

Researchers

Fellows Gipuzkoa

Dr. Rubén Esteban Llorente

NIST (National Institute of Standards and Technology), Gaithersburg, Maryland, USA

11/03/2013–Present

Quantum plasmonics.

Dr. Maia Garcia Vergniory

Max Planck Institute of Microstructure Physics, Halle an der Saale, Germany

01/06/2013–Present

Electronic and magnetic properties in ordered and disordered topological insulators.

Dr. Peter Koval

Asociación de Investigación Material Physics Center (MPC), Donostia-San Sebastián, Spain

25/11/2013–Present

Development of MBPT with localized orbitals.

Dr. Dimas Garcia de Oteyza Feldermann

Centro de Física de Materiales CSIC-UPV/EHU, Donostia-San Sebastián

01/05/2014–Present

Physical chemistry phenomena in organic materials and organic-inorganic interfaces.

Dr. Aitzol Garcia Etxarri

Stanford University, San Francisco, USA

01/11/2014–Present

Nanophotonics theory.

Postdoctoral Positions

Dr. Ilya Nechaev
Tomsk State University, Russia
03/04/2012–Present

Electronic structure and many-body effects in layered semiconductors.

Dr. Christos Tserkezis
University of Athens, Greece
01/08/2012–Present
Optical properties of metamaterials.

Dr. Noelia Beatriz Luque
Universidad Nacional de Córdoba, Argentina
01/11/2012–31/12/2014
Ab-initio quantum chemistry studies of seleno-L-cysteine on coinage metal surfaces.

Dr. Stepan Tsirkin
State University of Tomsk, Russia
06/12/2012–Present
Magnetic proximity effect in the layered structures.

Dr. Pablo Aguado Puente
Universidad de Cantabria, Santander, Spain
01/01/2013–31/12/2014
Coupling of ferroic nanoscale films with interfacial two dimensional electron gases in oxides.

Dr. Chang-Jin Lee
Boston College, USA
01/04/2013–26/03/2014
Electronic excitations and many-body effects in solids, surfaces, and nanostructures.

Dr. Fabienne Barroso Bujans
Centro de Física de Materiales, CSIC-UPV/EHU, Donostia-San Sebastián, Spain
16/04/2013–Present
Aimed at finding the much-needed link between structure and properties of polymers confined at sub-nanometer dimensions at both fundamental and practical levels via understanding, tuning, and, ultimately, controlling the properties of polymer-based graphene nanostructured matter.

Dr. Rubén González Moreno
Instituto de Ciencia de Materiales de Madrid, CSIC, Spain
01/07/2013–31/12/2014
Fabrication of curved single crystals.

Dr. María de Gracia Retamosa Hernández
Facultad de Química, UPV/EHU, Donostia-San Sebastián, Spain
01/07/2013–Present
Remote structural effects in unnatural amino acids.

Dr. Mikhail Otkov
State University of Tomsk, Russia
17/07/2013–Present
Topological insulators.

Dr. Miren Iosune Arrastia Basalo
Facultad de Química, UPV/EHU, Donostia-San Sebastián, Spain
01/08/2013–Present
Multiple spin state reactivity in Fe-containing complexes and enzymes.

Dr. Ion Errea Lope
Institut de Minéralogie et de Physique de Milieux Condensés, Université Pierre et Marie Curie, Paris, France
02/01–31/12/2014
Anharmonic free energies and phonon dispersions from the self-consistent harmonic approximation.

Dr. Marcos Gonçalves de Menezes
Universidade Federal Do Rio de Janeiro, Brasil
27/01–13/03/2014
Anomalous hall effect in metals and Chern insulators, and gyrotropic optical effects.

Dr. Elena Formoso Estensoro
Università della Svizzera Italiana, Lugano, Switzerland
01/02/2014–Present
Unveiling biochemical relevant structural conformations of the aluminum cation amyloid-beta peptide complex.

Dr. Federica Lo Verso
Material Physics Center, MPC, Donostia-San Sebastián, Spain
01/02/2014–Present
Structure and dynamics of complex materials based on polymers.

Dr. Luis Alejandro Miccio
UPV/EHU, Donostia-San Sebastián, Spain
17/07/2014–Present
Physical chemistry of curved surfaces.

Dr. Yao Zhang
University of Science and Technology of China (USTC), Anhui, China
21/08–05/10/2014
Plasmon-enhanced infrared spectroscopies for molecular characterization.

Dr. Daniel Gosálbez Martínez

Centro de Física de Materiales and Universidad del País Vasco, Donostia- San Sebastián, Spain

15/09–31/12/2014

Weyl nodes in ferromagnetic bandstructures.

Dr. Rémi Petuya

Institut des Sciences Moléculaires, Université Bordeaux, France

01/10/2014–Present

Characterization of structural and electronic properties of molecular overlayers on metal surfaces.

Dr. Jens Brede

Institute of Applied Physics and Interdisciplinary Nanoscience Center, Hamburg, Germany

27/10/2014–Present

Physical chemical reactions at surfaces: physico-chemical aspects.

Romain Dupuis

CEMES/CNRS, Toulouse, France

10/12/2014–Present

Cements and nanoadditions.

Temporary Contract Positions**Dr. Irina Sklyadneva**

Russian Academy of Sciences, Tomsk, Russia

14/05/2003–Present

Lattice dynamics and electron-phonon interaction in bulk materials and in ultrathin metal films. Electron-phonon interactions are of paramount importance for the correct description of the temperature dependence of quasiparticle dynamics. The goal of the present project is to study the electron-phonon coupling in ultrathin lead films, at bismuth and noble metal surfaces and in bismuth tellurohalides, layered polar semiconductors.

Dr. Laura Fernández Gómez-Recuero

Technische Universität Dresden (TU-Dresden), Germany

01/01–31/08/2014

Preparation and characterization of self-assembled metallic nanostructures that reveal magnetic properties. Structural analysis by scanning tunneling microscopy. Magnetic characterization by magnetometry and magneto-optics.

PhD Students**Elisabeth Goiri Little**

Facultad de Ciencias, UPV/EHU, Lejona, Spain

01/07/2010–28/02/2014

Tunneling microscopy and spectroscopy of molecules on metals at 1 K.

Alexander Correa Aristizabal

Universidad del Valle, Cali, Colombia

21/06/2011–Present

Studies at the nanoscale of interfaces for biosensor and solar cell applications.

Anton Xose Brion Rios

Universidad de Vigo, Spain

06/02/2013–Present

Theoretical study on the molecular adsorption and self-organization on substrates of different nature.

Dino Novko

University of Zagreb, Croatia

25/09/2013–Present

Non-adiabatic effects in the interaction of metal surfaces with atoms and small molecules.

Aitzol Iturbe Beristain

UPV/EHU, Donostia-San Sebastián, Spain

01/10/2013–31/03/2014

Electron-phonon interaction in surfaces with strong spin-orbit interaction.

Oihana Galparsoro Larraza

Facultad de Química, UPV/EHU, Donostia-San Sebastián, Spain

01/10/2013–Present

Phonon and electron excitations in diatom abstraction from metallic surfaces.

Bernhard Kretz

Gratz University of Technology, Gratz, Austria

09/06/2014–Present

Electronic and transport properties of graphenic nanostructures.

Tomas Neuman

Brno University of Technology, Czech Republic

01/09/2014–Present

Theory of scattering-type near-field microscopy and infrared spectroscopy.