CURRÍCULUM VÍTAE NORMALIZADO

Jorge Manuel García Martínez

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GOBIERNO DE ESPAÑA
MINISTERIO DE CIENCIA E INNOVACIÓN

FECYT INNOVACIÓN

Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

During my doctoral thesis I studied the effects of quantum confinement on the surface of noble metals. My interest in quantum confinement led me to work on self-assembling quantum dots (QDs) fabricated by molecular beam epitaxy (MBE), work that began during my post-doctoral fellowship at the University of California, Santa Barbara, USA.
I invented a method for the fabrication of self-assembled quantum rings (QRs) based on precise control of QD coating conditions. I have also been a pioneer and inventor of a method for tuning QD energy levels. My work contributed to establish a method to implement quantum dot band gap engineering (0D Band Gap Engineering). Technique used today in many laboratories for the equalization of the size of quantum dots.

At the IMM (currently IMN) I have carried out pioneering measurements of accumulated stress in III-V materials during the formation of InAs nanostructures (quantum dots, rings and threads). These results revealed the presence of “liquid” In during InAs/GaAs(001) growth. I have also contributed to explain the formation mechanisms of the quantum threads of InAs in InP(001). The threads exhibit an optical emission at room temperature at 1.55 microns. The possibility of using them as laser emitters for use in telecommunications was developed in the European NANOMAT project, of which I was IP.
In 2007 I set myself the challenge of making graphene by MBE. To do this, I began a two-year sabbatical stay with the help of Salvador de Madariaga at Bell Labs, USA with Prof. L.N. pfeiffer. It was necessary to design and build an MBE sytem from scratch. In collaboration with Prof. A. Pinczuk (Columbia University, NY), we have achieved the growth of high-quality graphene layers in extended area by MBE on hexagonal boron nitride. The high technological impact of this line of work is demonstrated by the patents issued.
Back at IMN, I have worked on the use of MBE growth technology for the hybrid integration of GaAs and graphene-based compound semiconductors. Gallium has been shown to have catalytic activity similar to other metals for graphene formation in the national project "Integration of graphene growth in compound semiconductor technology", MAT2015-67021-R.
I have developed and transferred technology to the International Iberian Nanotechnology Lab (INL) for the manufacture of CIGS thin-film solar cells, through the project "IMM-CSIC Collaboration with the International INL in the development of instrumentation for special coating processes on sensors" (AIC-B-2011-0806) of the National Plan for Scientific Research, Development and Technological Innovation.

After directing the IMN-CNM for 8 years, my scientific and technological objectives have diversified. I have developed, in collaboration with Dr. Sahba Mobini, devices for the growth of biological material by electrostimulation, based on our 2020 patent. I am developing high-efficiency systems for collecting photovoltaic solar energy for grazing angles of incidence of sun rays. As a result of these developments, Dr. José M. Ripalda and I have founded in 2020 a technology-based company (EBT) called FutureVoltaics S.L. that is currently going to carry

out a capital increase and that has already made its first sales. In addition, I am currently developing perfectly spherical gallium nanoparticles grown by MBE and their interaction with layers grown by vanadium oxide (VO2) sputtering, due to the high interest in their plasmonic properties.

General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

H-index is 43.

Total citations is >7660.
Average citations/year is 247.
Total number of publications in the first quartile (Q1) is 102.

Three doctoral theses directed

"Self-assembled nanostructures by InAs molecular beam epitaxy on GaAs(001) substrates: from dots to quantum rings" (2006),
Author: Daniel Granados Ruiz
Director: Jorge M. Garcia
Center: Autonomous University of Madrid

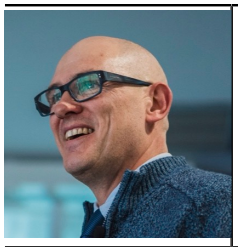
"Controlling the shape, size, and composition of III-V semiconductor nanostructures: rings and quantum dots" (2010)
Author: Alfonso González Taboada
Directors: José María Ripalda Cobián and Jorge M. García
Center: Autonomous University of Madrid

"Graphene synthesis on a surface by molecular beam epitaxy using a carbon-solid source" (2018)
Author: Irene Hernandez-Rodriguez
Directors: Javier L. Mendez and Jorge M. Garcia
Center: Autonomous University of Madrid

Sexenios, quinquenios y trienios

-1 "sexenio de transferencia" (2010-2018)
-5 "sexenios de investigación" (1991-1996, 1997-2002, 2003-2008, 2009-2014, 2015-2020).

-6 "quinquenios de investigación" (1991-1995, 1996-2000, 2001-2005, 2006-2010, 2011-2015, 2016-2020)
-8 "trienios"



Jorge Manuel García Martínez

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Name:	**Jorge Manuel**
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ScopusID:	**7406131310**
ResearcherID:	**B-5221-2008**
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Contact country:	**Spain**
Contact aut. region/reg.:	**Community of Madrid**
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Current professional situation

Employing entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Department: Fabricación y caracterización de nanoestructuras, Instituto de Microelectrónica de Madrid
Professional category: Investigador científico
Start date: 25/05/2007
Type of contract: Civil servant **Dedication regime:** Full time
Primary (UNESCO code): 221125 - Semiconductors
Secondary (UNESCO code): 221103 - Crystal Growth
Tertiary (UNESCO code): 221102 - Composites
Identify key words: Description; Quantum threads; Quantum points

Previous positions and activities

	Employing entity	Professional category	Start date
1	Consejo Superior de Investigaciones Científicas	Director del Instituto de Micro y Nanotecnología-CNM, CSIC	17/04/2017
2	Consejo Superior de Investigaciones Científicas	Director del Instituto de Micro y Nanotecnología-CNM, CSIC	18/04/2013
3	Consejo Superior de Investigaciones Científicas	Científico Titular	11/08/2000
4	Consejo Superior de Investigaciones Científicas	Científico Titular Interino	23/12/1999
5	Consejo Superior de Investigaciones Científicas	Investigador Contratado	01/01/1998

	Employing entity	Professional category	Start date
6	Consejo Superior de Investigaciones Científicas	Investigador Científico	25/05/2007

1 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Director del Instituto de Micro y Nanotecnología-CNM, CSIC
Start-End date: 17/04/2017 - 06/05/2021

2 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Director del Instituto de Micro y Nanotecnología-CNM, CSIC
Start-End date: 18/04/2013 - 16/04/2017

3 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Científico Titular
Start-End date: 11/08/2000 - 24/05/2007 **Duration:** 6 years - 10 months - 12 days

4 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Científico Titular Interino
Start-End date: 23/12/1999 - 10/08/2000 **Duration:** 8 months - 18 days

5 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Investigador Contratado
Start-End date: 01/01/1998 - 22/12/1999 **Duration:** 1 year - 11 months - 20 days

6 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Investigador Científico
Start date: 25/05/2007

Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

1 **University degree:** Master
Name of qualification: X Programa de Liderazgo para la Gestión Pública
Degree awarding entity: IESE Business School **Type of entity:** University Centres and Structures and Associated Bodies
Date of qualification: 01/07/2014

2 **University degree:** Higher degree
Name of qualification: Licenciado en Ciencias
Degree awarding entity: Universidad Autónoma de Madrid **Type of entity:** University
Date of qualification: 1990

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Ciencias Físicas
Degree awarding entity: Universidad Autónoma de Madrid **Type of entity:** University
Date of degree: 1995

Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

1 **Training title:** Programa de Aceleración Dinamiza 2020
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 15/07/2020 **Duration in hours:** 68 hours

2 **Type of training:** Course
Training title: Curso de Gestión Directiva en Organismos de I+D+i
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: FUNDACION GENERAL CSIC
End date: 15/03/2019 **Duration in hours:** 170 hours

3 **Type of training:** Course
Training title: GESTIÓN POSITIVA DE CONFLICTOS
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 18/10/2018 **Duration in hours:** 20 hours

4 **Type of training:** Course
Training title: ADOBE PHOTOSHOP AVANZADO 1ª EDICIÓN
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 27/04/2018 **Duration in hours:** 20 hours

5 **Type of training:** Course
Training title: FRANCES ON LINE
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 10/06/2016 **Duration in hours:** 40 hours

6 **Type of training:** Course
Training title: COACHING: UNA ESTRATEGIA DE DESARROLLO DE EQUIPOS
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 12/05/2016 **Duration in hours:** 20 hours

7 **Type of training:** Practical work
Training title: Introducción al Método GTD (Get Things Done)
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 28/05/2015 **Duration in hours:** 9 hours

8 **Training title:** Curso de formación directiva y gerencial
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 17/03/2015 **Duration in hours:** 60 hours

9 **Type of training:** Practical work
Training title: GESTIÓN EFICAZ DEL TIEMPO ON LINE
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 06/10/2014 **Duration in hours:** 30 hours

10 **Type of training:** Practical work
Training title: Machine Shop Training:Band saw, Lathe, Milling, etc..
City awarding entity: NY, NY, United States of America
Awarding entity: Columbia University, NY
End date: 03/02/2009 **Duration in hours:** 40 hours

11 **Type of training:** Practical work
Training title: SolidWorks 2008 Essentials
City awarding entity: Murray Hill, NJ, United States of America
Awarding entity: CIMQUEST CAD/CAM solutions **Type of entity:** Business

End date: 02/07/2008 **Duration in hours:** 24 hours

12 **Training title:** Preparación u Gestión de Acciones dentro del 6º Programa Marco de la IDT de la Unión Europea Módulo IV
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 14/04/2005 **Duration in hours:** 8 hours

13 **Training title:** Preparación u Gestión de Acciones dentro del 6º Programa Marco de la IDT de la Unión Europea Módulo III
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 13/04/2005 **Duration in hours:** 8 hours

14 **Training title:** Preparación u Gestión de Acciones dentro del 6º Programa Marco de la IDT de la Unión Europea Módulo II
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 12/04/2005 **Duration in hours:** 8 hours

15 **Training title:** Preparación u Gestión de Acciones dentro del 6º Programa Marco de la IDT de la Unión Europea Módulo I
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 11/04/2005 **Duration in hours:** 8 hours

16 **Training title:** Soldadura de aceros inoxidables y aluminios. Procesos de soldeo TIG-MIG-Electrodo Revestido
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 18/03/2005 **Duration in hours:** 40 hours

17 **Training title:** Gestión de Proyectos (1ª Edición), Programa de Formación
Awarding entity: Universidad Carlos III de Madrid **Type of entity:** University
End date: 12/01/2005 **Duration in hours:** 20 hours

18 **Training title:** GESTIÓN DE LA CIENCIA Y LA TECNOLOGÍA (6ª EDICIÓN), PROGRAMA DE FORMACIÓN
Awarding entity: Universidad Carlos III de Madrid **Type of entity:** University
End date: 17/06/2004 **Duration in hours:** 60 hours

