SABRINA *Elements determination of clinical relevance in biological tissues of Dmd<sup>mdx</sup>/J dystrophic mice strains investigated by NAA.*

MODANEZ, LEILA *Acceptance of irradiated food: an education issue.*

NAKAMURA, LIANA K.O. *Noble metals nanoparticles on titanium dioxide nanostructured films and the influence of their photocatalytic activity.*

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ORSINI, ROSELY dos R. *Study using waste from coffee plantations as a source of biomass for hydrogen.*

PAGANINI, PAULA P. *Synthesis and characterization of tin /*

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PUJATTI, PRISCILLA B. *Molecular markers derived from bombesin for tumor diagnosis by dpept and PET.*

QUEIROZ, RODRIGO G. *Snake venoms components with antitumor activity in murine melanoma cells.*

SANTOS, IVANILDO A. dos *Assessment of the LiF-LuF<sub>3</sub>-GdF<sub>3</sub> phase diagrams using computational thermodynamics.*

SANTOS, LUCIANA K. dos *Blood concentrations of ions and metals in amateur and elite runners using neutron activation analyses.*

SANTOS, MOISÉS O. dos *Ablation of burned skin with ultra-short pulses laser to promote healing. Evaluation by optical coherence tomography, histology,  $\mu\text{ATR-FTIR}$  and Nonlinear Microscopy.*

SANTOS, THAIS C. dos *Electron dosimetry in irradiation processing with rad-hard diodes.*

SENNA, ROQUE M. de *Hybrid system development and operation for an electric power generation with the brazilian technology composed of a PEMFC fuel cell stack and lead acid battery.*

SILVA, ANDREIA dos S. *Investigation of hyperfine interactions in DNA and antibody of different lineages of mice infected by *T. cruzi* by perturbed gamma-gamma angular correlation spectroscopy.*

SILVA, SUELANNY C. da *Pr<sub>2</sub>Fe<sub>14</sub>B/'alfa'-Fe nanocomposites for thermal applications.*

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VILA, GUSTAVO B. *Characterization of silicates and calcium carbonates applied to high-dose dosimetry.*

YAMAGUTI, ROSELE C. de L. *Evaluation of alternatives to nickel and chromate in the tricationic phosphating process of carbon steel.*

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ALMEIDA, BEATRIZ E. de *Potency determination of follitropin, lutropin and thyrotropin: a comparison between the quantification by reversed-phase high-performance liquid chromatography and in vivo bioassay.*

ALVIM, DÉBORA S. *Study of major precursors ozone in the metropolitan area of São Paulo.*

ANGELO, GABRIEL Numerical analysis of the fluid dynamics in a natural circulation loop.

AYOUB, JAMIL M.S. Preparation of catalysts PtSb<sub>2</sub>O<sub>5</sub>.SnO<sub>2</sub> supported on carbon and ATO using the alcohol reduction method for electrochemical oxidation of ethanol.

BONIFÁCIO, RAFAEL N. *Study and development of membrane electrode assemblies for proton exchange membrane fuel cell*

## Thesis

(PEMFC) with palladium based catalysts.

BRAMBILLA, TANIA de P. *Studies of adsorber materials for preparing  $^{68}\text{Ge}/^{68}\text{Ga}$  generators.*

BRANCACCIO, FRANCO *Data acquisition with software analysis methodology for  $4\pi\beta\gamma$  coincidence systems and application in radionuclide standardization, with emphasis on metastable transitions.*

CECCHI, CLAUDIA R. *An homologous model of gene therapy by in vivo administration of a plasmid containing the mouse growth hormone gene in immunocompetent dwarf mice.*

CORDEIRO, THIAGO da S. *Control of the geometric characteristics of silver nanoparticles by ultrashort pulses temporal shaping using genetic algorithms.*

CRISAFULLI, RUDY *Preparation of PtSnCu/C and PtSn/C electrocatalysts and activation by dealloying processes for ethanol electro-oxidation.*

DIAS, RICARDO R. *Study of electrocatalysts PtSnRh/C+CeO<sub>x</sub> prepared by alcohol reduction method for ethanol electro-oxidation.*

DOUBEK, GUSTAVO *Development of unsupported catalytic systems for high temperature polymeric fuel cell applications.*

ENOKIHARA, CYRO T. *Study of green quartz of hydrothermal origin treated by gamma radiation.*

FANARO, GUSTAVO B. *Ionizing radiation effect on teas of Camellia sinensis plant irradiated with different water activities.*

FERREIRA, ADEMAR de O. *Evaluation of natural radioactivity in some granitic rocks in the state of Paraná and its use in civil construction.*

FERREIRA, DANILO C. *Development and calibration of a routine dosimetry system for radiation processing.*

GERULIS, EDUARDO *Dose control in road transport of radioactive material.*

GOIA, TAMIYE S. *Titanium based porous implants, in vitro and in vivo evaluation.*

IZIDORO, JULIANA de C. *Synthesis and characterization of pure zeolite obtained from coal fly ashes.*

MARTIN, SANDRA R.S. *Recovering/recycling of compounds of butyl and halogenated butyl rubber via ionizing radiation.*

MATTOS, LUIS A.T. de *Methodological proposal for identification and evaluation of environmental aspects and impacts of nuclear facilities of IPEN: a case study applied to the nuclear fuel center.*

