

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>	07/11/2024
First and Family name	José Ignacio Pérez de Landazábal Berganzo		
Social Security, Passport, ID number		Age	
Researcher numbers	Researcher ID	H-9712-2015	
	Orcid code	0000-0003-1172-6141	

**A.1. Current position**

Name of University/Institution	Public University of Navarra		
Department	Science		
Address and Country	Ed. los Acebos, Campus de Arrosadía, 31006 Pamplona - Spain		
Phone number	E-mail		
Current position	Full Professor	From	14/06/2019
Espec. cód. UNESCO	221101,221105,221108,221112,221117,221119,221121,221129		
Palabras clave	Ferromagnetic shape memory alloys, magnetic nanoparticles, phase transformations,		

**A.2. Education**

PhD	University	Year
Science (Physics)	Basque Country University	1995

**A.3. JCR articles, h Index, thesis supervised...**

**JCR Articles: 190    h Index: 28    Number of Sexenios: 5 (3/5/2022)**  
**Thesis supervised: 4        Times cited: 2.7k**

**Part B. CV SUMMARY** (max. 3500 characters, including spaces)

Dr. J.I. Perez-Landazábal is Professor in the Public University of Navarra. His main research interests is focused on the field of Materials Physics, analysis of their properties and microstructural and magnetic characterization. He has participated in the development of 34 research projects funded by regional, national and international entities, 7 of them as Principal Investigator. All the work done was reflected in 190 publications in the Science Citations Index - SCI and other 22 publications with evidence of demonstrable quality. It has also presented the work in more than 185 conference communications, mainly international. Participates in 2 patented inventions with copyright registration. He has been responsible for 7 small R&D contracts with technological centers. He has acted as referee for several international scientific journals, evaluation committees and in various international conferences organized periodically by scientific societies. 1<sup>st</sup> Prize in the SienceEkaitza awards (selected by Nobel prizes) promoted by the Navarra Government. (<http://www.sciencekaitza.com>). He has been involved in research management tasks:

- Deputy Director of the Department of Physics UPNa from 10/10/01 to 29/4/04 and from 17/4/2008 to 15/04/2012.
- Member of the Research Commission of the UPNa from May 2008 to May 2012
- Member of the board of FideNa (Research and Development Foundation Nanotechnology) from 11 November, 2011 until 19 April 2013.
- From December 17, 2014 to January 1, 2019, Director of the Institute for Advanced Materials (INAMAT) of UPNa (<http://www.unavarra.es/inamat>).
- 2015-2018, Director of the Aditech Corporation Chair (<http://www.unavarra.es/catedra-aditech>).

