

Part A. Personal Information

DATE	18 June 2018
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Surname(s)	SEGUÍ PALMER	
Forename	MARIA CONCEPCIÓN	
ID number	42991495X	
Sex	Female	
Age	58	
Researcher codes	WoS Researcher ID (*)	M-1315-2018
	SCOPUS Author ID(*)	
	Open Researcher and Contributor ID (ORCID)	

(*) At least one of these is mandatory

A.1. Current position

Post/ Professional Category	Full Professor (<i>Catedrática de Universidad</i>)	
UNESCO Code	331208	
Key Words		
Name of the University/Institution	UNIVERSITAT DE LES ILLES BALEARS	
	Department/Centre	Departament de Física
	Full Address	Ctra. de Valldemossa, km 7.5 07122 Palma de Mallorca, Spain
	Email Address	concepcio.segui@uib.es
	Phone Number	+ 34 971173224
Start date	03/01/2018	

A.2. Education (title, institution, date)

Year	University	Degree	Title
1982	Universitat de Barcelona	First degree	Degree in Physics
		<i>Masters (if appropriate)</i>	
1986	Universitat de les Illes Balears	PhD	PhD in Physics

A.3. Indicators of Quality in Scientific Production (See the instructions)

<p>Publications: 88 articles published in scientific journals, 64 in indexed journals 1st quartile (Q1): 47 articles</p> <p>Total number of citations: 1672 Average: 26 citations/article, 51 citations/year Average number of citations during the last five years: 103 citations/year</p> <p>h-index: 22</p> <p>Assessment of research activity: 5 periods of 6 years (“sexenios”) with positive assessment, from 1987 till 2016 uninterrupted. Next assessment will be passed on 2022.</p>

Part B. Free Summary of CV (Max. of 3.500 characters, including spaces)

My research activity has been carried out in the Materials Physics Group of the UIB since 1984. The main lines of research are phase transformations in solids, more specifically in alloys with conventional and magnetic shape memory. Until the mid-nineties, alloys based on Cu and Ni-Ti were basically studied, but since 1994 and nowadays the focus of interest has shifted towards ferromagnetic alloys with shape memory (such as Ni-Mn-Ga, Ni-Fe-Ga or Ni-Mn-In + Co). The most important contributions in this field are the study of intermartensitic transformations in Ni-Mn-Ga, effect of the atomic order, etc.

In the most recent years (since 2012 approximately) my research has focused on the study of the as-called metamagnetic alloys, Ni-Mn-Ga-X type (X = Co, Cu) that have magnetostructural coupling.

The global research activity has been carried out through participation in 23 research projects (1 as main researcher) with national, European or regional funding, and has resulted in 88 publications, of which 64 in JRC indexed journals and 37 of them in the first quartile. There are 10 articles with more than 50 citations 0 citations, of which we can mention: Phys. Rev. B 57 (1998) 2659-2662 with 208 citations; Acta Mat. 50 (2002) 53-60 with 162 citations; Acta Mat. 45 (1997) 999-1004 with 78 citations and J. Phys. : Cond. Matt 8 (1996) 6457-6463 with 82 citations. I am also author or co-author of 94 contributions in Conferences and Symposiums, 8 times as invited lecturer.

Additionally, I have acted as "Referee" on numerous occasions for outstanding journals such as Journal of Alloys and Compounds, Phil. Mag., J. Appl. Phys., Scripta Mat. or J. Phys.: Condensed Matter, among others.

Part C. Relevant accomplishments

C.1. Publications

C. Seguí, V.A. Chernenko, J. Pons, E. Cesari, V. Khovailo, T. Takagi.

"Low Temperature induced Intermartensitic Phase Transformations in Ni-Mn-Ga single crystal".

Acta Mater, vol. 53, no. 1; pp. 111-120 (2005).

C. Seguí, E. Cesari, J. Font, J. Muntasell, V.A. Chernenko.

"Martensite stabilization in a high temperature Ni-Mn-Ga alloy".

Scripta Mater, vol. 53, no. 3; pp. 315-319 (2005).

C. Seguí J. Pons and E. Cesari.

"Effect of atomic ordering on the phase transformations in Ni-Mn-Ga shape memory alloys".

Acta Mater, Vol. 55, no. 5, pp. 1649-1655 (2007).

J. Pons, E. Cesari, C. Seguí, F. Masdeu and R. Santamarta.

"Ferromagnetic shape memory alloys: Alternatives to Ni-Mn-Ga".

Mat. Sci. and Eng. A., no. 481, pp. 57-65 (2008).

C. Seguí, E. Cesari.

"Effect of ageing on the structural and magnetic transformations and the related entropy change in a Ni-Co-Mn-Ga ferromagnetic shape memory alloy".

Intermetallics 19; pp. 721 – 725 (2011).

C. Seguí, E. Cesari.

"Composition and atomic order effects on the structural and magnetic transformations in ferromagnetic Ni-Co-Mn-Ga shape memory alloys".

Journal of Applied Physics, Vol: 111 no. 4, p. 043914 (2012).

C. Seguí.

"Effects of the interplay between atomic and magnetic order on the properties of metamagnetic Ni-Co-Mn-Ga shape memory alloys".

Journal of Applied Physics, Vol: 115 no. 11, p. 113903 (2014).

C. Seguí, E. Cesari, P. Lázpita

“Magnetic properties of martensite in metamagnetic Ni-Co-Mn-Ga alloys”

Journal of Physics D-Applied Physics **49** (2016) pp. 165007

C.2. Research Projects and Grants

Title: Functional properties and non-equilibrium processes in shape memory alloys and related ferroic materials

Funding body: Ministerio de Economía y Competitividad (Spain)

Reference: MAT2014-56116-C4-1-R

Start and end dates: 01/2015-12/2018

Type of participation: Researcher

Title: Micro and nanoscale design of thermally actuating systems-MIDAS

Funding body: European Commission - Marie Curie Actions Call: FP7-PEOPLE-2013-IRSES

Reference: Grant Agreement Number 612585

Start and end dates: 01/01/2014 - 31/12/2017

Type of participation: Researcher

Amount of subsidy: 30.000 € UIB

Title: Entropy changes in ferromagnetic shape memory alloys in relation to their e/a ratio to optimize the magnetocaloric effect

Funding body: National Science Centre, prog. Harmonia-3 (Poland)

Reference: UMO-2012/06/M/ST8/00451

Start and end dates: 2013-2016

Type of participation: Researcher

Amount of subsidy: 30.000 € UIB

Title: Magneto-structural effects in magnetic shape memory materials with improved functional properties

Funding body: SDGPI – Ministerio Ciencia e Innovación

Reference: MAT2011-28217-C02-01 Proyecto en ejecución

Start and end dates: 01/01/2012 - 31/12/2014

Type of participation: Researcher

Amount of subsidy: 154.999,79 €

Title: Comportamiento magnetoelástico, microestructura y propiedades funcionales en aleaciones ferromagnéticas con memoria de forma

Funding body: SDGPI – Ministerio Ciencia e Innovación

Reference: MAT2008-01587

Start and end dates: 01/01/2009 - 31/12/2011

Type of participation: Researcher

Amount of subsidy: 145.200 €

C.3. Contracts

C.4. Patents and other IPR

C.5, C.6, C.7... Other

