

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, Spain
01/05/2014–30/04/2015
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.

Senior Positions

Dr. Irina Sklyadneva

Russian Academy of Sciences, Tomsk, Russian Federation

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.

Prof. Vladimiro Mújica Hernandez

Arizona State University, Phoenix, USA

01/10/2015–31/07/2016

Charge and spin transfer at nano-interfaces. Reformulation of Marcus theory using the molecular polarizability as fundamental variable.

Postdoctoral Positions

Dr. Ilya Nechaev

Tomsk State University, Russian Federation

03/04/2012–31/08/2015

Electronic structure and many-body effects in layered semiconductors.

Dr. Christos Tserkezis

University of Athens, Greece

01/08/2012–31/07/2015

Optical properties of metamaterials.

Dr. Stepan Tsirkin

State University of Tomsk, Russian Federation

06/12/2012–Present

Magnetic proximity effect in the layered structures.

Dr. Fabienne Barroso Bujans

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

16/04/2013–14/09/2015

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. 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 Otrokov

State University of Tomsk, Russian Federation

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. 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

17/07/2014–15/11/2015

Physical chemistry of curved surfaces.

Dr. Daniel Gosálbez Martínez

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

15/09/2014–24/01/2015

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
27/10/2014–31/08/2015

Physical chemical reactions at surfaces: physico-chemical aspects.

Dr. Romain Dupuis

CEMES/CNRS, Toulouse, France
10/12/2014–Present

Cements and nanoadditions.

Dr. Ion Errea Lope

Institut de Minéralogie et de Physique de Milieux Condensés, Université Pierre et Marie Curie,
Paris, France

01/01/2015–22/04/2015

Vibrational properties of bulk materials and nanostructures.

Dr. Eloy Ramos Cordoba

Universitat de Girona, Spain

01/01/2015–31/12/2015

Domain-averaged molecular Fermi holes and quantum molecular aromaticity.

Dr. Tatiana Novokhatskaya

Institute d'Electronique Fondamental, Orsay, France

01/01/2015–31/12/2015

Computational plasmonics.

Dr. Guillaume Vasseur

Institut Jean Lamour, Université de Lorraine-CNRS, France

05/01/2015–Present

Physics and chemistry of curved crystal surfaces.

Dr. Deung Jang Choi

Max Planck Institute, Hamburg, Germany

10/03/2015–30/04/2015

Spin dynamics of atomic objects on surfaces.

Dr. Joseba Alberdi Rodriguez

Facultad de Informática, UPV/EHU, Donostia/San Sebastián, Spain

01/07/2015–Present

Morfokinetics: development of computational techniques for the analysis of CVD growth of new 2D materials.

Dr. Marta Pelc

Nicolaus Copernicus University, Torun, Poland

01/12/2015–Present

Topological defects on carbon like nanostructures.

PhD Students**Alexander Correa Aristizabal**

Universidad del Valle, Cali, Colombia

21/06/2011–20/06/2015

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.

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

01/09/2014–30/04/2015

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

Lucía Ortega Alvarez

Instituto de Ciencia y Tecnología de Polímeros/CSIC, Madrid, Spain

12/01/2015–Present

Structure and dynamics of silica filled rubber compounds.

Natalia Koval

Adygea State University, Russian Federation

21/01/2015–Present

Time-dependent density functional theory calculations of the energy loss of particles in metallic media.

Néstor Merino Diez

Universidad de la Rioja, Logroño, Spain

01/09/2015–Present

Functional materials synthesized by surface-supported chemistry under vacuum.