19 **Type of training:** Practical work
Training title: Política de Seguridad de Redes
City awarding entity: Granada, Andalusia, Spain
Awarding entity: Catón Sistemas Alternativos, CIF B-18448258
End date: 03/10/2003 **Duration in hours:** 12 hours

20 **Type of training:** Practical work
Training title: Nivel Básico de Utilización del Torno, Fresa, Taladradora y otras Herramientas
City awarding entity: Madrid, Community of Madrid, Spain
Awarding entity: Gabinete de Formación del CSIC, Plan de Formación Permanente
End date: 10/05/2002 **Duration in hours:** 20 hours

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
French	A1	A1	A1	A1	A1
Russian	A1	A1	A1	A1	A1
English	C2	C2	C2	C2	C2

Teaching experience

General teaching experience

1 **Name of the course:** Preparación, Caracterización y Aplicaciones de Láminas Delgadas/Aplicaciones de las láminas delgadas en Microelectrónica
University degree: Curso de Alta Especialización del Consejo Superior de Investigaciones Científicas (CSIC)
Start date: 23/05/2022 **End date:** 03/06/2022
Type of hours/ ECTS credits: Credits
Hours/ECTS credits: 2
Entity: Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Faculty, institute or centre: CSIC

2 **Type of teaching:** Unofficial teaching
Name of the course: I Curso de Vacío ASEVA: "Materiales para aplicaciones de vacío"
Type of teaching: Virtual
Type of subject: Curso
University degree: I Curso de Vacío ASEVA: "Materiales para aplicaciones de vacío"
Start date: 08/11/2021 **End date:** 08/11/2021
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 1,5
Entity: ASOCIACIÓN ESPAÑOLA DEL VACÍO Y SUS APLICACIONES (ASEVA)
Subject language: Spanish

3 **Type of teaching:** Official teaching
Name of the course: Nanotecnología: luces y sombras del control de la materia a escala atómica
University degree: Curso Nanotecnología
Start date: 11/07/2016 **End date:** 11/07/2016
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 7,5
Entity: Universidad Internacional Menéndez Pelayo **Type of entity:** University

4 **University degree:** Graphene synthesis and properties
Start date: 23/04/2014 **End date:** 23/04/2014
Entity: Setcor

5 **Type of teaching:** Official teaching
Name of the course: Nanoestructuras de semiconductores III-V
Type of programme: Doctorate **Type of teaching:** In person theory

Type of subject: Doctorate
University degree: Doctorado
Course given: Nanoestructuras de semiconductores III-V
Frequency of the activity: 1
Start date: 2005
End date: 2006
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 6
Entity: Universidad Complutense de Madrid
Type of entity: University
Faculty, institute or centre: Facultad de Ciencias Físicas
Department: Departamento de Física de Materiales
City of entity: Madrid, Community of Madrid, Spain
Subject language: Spanish

6 **Name of the course:** Tecnologías de fabricación en microelectrónica
University degree: Programa de post-grado
Start date: 01/10/1998
End date: 01/12/1998
Entity: Programa FOCCIMAF'98

Experience supervising doctoral thesis and/or final year projects

1 **Project title:** Graphene Synthesis on a surface by Molecular Beam Epitaxy using a carbon-solid source
Co-director of thesis: Javier Méndez Pérez-Camarero; Jorge Manuel García Martínez
Entity: Consejo Superior de Investigaciones Científicas
Type of entity: State agency
Student: Irene Hernández Rodríguez
Date of reading: 02/04/2017

2 **Project title:** Growth of Graphene on h-BN via Molecular Beam Deposition
Type of project: Work leading to an ASD
Entity: Department: Applied Physics, Universidad de Columbia, NY.
City of entity: New York, United States of America
Student: Antonio Levi
Obtained qualification: A+
Date of reading: 06/08/2011

3 **Project title:** Control de la forma, tamaño y composición de nanoestructuras de semiconductores III-V: anillos y puntos cuánticos
Type of project: Doctoral thesis
Co-director of thesis: Jorge Manuel García Martínez; Jose María Ripalda Cobián
Entity: Universidad Autónoma de Madrid
Type of entity: University
City of entity: Madrid, Community of Madrid, Spain
Student: Alfonso González Taboada
Obtained qualification: Sobresaliente cum laude por unanimidad
Date of reading: 29/11/2010

4 **Project title:** Large area growth of few layers graphene via molecular beam deposition
Type of project: Work leading to an ASD
Entity: Universidad de Columbia, NY
Type of entity: University
City of entity: New York, United States of America
Student: Mason P Jiang
Date of reading: 06/08/2009

5 **Project title:** Nanoestructuras autoensambladas mediante epitaxia de haces moleculares de InAs sobre substratos de GaAs(001): De los puntos cuánticos a los anillos cuánticos
Type of project: Doctoral thesis
Entity: Universidad Autónoma de Madrid **Type of entity:** University
City of entity: Madrid, Community of Madrid, Spain
Student: Daniel Granados Ruiz
Obtained qualification: Sobresaliente cum Laude por unanimidad
Date of reading: 04/07/2006

6 **Project title:** ESPECTROSCOPÍA DE CAPACITANCIA VOLTAJE APLICADA AL ESTUDIO DE LOS NIVELES ENERGÉTICOS DE PUNTOS CUÁNTICOS DE InAs SOBRE GaAs (001) Y ANILLOS CUÁNTICOS DE In(Ga)As SOBRE GaAs (001)
Type of project: Work leading to an ASD
Entity: Universidad Autónoma de Madrid **Type of entity:** University
City of entity: Madrid, Community of Madrid, Spain
Student: Daniel Granados Ruiz
Date of reading: 14/07/2004

7 **Project title:** Electrical and optical properties of Quantum Dots and Quantum Volcanos
Type of project: Work leading to an ASD
Entity: Universidad Técnica de Eindhoven **Type of entity:** University
Student: Simon G.J Mathijssen
Date of reading: 05/06/2004

8 **Project title:** Quantum Dot Resonant tunneling Diodes
Type of project: Work leading to an ASD
Entity: Univesidad de California, Santa Barbara, CA, USA **Type of entity:** University
Student: Paul Molnar
Date of reading: 12/06/1997

Most relevant contributions of your teaching CV

1 **Description:** XXII Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 500€
End date: 18/11/2022

2 **Description:** XXI Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 600€
End date: 08/11/2021

3 **Description:** Conferencia Científica del CSIC dirigidas al sistema educativo de la Comunidad de Madrid (IES Zazuar): "Nanotecnología: Quantum revolution 2.0"
Identify key words: Phisics
City of activity: Madrid, Community of Madrid, Spain
Organising entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 04/06/2021

4 **Description:** XVIII Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 600€
End date: 12/11/2018

5 **Description:** Conferencia Científica del CSIC dirigidas al sistema educativo de la Comunidad de Madrid (IES Miguel Catalán): "Nanotecnología: Quantum revolution 2.0"
City of activity: Madrid, Community of Madrid, Spain
Organising entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
End date: 15/03/2018

6 **Description:** XVII Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 600€
End date: 13/11/2017

7 **Description:** XVI Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 600€
End date: 12/11/2016

8 **Description:** XV Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 300€
End date: 12/11/2015

9 **Description:** Programa de Enriquecimiento Educativo para Alumnos con Altas Capacidades. Profesor experto 6 h.
Identify key words: Nanomaterials
City of activity: Tres Cantos, Community of Madrid, Spain
Organising entity: Comunidad de Madrid **Type of entity:** Organismo
End date: 25/04/2015

10 **Description:** XIV Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 300€
End date: 12/11/2014

11 **Description:** XIII Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 300€
End date: 17/11/2013

12 **Description:** XII Semana de la Ciencia
Organising entity: Comunidad de Madrid **Type of entity:** 600€
End date: 18/10/2012

13 **Description:** VI Semana de la Ciencia y la Tecnología
Organising entity: Comunidad de Madrid **Type of entity:** 500€
End date: 18/10/2006

14 **Description:** V Semana de la Ciencia y la Tecnología
Organising entity: Comunidad de Madrid **Type of entity:** 400€
End date: 18/10/2005

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

1 **Name of the project:** Development of advanced technologies to boost photovoltaics: novel approaches for bifacial solar cells and GaAsGe alloys (PVBoster, PID2021-124193OB-C22)
Entity where project took place: Instituto de Micro y Nanotecnología-CNM, CSIC **Type of entity:** Public Research Body
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Ripalda Cobián IP
Nº of researchers: 4
Name of the programme: Ministerio de Ciencia e Innovación
Code according to the funding entity: PID2021-124193OB-C22
Start-End date: 01/01/2022 - 31/12/2026
Total amount: 121.726 €

2 **Name of the project:** High Performance Agrivoltaic Tecnology. (AgriVolts, PDC2022-133282-I00)
Entity where project took place: Instituto de Micro y Nanotecnología-CNM, CSIC
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Ripalda Cobián IP
Nº of researchers: 4
Name of the programme: Ministerio de Ciencia e Innovación
Code according to the funding entity: PDC2022-133282-I00
Start-End date: 01/01/2022 - 31/12/2024
Total amount: 149.500 €

3 **Name of the project:** Next generation solar bifacial photovoltaic technologies. (NextGeSolar, TED2021-130623B-I00)
Entity where project took place: Instituto de Micro y Nanotecnología-CNM, CSIC **Type of entity:** Public Research Body
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Ripalda Cobián IP
Nº of researchers: 4
Name of the programme: Ministerio de Ciencia e Innovación
Code according to the funding entity: TED2021-130623B-I00
Start-End date: 01/01/2022 - 31/12/2024
Total amount: 327.750 €

4 **Name of the project:** MULTIPLIER-Dispositivo fotovoltaico multi-terminal con colección lumínica global para maximizar el rendimiento energético
Entity where project took place: Instituto de Micro y Nanotecnología-CSIC
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Elisa Antolín Fernández; José María Ripalda Cobián
Nº of researchers: 6
Start-End date: 01/01/2019 - 31/12/2021

Total amount: 223.850 €

5 **Name of the project:** IGNITE-Integración del crecimiento de Grafeno en la tecNologÍa de semiconducTores compuEstos
Entity where project took place: Instituto de Nanotecnología-CSIC **Type of entity:** State agency
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Jorge Manuel García Martínez
Nº of researchers: 3
Start-End date: 01/01/2016 - 31/12/2019
Total amount: 121.000 €

6 **Name of the project:** Colaboración IMM.CSIC con INL en desarrollo de instrumentación para procesos de recubrimiento especiales en sensores
Type of project: Basic research (including archaeological digs, etc)
Degree of contribution: Coordinator of total project, network or consortium
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Jorge Manuel García Martínez; Fernando Briones Fernández-Pola
Nº of researchers: 4
Funding entity or bodies:
Ministerio de Economía y Hacienda **Type of entity:** Secretaría de Estado de Investigación, Desarrollo e Innovación
City funding entity: Madrid, Community of Madrid, Spain

