Part A. PERSONAL INFORMATION

CV date	01-20-2023

First and Family name	ÁLVARO DE GUZMÁN, FERNÁNDEZ GONZÁLEZ		
Social Security, Passport, ID number		Age	[redacted]
Researcher codes	WoS Researcher ID (*)	G-1107-2012	
	SCOPUS Author ID (*)		
	Open Researcher and Contributor ID (ORCID) **	0000-0001-6655-1719	

A.1. Current position

Name of University/Institution	UNIVERSIDAD POLITÉCNICA DE MADRID		
Department	INGENIERÍA ELECTRÓNICA - INSTITUTO DE SISTEMAS OPTOELECTRÓNICOS Y MICROTECNOLOGÍA		
Address and Country	ETSI TELECOMUNICACION AVDA. COMPLUTENSE 30 28040-MADRID		
Phone number	910672118	E-mail	guzman@die.upm.es
Current position	Catedrático de Universidad	From	[redacted]
Key words	Optoelectronic devices, Electronic Technology		

A.2. Education

PhD	University	Year
Dr. Ingeniero de Telecomunicación	Universidad Politécnica de Madrid	

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

1. [redacted]
2. 4 PhD Thesis supervised, (last defended in May 2015).
3. 7 Ms. Thesis supervised (last defended in July 2021).
4. 92 papers indexed by JCR; 37 as first or second autor. 63 in Q1, 14 in Q2 and 6 in Q3. 487 citations (WOS). H index = **15**.
5. 3 book chapters
6. 88 international conferences. 10 invited talks.
7. PI of 16 projects (including **2 AFRL-USA awards**, 2 granted by Comunidad Autónoma de Madrid, 3 granted by CICYT, 1 PROFIT, 1 Acción Integrada with Germany, 1 private contract, and 5 contracts with the Ministry of Defence).
8. Collaborator in 24 projects (including **2 EU-ESPRIT**, 1 COST-Action, 1 Acción Integrada with Germany, 1 **Office of Naval Research Award**, 7 granted by CICYT, 3 granted by Comunidad Autónoma de Madrid, 1 COINCIDENTE and 7 contracts with the Ministry of Defence).

Part B. CV SUMMARY

Dr. Álvaro de Guzmán Fernández obtained his degree in Telecommunication Engineering in 1993 by the Universidad Politécnica de Madrid. In 1996 he started doing Research in the Departamento de Ingeniería Electrónica of UPM with a **FPU fellowship**. He received his PhD in 2000 by the same University. During his PhD, he became an specialist in the technique of Molecular Beam Epitaxy, and he carried out important developments for the improvement of quantum IR detectors for night vision and defense applications. Besides he contributed to the building of the **Instituto de Sistemas Optoelectrónicos y Microtecnología (ISOM).** After his graduation, he joined the **Centre de Recherche sur L'Hétéroepitaxie et ses Applications (CRHEA)** in Sophia-Antipolis (France) where he was working on the growth and characterization of dilute-nitride based semiconductor lasers. In 2001 he moved to **the Paul Drude Institut für Festkörperelektronik** in Berlin (Germany) to study structural and optical characteristics of semiconductor lasers by TEM and SEM. Prof. Guzman has been invited to stay in this institution 4 times, **for a total duration of 3 years**.

Along these stays he had the opportunity to study dilute nitride lasers and surface quantum dot sensors. The results of these works contributed to improve the quality of the devices, and to understand the relationship between the structural and the optical properties of the material. All these achievements have been widely appreciated and led to 25 JCR publications, 5 invited talks and 2 “best paper awards” in international conferences, 1 of them in the European MBE Workshop (**the most important workshop in this area within the EU**).

In 2003 he obtained a position of **Associate Professor (Profesor Titular de Universidad)** at the Departamento de Ingeniería Electrónica-UPM. During 14 years, he worked in the development of surface quantum dot sensors and high temperature IR detectors combining the growth by MBE with the electrical and optical characterization of the devices. The results in this area acquired important relevance, and yielded 2 publications in Q1 indexed reviews and 2 awards granted by the Air Force Research Laboratory (USA). In 2017, Professor Guzman moved to the Departamento de Ingeniería Eléctrica, Electrónica, de Computadores y de Sistemas (**Universidad de Oviedo),** where he performed research activities in high power devices for power supplies. In Sept. 2019 he obtained a **Full Professorship position (Catedrático de Universidad)** in the UPM. Currently he leads a research line focused on the growth by MBE and characterization of Quantum IR detectors and he is responsible for the Laboratory of Molecular Beam Epitaxy. He is author or co-author of 92 indexed publications, 10 invited talks and more than 80 contributions at prestigious international conferences. His h-index is 15. Professor A. Guzmán has supervised 4 PhD Thesis and 7 Ms. Thesis.

Part C. RELEVANT MERITS

C.1 Institutional responsibilities

1. Secretary of Instituto de Sistemas Optoelectrónicos y Microtecnología (ISOM) from January to November 2005.
2. Administrator of Instituto de Sistemas Optoelectrónicos y Microtecnología (ISOM) from January 2007 to January 2010.
3. Secretary of the Departamento de Ingeniería Electrónica (ETSI de Telecomunicación UPM) from November 2008 to February 2012.
4. Secretary of the Departamento de Ingeniería Electrónica (ETSI de Telecomunicación UPM) from February 2017 to August 2017.
5. Responsible of the Molecular Beam Epitaxial facility at the ISOM.

C.2 Reviewer

1. Member of the evaluation panel of "Programas de Ayudas a la Formación del Personal Investigador del Gobierno Vasco" 2005-2008.
2. Reviewer of the following JCR journals (more than 40 manuscripts reviewed):
   - Journal of Physics: Condensed Matter
   - Journal of Physics D: Applied Physics
   - Journal of Optics
   - Nanotechnology
   - Semiconductor Science and Technology
   - Solid State Electronics
   - Journal of Crystal Growth

C.3 Stays abroad:

1. May 2001: **Post-doc stay** “Centre de Recherche sur l’Hétéro-Epitaxie et ses Applications” (CRHEA), Sophia-Antipolis, (France), 4 months.
2. October 2001: **Post-doc stay** “Paul Drude Institut für Festkörperelektronik (PDI)”, Berlín (Germany). 2 months.
3. November 2005: **Invited stay**, “Paul Drude Institut für Festkörperelektronik (PDI)”, Berlín (Germany). 6 months.
4. October 2007: : **Invited stay**, “Paul Drude Institut für Festkörperelektronik (PDI)”, Berlín (Germany). 6 months.
5. March 2012: : **Invited stay**, “Paul Drude Institut für Festkörperelektronik (PDI)”, Berlín (Germany). 6 months.
6. January 2016: : **Invited stay**, “Paul Drude Institut für Festkörperelektronik (PDI)”, Berlín (Germany). 12 months.