

Modellistica, Simulazione Computazionale e Caratterizzazione Multiscala per le Scienze dei Materiali e della Vita

Scuola di Dottorato attiva fino al ciclo XXVIII (2013-2015)

Dottori di Ricerca

XXVIII ciclo, 2013-2015 Acquisizione del titolo anno 2016

Alex Berni Isotopes for food geographical traceability and environmental applications: strategies for methods development.

Tutor: Prof. A. Marchetti

Fabrizio Bernini Reactions at the solid/liquid and solid/gas interfaces between 1:1 and 2:1 phyllosilicates, complexes of Fe (III), Cu(II) and sulfur compounds

Tutor: Dott. D. Malferrari

Erik Mantovani Multivariate process monitoring in polymers production

Tutor: Prof.ssa M. Cocchi

Luca Nocetti Hepatic hemodynamic characterization through MR perfusion and angiography techniques

Tutor: Prof.ssa P. Baraldi

Andrea Elia A multivariate approach in pharmaceutical process development research

Tutor Prof.ssa Marina Cocchi, Dr. Ciro Cottini

Simone Pollastri Crystal chemistry and physical-chemical characterization of mineral fibres aimed at understanding their toxicity potential

Tutor: Prof. A. Gualtieri

XXVII ciclo, 2012-2014 Acquisizione del titolo anno 2015

Davide Presti Quantum computational methodologies for the study of molecular crystals

Tutor: Prof.ssa M.C. Menziani, Prof. C. Adamo

Porta Federica Novel steplength approaches for differentiable and non-differentiable optimization.

Tutor: Prof. L. Zanni

Paltrinieri Licia Investigation of the effects of the environment on the dynamic/function relationship in metallo-proteins

Tutor: Prof. G. Battistuzzi

Gambuzzi Elisa NMR Computational Spectroscopy: a new way to determine oxide glass structures.

Tutor: Dr. A Pedone

Conte Sonia Protohistoric vitreous material from southern Italy: Chemical characterization and trace elements study

Tutor: prof. A. Gualtieri

Broglia Giulia Computational Approach to Transition Metal Oxides based materials

Tutor: Dott.ssa M. Montorsi

XXVI ciclo, 2011-2013 Acquisizione del titolo anno 2014

Bozza Francesco Protection of components for energy production by surface engineering techniques: development of oxide-dispersion-strengthened bondcoats and Cr-rich diffusion coatings.

Tutor: Prof.ssa Cristina Siligardi, Dott. Luca Lusvarghi

Cedillo Gonzalez Erika Iveth Study and Development of Advanced Materials for Architecture and Construction: Preparation and Characterization of TiO₂ Coatings for Building Materials

Tutor: Prof.ssa Cristina Siligardi e Dott.ssa Monia Montorsi

Cavicchioli Roberto Methods and Software for Image Restoration on different Parallel Environments

Tutor: Prof. Luca Zanni, Dr. Marco Prato

Malagoli Tagliazucchi Guidoantonio A computational approach for the identification of genome cis-regulatory elements from ChIP-seq data

Tutor: Prof. Mauro Leoncini, Prof. Silvio Bicciato

Dignatici Matteo Study and development of glass coating for industrial application

Tutor: Prof.ssa C. Siligardi

Silvestri Michele Data fusion to integrate data of different nature in food authenticity

Tutor: Dott.ssa Marina Cocchi, Prof. A. Marchetti

De Pretis Francesco A quantitative approach to the modelling of interacting systems from empirical data: the statistical mechanics perspective and a case study from social sciences

Tutor: Prof. C. Giberti

Ferrari Chiara Design, development and testing of solar-reflective ceramic-based building materials

Tutor: Prof.ssa C. Siligardi

XXV ciclo, 2010-2012 Acquisizione del titolo anno 2013

Andrea Cattini Coatings of bioactive glasses and hydroxyapatite and their properties

Tutor: Prof.ssa V. Cannillo, Prof. L. Pawlowski

Elisa Salvatore Multiset and Multi-way Approaches in Food Authentication

Tutor: Dott.ssa Marina Cocchi, Dott. F. Marini

Anastasia Cornelio Separable least squares problems and their application to blind deconvolution

Tutor: Prof. I. Zanni

Marta Del Cadia Structure and function of 5-HT₃ receptors unveiled by computational and experimental studies

Tutor: Prof.ssa M.C. Menziani, Prof. A. Cappelli

Lucia Bertacchini Handling traceability issues in food: a methodological approach for oenological products

Tutor: Dott.ssa Marina Cocchi, Prof. A. Marchetti

XXIV ciclo, 2009-2011 Acquisizione del titolo anno 2012

Baschieri Carlo Food traceability: a multivariate approach to procedure optimization and model development