Name of the programme: Internacionalización de la I+D
Start-End date: 10/08/2011 - 31/12/2016
Total amount: 1.000.000 €
Dedication regime: Full time

7 **Name of the project:** REOMS (Reactividad de Moléculas Orgánicas en Superficies)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Javier Mendez
Funding entity or bodies:
Ministerio de Ciencia e Innovación. Investigación **Type of entity:** MAT2011-26534
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2012 - 01/01/2015
Total amount: 394.999,66 €

8 **Name of the project:** Tecnologías clave para nanofotónica y nanoplasmónica basadas en nanoestructuras cuánticas epitaxiales
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Benito Alen Millan
Funding entity or bodies:
Ministerio de Ciencia e Innovación. Investigación **Type of entity:** 200950I154
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2012 - 31/12/2014
Total amount: 187.550 €

9 **Name of the project:** Tailoring electronic properties of graphene at the nanoscale
Entity where project took place: Columbia University, NY
City of entity: NY, United States of America
Name principal investigator (PI, Co-PI....): Aron Pinczuk
Funding entity or bodies:
US Office of Naval Research – Multi-University-Research-Initiative (MURI)

Start-End date: 01/10/2009 - 30/11/2012

10 **Name of the project:** QOIT (Quantum Optics Information Technologies)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Juergen Eshner; Fernando Briones; Jorge Manuel García Martínez
Funding entity or bodies:
Ministerio de Ciencia e Innovación. Investigación **Type of entity:** CSD2006-00019
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2006 - 31/12/2011

11 **Name of the project:** Columbia University Center for Studies of transport in Molecular Electronics
Entity where project took place: Columbia University, NY
City of entity: NY, United States of America
Name principal investigator (PI, Co-PI....): Aron Pinczuk
Funding entity or bodies:
US National Science Foundation – NSEC-Initiative

Start-End date: 01/10/2006 - 30/11/2011

12 **Name of the project:** NANOCOMIC (Nanoestructuras de Semiconductores como Componentes para la Información Cuántica)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Enrique Calleja; Luisa González
Funding entity or bodies:
Comunidad de Madrid **Type of entity:** S-0505/ESP/000200
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2006 - 31/12/2010

13 **Name of the project:** NUMANCIA (Nueva generación de materiales, dispositivos y estrategias fotovoltaicas para un mejor aprovechamiento de la energía solar)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Antonio Luque; Fernando Briones
Funding entity or bodies:
Comunidad de Madrid **Type of entity:** S-0505/ENE/000310
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2006 - 31/12/2010

14 **Name of the project:** Developing novel low dimensional electric & magnetic field effect devices from graphene & other single atomic layers
Entity where project took place: Columbia University, NY
City of entity: NY, United States of America
Name principal investigator (PI, Co-PI....): Aron Pinczuk
Funding entity or bodies:
US Office of Naval Research

Start-End date: 01/01/2006 - 30/11/2009

15 **Name of the project:** NANIC (Nanoestructuras de Semiconductores como Componentes para la Información Cuántica)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Luisa González
Funding entity or bodies:
Ministerio de Ciencia e Innovación. Investigación **Type of entity:** 2004-09109-C04-01
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2005 - 31/12/2008

16 **Name of the project:** NANOSELF-II (Nanoestructuras de semiconductores compuestos y su aplicación en dispositivos optoelectrónicos y fotónicos)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Yolanda González
Funding entity or bodies:
PGC del Plan Nacional de I+D+I

Start-End date: 31/12/2005 - 31/12/2008

17 **Name of the project:** Extensión de las longitudes de onda de aplicación de las nanoestructuras autoensambladas de In(Ga)As(Sb)/GaAs al rango de 1.3 – 1.5 micras
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Jose María Ripalda
Funding entity or bodies:
Comunidad autonoma de Madrid

Start-End date: 01/10/2005 - 01/10/2008

18 **Name of the project:** SANDiE (Self-Assembled semiconductor Nanostructures for new Devices in photonics and Electronics)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Marius Grundmann; Fernando Briones; Jorge M. Garcia Martínez
Funding entity or bodies:
EU, 6 programa Marco, NMP4-CT-2004-500101

Start-End date: 01/10/2004 - 01/10/2008

19 **Name of the project:** NANOALIN-2 (Nuevos tipos de nanoestructuras basadas en semiconductores III-V con alineamiento de bandas de tipo II)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Benito Alen
Funding entity or bodies:
Comunidad de Madrid **Type of entity:** 00560M089
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2005 - 31/12/2006

20 **Name of the project:** NANOSELF (Nanoestructuras de semiconductores compuestos y su aplicación en dispositivos optoelectrónicos y fotónicos)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Luisa González
Funding entity or bodies:
PGC del Plan Nacional de I+D+I, TIC2002-04096 **Type of entity:** State agency
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 31/12/2002 - 31/12/2005

21 **Name of the project:** NANOMAT (Acción especial de ayuda complementaria al proyecto Europeo “Self-Assembled Nanostructured Materials for Electronic and Optoelectronic Applications)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Jorge M. Garcia Martínez
Funding entity or bodies:
Ministerio de Ciencia y Tecnología, MAT2002-10465-E

Start-End date: 01/10/2001 - 01/10/2004
Total amount: 68.500 €

22 **Name of the project:** NANOMAT (Self-Assembled Nanostructured Materials for Electronic and Optoelectronic Applications)
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Victor V. Moshchalkov; Jorge M. Garcia Martínez
Funding entity or bodies:
Unión Europea, V programa Marco (Growth), G5RD-CT-2001-00545 **Type of entity:** State agency

Start-End date: 01/10/2001 - 01/10/2004
Total amount: 2.467.261 €

23 **Name of the project:** HETEROESTRUCTURAS HÍBRIDAS CON APLICACIONES EN MAGNETOELECTRÓNICA
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Alfonso Cebollada
Funding entity or bodies:

Ministerio de Ciencia y Tecnología, mat2000-1290-c03-02 **Type of entity:** State agency
City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2001 - 31/12/2003

24 **Name of the project:** LÁSERES SEMICONDUCTORES DE ANILLOS CUÁNTICOS AUTO-ENDSAMBLADOS PARA APLICACIONES EN TELECOMUNICACIONES
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Jorge M. Garcia Martínez
Funding entity or bodies:
Comunidad Autónoma de Madrid, 07T/0062/2000

Start-End date: 01/01/2001 - 31/12/2002
Total amount: 18.650,22 €

25 **Name of the project:** TECNOLOGÍA DE INTEGRACIÓN MONOLÍTICA DE DISPOSITIVOS OPTOELECTRÓNICOS EN CIRCUITOS INTEGRADOS VLSI DE GaAs
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Luisa González
Funding entity or bodies:
CICYT, TIC 1999-1035-C02-01

Start-End date: 31/12/1999 - 31/12/2002

26 **Name of the project:** FABRICATION OF ELEMENTARY MOLECULAR ELECTRONIC DEVICES
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Ricardo García
Funding entity or bodies:
UNIÓN EUROPEA (ESPRIT IV-22955) **Type of entity:** State agency

Start-End date: 01/01/1997 - 31/12/2000

27 **Name of the project:** RESONANT TUNNELING SELF ASSEMBLED QUANTUM DOT STRUCTURES FOR ULTRA HIGH DENSITY MEMORIES
Entity where project took place: Universidad de California Santa Barbara **Type of entity:** University
City of entity: Santa Barbara, CA, United States of America
Name principal investigator (PI, Co-PI....): Pierre M. Petroff
Funding entity or bodies:
NSF-STC

Start-End date: 01/01/1997 - 31/12/1999
Total amount: 300.000 €

28 **Name of the project:** DISEÑO Y FABRICACIÓN DE DIODOS LASER ESPECÍFICOS PARA SENSORES OPTICOS
Entity where project took place: Instituto de Microelectrónica de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Luisa González
Funding entity or bodies:

CICYT, TIC:96-1020-C02-01 **Type of entity:** State agency

Start-End date: 01/08/1997 - 31/07/1999

29 **Name of the project:** SELF ASSEMBLED SEMICONDUCTOR QUANTUM DOT ARRAYS AS DETECTORS AND IMAGING DEVICES IN THE 5-10 MICRON RANGE
Entity where project took place: Universidad de California Santa Barbara **Type of entity:** University
City of entity: Santa Barbara, CA, United States of America
Name principal investigator (PI, Co-PI....): Pierre M. Petroff
Funding entity or bodies:
ARO (U.S. Army Research Office)

Start-End date: 01/01/1996 - 31/12/1998

30 **Name of the project:** ESTRUCTURA, DINAMICA Y PROPIEDADES MAGNETICAS DURANTE EL CRECIMIENTO DE UNA MONOCAPA A LAS SUPERREDES
Entity where project took place: Universidad Autónoma de Madrid **Type of entity:** University
City of entity: Madrid, Community of Madrid, Spain
Funding entity or bodies:
DGICYT

Start-End date: 27/06/1994 - 26/06/1997

31 **Name of the project:** HETEROSTRUCTURAS OF SEMICONDUCTING SILICIDES ON SI. APPLICATIONS TO Si-COMPATIBLE OPTOELECTRONICS DEVICES
Entity where project took place: Universidad Autónoma de Madrid **Type of entity:** University
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): J. Derrian; Rodolfo Miranda
Funding entity or bodies:
Comisión de la Comunidad Europea

Start-End date: 01/01/1989 - 31/12/1992

32 **Name of the project:** Microscopio Electrónico de Barrido de Emisión de Campo (Fe-Sem)
Identify key words: Physics - Structure of materials; Fisica lm -- sistemas de bajas dimensiones y mesoscopicos [eng]; Physics - Instrumentation and data analysis
Identify key words: Physics - Structure of materials; Fisica lm -- sistemas de bajas dimensiones y mesoscopicos [eng]; Physics - Instrumentation and data analysis
Type of project: Basic research (including archaeological digs, etc) **Geographical area:** National
Degree of contribution: Coordinator of total project, network or consortium
Entity where project took place: Instituto de Micro y Nanotecnología-CSIC **Type of entity:** State agency
City of entity: Tres Cantos, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Jorge Manuel García Martínez
Nº of researchers: 32
Type of participation: Co-ordinator
Name of the programme: Infraestructuras Científicas y Técnicas y Equipamiento 2013
Code according to the funding entity: CSIC13-4E-1794
Start date: 01/01/2015 **Duration:** 5 years
Participating entity/entities: Instituto de Microelectrónica de Madrid

Total amount: 534.546 € **Sub-project amount:** 534.546 €
Percentage as grant: 75
Relevant results: Dotar al Instituto de Microelectrónica de Madrid de un Microscopio Electrónico de Barrido de Emisión de Campo
Dedication regime: Full time
Applicant's contribution: Coordinación del proyecto.