MORAES, JAIR R. de *Study of the preparation of LiLa(WO<sub>4</sub>)<sub>2</sub>:TR<sup>3+</sup> microcrystals for photonic applications.*

NAKAMURA, GERSON H. de G. *Thermal analysis and phase diagrams of the LiF-BiF<sub>3</sub> e NaF-BiF<sub>3</sub> systems.*

NASCIMENTO, FERNANDO C. *Treatment of effluent from industrial automotive and refinish paints by electron beam irradiation.*

NEVES, LUCIO P. *Development and characterization of cylindrical ionization chambers as dosimetric reference systems for photon radiation.*

NÓBREGA, SHAYENNE D. da *Solid oxide fuel cells fabrication and operation running direct ethanol using a catalytic layer.*

OLIVEIRA, MARIA J. A. de *Obtaining membranes for alternative treatment hydrogeis of cutaneous Leishmaniasis.*

PALADINO, PATRÍCIA A. *Use of hydrogen in the public transport of São Paulo city.*

PEREIRA, THIAGO M. *Analysis of biochemical differences in normal and lesioned thyroid tissue by infrared spectral imaging (FTIR).*

PERINI, ANA P. *Project, construction and characterization of ionizing chambers for use as standard systems in X and gamma radiation beams.*

PIASENTIN, RICARDO M. *Study on ethanol electro-oxidation using PtPd/C+ATO and PtPdSn/C+ATO catalysts prepared by the reduction by sodium borohydride method.*

RAELE, MARCUS P. *Development of autocorrelation optical coherence tomography technique and axial resolution enhancement through Fourier transform analysis.*

RIBEIRO, MÁRCIA A. *Pretreatment of sugarcane bagasse using the advanced oxidation process by electron beam for enzymatic hydrolysis of cellulose.*

SENA, ROSA M.M. de *Effects of photodynamic therapy mediated by red laser and methylene blue applied in induced vaginitis by Candida albicans.*

SILVA, FERNANDO R. da *Single crystal fibers growth of double lithium, lanthanum molybdate and adjustment of a micro-pulling down furnace for high vacuum setup.*

SILVA, JONAS O. da *Development of special ionization chambers for a quality control program in mammography.*

SILVA, RITA de C.A. da *Study of the great egret Ardea alba (Linnaeus, 1758) species, as an environmental contamination bioindicator, in the metropolitan region of São Paulo.*

STREFEZZA, CLAUDIA *Analysis of bond strength in esthetics and metal posts cemented in root canals irradiated with high power diode laser (830nm).*

TADDEI, MARIA H.T. *Determination of scaling factors to estimate the radionuclide inventory in waste low and intermediate-level activity from the IEA-R1 reactor.*

TONELLO, KAROLINA P. dos S. *Alumina composites with additions of NbC, TaC and TiC for application in cutting tools.*

VALLEJO, NATÁLIA M. *Renaturation studies of aggregate proteins using high hydrostatic pressure.*

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ALTRAN, SILVANA C. *Replacement of xenobiotic components, applied in the culture medium for maintenance of human keranocytes, by human similar.*

AMARAL, ANTONIO A. *Application of the perturbed angular correlation in the investigation of hyperfine interactions in compounds of hafnium, indium and cadmium with F<sup>-</sup>, OH<sup>-</sup> and EDTA ligands.*

ANDRADE, TIAGO F. *Effect of zinc oxide and boron oxide addition on the properties of yttrium-doped barium zirconate.*

ANDRADE, WANDERLEI *Use of ionizing radiation in polymer packaging: social knowledge: a qualitative analysis.*

ARTHUSO, FERNANDA dos S. *Adaptation of CHO cells secreting human prolactin and their antagonists to growth in suspension.*

BASSO, LUANA S. *Study of Amazon Basin methane emissions using airplane vertical profiles.*

BATISTA, WAGNER F. *Nuclear parameters determination of the <sup>127</sup>Te 'beta' decay: a proposal for teaching nuclear physics.*

BOEMER, VERÔNICA A. *A comparative study of the perceptions of nuclear and environmental risk.*

BORELLI, VANESSA *Research and development of biomaterials: study of scientific, technological and regulatory inter relationship.*

BORGES, WESDEN de A. *Computational simulation studies of the reduction process of UF<sub>6</sub> to metallic uranium.*

BRITO, ANDRÉIA B. de *Desintegration rate of Tc-99m and In-111 radioactive solutions in coincidence systems.*

CANTARIN, TADEU N. *Mechanical and microstructural characterizations of AISI 8630 modified cladded with nickel alloy 625 made by the TIG process after simulated Post Weld Heat Treatment cycles.*

CASINI, JULIO C.S. *Hidrogenation of the rare earth alloys for production negative electrodes of niquel-metal hidride batteries.*

CASTRO, LUIS F.D. e *Evaluation of zinc in plasma samples collected from aged pacients admitted in the Regional Hospital of Araguaina city, Tocantins.*

CATANOSO, MARCELA F. *<sup>123</sup>I and <sup>131</sup>I purification for biomolecules labeling.*

CLARO, THIAGO R. *Development of a computational code for the internal doses assessment of the main radionuclides of occupational exposure at IPEN.*

CORTEZ, FERNANDO S. *Ecotoxicological assessment of the pharmaceutical tricosan for marine invertebrates.*

COSTA, LUCAS J.P. da *Study of radon exhalation from phosphogypsum plates and blocks from different origins.*