Tutor: Dott.ssa Marina Cocchi

Lavinia De Ferri Characterization and ageing of medieval-like glass for the design of protective coating

Tutor: Prof. Gualtieri, Proff.ssa M. G. Vezzalini

Giacobbe Carlotta High temperature reaction of serpentine group minerals

Tutor: Prof. Gualtieri

Mugoni Consuelo Design, synthesis and characterization of transition metal oxide-based glasses for material science applications

Tutor: Dott.ssa C. Siligardi, M. Montorsi

Palmieri Lorenzo Analysis and prediction of residue solvent accessible accessibility in proteins and hot spots in protein interaction

Tutor: Prof. M. Leoncini, Dott.ssa M. Montangero

Shruti Bioactive sol-gel glasses doped with Cerium, Gallium and Zinc: advanced bioceramics of third generation.

Tutor: Prof. Ledi Menabue, Prof. A.J. Salinas

XXIII ciclo, 2008-2010 Acquisizione del titolo anno 2011

Diego Calzolari Automated Tracking and Analysis of live cell migration in 2D and 3D

Tutor: Prof. M. Leoncini

Chiara Damiani Dynamics of interacting genetic networks

Tutor: Prof. R. Serra, Prof. C. Giberti

Marco Demartini Data analysis challenges in the elaboration of 2D-PAGE gel electrophoretic maps

Tutor: Dott.ssa M. Cocchi

Chiara Elmi Crystal chemistry and surface features of minerals with six- and eight-membered tetrahedral rings

Tutor: Prof. M. Brigatti

Stefania Favilla Machine learning approaches and statistical multi-way models for the analysis of fMRI data

Tutor: Prof. P. Baraldi

Maria Federico Discovery of motifs and long multiple repeats in biological sequences

Tutor: Dott.ssa M. Montangero, Dr. N. Pisanti

Alessandro Filisetti Theoretical models for a protocell

Tutor: Prof. R. Serra

Elisa Petrini Mineralogical and chemical characterization of as pollution in soils, sediments and waters from the Argentina Andes volcanic area (JuJuy Province)

Tutor: Prof. M. Brigatti, Prof. A Mottana

Puneet Saxena Computational study of aggrecanase inhibition.

Tutor: Prof. M.C. Menziani

XXII ciclo, 2007-2009 Acquisizione del titolo anno 2010

Armenio Jorge Moura Barbosa: Computational studies of the 5-HT3 receptor: molecular determinants for ligand-binding

Tutor: Prof. M.C. Menziani, Maria J. Ramos

Mario Li Vigni: Wheat Flour and Industrial Bread-Making. A Multivariate Approach to Quality and Process Monitoring

Tutor: Dott.ssa M. Cocchi

Nikita Basant: Modelling Inhibitor-MAP Kinase Interactions by Chemoinformatics Tools

Tutor: Dott.ssa M. Cocchi, Prof. M.C. Menziani

Alex Graudenzi: Criticality and perturbations in Boolean models of gene regulatory networks

Tutor: Prof. R. Serra

Andrea Malagoli: Studies for a low-cost instrumental setup for recording and processing the fast optical response of cortical neurons in visual stimulation

Tutor: Prof. S. Fonda

Riccardo Zanella: Scaled Gradient Projection Methods for Image and Signal Reconstruction

Tutor: Prof. Luca Zanni, Dr. Marco Prato

Guido Ori: Experimental and Computational Approaches towards Functional Glass- and Clay-based Materials

Tutor: Dott.ssa C. Siligardi, M. Montorsi

XXI ciclo, 2006-2008. Acquisizione del titolo anno 2009

Domenico Borla: Multi-scale Characterization of Human Brain Function

Tutor: Prof. P. Baraldi e Prof. S. Panzeri

Luca Bulf: New Approach to Video Based, Gaze-driven Human Computer Interaction to Afford Low Cost Solutions overcoming the Limits of Conventional Methods

Tutor: prof. S. Fonda

Lucia Denti, Study of innovative materials and processes in the dental prosthetic production
Tutor: Dott.ssa E. Bassoli

Federico Filomia, Computational studies of enzyme ligand-induced conformational changes
Tutor: Prof.ssa M.C. Menziani

Domenico Maisto, "Human brain connectivity: dynamic Bayesian network modelling from fMRI time series"
Tutor: Prof.ssa P. Baraldi e Dr. L. La Rocca

Fiorenza Pierli, Computer design and experimental development of new biomaterials and biocoatings
Tutor: Prof.ssa V. Cannillo

Marco Pota, Molecular Dynamics Simulations of Alkaline Silicate Glasses: Optimization of the Computational Procedure and Limits
Tutor: Dr. G. Malavasi e Dott.ssa M. Cocchi