Results

Industrial and intellectual property

1 **Title registered industrial property:** ELECTRODOS NANOESTRUCTURADOS PARA LA ESTIMULACIÓN ELÉCTRICA DE CÉLULAS EN CULTIVO, DISPOSITIVOS, SISTEMAS Y PROCEDIMIENTOS ASOCIADOS
Inventors/authors/obtainers: Sahba Mobini; José Miguel García Martín; María Ujeé González Sagardoy; Marisol Martín González; Olga Caballero Calero; Jorge M García Martínez
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: P202030626
Country of inscription: Spain
Date of register: 23/06/2020

2 **Title registered industrial property:** SINGLE-AND BI-LAYER GRAPHENE GROWN ON SAPPHIRE BY MOLECULAR BEAM EPITAXY
Type of industrial property: Patent of invention
Inventors/authors/obtainers: Jorge M. García Martínez; Ulrich Wurstbauer; Aron Pinczuk
Entity holder of rights: Columbia University, NY, CSIC
Nº of application: 61/906767
Country of inscription: United States of America
Date of register: 20/11/2013
Spanish patent: Yes
International non-EU patent: Yes
Operating aut.region/region: Spain / United States of America

3 **Title registered industrial property:** System and methods using a glassy carbon heater
Inventors/authors/obtainers: Jorge M. García Martínez; Aron Pinczuk
Entity holder of rights: Columbia University, NY, CSIC
Nº of application: WO 2012/050964 A1
Country of inscription: United States of America
Date of register: 19/04/2012
Conferral date: 13/03/2013
Operating aut.region/region: Spain / United States of America

4 **Title registered industrial property:** Method of growing graphene nanocrystalline layers
Type of industrial property: Patent of invention
Inventors/authors/obtainers: Jorge M. García Martínez; Ulrich Wurstbauer; Aron Pinczuk
Entity holder of rights: Columbia University, NY, CSIC
Nº of application: WO/2013/003083-A1
Country of inscription: United States of America
Date of register: 03/01/2013
Spanish patent: Yes

International non-EU patent: Yes
Operating aut.region/region: Spain / United States of America

5 **Title registered industrial property:** DEVICES WITH GRAPHENE LAYERS
Inventors/authors/obtainers: Loren N. Pfeiffer; Jorge Manuel Garcia Martinez
Entity holder of rights: ALCATEL-LUCENT USA INC.
Nº of application: PCT/US2008/013796
Country of inscription: United States of America
Date of register: 17/12/2008
Conferral date: 07/09/2009

Scientific and technological activities

Scientific production

1 **H index:** 43
Date of application: 25/05/2023
Fuente de Indice H: WOS

2 **H index:** 47
Date of application: 26/11/2021
Fuente de Indice H: GOOGLE SCHOLAR

Publications, scientific and technical documents

1 David Fuster; Yolanda González; Luisa González; Javier Méndez; Fernando García; Jose L. Córdoba-Cabanillas; Marisa L. Dotor; Raquel Álvaro; Lorena Torné; Jorge M. García. Optimization of a carbon evaporator cell for MBE growth. Vacuum. 181, pp. 109653-1 - 109653-8. Elsevier, 24/07/2020.
DOI: 10.1016/j.vacuum.2020.109653
Type of production: Scientific paper **Format:** Journal
Relevant publication: Yes

2 Claudia Backes; Amr M. Abdelkader; Concepcion Alonso; Amandine Andrieux-Ledier; Raul Arenal; Jon Azpeitia; Nilanthy Balakrishnan; Luca Banszerus; Julien Barjon; Ruben Bartali; Sebastiano Bellani; Claire Berger; Reinhard Berger; M. M. Bernal Ortega; Carlo Bernard; Peter H. Beton; Andre Beyer; Alberto Bianco; Peter Boggild; Francesco Bonaccorso; Gabriela Borin Barin; Cristina Botas; Rebeca A. Bueno; Daniel Carriazo; Andres Castellanos-Gomez; Meganne Christian; Artur Ciesielski; Tymoteusz Ciuk; Matthew T. Cole; Jonathan Coleman; Camilla Coletti; Luigi Crema; Huanyao Cun; Daniela Dasler; Domenico De Fazio; Noel Diez; Simon Drieschner; Georg S. Duesberg; Roman Fasel; Xinliang Feng; Alberto Fina; Stiven Forti; Costas Galiotis; Giovanni Garberoglio; Jorge M. Garcia; Jose Antonio Garrido; Marco Gibertini; Armin Goelzhaeuser; Julio Gomez; Thomas Greber; Frank Hauke; Adrian Hemmi; Irene Hernandez-Rodriguez; Andreas Hirsch; Stephen A. Hodge; Yves Huttel; Peter U. Jepsen; Ignacio Jimenez; Ute Kaiser; Tommi Kaplas; HoKwon Kim; Andras Kis; Konstantinos Papagelis; Kostas Kostarelos; Aleksandra Krajewska; Kangho Lee; Changfeng Li; Harri Lipsanen; Andrea Liscio; Martin R. Lohe; Annick Loiseau; Lucia Lombardi; Maria Francisca Lopez; Oliver Martin; Cristina Martin; Lidia Martinez; Jose Angel Martin-Gago; Jose Ignacio Martinez; Nicola Marzari; Alvaro Mayoral; John McManus; Manuela Melucci; Javier Mendez; Cesar Merino; Pablo Merino; Andreas P. Meyer; Elisa Miniussi; Vaidotas Miseikis; Neeraj Mishra; Vittorio Morandi; Carmen Munuera; Roberto Munoz; Hugo Nolan; Luca Ortolani; Anna K. Ott; Irene Palacio; Vincenzo Palermo; John Parthenios; Iwona Pasternak; Amalia Patane; Maurizio Prato; Henri Prevost; Vladimir Prudkovskiy; Nicola Pugno; Teofilo Rojo; Antonio Rossi; Pascal Ruffieux; Paolo Samori; Leonard Schue; Eki Setijadi; Thomas Seyller; Giorgio Speranza; Christoph Stampfer; Ingrid Stenger; Wlodek Strupinski;

Yuri Svirko; Simone Taioli; Kenneth B. K. Teo; Matteo Testi; Flavia Tomarchio; Mauro Tortello; Emanuele Treossi; Andrey Turchanin; Ester Vazquez; Elvira Villaro; Patrick R. Whelan; Zhenyuan Xia; Rositza Yakimova; Sheng Yang; G. Reza Yazdi; Chanyoung Yim; Duhee Yoon; Xianghui Zhang; Xiaodong Zhuang; Luigi Colombo; Andrea C. Ferrari; Mar Garcia-Hernandez. Production and processing of graphene and related materials. 2D MATERIALS. 7 - 2, 04/2020. ISSN 2053-1583

Type of production: Scientific paper **Format:** Journal

Relevant publication: Yes

3 D. Fuster; P. Anacleto; J. Virtuoso; M. Zutter; D. Brito; M. Alves; L. Aparicio; D. Fuertes Marrón; F. Briones; S. Sadewasser; J.M. García. System for manufacturing complete Cu(In,Ga)Se2 solar cells in situ under vacuum. Solar Energy. 198, pp. 490 - 498. Elsevier, 01/03/2020.

DOI: 10.1016/j.solener.2020.01.073

Type of production: Scientific paper **Format:** Journal

Relevant publication: Yes

4 Marco Zutter; Jose Virtuoso; Pedro Anacleto; Liam Yasin; Marina Alves; Miguel Madeira; Oleksandr Bondarchuk; Saibal Mitra; David Fuster Signes; Jorge M. Garcia; Fernando Briones; Rolf Waechter; Oliver Kiowski; Dimitrios Hariskos; Diego Colombara; Sascha Sadewasser. Giant V-oc Boost of Low-Temperature Annealed Cu(In,Ga)Se-2 with Sputtered Zn(O,S) Buffers. PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS. 13 - 9, WILEY-V C H VERLAG GMBH, 09/2019. ISSN 1862-6254

Type of production: Scientific paper **Format:** Journal

Relevant publication: Yes

5 Annette S. Plaut; Ulrich Wurstbauer; Sheng Wang; Antonio L. Levy; Lara Fernandes dos Santos; Lei Wang; Loren N. Pfeiffer; Kenji Watanabe; Takashi Taniguchi; Cory R. Dean; James Hone; Aron Pinczuk; Jorge M. Garcia. Exceptionally large migration length of carbon and topographically-facilitated self-limiting molecular beam epitaxial growth of graphene on hexagonal boron nitride. CARBON. 114, pp. 579 - 584. 04/2017. ISSN 0008-6223

Type of production: Scientific paper **Format:** Journal

Relevant publication: Yes

6 Jorge M. Garcia; Ulrich Wurstbauer; Antonio Levy; Loren N. Pfeiffer; Aron Pinczuk; Annette S. Plaut; Lei Wang; Cory R. Dean; Roberto Buizza; Arend M. Van Der Zande; James Hone; Kenji Watanabe; Takashi Taniguchi. Graphene growth on h-BN by molecular beam epitaxy. Solid State Communications. 152 - 12, pp. 975 - 978. 2012.

Type of production: Scientific paper **Format:** Journal

Source of citations: WOS **Citations:** 30

Relevant publication: Yes

7 U. Wurstbauer; T. Schiros; C. Jaye; A. S. Plaut; R. He; A. Rigosi; C. Gutierrez; D. Fischer; L. N. Pfeiffer; A. N. Pasupathy; A. Pinczuk; J. M. Garcia. Molecular beam growth of graphene nanocrystals on dielectric substrates. Carbon. 50 - 13, pp. 4822 - 4829. 2012.

Type of production: Scientific paper **Format:** Journal

Source of citations: WOS **Citations:** 8

Relevant publication: Yes

8 J. M. Garcia; R. He; M. P. Jiang; P. Kim; L. N. Pfeiffer; A. Pinczuk. Multi layer graphene grown by precipitation upon cooling of nickel on diamond. Carbon. 49 - 3, pp. 1006 - 1012. 2011.