COSTA, VALTER M. *Analysis of input variables of an artificial neural network using bivariate correlation and canonical correlation.*

FALCÃO, RAILSON B. *Obtention of TiFe by high-energy ball milling.*

FERMINO, DANILÓ M. *Study of mechanical, rheological and thermal properties of nanocomposite HMSPP (High melt strength polypropylene) with a brazilian bentonite.*

FERNANDES, IVANI M. *Quality of life evaluation of workers for diagnostic radiology services.*

FERNANDO, ALBERTO de J. *Development and implementation of a new pneumatic transfer system for materials irradiation at IEA-R1 reactor.*

FERREIRA, PATRICIA C. *Studies on the adsorption of reactive black 5 dye of aqueous solution using zeolite of the coal ashes.*

FERRUFINO, FELIPE B.J. *Quantitative determination of uranium distribution homogeneity in MTR fuel type plates.*

FLOSI, ADRIANA A. *Development of monitor unit calculation in IMRT.*

FOLGOSI-CORREA, MELISSA S. *Characterization of laser doppler signal fluctuations in microvascular flow.*

FUCASE, TAMARA M. *Study of venom *Crotalus vegrandis* and their fractions with antitumor activity.*

GALDINO, GABRIEL S. *Influence of Pr in the microstructure and electrical properties in LaPrMgAlMnCoNi based alloys for using for Ni-HM batteries.*

GALVÃO, ANTONIO de S. *Development of standart reference samples for diffractometry.*

GOMES, CINTHIA Z. *Use of fluorescence spectroscopy to measure molecular autofluorescence in diabetic subjects.*

GUIMARÃES, GUILHERME M. *Metal and trace element sediment assessment from Grarapiranga reservoir, Alto Tietê basin, São Paulo, Brasil.*

HIGUTI, ELIZA. *Study of endocrine and paracrine effects of growth hormone after adminstration of plasmid DNA in animal models of gene therapy.*

LAVOR, MILTON *Evaluation tools of quality control for patients submitted to IMRT.*

LIMA, CLARICE M. de *Studies of the radiolabeling and biodistribution of substance P using lutetium-177 as a radiotracer.*

LOESER, SÉRGIO *Methodology for Wet sump centrifugal vertical pumps structural design.*

LOUREIRO, CESAR A.D. *Development and application of a subcritical digital reactivity meter.*

MARTINS, JOÃO F.T. *Development of the mercury iodine semiconductor crystal for application as a radiation detector.*

MASSICANO, ADRIANA V.F. *Study of conjugation and radiolabelling of monoclonal antibody eityximab for use in radionuclide therapy.*

MATSUBARA, TASSIANE C.M. *A study on antimony determination in environmental samples by neutron activation analysis. Validation of the methodology and determination of the uncertainty of the measurement.*

## Dissertations

- MATTOS, CLEITON dos S. *Production of solid galvanic waste in densely populated areas - evaluation, inertization and disposal.*
- MESQUITA, LETÍCIA C.A. *Ecotoxicological assessment and chemical characterization in surface waters of Cubatão River, SP.*
- MIRANDA, ADRIANA R. *Evaluation of connexin 43 expression and localization in renal acute ischemic injury.*
- MIRIM, DENILSON de C. *Investigation of residual stress in laser welding between carbon steel AISI 1010 and stainless steel AISI 304.*
- MONTEIRO, NATALIA K. *Synthesis and characterization of manganite-cromite lanthanum doped with ruthenium anodes for solid oxide fuel cells.*
- MOTA, HENRIQUE de S. *Technical economic analysis of distributed power generation units.*
- MOURA, EDUARDO S. de *Study and parameters survey for iodine-125 source dosimetry to be applied in brachytherapy.*
- MURA, LUIZ E.C. *Neutronic characterization of the fields obtained by means of neutron traps inside the nuclear reactor core IPEN/MB-01.*
- NANDENHA, JULIO *Development of new systems of nano-disperse 20% Pt-(2%Pt-Ce<sub>0.9</sub>W<sub>0.1</sub>O<sub>3</sub>)/C tolerant to carbon monoxide (CO) for PEMFC'S anodes.*
- OLIVEIRA, ANA C.S. *Evaluation of the effects of gamma radiation on physicochemical characteristics of KIWI (*Actinidia deliciosa*) cv. Hayward minimally processed.*
- OLIVEIRA, ÉRICA A. de *Comparative study of angiogenesis radiopharmaceuticals for melanoma detection.*
- OLIVEIRA, FELIPE de *Thin layer study treated by laser in piston rings.*
- OLIVEIRA, JUSTINE P.R. de *Study of persistent organic pollutants (POPs) in industrial areas of Greater São Paulo - via gas chromatography-mass spectrometry (GC-MS) and electron capture (GC-ECD).*
- OLIVEIRA, RENE R. de *Residual stress evaluation and curvature behaviour of aluminium 7050 PEEN forming processed.*
- PASSARO, BRUNO M. *Quantitative analysis of results for quality assurance in radiotherapy.*
- PEREIRA, CARLOS H.V. *The influence social networks in the safety culture.*
- PEREIRA, LUCIANO F.D. *Study of electric field gradient and of electronic structure of ZnO co-doped with Co and Cd and of HfO<sub>2</sub>, doped with Ta by means of first principles calculations.*
- PIDONE, LEANDRO A. *Using of RoHS e WEEE directives for electromedical devices from Brazil manufactures.*
- PORFIRIO, TATIANE C. *Influence of calcium and lithium on the densification and electrical conductivity of gadolinia-doped ceria.*
- REDÍGOLO, MARCELO M. *Inorganic elements determination in human and animal whole blood samples by x-ray fluorescence technique (EDXRF).*
- RODRIGUES, RITA M. de S. *Preparation and characterization of PtSn/C-rare earth and PtRu/C-rare earth using an alcohol reduction process for ethanol electro-oxidation.*