## Part C. RELEVANT MERITS

### C.1. 10 Last Relevant publications

1. Unzueta I; Sánchez-Alarcos V; Recarte V; Pérez-Landazabal, Zabala N; JI; García JA; Plazaola F.  
*Identification of a Ni-vacancy defect in Ni-Mn-Z (Z = Ga, Sn, In): An experimental and DFT positron-annihilation study*  
Physical Review B 99 (2019) 064108-1
2. I. Unzueta, D. Alonso de R-Lorente, E. Cesari, V. Sánchez-Alarcos, V. Recarte, J. I. Pérez-Landazábal, J. A. García and F. Plazaola  
*Experimental Observation of Vacancy-assisted Martensitic Transformation Shift in Ni-Fe-Ga Alloys*  
Physical Review Letters 122 (2019) 165701:1-7
3. J.I. Pérez-Landazabal, V. Recarte, V. Sánchez-Alarcos, M. Jiménez-Ruiz, E. Cesari  
*Outstanding role of the magnetic entropy in arrested austenite in an ordered Ni<sub>45</sub>Mn<sub>36.7</sub>In<sub>13.3</sub>Co<sub>5</sub> metamagnetic shape memory alloy*  
Scripta Materialia 168 (2019) 91-95
4. L. Cervera, J.I. Pérez-Landazábal, E. Garaio, M. Monteserín, S. Larumbe, F. Martín, C. Gómez-Polo  
*Fe-C nanoparticles obtained from thermal decomposition employing sugars as reducing agents*  
Journal of Alloys and Compounds 863 (2021) 158065
5. V. Sánchez-Alarcos, V. Recarte, D.L.R. Khanna, J. López-García, J.I. Pérez-Landazábal  
*Deformation induced martensite stabilization in Ni<sub>45</sub>Mn<sub>36.7</sub>In<sub>13.3</sub>Co<sub>5</sub> microparticles*  
Journal of Alloys and Compounds 870 (2021) 159536
6. Paulo La Roca, Javier López-García, Vicente Sánchez-Alarcos, Vicente Recarte, José Alberto Rodríguez-Velamazán, José Ignacio Pérez-Landazábal  
*Room temperature huge magnetocaloric properties in low hysteresis ordered Cu-doped Ni-Mn-In-Co alloys*  
Journal of Alloys and Compounds 922 (2022) 166143
7. Eneko Garaio, Paulo La Roca, Cristina Gómez-Polo, Vicente Sánchez-Alarcos, Vicente Recarte, José Ignacio Pérez-Landazábal  
*Martensitic transformation controlled by electromagnetic field: From experimental evidence to wireless actuator applications*  
Materials & Design 219 (2022) 110746
8. Galarreta-Rodriguez I.; Lopez-Ortega A.; Garayo E.; Beato-López J. J.; La Roca P.; Sanchez-Alarcos V.; Recarte V.; Gómez-Polo C.; Pérez-Landazábal J. I.  
*Magnetically activated 3D printable polylactic acid/polycaprolactone/magnetite composites for magnetic induction heating generation.*  
Advanced Composites and Hybrid Materials. 6 (2023) 1. Springer Nature
9. García L.; Garaio E.; López-Ortega A.; Galarreta-Rodriguez I.; Cervera-Gabalda L.; Cruz-Quesada G.; Cornejo A.; Garrido J. J.; Gómez-Polo C.; Pérez-Landazábal J. I.  
*Fe<sub>3</sub>O<sub>4</sub>-SiO<sub>2</sub> mesoporous core/shell nanoparticles for magnetic field-induced ibuprofen-controlled release.*  
Langmuir. 31(2023) 211
10. V. Sánchez-Alarcos, D. L. R. Khanna, P. La Roca, V. Recarte, F. D. Lambri, F. G. Bonifacich, O. A. Lambri, I. Royo-Silvestre, A. Urbina, J. I. Pérez-Landazábal  
*Polycaprolactone/MSMA composites for magnetic refrigeration applications*  
Polymer Composites. (2024)1.

## C.2. Research projects (PI)

1. Aleaciones con memoria de forma de Cu-Al-Ni elaboradas por pulvimetalurgia (MAT2000-1676-C02-02)

PI: J.I Pérez de Landazábal Berganzo  
Funding entity: Ministerio de Educación y Ciencia  
Duration: 28/12/2000 – 27/12/2003  
Funding received: 74.718 €

2. Efecto magnetocalórico en aleaciones con memoria de forma ferromagnéticas (Res. 228/2008-2305)

PI: J.I Pérez de Landazábal Berganzo  
Funding entity: Dept. de Educación - Gobierno de Navarra  
Duration: 01/07/2008 – 30/06/2010  
Funding received: 54.996 €

3. Nanopartículas Magnéticas multifuncionales para la detección y tratamiento de Biofilms (MNP Biofilms)

PI: J.I Pérez de Landazábal Berganzo  
Funding entity: Dpto. De Innovación, Empresa y Empleo - Gobierno de Navarra  
Duration: 01/05/2009 – 30/04/2012  
Funding received: 201.915 €

4. Aleaciones con memoria de forma metamagnéticas. Efectos magnetoestructurales en la transformación martensítica inducida por campo magnético (MAT2009 07928)

PI: J. I. Pérez de Landazábal Berganzo  
Funding entity: Ministerio de Ciencia e Innovación  
Duration: 01/01/2010 – 31/12/2012  
Funding received: 60.500 €

5. Propiedades multifuncionales y defectos en micro y nanopartículas de aleaciones con memoria de forma ferromagnéticas

PI: J. I. Pérez de Landazábal Berganzo  
Funding entity: Ministerio de Economía y Competitividad (MAT2015-65165-C2-1-R).  
Duration: 01/01/2016-30/09/2019  
Funding received: 133.100 Euros

6. Advanced Manufacturing of Electronics (PC017-018 AMELEC)

PI: J. I. Pérez de Landazábal Berganzo  
Funding entity: Gobierno de Navarra-Departamento de Desarrollo Económico  
Duration: 01/01/2020 - 30/11/2022  
Funding received: 211.888,44 €

7. Sustainable development of 3D functional materials for electromagnetic noise mitigation (PC003-004 3D-MAGNET)

PI: J. I. Pérez de Landazábal Berganzo  
Funding entity: Gobierno de Navarra-Departamento de Desarrollo Económico  
Duration: 01/12/2022 - 30/11/2024  
Funding received: 223.640,26 €