Type of production: Scientific paper **Format:** Journal

Source of citations: WOS **Citations:** 12

Relevant publication: Yes

9 E. Gallardo; L. J. Martinez; A. K. Nowak; D. Sarkar; H. P. van der Meulen; J. M. Calleja; C. Tejedor; I. Prieto; D. Granados; A. G. Taboada; J. M. Garcia; P. A. Postigo. Optical coupling of two distant InAs/GaAs quantum dots by a photonic-crystal microcavity. Physical Review B. 81 - 19, pp. 4 - 4. 2010.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 23

Relevant publication: Yes

10 Najm Kleemans; J. H. Blokland; A. G. Taboada; H. C. M. van Genuchten; M. Bozkurt; V. M. Fomin; V. N. Gladilin; D. Granados; J. M. Garcia; P. C. M. Christianen; J. C. Maan; J. T. Devreese; P. M. Koenraad. Excitonic behavior in self-assembled InAs/GaAs quantum rings in high magnetic fields. Physical Review B. 80 - 15, 2009.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 17

Relevant publication: Yes

11 Najm Kleemans; I. M. A. Bominaar-Silkens; V. M. Fomin; V. N. Gladilin; D. Granados; A. G. Taboada; J. M. Garcia; P. Offermans; U. Zeitler; P. C. M. Christianen; J. C. Maan; J. T. Devreese; P. M. Koenraad. Oscillatory persistent currents in self-assembled quantum rings. Physical Review Letters. 99, 2007.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 109

Relevant publication: Yes

12 D. Granados; J. M. Garcia. In(Ga)As self-assembled quantum ring formation by molecular beam epitaxy. Applied Physics Letters. 82 - 15, pp. 2401 - 2403. 2003.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 161

Relevant publication: Yes

13 J. M. Garcia; L. Gonzalez; M. U. Gonzalez; J. P. Silveira; Y. Gonzalez; F. Briones. InAs/InP(001) quantum wire formation due to anisotropic stress relaxation: in situ stress measurements. Journal of Crystal Growth. 227, pp. 975 - 979. 2001.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 64

Relevant publication: Yes

14 L. Gonzalez; J. M. Garcia; R. Garcia; F. Briones; J. Martinez-Pastor; C. Ballesteros. Influence of buffer-layer surface morphology on the self-organized growth of InAs on InP(001) nanostructures. Applied Physics Letters. 76 - 9, pp. 1104 - 1106. 2000.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 119

Relevant publication: Yes

15 R. J. Warburton; C. Schaflein; D. Haft; F. Bickel; A. Lorke; K. Karrai; J. M. Garcia; W. Schoenfeld; P. M. Petroff. Optical emission from a charge-tunable quantum ring. Nature. 405 - 6789, pp. 926 - 929. 2000.

Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 648

Relevant publication: Yes

16 A. Lorke; R. J. Luyken; A. O. Govorov; J. P. Kotthaus; J. M. Garcia; P. M. Petroff. Spectroscopy of nanoscopic semiconductor rings. Physical Review Letters. 84 - 10, pp. 2223 - 2226. 2000.
Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 607

Relevant publication: Yes

17 J. M. Garcia; J. P. Silveira; F. Briones. Strain relaxation and segregation effects during self-assembled InAs quantum dots formation on GaAs(001). Applied Physics Letters. 77 - 3, pp. 409 - 411. 2000.
Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 86

Relevant publication: Yes

18 J. M. Garcia; T. Mankad; P. O. Holtz; P. J. Wellman; P. M. Petroff. Electronic states tuning of InAs self-assembled quantum dots. Applied Physics Letters. 72 - 24, pp. 3172 - 3174. 1998.
Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 127

Relevant publication: Yes

19 J. M. Garcia; G. MedeirosRibeiro; K. Schmidt; T. Ngo; J. L. Feng; A. Lorke; J. Kotthaus; P. M. Petroff. Intermixing and shape changes during the formation of InAs self-assembled quantum dots. Applied Physics Letters. 71 - 14, pp. 2014 - 2016. 1997.
Type of production: Scientific paper **Format:** Journal
Source of citations: WOS **Citations:** 453

Relevant publication: Yes

20 Jorge Manuel García Martínez; Benito Alen; Juan Pedro Silveira; Daniel Granados. 0D Band Gap Engineering by MBE Quantum Rings: Fabrication and optical properties. Physics of Quantum Rings. Springer, Fomin, Vladimir (Ed.), 31/08/2013. ISBN 978-3-642-39196-5
Type of production: Scientific book or monograph **Format:** Book
Corresponding author: Yes
Relevant publication: Yes

21 Chayma Nefzi; Mehdi Souli; J. L. Costa-Kramer; Jorge M. Garcia; Najoua Kamoun-Turki. Growth of the next generation promising Cu-2 Fe1-xCoxSnS4 thin films and efficient p-CCTS/n-In2S3/n-SnO2F heterojunction for optoelectronic applications. MATERIALS RESEARCH BULLETIN. 133, pp. 1873 - 4227. PERGAMON-ELSEVIER SCIENCE LTD, 01/2021. ISSN 0025-5408
Type of production: Scientific paper **Format:** Journal

22 Chayma Nefzi; Mehdi Souli; M. {Luisa Dotor Castilla}; Jorge M. García; Najoua Kamoun-Turki. CFTS-3/In2S3/SnO2:F heterojunction structure as eco-friendly photocatalytic candidate for removing organic pollutants. Arabian Journal of Chemistry. 13 - 8, pp. 6366 - 6378. 2020. Available on-line at: <https://www.sciencedirect.com/science/article/pii/S1878535220301921>. ISSN 1878-5352
Type of production: Scientific paper **Format:** Journal

23 Rihab Ben Ayed; Mejda Ajili; Jorge M. Garcia; Aicha Ziouche; Jose Luis Costa Kramer; Najoua Kamoun Turki. First principal investigation of structural, morphological, optoelectronic and magnetic characteristics of sprayed Zn: Fe2O3 thin films. Optik. 219, pp. 165303 - 165303. 2020. Available on-line at: <https://www.sciencedirect.com/science/article/pii/S0030402620311396>. ISSN 0030-4026
Type of production: Scientific paper **Format:** Journal

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Type of production: Book chapter **Format:** Book

Works submitted to national or international conferences

1 **Title of the work:** Nanostructures for Energy Photovoltaics Solar Cells
Name of the conference: AGYA International Workshop “Advanced Applications of Emergent Materials”
Corresponding author: Yes
City of event: Rabat, Morocco
Date of event: 03/12/2019
End date: 07/12/2019
Organising entity: Arab-German Young Academy of Sciences and Humanities
City organizing entity: Berlin, Germany
Available on-line at: <http://www.agya.info/fileadmin/user_upload/Upcoming_Events/2019/Advanced_Applications_27_11_2019.pdf>.

2 **Title of the work:** Development of a Sputtering System for in-situ fabrication of Cu(in,Ga)Se2 thin-film solar cells: STAR
Name of the conference: Iberian Vacuum Conference, RIVA-X
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Bilbao, Basque Country, Spain
Date of event: 03/10/2017
End date: 05/10/2017
Organising entity: ASEVA **Type of entity:** Associations and Groups
Jorge M García Martínez; David Fuster; David Fuertes Marrón; Sascha Sadewasser; Fernando Briones Pola.

3 **Title of the work:** Carbon evaporator for Molecular Beam Epitaxy graphene growth
Name of the conference: Iberian Vacuum Conference, RIVA-X
Geographical area: European Union
Type of participation: 'Participatory - poster
Corresponding author: Yes
City of event: Bilbao, Basque Country, Spain
Date of event: 03/10/2017
End date: 05/10/2017
Organising entity: ASEVA **Type of entity:** Associations and Groups
Jorge M García Martínez; Irene Hernández Rodríguez; Jose Angel Martín Gago; Javier Mendez.

4 **Title of the work:** New Strategy for Graphene Growth: a MBE Carbon-source
Name of the conference: Iberian Vacuum Conference, RIVA-X
Geographical area: European Union
Type of participation: Participatory - oral communication
Corresponding author: No
City of event: Bilbao, Basque Country, Spain
Date of event: 03/10/2017
End date: 05/10/2017
Organising entity: ASEVA **Type of entity:** Associations and Groups
Irene Hernández Rodríguez; Jorge M García Martínez; Jose Angel Martín Gago; Javier Mendez.

5 **Title of the work:** Nanostructures for energy harvesting: solar cells and thermoelectricity
Name of the conference: SOLAR ENERGY MATERIALS AND APPLICATIONS
Type of participation: Participatory - invited/keynote talk
Corresponding author: Yes
City of event: Hammamet, Tunisia
Date of event: 05/05/2017
End date: 08/05/2017
Organising entity: ANSOLE

6 **Title of the work:** Epitaxial CuInSe2 thin films grown by molecular beam epitaxy and migration enhanced epitaxy
Name of the conference: European Materials Research Society (EMRS) spring meeting
Type of event: Conference
Corresponding author: No
City of event: Lille, France
Date of event: 02/05/2016
End date: 06/05/2016
Organising entity: EMRS
Kamal Abderrafi; R R-Andrade; N Nicoara; H Limborço; J.C. Gonzalez; P.M.P. Salomé; F. Briones; J.M. Garcia; S. Sadewasser.

7 **Title of the work:** MBE-grown nanostructures, thermoelectric nanomaterials and nanomechanical systems
Name of the conference: 2nd World Congress and Expo on Nanotechnology and Materials Science
Corresponding author: Yes
City of event: Dubai, United Arab Emirates
Date of event: 04/04/2016
End date: 06/04/2016
Organising entity: Scientific Future Group
Jorge M. Garcia.

8 **Title of the work:** MBE growth of Quantum nanostructures for optoelectronics
Name of the conference: Workshop on Frontier Photonic and Electronic Materials and Devices -2015 German-Japanese-Spanish Joint Workshop
Type of event: Conference **Geographical area:** Internacional
Type of participation: Participatory - invited/keynote talk **Reasons for participation:** Upon invitation
Corresponding author: No
City of event: Kyoto, Japan
Date of event: 11/07/2015
End date: 14/07/2015
Organising entity: The 162nd Committee on Wide Bandgap Semiconductor Photonic and Electronic Devices, Japan Society for the Promotion of Science (JSPS) **Type of entity:** Public Research Body
City organizing entity: Kyoto, Japan
Jorge M. Garcia; Sheng Wang; Annette Plaut; Ulrich Wurstbauer; Aron Pinczuk; Jose M. Ripalda; Daniel Granados; Benito Alen; Yolanda González; Luisa González. Available on-line at: <http://jsps162.jpn.org/gjs.html>.

9 **Title of the work:** MBE growth of Quantum nanostructures for optoelectronics
Name of the conference: NANOTECH MEET Tunisia 2014 joint international conferences
Type of event: Conference **Geographical area:** Internacional
Type of participation: Participatory - invited/keynote talk **Reasons for participation:** Upon invitation
City of event: Hammamet, Tunisia
Date of event: 24/04/2014
End date: 26/04/2014
Organising entity: SETCOR, http://www.setcor.org
Jorge M. Garcia; Jose M. Ripalda; Daniel Granados; Benito Alen; Yolanda González; Luisa González; Sheng Wang; Annette Plaut; Ulrich Wurstbauer; Aron Pinczuk.

10 **Title of the work:** Graphene growth on Pt(111) and Au(111) using a MBE solid carbon source
Name of the conference: GrapEsp – A European Conference/Workshop on the Synthesis, Characterization and Applications of Graphene.
City of event: Lanzarote, Canary Islands, Spain
Date of event: 18/02/2014
End date: 21/02/2014
Organising entity: Graphene Flagship EU
Irene Hernández-Rodríguez; J.M. García; M.F. López; J.A. Martín-Gago; P.L. de Andrés; J. Méndez.