- ROSA, DANIELE S. *Chemical, physical and isotopic characterization of U<sub>3</sub>Si<sub>2</sub> for nuclear forensics purposes.*
- ROSSETTO, DANIEL de A. *Hyperfine interaction study in the powder and thin films HfO<sub>2</sub> perturbed angular correlation technique.*
- SABINO, TALITA *Study and validation of dosimetry in non-reference conditions.*
- SAFRA, LEANDRO C.P.G. *Obtation of cooper-chromium-zirconium alloy wires for use in electrical transmission lines and electrodes for electrical contacts.*
- SANTILLO, AMANDA G. *Effects of ionizing radiation on the nutritional properties of table grapes benitaka and dark raisins.*
- SANTOS, GEYZA S. *Evaluation of the radiomodifier effect of própolis on chinese hamster ovary (CHO-K1) and human prostate cancer (PC3) cells, irradiated with 60-CO.*
- SANTOS, PATRICIA B. *Effects of surfactant addition and high-speed ball milling on magnetic powders based on Pr-Fe-B obtained by HDDR.*
- SANTOS, WAGNER I.A. dos *Characterization of the corrosion resistance of aluminium alloys after alternative treatments the chromate, with and without organic coating.*
- SILVA, AMANDA J. da *Evaluation of occupational dose from the special procedures guided by fluoroscopy: cardiac catheterism.*
- SILVA, DANILO M. da *Speckle interferometry with multimode diode lasers for analysis of materials and devices.*
- SILVA, FABRICIO F.V. da *Absolute activity measurement and determination of gamma-ray emission probability per decay of <sup>177</sup>Lu.*
- SILVA, LUCIANA S. *Evaluation of natural radioactivity in superficial and underground drinking water, from the Caetité region, BA.*
- SILVA, LUCIANA V. da *Studies of the mechanisms involved in the laser surface hardening process of aluminium base alloys.*
- SILVA, MARCO A.O. da *Electrochemical study of polymer membrane electrolysis for hydrogen production.*
- SILVA, MAURO V. da *Development of bricks with incorporation of coal ash and sludge from water treatment plant.*
- SOARES, VIVIANE M. *Physical and chemical aspects of Paraibuna and Paraitinga reservoirs, São Paulo.*
- SOUZA, GREGÓRIO S. de *Improvement at the biological shielding of BNCT research facility in the IEA-R1 reactor.*
- SOUZA, JOSE A.B. de *Fabrication procedures for manufacturing high uranium concentration dispersion fuel elements.*
- SOUZA, LEONARDO P. *Morphological images analysis and chromosomal aberrations classification based on fuzzy logic.*
- SOUZA, LETICIA L. de *Use a cyclic voltammetry and electrochemical impedance spectroscopy for the determination of active surface area of modified carbon-based electrodes.*
- SOUZA, RENATA R. de *Development and validation of analytical methodology for determination of endocrine disruptors from anthropic activities in waters at region of Paraíba do Sul, River, SP.*
- SUSSA, FÁBIO V. *Inorganic composition determination and evaluation of the biologic activity of Peperomia pellucida in the Aspergillus flavus growth.*

TANIMOTO, KÁTIA S. *Proposal for a questionnaire to assess risk perception concerning a radioactive waste repository.*

TEIXEIRA, CHRISTIAN A.H.M. *Ionizing radiation efect on different types of flours used in bakery technology.*

TONDIN, JULIO B.M. *Software development for managing nuclear material database.*

UEHARA, VANESSA B. *Effect of gamma radiation in properties of green banana flour.*

VIEIRA, EDEVAL *Parametric study of the deformation of U<sub>3</sub>Si<sub>2</sub>-Al dispersion fuel plates.*

VIEIRA, LUCIA H. *Application of natural Ra isotopes and 234Th as tracers of organic carbon export in Bransfield Strait, Antarctica.*

VIEIRA, RENATO J.R. *Powder neodymium laser with nanometric granulation.*

YOSHIKAWA, DANIEL S. *Effect of surface treatments on the corrosion resistance of the aluminium Aa1050.*

YOSHITO, DANIELE Cultivation and irradiation of human fibroblasts in a medium enriched with platelet lysate for obtaining feeder layer in epidermal cell culture.