## C.3. Contracts

1. Several short projects with the Fundación Investigación y Desarrollo en Nanotecnología (FIDeNa). From 12/01/2011 to 25/01/2011, 05/04/2011 to 19/04/2011, 27/07/2011 to 24/08/2011, 09/11/2012 to 07/12/2012. (~1500 €) IP: Pérez de Landazábal Berganzo, José Ignacio

2. “Análisis nanoarcillas” with FUNDACIÓN CETENA (CEMITEC). From 06/11/2013 to 05/12/2013 (~100 €) IP: Pérez de Landazábal Berganzo, José Ignacio

3. “Medidas de Imanación a bajos y altos campos en el Magnetómetro SQUID” (O.T.R.I. 2022908108) with Centro Nacional Instituto Geológico y Minero de España (CN IGME-CSIC) from 09/06/2022 to 09/09/2022. PI: Pérez de Landazábal Berganzo, José Ignacio (1.981,98 €)

## C.4. Patents

1. Ferromagnetic shape-memory wires, production method thereof and use of the same.

Authors: Vázquez Villalabeitia, Manuel; Pérez de Landazabal Berganzo, José Ignacio; Recarte Callado, Vicente; Gómez Polo, Cristina; Sánchez Alarcos, Vicente; Badini Confalonieri, Giovanni

Priority Territory: Spain

Number of priority application: ES P200700545, Priority: 01/03/2007

Holders entities: Consejo Superior de Investigaciones Científicas - CSIC, Universidad Pública de Navarra

EXTENSIONS: Territory: Spain Date: 01/03/2007 Application Number: ES P200700545. Territory: Patent Co-operation Treaty Date:27/02/2008 Application Number: PCT/IB2008/051638

2. Dispositivo multifuncional basado en recubrimientos de óxidos cerámicos con simetría cilíndrica.

Authors: Gómez Polo, Cristina; Gil Bravo, Antonio; Korili Sophia; Pérez de Landazabal Berganzo, José Ignacio; De la Cruz Blas, Carlos Aristóteles; Olivera Cabo, Jesús; Armañanzas Soto, Javier; Mendizabal Pérez, Itziar

Priority Territory: Spain

Number of priority application: ES P201130262, Priority date: 28/02/2011

Holders entities: Universidad Pública de Navarra

EXTENSIONS:Territory:Spain. Date:28/02/2011 .Application Number: ES P201130262

## C.5 Institutional Responsibilities

1. Director of the Institute for Advanced Materials (INAMAT) of UPNa from December 17, 2014 to January 1, 2019 (<http://www.unavarra.es/inamat2/>)

2. Member of the Academic Committee of the Doctoral Program in Science and Industrial Technology from October 11 2013 to May 2015.

3. Deputy Director of the Physics Department from 01/10/10 to 04/29/04 and from 17/4/ 2008 to 15/4/2012

4. Member of the Research commission (UPNa) from May 21, 2008 to 2 July 2012.

5. Head of the research group Physical Properties and Materials Applications from 04/02/2004 until 22/2/2010.

6. Member of the board of FideNa (Foundation Nanotechnology Research and Development) from November 11, 2011 until April 19, 2013.

7. Director of the Aditech Corporation Chair from October 16, 2015 to 2018

## C.6 Scientific Awards

1<sup>st</sup> Prize in the SienceEkaitza awards (selected by Nobel prizes) promoted by the Navarra Government. (<http://www.sciencekaitza.com>)

## C.7 Evaluation processes

1. Participation in the evaluation process of the Committee of Energy Technology, Mechanics, Mining and Materials of the National Agency for Scientific and Technological Promotion in Argentina.

2. Participation in the evaluation process of the MANUNET European program.

3. Member of the Evaluation Committee Unibasq, Quality Agency of the Basque University System

4. Membership of the bank of experts of the State Investigation Agency (AEI). Ministry of Science and innovation. Evaluator in ANECA PPL candidates.

## C.8 Other activities

1. Editor Journal of Physics: conference series, Vol.663 (2015).

2. Member of the organizing Committee of the IV National Congress of mechanical properties of solids. Date: 29/6/1997-1/7/1994.

3. Member of the organizing Committee of the International Conference on Internal Friction and Ultrasonic Attenuation in Solids 13 (ICIFUAS 13). Date: 8-12/07/ 2002.

4. Member of the organizing Committee of the 2<sup>nd</sup> International Conference on Ferromagnetic shape memory alloys (ICFSMA 09). Date: 1-3/07/ 2009.

5. Co-Chairman of the VII Meeting of the SETN (Spanish Society of Neutron Techniques). Date: 22-25/06/ 2014.