11 **Title of the work:** Graphene growth on h-BN by Van der Waals MBE
Name of the conference: PDI Topical Workshop on MBE-Grown Graphene
Type of participation: Participatory - oral communication **Reasons for participation:** Upon invitation
City of event: Berlin, Germany
Date of event: 19/11/2013
End date: 20/11/2013
Organising entity: Paul-Drude-Institut für Festkörperelektronik Leibniz-Institut im Forschungsverbund Berlin
Jorge M Garcia,; Ulrich Wurstbauer; Sheng Wang; Lara Fernandes dos Santos; Lei Wang; Antonio Levy; K. Watanabe; T. Taniguchi,; Cory R. Dean; Loren N. Pfeiffer; James Hone; Aron Pinczuk.

12 **Title of the work:** Graphene growth on h-BN by molecular beam epitaxy
Name of the conference: 17th European Molecular Beam Epitaxy Workshop
Type of participation: Participatory - oral communication
City of event: Levi, Finland
Date of event: 10/03/2013
End date: 13/03/2013
Organising entity: Tampere University of technology **Type of entity:** University
City organizing entity: Tampere, Finland
Jorge M. Garcia; Ulrich Wurstbauer; Sheng Wang; Lara Fernandes dos Santos; Lei Wang; Antonio Levy; Jungsik Park; Cory R. Dean; Loren N. Pfeiffer; James Hone; Aron Pinczuk. "Graphene growth on h-BN by molecular beam epitaxy".

13 **Title of the work:** Molecular Beam Epitaxy of graphene nanocrystals
Name of the conference: APS March Meeting 2012
Type of participation: Participatory - oral communication
City of event: Boston, United States of America
Date of event: 27/02/2012
End date: 02/03/2012
Organising entity: APS
Jorge M. Garcia; Ulrich Wurstbauer; Rui He; Albert Rigosi; Theanne Schiros; Annette Plaut; Loren N. Pfeiffer; Philip Kim; Abhay Pasupathy; Aron Pinczuk. "Molecular Beam Epitaxy of graphene nanocrystals".

14 **Title of the work:** Ultra Thin Carbon Molecular Beam Epitaxy on Dielectric Substrates
Name of the conference: Imaginenano, Graphene 2011
Type of participation: Participatory - oral communication
City of event: Bilbao, Basque Country, Spain
Date of event: 11/04/2011
End date: 14/04/2011
Organising entity: FUNDACION PHANTOMS
J. M. García; U. Wurstbauer; R. He; A. Rigosi; T. Schiros; A. S. Plaut; P. Kim; L. N. Pfeiffer; A. Pasupathy; A. Pinczuk.

15 **Title of the work:** Graphitic carbon molecular beam epitaxy on dielectric substrates
Name of the conference: APS March Meeting 2011
Reasons for participation: Review before acceptance
City of event: Dallas, United States of America
Date of event: 21/03/2011
End date: 21/03/2011
Organising entity: APS
Ulrich Wurstbauer; Rui He; Albert Rigosi; Theanne Schiros; Annette Plaut; Loren N. Pfeiffer; Philip Kim; Abhay Pasupathy; Aron Pinczuk; Jorge M. Garcia. "Graphitic carbon molecular beam epitaxy on dielectric substrates".

16 **Title of the work:** Strain Induced segregation in III-V nanostructures growth.
Name of the conference: Growth and Fundamental Properties of Semiconductor Nanostructures
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Bonassola, Italy
Date of event: 17/09/2006
End date: 22/09/2006
Jorge M García; Daniel Granados; A.G. Taboada; J.P. Silveira; F. Briones.

17 **Title of the work:** Electro-optical characterization of self-assembled InAs/GaAs Quantum Rings embedded in p-i-n and Schottky diodes.
Name of the conference: IV Reunión Nacional de Física del Estado Sólido (GEFES)
City of event: Alicante, Valencian Community, Spain
Date of event: 2006
A.G. Taboada; F. Suárez; D. Granados; B. Alén; M.L. Dotor; J.M. García.

18 **Title of the work:** Electro-optical states characterization of self-assembled InAs/GaAs Quantum Rings.
Name of the conference: 28th International Conference on the Physics of Semiconductors (ICPS-28)
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 2006
Organising entity: International Union of Pure and Applied Physics (IUPAP)
Alfonso G Taboada; Ferrán Suárez; Daniel Granados; Benito Alén; María L Dotor; Jorge M García; Tom J Badckoc; David J Mowbray; Kriss M Groom.

19 **Title of the work:** Fabrication and characterization of Quantum Rings
Name of the conference: Sixth International Workshop on Epitaxial Semiconductors on Patterned Substrates and Novel Index Surfaces (ESPS-NIS)
Type of participation: Participatory - invited/keynote talk
City of event: Nottingham, United Kingdom
Date of event: 2006
Organising entity: Universidad de Nottingham
Jorge M. García; Daniel Granados.

20 **Title of the work:** InGaAsSb self assembled quantum dots epitaxially grown on GaAs(001)
Name of the conference: IV Reunión Nacional de Física del Estado Sólido (GEFES)
City of event: Alicante, Valencian Community, Spain
Date of event: 2006
J. M. Ripalda; D. Granados; Y. González; J. M. García; M. Sánchez; S.I. Molina.

21 **Title of the work:** Morphology, spatial distribution and strain field in InAs/GaAs(001) stacked quantum rings structure.
Name of the conference: The 16th International Microscopy Congress
Type of participation: 'Participatory - poster
City of event: Sapporo, Japan
Date of event: 2006
T. T. Ben; A. M. Sánchez; P. Galindo; A.G. Taboada; D. Granados; J. M. García; S I. Molina.

22 **Title of the work:** Observation of modulation of PL intensity in self assembled quantum rings under strong pulsed magnetic fields.
Name of the conference: 28th International Conference on the Physics of Semiconductors (ICPS-28)
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 2006
Organising entity: International Union of Pure and Applied Physics (IUPAP)
Jorge M. Garcia; Daniel Granados; Alfonso G. Taboada; Manus Hayne.

23 **Title of the work:** Oscillatory persistent currents in nano-volcanoes.
Name of the conference: 28th International Conference on the Physics of Semiconductors (ICPS-28)
Type of participation: Participatory - oral communication
City of event: Viena, Austria
Date of event: 2006
Organising entity: International Union of Pure and Applied Physics (IUPAP)
N.A.J.M. Kleemans; I.M.A. Bominaar-Silkens; V.M. Fomin; V.N. Gladilin; D. Granados; A.G. Taboada; J.M. García; P. Offermans; U. Zeitler; P.C.M. Christianen; J.C. Maan; J.T. Devreese; J.H. Wolter; P.M. Koenraad.

24 **Title of the work:** Capacitance Spectroscopy of Self-Assembled InGaAs Quantum Rings
Name of the conference: 13th European Molecular Beam Epitaxy Workshop
Type of participation: Participatory - oral communication
City of event: Grindelwald, Suiza, Switzerland
Date of event: 2005
Daniel Granados; Jorge M. García.

25 **Title of the work:** Energy level tuning of Self-Assembled Quantum Dots and Quantum Rings
Name of the conference: SPIE - Microtechnologies for the New Millenniu
Type of participation: Participatory - oral communication
City of event: Sevilla, Spain
Date of event: 2005
Daniel Granados; Jorge M. García.

26 **Title of the work:** Fabrication and characterization of Quantum Rings
Name of the conference: Characterization and Modelling of Self-assembled semiconductors structures
Type of participation: 'Participatory - poster **Reasons for participation:** Upon invitation
City of event: Eindhoven, Holland
Date of event: 2005
Daniel Granados; Jorge M. García.

27 **Title of the work:** Influence of the spacer layer on InAs/GaAs(001) stacked quantum rings structures
Name of the conference: Characterization and Modelling of Self-assembled semiconductors structures
Type of participation: 'Participatory - poster
City of event: Eindhoven, Holland
Date of event: 2005
T. Ben; S. Molina; Daniel Granados; Jorge M. García.

28 **Title of the work:** Luminescence and photocurrent spectroscopy of self-assembled InAs Quantum Wires on InP(001)
Name of the conference: Indium Phosphide and related Materials Conference (IPRM-17)
Geographical area: Non EU International
Type of participation: 'Participatory - poster
City of event: Glasgow, Eastern Scotland, United Kingdom
Date of event: 2005
F. Suárez; W. Wang; D. Fuster; L. González; Y. González; D. Golmayo; J.M. García; M.L. Dotor.

29 **Title of the work:** Magnetotunneling spectroscopy of ring-shaped (InGa)As quantum dots: evidence of excited states with 2pz levels
Name of the conference: 12th International Conference on Modulated Semiconductors Structures (ICPS-12)

City of event: Albuquerque, United States of America
Date of event: 2005
D. Walker; F. Pulizzi; A. Patanè; L. Eaves; D. Granados; J. M. Garcia; M. Henini; V. V. Rudenkov; P. C. M. Christianen; J.C. Maan; P. Offermans; P. M. Koenraad; G. Hille.

30 **Title of the work:** Self-assembled InAs Quantum Wires Lasers on InP(001) at 1.66 micron
Name of the conference: One Day Quantum Dot
Type of participation: 'Participatory - poster
City of event: Nottingham, United Kingdom
Date of event: 2005
Organising entity: Universidad de Nottingham **Type of entity:** University
City organizing entity: Nottingham, United Kingdom
F. Suárez; W. Wang; D. Fuster; L. González; Y. González; D. Golmayo; J.M. García; M.L. Dotor.

31 **Title of the work:** Self-assembled InAs Quantum Wires Lasers on InP(001) at 1.66 micron.
Name of the conference: 13th European Molecular Beam Epitaxy Workshop
Type of participation: 'Participatory - poster
City of event: Grindelwald, Sweden
Date of event: 2005
F. Suárez; W. Wang; D. Fuster; L. González; Y. González; D. Golmayo; J.M. García; M.L. Dotor.

32 **Title of the work:** The Aharonov-Bohm effect in self-assembled InAs/GaAs quantum rings
Name of the conference: 12th International Conference on Modulated Semiconductor Structures (MSS-12)
City of event: Albuquerque, United States of America
Date of event: 2005
V. M. Fomin; V. N. Gladilin; J. T. Devreese; P. Offermans; P. M. Koenraad; J. H. Wolter; D. Granados; J. M. García.

33 **Title of the work:** The Aharonov-Bohm effect in self-assembled InAs/GaAs quantum rings
Name of the conference: APS March Meeting
City of event: Los Angeles, United States of America
Date of event: 2005
Organising entity: APS
V.M. Fomin; V.N. Gladilin; J.T. Devreese; P. Offermans; P.M. Koenraad; J.H. Wolter; D. Granados; J.M. García.