2012

ALMEIDA, MARIANA C. de *Effect of the radiation processing in species of Zingiberaceae family: Turmeric (*Curcuma longa L.*), Ginger (*Zingiber officianale Roscoe*) and Zedoaria (*Curcuma zedoaria Christm.*)*

ARTHUR, PAULA B. *Application of the gamma radiation of the cobalt-60 in disinfection of some types of rations for feeding of small animals.*

BARBEZAN, ANGÉLICA B. *Comparison of labeling various phosphonates: MDP, EDTMP and clodronate with <sup>188</sup>Re.*

BARROS FILHO, ERALDO C. *Study of the spheroidization process of glass particles for selective internal radiotherapy.*

BONTURIM, EVERTON *Study of BSCF oxide properties for application as cathode in intermediate temperature solid oxide fuel cell (ITSOFC).*

CARA, ANA C.B. de *Human dental enamel demineralization process assessment using the optical coherence tomography technique.*

CARDOSO, ELISANGELA S. *Síntese e caracterização de eletrocatalisadores Pt/C, PtAu/C e PtAuBi/C pelo método da redução via feixe de elétrons para oxidação direta de metanol e etanol.*

CARVALHO, LARISSA G. de *Development of the radiopharmaceutical <sup>18</sup>F-acetate for detection of primary tumors through PET/CT.*

CASTRO, FRANCISCO J.V. de *Availability of metals Cd and Pb and metalloid As in the Ribeira do Iguape River hydrographic basin and its tributaries: an environmental contamination assessment.*

CHRISTE, CHARLES de M. *Variable effects of the internal gelatin process in the physical and chemical properties of alumina microspheres.*

CIONE, FRANCISCO C. *Measurements of residual stresses with strain gages for components used in the mobility sector.*

COELHO, JOAQUIM M.S. *Litterfall as biomonitor applied the*

*evaluation of urban forest of the Nuclear and Energy Research Institute, São Paulo, SP.*

COELHO, MARCELO L.R. *Influence study of TiB<sub>2</sub> content in mechanical properties of B<sub>4</sub>C ceramic based, obtained by in situ reaction of B<sub>4</sub>C and TiC.*

COSTA, LUZIA B.O. *Life cycle assessment of biogas produced in a wastewater treatment plant (WWTP) and its use in a solid oxide fuel cell (SOFC).*

CUNHA, TATIANA F. da *Aplication of star-shaped poly(epsilon-caprolactone) to prepare bioreabsorbable microspheres.*

DOMINGUES, LUCAS G. *Study of the role of the Amazon Basin in emission/absorption of carbon dioxide during the year 2010.*

ENGELMANN, KLAUSS *Synthesis of luminescents biomarkers containing rare-earth ions for application for diagnostics tests for disease chagas.*

FERREIRA, HENRIQUE P. *Poly(vinylidene fluoride) modification induced by gamma irradiation for application as ionic polymer-metal composite.*

FORMIGONI, ANDRE L. *Defects diagnosis of nuclear power plant steam generator tubes using the Hilbert-Huang transform in eddy current testing signals.*

GARCIA, VANESSA S.G. *Assessment of toxicity in water and sediment from Cubatão River - SP.*

GERALDO, BIANCA *Use of radioanalytical methods for determination of uranium, neptunium, plutonium, americium and curium isotopes in waste radioactive.*

GIGLIOLI, MILENA *Evaluation of absorbed dose distribution in radiotherapy with irregular and extended fields.*

GIOVANNINI, ADRIANO *Study of risks presented by radioisotopes be submitted after the effects of detonation an explosive device.*

GISHITOMI, KAROLINE C. *Desintegration rate and gamma ray emission probability per decay measurement of <sup>123</sup>I.*

GOBBATO, GUSTAVO M. *Evaluation of metals and hydrocarbons gradiente on the sediments from Santos and São Vicente estuary system to Marine State Park of Laje de Santos.*

GOULART, VIVIANE P. *Fluorescence spectroscopy in the optimization of photodynamic therapy of skin squamous cell carcinoma and its evaluation by optical coherence tomography.*

GROSSO, ROBSON L. *Densification and electrical conductivity of zirconia-scandia-ceria.*

KIIPPER, FELIPE de M. *Public perception of nuclear installations.*

LANGE, CAMILA N. *Soil contamination and mobility of As, Cd, Mo, Pb and Zn in sandy loam soil columns with coal fly ash.*

LEITE, ELIANA R. *Safety indicators for a final repository for disused sealed radioactive sources.*

LEMKE, LAURA S. *Renaturalization under high hidrostatic pressure of thioredoxins of *Xylella fastidiosa*.*

LEVY, DENISE S. *Contribution to the informatization of radiation protection programs for nuclear facilities other than nuclear fuel cycle.*

LIMA, ROBERTA B. *Sugarcane juice clarification applying electron beam technology.*

## Dissertations

LULIO, LIGIA C.D. *Study of electro-oxidation the mix H/CO using Pt/C etek and yttria or ruthenium doped ceria electrocatalysts for proton exchange membrane fuel cell.*

MAEDA, REINALDO de M. *Experimental determination of reactor physics parameters using heavy water reflector at the IPEN/MB-01 research reactor facility.*

MAGALHÃES, VANESSA D. *Radiomodifying effect of resveratrol in human rhabdomyosarcoma (RD) cell culture applying the comet assay.*

MARCATO, LARISSA A. *Internal dosimetry for [4-14C]-cholesterol in humans.*

MARIANO, DAVI B.  *$k_\theta$ -INAA implementation and application at IPEN Neutron Activation Laboratory by using the  $k_\theta$ -IAEA software. Application to geological sample analysis.*

MONTEIRO, ELISIANE de G. *Comparison study among methodologies of planar chromatography for radiochemical control of sup(99m)Tc radiopharmaceuticals.*

