Part A. Personal Information

DATE February 9, 2021

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 (Cat	tedrática de Universidad)	
UNESCO Code	331208		
Key Words			
Name of the	UNIVERSITAT DE LES ILLES BALEARS		
University/Institution	Department/Centre	Departament de Física	
	Full Address	Ctra. de Valldemossa, km 7.5 07122	
	Full Addless	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	First degree	Degree in Physics
	Barcelona		
		Masters (if appropriate)	
1986	Universitat de les Illes	PhD	PhD in Physics
	Balears		

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

Publications: 90 articles published in scientific journals, 66 in indexed journals 1rt quartile (Q1): 53 articles

Total number of citations: 1872 Average: 27 citations/article, 51 citations/year Average number of citations during the last five years: 103 citations/year

h-index: 22

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.



Before proceeding, please read carefully the instructions at the end of the document.

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 90 publications, of which 66 in JRC indexed journals and 53 of them in the first quartile. There are 10 articles with more than 50 citations, of which we can mention: Phys. Rev. B 57 (1998) 2659-2662 with 226 citations; Acta Mat. 50 (2002) 53-60 with 174 citations; Waste Management 24(2004) 899-909 with 164 citations; Acta Mat. 53 (2005) 111-120 with 93 citations and J. Phys .: Cond. Matt 8 (1996) 6457-6463 with 86 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, E. Cesari. "Efect 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

A. Kosogor, V.A. L'vov, P. Lázpita, C. Seguí, E. Cesari "MAgnetocaloric Effect caused by Paramagnetic Austenite-Ferromagnetic Martensite Phase Transformation" Metals, Vol: 19 no. 1, art. 11 (2019).

C. Seguí, J. Torrens-Serra, E. Cesari. "Optimizing the caloric properties of Cu-doped Ni-Mn-Ga alloys" Materials, Vol: 13 no. 2, art. 419 (2020).



Before proceeding, please read carefully the instructions at the end of the document.

C.2. Research Projects and Grants

Title: Next Generation Multifunctional Martensitic Materials For Energy And Actuation (Multimart) Funding body: Ministerio de Economía y Competitividad (Spain) *Reference:* RTI2018-094683-BC51 *Start and end dates:* 01/2019-12/2022 *Type of participation:* Researcher

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 Comnission - 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 \in 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 €

C.3. Contracts

C.4. Patents and other IPR

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



Short CV