34 **Title of the work:** Towards big Quantum dots with InGaAs/GaAsSb claddings layers for longer wavelength emission
Name of the conference: One Day Quantum Dot
Type of participation: 'Participatory - poster
City of event: Nottingham, United Kingdom
Date of event: 2005
Organising entity: Universidad de Nottingham
J. M. Ripalda; D. Granados; Y. González; L. González; M.L. Dotor; J. M. García.

35 **Title of the work:** Capacitance Spectroscopy of Self-Assembled InGaAs Quantum Rings
Name of the conference: Trends in Nanotechnology Conference-TNT
Type of participation: 'Participatory - poster
City of event: Segovia, Spain
Date of event: 2004
Organising entity: FUNDACION PHANTOMS

Daniel Granados; Jorge M. García.

36 **Title of the work:** Electronic structure of Self-Assembled InAs/InP quantum wires
Name of the conference: Belgium Physical Society Conference
City of event: Brussels, Belgium
Date of event: 2004
Organising entity: Belgium Physical Society
Y. Sidor; B. Partoens; F. Peeters; J. Maes; M. Hayne; L. Gonz´laez; D. Fustaer; J.M. García; V.V. Moshchalkov.

37 **Title of the work:** InGaAs Quantum dots with soft confinement potential for longer wavelength emission
Name of the conference: Trends in Nanotechnology Conference-TNT
Type of participation: 'Participatory - poster
City of event: Segovia,
Date of event: 2004
Organising entity: FUNDACION PHANTOMS
J. M. Ripalda; D. Granados; J. M. Garcia; Y. Gonzalez; L. Gonzalez.

38 **Title of the work:** Room-Temperature Operation of self-assembled InAs Quantum Wires Lasers on InP(001)
Name of the conference: Trends in Nanotechnology Conference-TNT
Type of participation: 'Participatory - poster
City of event: Segovia, Spain
Date of event: 2004
Organising entity: FUNDACION PHANTOMS
F. Suárez; W. Wang; D. Fuster; L. González; Y. González; D. Golmayo; J.M. García; M.L. Dotor.

39 **Title of the work:** Accumulated stress evolution during InAsGaA saccumulated stress during QR formation
Name of the conference: XXIX reunión bienal de la Real Sociedad Española de Física, GEFES
Type of participation: 'Participatory - poster
City of event: Madrid, Spain
Date of event: 2003
Organising entity: REAL SOCIEDAD ESPAÑOLA DE FISICA
D. Granados; J.P. Silveira; J.M. García; F. Briones.

40 **Title of the work:** Charge confinement in self-assembled InAs/InP Quantum Wires studied by magneto-photoluminescence
Name of the conference: 11th Conference on Modulated Semiconductors Structures, MSS-11
City of event: Nara, Japan
Date of event: 2003
J. Maes; M. Hayne; Y. Gonzalez; L. Gonzalez; D. Fuster; J.M. García; V.V. Moshchalkov.

41 **Title of the work:** Emission from neutral and charged excitons in a single quantum dot in a magnetic field
Name of the conference: 11th Conference on Modulated Semiconductors Structures, MSS-11
City of event: Nara, Japan
Date of event: 2003
C. Schulhauser; R.J. Warburton; A. H-ogele; A.O. Govorov; K. Karrai; J.M. Garcia; B.D. Gerardot; P.M. Petroff.

42 **Title of the work:** Laser devices with stacked layers of InAs/GaAs quantum rings,
Name of the conference: Trends in Nanotechnology Conference-TNT
Type of participation: 'Participatory - poster
City of event: Salamanca, Spain
Date of event: 2003
Organising entity: FUNDACION PHANTOMS
Daniel Granados; Ferran Suárez; María Luisa Dotor; Jorge M. García.

43 **Title of the work:** MBE in situ characterization: Quantum Dot and Ring formation
Name of the conference: NANO´2003 3rd. Ibero American Workshop on Nanostructures for Application In Micro and Optoelectronics
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2003
J.M. García (INVITADA).

44 **Title of the work:** Pure Luminescence Transitions from a Small InAs/GaAs Quantum Dot Exhibiting a Single Excitonic Level
Name of the conference: 15th International Conference on Indium Phosphide Materials and Related Materials
City of event: Santa Barbara, California, United States of America
Date of event: 2003
K.F. Karlsson; P.O. Holtz; E.S. Moskalenko; B. Monemar; W.V.Schoenfeld; J.M. Garcia; P.M.Petroff.

45 **Title of the work:** The quantum dot as a sensitive probe for impurities in the vicinity of the quantum dot
Name of the conference: 11th Conference on Modulated Semiconductors Structures, MSS-11
City of event: Nara, Japan
Date of event: 2003
K.F. Karlsson; P.O. Holtz; E.S. Moskalenko; B. Monemar; W.V.Schoenfeld; J.M. Garcia; P.M.Petroff.

46 **Title of the work:** In situ stress monitoring during growth of InAs on InP(001)
Name of the conference: Trends in Nanotechnology Conference (TNT 2002)
Type of participation: 'Participatory - poster
City of event: Santiago de Compostela, Galicia, Spain
Date of event: 2002
Organising entity: FUNDACION PHANTOMS
M. U. González; J. M. García; L. González; J. P. Silveira; Y. González; F. Briones.

47 **Title of the work:** Morphological control and optical tuning of InAs on GaAs(100) nanostructures: from quantum dots to quantum rings
Name of the conference: Trends in Nanotechnology Conference (TNT 2002)
Type of participation: 'Participatory - poster
City of event: Santiago de Compostela, Galicia, Spain
Date of event: 2002
Organising entity: FUNDACION PHANTOMS
D. Granados; J.M. García.

48 **Title of the work:** Optical tuning via morphological control of InAs on GaAs(100) nanostructures: from quantum dots to quantum rings
Name of the conference: International Conference on the Physics of Semiconductors (ICPS-26)
Type of participation: 'Participatory - poster

City of event: Edingburgo, Eastern Scotland, United Kingdom
Date of event: 2002
D. Granados; J.M. García.

49 **Title of the work:** Size control of self-assembled quantum wires for 1.5 micron wavelength engineering
Name of the conference: XIIth International Conference on Molecular Beam Epitaxy, MBE-XII
Type of participation: Participatory - oral communication
City of event: San Francisco, United States of America
Date of event: 2002
L. González; Y. González; D. Granados; J. M. García; D. Fuster; J.Martínez-Pastor.

50 **Title of the work:** Size self-filtering effect in vertical stacks of InAs/InP self-assembled quantum wires
Name of the conference: International COnference on Semiconductor nano-structures ans nano-devices
Type of participation: Participatory - oral communication
City of event: Toulouse, France
Date of event: 2002
B. Alén; J. Martínez-Pastor; D. Fuster; L. González; J. M. García; S. I. Molina; A. Ponce; R. García.

51 **Title of the work:** Spectroscopy of self-assembled quantum rings
Name of the conference: International Conference on the Physics of Semiconductors (ICPS-26)
Type of participation: Participatory - oral communication
City of event: Edingburgo, Eastern Scotland, United Kingdom
Date of event: 2002
Richard J. Warburton; Bernhard Urbaszek; Christian Schulhauser; Alexander Högele; Khaled Karrai; Jorge M. García; Pierre M. Petroff.

52 **Title of the work:** Temperature and electric field quenching of the photoluminescence in self-assembled InAs/GaAs quantum dots
Name of the conference: Trends in Nanotechnology Conference (TNT 2002)
Type of participation: 'Participatory - poster
City of event: Santiago de Compostela, Galicia, Spain
Date of event: 2002
Organising entity: FUNDACION PHANTOMS
D. Fuster; B. Alén; J. Bosch; C. Boubeta; J. Martínez-Pastor; L. González; J.M. García.

53 **Title of the work:** The role of stress and stress anisotropy in semiconductor nanostructures self-assembling
Name of the conference: European Material Research Society, Fall Meeting Symposium (E-MRS)
Type of participation: Participatory - oral communication
City of event: Varsovia, Poland
Date of event: 2002
M. U. González; J. P. Silveira; J. M.García; L. González; Y. González; F. Briones.

54 **Title of the work:** The role of stress anisotropy in quantum wire and quantum dot formation
Name of the conference: XIIth International Conference on Molecular Beam Epitaxy, MBE-XII
Type of participation: Participatory - oral communication
City of event: San Francisco, United States of America
Date of event: 2002
F. Briones; J. P. Silveira; M. U. González; J. M. García; L. González; Y. González.

55 **Title of the work:** Vertical stacks of small InAs/GaAs self-assembled dots: resonant and non-resonant excitation
Name of the conference: International COnference on Semiconductor nano-structures ans nano-devices
Type of participation: 'Participatory - poster
City of event: Toulouse, France
Date of event: 2002
J. Martínez-Pastor; B. Alén; C. Boubeta; Ph. Roussignol; L. González; J.M. García.

56 **Title of the work:** Carrier Recombination in InAs/GaAs Self-Assembled Quantum Dots under Resonant Excitation Conditions
Name of the conference: 7th International Conference on Optics and Excitons in Confined Systems (OECS7)
City of event: Montpellier, France
Date of event: 2001
C. Rudazas; J. Martínez –Pastor; A. García-Cristóbal; Ph. Roussignol; J. M. García; L. González.

57 **Title of the work:** Exciton Recombination in Self-Assembled InAs/GaAs Small Quantum Dots ubli an External Electric Field
Name of the conference: 7th International Conference on Optics and Excitons in Confined Systems (OECS7)
City of event: Montpellier, France
Date of event: 2001
J. Martínez-Pastor; J. Bosch; D. Biswas; B. Alén; J. L. Valdés; J. M. García; L. González.

58 **Title of the work:** Giant permanent dipole moments of excitons in semiconductor nanostructures.
Name of the conference: 10th International Conference on Modulated Semiconductors Structures (MSS10)
City of event: Linz, Austria
Date of event: 2001
D C. Schulhauser; D. Haft; R. J. Warburton; K. Karrai; W. Schoenfeld; J. M. Garcia; P. M. Petroff.

59 **Title of the work:** In situ monitorization of the relaxation process during growth of InAs/GaAs
Name of the conference: European Material Research Society, Spring Meeting Symposium (E-MRS)
Type of participation: 'Participatory - poster
City of event: Estrasburgo, France
Date of event: 2001
M. U. González; Y. González; L. González; J.P. Silveira; J. M. García; F. Briones.

60 **Title of the work:** Influence of the InAs-Coverage on the phonon-assisted recombination in InAs/GaAs Quantum Dots
Name of the conference: 20th European Conference on Surface Science (ECOSS-20)
City of event: Krakow, Poland
Date of event: 2001
C. Rudamás; J. Martínez-Pastor; PH. Roussignol; J.M. García; L. González.