MORORÓ, JANIO da S. *The labelling of antibody anti-PBP2a with  $^{99m}$ Tc.*

NEGRÃO, SERGIO G. *Determination of long-lived natural Ra isotopes,  $^{226}$ Ra e  $^{238}$ Ra, in mineral and spring waters from Caxambu (MG) and Águas de Lindóia (SP) SPAS.*

NISHIYAMA, PEDRO J.B. de O. *Neutronic and thermal-hydraulic analysis of a device for irradiation of LEU UAl<sub>x</sub>Al targets for de  $^{90}$ Mo production in the IEA-R1 reactor.*

NOGUEIRA, BEATRIZ R. *Evaluation of electron beam radiation effects in the incorporation of piassava fibers (*Attalea funifera mart.*) on ethylene vinyl alcohol copolymer (EVOH).*

NUNES, BEATRIZ G. *Experimental determination of spectral ratios and of neutrons energy flux in the fuel of the nuclear reactor IPEN/MB-01.*

OLIVEIRA, BRUNA R. de *Assessment of environmentally available metals in sediment samples from water for public supply of the city of Palmas, Tocantins.*

OLIVEIRA, CAROLINE L. de *Study sterols as markers chemical in water supply for the public in the Region of the Paraíba do Sul River, SP. Development and validation of analytical methodology.*

OLIVEIRA, TALITA A. de *Presents metals in water and fish tissue of Billings Dam: a temporal evaluation.*

PEREIRA, SILVIO A. de L. *Effect of cold working on nitriding process of AISI 304 and 316 austenitic stainless steel.*

PIERETTI, EURICO F. *Effect marking process on the corrosion resistance of orthopedic implants produced on ISO 5832-1 stainless steel.*

PINTO, LETICIA N. *Reactivity effects experiments at IPEN/MB-01 nuclear reactor.*

POSSANI, RAFAEL G. *Reengineering the SCMS software for object-oriented language (JAVA) to use in creating phantoms segmented.*

REJOWSKI, EDNEY D. *Characterization and performance of a graded hydrogen amorphous DLC film (a-C:H) doped with silicon, applied in cylinder liner component for internal combustion engine.*

RODRIGUES, DANIELLA *Utilization of high hydrostatic pressure for the study and refolding of proteins with quaternary structure.*

RODRIGUES, VALÉRIA C. *Development and validation of analytical methodology for determination of pharmaceutical compounds in surface and surface treated water samples by ultra performance liquid chromatography coupled to tandem mass spectrometry (UPLC-MS/MS).*

ROSA, MYCHELLE M.L. *Evaluation of U, Th,  $^{226}$ Ra,  $^{228}$ Ra,  $^{210}$ Pb levels and other elements in mushrooms from a high natural radiation region of Brazil.*

SANCHES, THALITA P. *A study on chemical element determinations in human nails by neutron activation analysis.*

SANTOS, ALAN A. dos *Study of variables in the process of compaction powders basis of alumina.*

SANTOS, ANTONIO J. da S. *Effects of low level laser therapy on melanoma an in vitro study.*

SANTOS, DYMES R.A. dos *Ecotoxicological assessment of the pharmaceutical fluoxetine hydrochloride and the surfactant dodecyl sodium sulfate after their submission to ionizing radiation treatment.*

SANTOS, LUCAS R. dos *In vivo monitoring - analysis of uncertainties.*

SANTOS, ROBERTO M. dos *Development of a method for obtaining the efficiency of detection in HPGe detector with measures large sources.*

SANTOS, ROBINSON A. dos *Methodology optimization of the thallium bromide crystal preparation for application as a radiation detector.*

SEO, DANIELE *Evaluation of the levels of Br, Cl, K, Mg, Mn and V in *Perna perna* mussels (*Linnaeus, 1758: Mollusca, bivalvia*) collected in coast of São Paulo, Brazil.*

SICCHIERI, LETÍCIA B. *Characterization of low density lipoprotein (LDL) by spectroscopic methods.*

SILVA JUNIOR, IREMAR A. da S. *Development and implementation of an automated system for adequation of the calibration process for gamma radiation monitors.*

SILVA, ALEXANDRE E. de S. da *Identification and techniques via chromatographic quantification of fatty acid in fruit with potential pharmacological amazon.*

SILVA, BRUNO F.A. da *Preparation of bonded hybrid magnets with mixture of powders based on TR-Fe-B and ferrite.*

SILVA, CLAYTON P. da *Chemometrics application in fuel's MTR type chemical characterization by x-ray fluorescence.*

SILVA, PAULA P.N. *Analysis of the radiation levels at the dependences of the accelerator cyclotron of IPEN.*

SILVA, RENAN de A. *Software development as a tool for reliability analysis of groundwater of IPEN.*

SILVA, SHARLENY A. *Micro and macro sediment constituent concentration assessment of the Itupararanga reservoir/Sorocaba-SP.*

SOARES, WÁLACE A.A. *Metal distribution evaluation in water, sediment and aquatic organisms in rivers and reservoirs of a sediment quality monitoring network of São Paulo state, Brazil.*

SOUZA, CARLA D. de *Comparison between methods for fixing radioactive iodine in silver substrate for manufacturing brachytherapy sources.*

VENEZIANI, GLAUCA R. *Evaluation of doses from radiodiagnostic procedures performed in veterinary medicine and assessing of the doses of secondary radiation in the medical staff and animal owners.*

VIANA, VLAMIR. *Characterization of a test device for determination of the half value layer and of filtration with quality equity of materials in accordance with standard ABNT NBR IEC 606001-1-3.*

VIVEIROS, WILLIAM Chironomus sancticaroli: culturing in the laboratory and ecotoxicological, test with environmental sediment samples.

