

PERSONAL INFORMATION

Pablo Nieves Cordones



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🌐 https://www.researchgate.net/profile/Pablo_Nieves2

Sex Male | Date of birth 10 Mar 1983 | Nationality Spanish

WORK EXPERIENCE

2016–Present

Postdoc

Universidad de Burgos, Burgos (Spain)

2011–2015

Ph.D. Student

Instituto de Ciencias de Materiales de Madrid (ICMM) - Consejo Superior de Investigaciones Científicas (CSIC), Madrid (Spain)

EDUCATION AND TRAINING

2015

Doctor degree in Condensed matter physics and nanotechnology

Instituto de Ciencias de Materiales de Madrid (ICMM - CSIC), Madrid (Spain)

2012

Master in Condensed Matter Physics and Nanotechnology

Universidad Autónoma de Madrid, Madrid (Spain)

2010

Bachelor of Physics

Universidad de Murcia, Murcia (Spain)

2004

Bachelor of Physical therapy

Universidad de Murcia, Murcia (Spain)

PERSONAL SKILLS

Mother tongue(s)

Spanish

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
First certificate University of Cambridge					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

Publications

Number of publications (Scopus): 25. Citations (Scopus): 247. H-index (Scopus): 7 (Date: January 2020)
8 relevant publications:

1. J. Mendil; **P. Nieves**; O. Chubykalo-Fesenko; J. Walowski; T. Santos; S. Pisana; M. Muzenberg.

Resolving the role of femtosecond heated electrons in ultrafast spin dynamics. Scientific Reports **4**, 3980 (2014).

2. U. Atxitia; **P. Nieves**; O. Chubykalo-Fesenko. *Landau-Lifshitz-Bloch equation for ferrimagnetic materials*. Physical Review B **86**, 104414 (2012).

3. R. John; M. Berrita; D. Hinzke; C. Muller; T. Santos; H. Ulrichs; **P. Nieves**; R. Mondal; J. Walowski; O. Chubykalo-Fesenko; J. McCord; P. Oppeneer; U. Nowak; M. Muzenberg. *Magnetization switching of FePt nanoparticle recording medium by femtosecond laser pulses*. Scientific Reports **7**, 4114 (2017).

4. D. Hinzke; U. Atxitia; K. Carva; **P. Nieves**; O. Chubykalo-Fesenko; P. Oppeneer; U. Nowak. *Multiscale modeling of ultrafast element specific magnetization dynamics of ferromagnetic alloys*. Physical Review B **92**, 054412 (2015).

5. **P. Nieves**; O. Chubykalo-Fesenko. *Modeling of ultrafast heat- and field-assisted magnetization dynamics in FePt*. Physical Review Applied **5**, 014006 (2016).

6. **P. Nieves**; D. Serantes; U. Atxitia; O. Chubykalo-Fesenko. *Quantum Landau-Lifshitz-Bloch equation and its comparison with the classical case*. Physical Review B **90**, 104428 (2014).

7. **P. Nieves**; U. Atxitia; R. W. Chantrell; O. Chubykalo-Fesenko. *The classical two sublattice Landau-Lifshitz-Bloch equation at all temperatures*. Low Temperature Physics **41**, 949 (2015).

8. O. Suarez; **P. Nieves**; D. Laroze; D. Altbir; O. Chubykalo-Fesenko. *The ultra-fast relaxation rates and reversal time in disordered ferrimagnets*. Physical Review B **92**, 144425 (2015).

Projects

- Team member in 4 EU-HORIZON-2020 projects: NOVAMAG (GA 686056, 01/04/2016, 7.146.610€), ICARUS (GA 713514, 01/09/2016, 2.698.062€), SCREEN (GA 730227, 01/11/2016, 2.999.500€) and DRYNET (GA 734434, 01/03/2017, 841.500€).
- Team member in 1 EU-FP7-NMP project, FEMTOSPIN (GA 281043, 01/06/2012, 5.175.547€).
- 5 projects for CPU time at Red Española de Supercomputadores (RES). Total Hours Assigned: 1,800 khours.

Conferences

10 works presented at international conferences

Courses

- Winter School Magnetism. Awarding entity: Vienna University of Technology. 23/02/2017. Duration: 25 hours
- FEMTOMAG, magnetism from fundamentals to ultrafast nanoscale dynamics. Awarding entity: Radboud University Nijmegen. 15/08/2014. Duration: 60 hours
- Frontiers in material science. Awarding entity: ICMM-CSIC. 06/05/2013. Duration: 60 hours
- European School on Magnetism. Awarding entity: European community of Magnetism. 08/03/2013. Duration: 60 hours
- Challenges and breakthroughs in recent research on nanotechnology. Awarding entity: Iberian Nanotechnology laboratory. 22/07/2011 Duration: 25 hours

Programming Language skills

Fortran, Mathematica, Linux, Matlab, Python, C++, micromagnetic code OOMMF, density functional theory codes VASP, FLEUR, ASW and ABINIT, molecular dynamics codes LAMMPS and NAMD, predicting structure code USPEX based on genetic algorithms, finite element code COMSOL Multiphysics, atomistic spin dynamics codes like VAMPIRE and UPPASD, and electronic microcontroller programming ARDUINO.

Teaching experience

Lectures on micromagnetic simulations in the course "Frontiers in material science", CSIC-ICMM (04/2014 and 04/2015)

Industrial and intellectual property

- Title: Modelling data elements (MODA) for theoretical prediction of new rare earth-free high-performance permanent magnets. Authors: S. Arapan; P. Nieves; S. Cuesta-López. Entity holder of rights: Universidad de Burgos. N° of application: 00/2017/1290. Date: 23/01/2017
- Title: EqMag. Equilibrium magnetic alloys solver. Author: P. Nieves. Entity holder of rights: Universidad de Burgos. N° of application: BU-178-16. Date: 22/12/2016.