2013

ANDRADE, ANDRÉIA B.N. de *Development of a controlled delivery system of Azadirachta indica A. Juss active agents oil in poly(vinyl alcohol) (PVA) matrix for veterinary applications.*

ANDREA, VINÍCIUS *Durability studies of membrane electrode assemblies (MEAs), produced through th sieve printing technique for use in proton exchange membrane fuel cells.*

ANTONIASSI, RODOLFO M. *Electrical performance and products distribution of direct ethanol fuel cell using Pt/C, PtSn/C<sub>alloy</sub>, and PtSnO<sub>x</sub>/C as anodic electrocatalysts.*

ARAUJO, LEANDRO G. de *Degradation of ion spent resin using the Fentons reagent.*

BARROS, LIVIA F. *Assessment of the variation of natural radioactivity in sands of Camburi beach-Vitória-Espírito Santo with climatological and geological factors of the region.*

BIGNARDI, ALINE M.T. *Development of a recovery method of <sup>131</sup>I in the <sup>99</sup>Mo process through the fission of <sup>235</sup>U.*

BIZETTO, CESAR A. *Dosimetric properties characterization of silicon diodes used in photon beam radiotherapy.*

BORGES, VIVIANE F. *Determination of the background greenhouse gases concentrations in Amazon basin.*

CAPONE, MARCOS V.N. *Characterization of the oligosaccharide structure of human glycosylated prolactin (G-hPRL) native and recombinant.*

CASTRO, FLAVIA J. de *Ecotoxicological evaluation of leachates from columns of coal fly ash soil with coal fly ash using Lactuca sativa and Daphnia similis as test organism.*

CASTRO, JOSE C. de *Performance PtSnRh electrocatalysts supported on carbon-Sb2O5.Sb2O3 for the electro-oxidation of ethanol, prepared by an alcohol-reduction process.*

CAVALIERI, TÁSSIO A. *Employment of MCNP in the study of TLDs 600 and 700 seeking the implementation of radiation beam characterization of BNCT facility at IEA-R1.*

CORREA, PAULO R. *Development of a communication interface to determinate the thermal diffusivity as a function of temperature by infrared thermography.*

COSTA, NATHALIA A. *Development of a calibration methodology and tests of kerma area product meters.*

CRAESMEYER, GABRIEL R. *Treatment of effluent containing uranium with magnetic zeolite.*

DANTAS, DANIELLE M. *Acute and subacute toxicity of <sup>18</sup>F-FDG.*

DIAS, MARIA C.F. *Sintering, microstructure and electrical*

*conductivity of gadolinia-doped ceria with SrO, TiO<sub>2</sub> e SrTiO<sub>3</sub>,*

FERRAZ, CAROLINE C. *Radio-synthesized polyacrylamide nanostructured hydrogels for proteins release.*

FERREIRA JUNIOR, OSCAR L. *Separation processes of metal materials and non metal recycling on waste of printed circuit boards microcomputers.*

FERREIRA, EDUARDO G.A. *Assessment of cement paste properties changes in repository environment.*

GALLO, JULIANA M.A.S. *Evaluation of rheological behavior and sensory properties of ready to eat salad dressings submitted to irradiation.*

GIMILIANI, GIOVANA T. *Ecotoxicological comparison of active ingredients of repellents for aquatic invertebrates irradiated and non-irradiated with gamma radiation.*

GOMES, THIAGO B. *Study of the oxygen reduction reaction usyng Pt-rare earths (La, Ce, Er) electrocatalysts for application of pem fuel cells.*

GONNELLI, EDUARDO *The reflector effect on the neutron lifeimes in the IPEN/MB-01 reactor.*

GONSCHOROWSKI, GRACIELE P. da C. *Chemical characterization of sex hormones in water from wells in the region of the USP by gas chromatography coupled to mass spectrometry GC/MS.*

GROPPÓ, DANIELA P. *Dosimetric characterization BeO samples in alpha, beta and X radiation beams using luminescent techniques.*

HARAGUCHI, MARCIO I. *Industrial process equipment troubleshooting with imaging technique improved gamma-ray absorption scans.*

ICHIKAWA, RODRIGO U. *Applications of the Warren-Averbach method of X-ray diffraction line profile analysis.*

LACERDA, FLÁVIO W. *68Ga standardization by means of a 4πβ-γ coincidence system.*

LAPA, FLÁVIA V. *Temporal evolution of natural radionuclides distributions <sup>238</sup>U, <sup>234</sup>Th, <sup>226</sup>Ra, <sup>228</sup>Ra, <sup>210</sup>Pb and <sup>210</sup>Po in the Bransfield strait, Antarctica Peninsula.*

MACHADO, JÉSSICA S. *Ocupational doses distribuition analysis in operation of maintenance and interventions in restricted areas at Radiofarmacy Center of IPEN.*

MAEDA, NANCY T. *Evaluation of new bone formation in rabbits using hydroxyapatite dome associated to different materials.*

MARCHINI, LEONARDO G. *Development of optical marker for polyolefin processes.*

MARTINI, GISELA de A. *Cytotoxicity evaluation of Diethyltoluamide (DEET) in Perna perna (Linnaeus, 1758) mussels non-irradiated and irradiated with <sup>60</sup>Co gamma radiation.*

MATTOS, FABIO R. de *Study and development of an iridium-192 seed for use in ophthalmic cancer.*

MOREIRA, GREGORI de A. *Methods to obtain heighth of Planetary Boundary Layer by LIDAR data.*

NATALENSE, JULIO C. *Technology roadmapping for biobutanol in the brazilian biofuels market.*

## Dissertations

- OLIVEIRA, MARCIO M.M. de *Social environment sustainability in industrial complex: a case study in Minas Gerais.*
- PELEIAS JUNIOR, FERNANDO dos S. *Development of methodology for the synthesis of poly(lactic acid-co-glycolic acid) for use in the production of radioactive sources.*
- PEREIRA, LILIAN N. *Use of epitaxial silicon diodes in photon dosimetry.*
- PESTANA, RAFAEL C.B. *Identification of uranium signatures in wipe samples on verification of nuclear activities for nuclear safeguards purpose.*
- PETRI, ANNA R. *Measurements of Townsend first ionization coefficient in pure isobutane under uniform electric fields.*
- PINHEIRO, LUCAS B. *Synthesis and characterization of NiO-YSZ-CeO<sub>2</sub> composites with microwave-assisted hydrothermal treatment.*
- PORTO, KARINA M.B.G. *Effects of gamma radiation (<sup>60</sup>Co) on the main physical and chemical properties of health care packaging and their compounds paper and multilayer plastic film, used for health products sterilization.*
- PUERTA, DANIEL C. *k<sub>o</sub>-INAA application at IPEN Neutron Activation Laboratory by using the k<sub>o</sub>-IAEA program. Biological sample analysis.*
- REGO, MARIA E. de M. *Management of radioactive waste from <sup>99</sup>Mo production by nuclear fission.*
- REIS, FABRICIO C. *Survey of insects fauna from plants medicinal, aromatic and seasoning and disinfection the process of radiation.*
- RIBEIRO, MARCOS S. *Calorimetric system and software for analysis of polymerization of methyl methacrylate compounds, the variation exotherm reaction.*
- RIBEIRO, ROGÉRIO B. Physical and chemical characterization of ceramics from archaeological site São Paulo II.
- RIOS, ILKA A. *Uranium density reduction on fuel element side plates assessment.*
- RODRIGUES, YKLYS S. *Optimization of a data acquisition and control system for calibration of X rays detectors with usage of computational tools.*
- RUSSO, ANA C. *Bioavailability of radionuclides <sup>226</sup>Ra, <sup>228</sup>Ra and <sup>210</sup>Pb present in the brazilian phosphate fertilizers and phosphogypsum.*
- SABBAG, MAURICIO G. *Study of radionuclide migration in repository type tubular well for sealed sources deposition.*
- SANTANA, LUCIANA VIEIRA de *Preparation, characterization and use of a reference material to proficiency testing for determination of metals in fish tissue in natura.*
- SILVA, JULIANA C. da *Mobility of As, Cd, Mo, Pb and Zn in clayey oxisol columns with coal fly ash and soil contamination.*
- SILVA, SILVIO L.V. da *Characterization of nickel alloy 600 with ultrafine structure processed by severe plastic deformation (SPD).*
- SILVA, SIRLANE G. da *Effect study of the support in nickel and cobalt catalysts to obtaining hydrogen from ethanol steam reforming.*
- SOARES, FERNANDO A.N. *Morphological and biomechanical analysis of amnion stored in glycerol sterilized with different doses of ionizing radiation.*
- SOUZA, DAIANE C.B. de *Development of a method for the radioisotopic characterization of waste packages.*
- STEFANI, GIOVANNI L. de *About the technique of Rod Drop in measures of rod worth in security and control rods of nuclear reactors.*
- SUFI, BIANCA da S. *Use of melanocytes and keratinocytes in co-culture for evaluation of the action of cashew nut shell liquid (CNSL) in epidermal pigmentation.*
- TARDELLI, TIAGO C. *Evaluation of nuclear data for neutron dosimetry.*
- TUDELA, DIEGO R.G. *Physical-chemical characterization of sediments from Lapa Grande de Taquaraçu archaeological site, MG.*
- UZUELI, DANIEL H. *Study on ozone gas formed in the industrial radiation process with cobalt-60 and its impact on the environment.*
- VALLINOTO, PRISCILA Determination of essential and toxic elements in commercial baby foods by instrumental neutron activation analysis and atomic absorption spectrometry.
- VELOSO, MARCELO N. *In vitro evaluation of ionizing radiation effects in bone tissue by FTIR spectroscopy and dynamic mechanical analysis.*
- ZANETTE, CAMILA *Study of the production of the radiopharmaceutical <sup>18</sup>F-FLT in automated system: Contribution for process validation.*

2011

Situação	Patentes
Protocolo - INPI emitido	12
Protocolo - INPI emitido (terceiros)	1
<b>Total</b>	<b>13</b>

2012

Situação	Patentes
Protocolo - INPI emitido	8
Protocolo - INPI emitido (terceiros)	2
<b>Total</b>	<b>10</b>

2013

Situação	Patentes
Protocolo - INPI emitido	6
<b>Total</b>	<b>6</b>