61 **Title of the work:** La anisotropía en la tensión, responsable de la formación espontánea de hilos cuánticos de InAs/InP (001)
Name of the conference: Reunión Nacional de Física del Estado Sólido (GEFES)
City of event: Madrid, Spain
Date of event: 2001
M. U. González; J. M. García; L. González; J. P. Silveira; Y. González; F. Briones.

62 **Title of the work:** Magnetic properties of excitons in charge-tunable quantum rings.
Name of the conference: 10th International Conference on Modulated Semiconductors Structures (MSS10)
City of event: Linz, Austria
Date of event: 2001
D. Haft; C. Schulhauser; A. O. Govorov; R. J. Warburton; K. Karrai; W. Schoenfeld; J. M. Garcia; P. M. Petroff.

63 **Title of the work:** Self-assembling of InAs/InP quantum wires due to stress anisotropy", M. U. González, J. M. García, L. González, J. P. Silveira
Name of the conference: European Material Research Society, Spring Meeting Symposium (E-MRS)
Type of participation: Participatory - oral communication
City of event: Estrasburgo.,
Date of event: 2001
M. U. González; Y. González; L. González; J.P. Silveira; J. M. García; F. Briones.

64 **Title of the work:** limited In incorporation during pseudomorphic InAs/GaAs GROWTH AND QD FORMATION OBSERVED BY IN-SITU STRESS MEASUREMENTS.
Name of the conference: European Material Research Society, Spring Meeting Symposium (E-MRS)
Type of participation: Participatory - oral communication
City of event: Estrasburgo, France
Date of event: 2001
J.P. Silveira; J.M. Garcia; F. Briones.

65 **Title of the work:** Caracterización in-situ de losprocesos de relajación y la evolución de la rugosidad superficial durante el crecimiento de In0.2Ga0.8As sobre GaAs por epitaxia de haces moleculares
Name of the conference: II Congreso Español de Microscopía de Fuerzas y Efecto Túnel, Fuerzas y Túnel
Type of event: Conference
Type of participation: 'Participatory - poster
City of event: Santiago de Compostela, Galicia, Spain
Date of event: 2000
M. U. González; Y. González; L. González; J. P. Silveira; J. M. García; F. Briones.

66 **Title of the work:** A growth method to obtain flat and relaxed In0.2Ga0.8As on GaAs (001) developed through in-situ monitoring of surface topography and stress evolution
Name of the conference: XI th International Conference on Molecular Beam Epitaxy, MBE-XI
Type of participation: Participatory - oral communication
City of event: Pekín, China
Date of event: 2000
M. U. González; Y. González; L. González; J. P. Silveira; J. M. García; F. Briones.

67 **Title of the work:** Accumulated stress relaxation due to InAs quantum wire formation on InP(001)
Name of the conference: XI th International Conference on Molecular Beam Epitaxy, MBE-XI
Type of participation: 'Participatory - poster
City of event: Pekín, China
Date of event: 2000
J. M. García; L. González; M. U. González; J. P. Silveira; Y. González; A. Mazuelas; F. Briones.

68 **Title of the work:** As/P exchange reactions study by in-situ stress measurements on InP(001).
Name of the conference: European Conference on Surface Science 19 (ECOSS-19)
Type of participation: 'Participatory - poster
City of event: Madrid.,

Date of event: 2000
J.M. García; L. González; M.U. González; J.P. Silveira; Y. González; F. Briones.

69 **Title of the work:** Electronic Structure of Nanometer-size Quantum Dots and Quantum Rings
Name of the conference: International Conference on Semiconductor Quantum Dots (QD 2000)
City of event: Munich, Germany
Date of event: 2000
Axel Lorke; R.J. Luyken; M. Fricke; J.P.Kotthaus; G. Medeiros-Ribeiro; J.M. García; P.M. Petroff.

70 **Title of the work:** Epitaxial metallic/insulator systems on gaas(001) for the fabrication of nanostructures.
Name of the conference: European Conference on Surface Science 19 (ECOSS-19)
Type of participation: 'Participatory - poster
City of event: Madrid, Spain
Date of event: 2000
C.Martínez Boubeta; J.L.Menéndez; J.L.Costa-Krämer; J.M. García; J.V.Anguita; B.Bescós; A.Cebollada; F.Briones; A.V. Chernykh; I.V.Malikov; G.M.Mikhailov.

71 **Title of the work:** Growth and electronic properties of self-organized quantum rings
Name of the conference: International Symposium on Formation, Physics and Device Applications of Quantum Dots Structures (QDS 2000)
City of event: Sapporo, Japan
Date of event: 2000
A. Lorke; R.J.Luyken; J.M.Garcia; P.M. Petroff.

72 **Title of the work:** In-situ measurement of relaxation and surface roughening during growth of InAs on GaAs
Name of the conference: European Conference on Surface Science 19 (ECOSS-19)
Type of participation: 'Participatory - poster
City of event: Madrid, Spain
Date of event: 2000
M.U. González; Y. González; L. González; J.P. Silveira; J.M. García; F. Briones.

73 **Title of the work:** Surface stress effects during MBE growth of III-V semiconductors nanostructures.
Name of the conference: XI th International Conference on Molecular Beam Epitaxy, MBE-XI
Type of participation: 'Participatory - poster
City of event: Pekín, China,
Date of event: 2000
J. P. Silveira; J. M. García; F. Briones.

74 **Title of the work:** Auger Processes in InAs Self Assembled Quantum Dots
Name of the conference: 13th InternationalConference on the Electronic Properties of Two-Dimensional Systems (13th EP2DS)
Type of participation: Participatory - oral communication
City of event: Otawa, Canada
Date of event: 01/08/1999
End date: 06/08/1999
P.Paskov; P.O.Holtz; S.Wongmanerod; J.M.Garcia; W.Schoenfeld; P.M.Petroff.

75 **Title of the work:** Excitons in Self-Assembled Quantum Ring-Like Structures
Name of the conference: 13th InternationalConference on the Electronic Properties of Two-Dimensional Systems(13th EP2DS)
Type of participation: Participatory - oral communication

City of event: Otawa, Canada,
Date of event: 01/08/1999
End date: 06/08/1999
H.Pettersson; R.J.Warburton; A.Lorke; K.Karrai; J.P.Kotthaus; J.M.Garcia; P.M.Petroff.

76 **Title of the work:** Buffer layer surface morphology influence on the self-organization on InAs on InP(001) nanostructures
Name of the conference: European Molecular Beam Epitaxy Conference (Euro-MBE 99)
Type of participation: Participatory - oral communication
City of event: Les Archs, France.,
Date of event: 1999
L. González; J.M.García; J.Martínez-Pastor; C. Ballesteros; R. García; F.Briones.

77 **Title of the work:** Excitonic recombination in Self-Organized InAs/InP quantum wires.
Name of the conference: XXVII Reunión Bienal de la Real Sociedad Española de Física
Type of participation: Participatory - oral communication
City of event: Valencia, Spain
Date of event: 1999
Organising entity: Real Sociedad Española de Física
B.Alen; C.Rudamas; J.Martinez-Pastor; J.M.Garcia; L.Gonzalez.

78 **Title of the work:** Indium segregation effects during InAs/(100)GaAs observed via In-situ stress-thickness measurements.
Name of the conference: Conferencia de DIspositivos Electrónicos
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 1999
J.M.García; J.Silveira; F.Briones.

79 **Title of the work:** Indium segregation effects during InAs/(100)GaAs observed via In-situ stress-thickness measurements.
Name of the conference: Conferencia de Dispositivos Elect´ronicos (CDE99)
City of event: Madrid,
Date of event: 1999
J.M.Garcia; J.Silveira; F.Briones.

80 **Title of the work:** Indium segregation effects observed via In-situ strain measurements during InAs/(100)GaAs QD's growth
Name of the conference: European Molecular Beam Epitaxy Conference (Euro-MBE 99)
Type of participation: Participatory - oral communication
City of event: Les Archs, France
Date of event: 1999
J.M.García; J.Silveira; F.Briones.

81 **Title of the work:** Indium segregation effects observed via In-situ strain measurements during InAs/(100)GaAs QD's growth
Name of the conference: Xth European Workshop on Molecular Beam Epitaxy (Euro MBE 99)
City of event: Les Archs, France,
Date of event: 1999
J.M.Garcia; J.Silveira; F.Briones.

82 **Title of the work:** Interband Optics of Charge-tunable quantum dots.
Name of the conference: NATO workshop “Optical properties of semiconductor nanostructures”
Type of participation: Participatory - oral communication
City of event: Jaszowiec, Poland
Date of event: 1999
R.J.Warburton; C.Schäflein; H.Petterson; D.Haft; Fbickel; C.S.Dür; K.Karrai; J.P.Kotthaus; G.Medeiros-Ribeiro; J.M.Garcia; W.Schoenfeld; P.M.Petroff.

83 **Title of the work:** Seguimiento en tiempo real del estado de tensión y de la morfología superficial durante el crecimiento de InAs sobre GaAs por epitaxia de haces moleculares
Name of the conference: Reunión Nacional de Física del Estado Sólido (GEFES)
City of event: Madrid, Spain
Date of event: 1999
M. U. González; Y. González; L. González; J. A. Sánchez-Gil; J. P. Silveira; J. M. García; F. Briones.

84 **Title of the work:** Shake Up Processes in InAs Self Assembled Quantum Dots
Name of the conference: XXVIII International School on Physics of Semiconducting Compounds
City of event: Jaszowiec, Poland
Date of event: 1999
P.O. Holtz; P. Paskov; S. Wongmanerod; J.M. Garcia; W. Schoenfeld; P.M. Petroff.

85 **Title of the work:** Giant magnetoresistance effect in a low-temperature grown GaAs with imbedded MnAs nanomagnets.
Name of the conference: Non Stoichiometric III-V compound semiconductors
Type of participation: 'Participatory - poster
City of event: Erlangen, Holland
Date of event: 1998
P.J. Wellmann; J.M. García; J.-L Feng; P.M. Petroff.

86 **Title of the work:** Giant magnetoresistance effect in a new Irbid granular ferromagnet semiconductor system – MnAs nanomagnets embedded in GaAs
Name of the conference: 24th International Conference on the Physics of Semiconductors
Type of participation: 'Participatory - poster
City of event: Jerusalem, Israel
Date of event: 1998
Organising entity: International Union of Pure and Applied Physics (IUPAP)
P.J. Wellmann; J.M. García; J.-L Feng; P.M. Petroff.

87 **Title of the work:** Infrared Photoconductivity study of the electronic structure in Self-assembled InAs/GaAs Quantum Dot structures,
Name of the conference: 24th International Conference on the Physics of Semiconductors
City of event: Jerusalem, Israel
Date of event: 1998
Organising entity: International Union of Pure and Applied Physics (IUPAP)
E. Finkman; S. Maimon; G. Bahir; S.E. Schacham; L.R.C. Fonseca; J. Shumway; J.P. Leburton; J.M. García; P.M. Petroff.

88 **Title of the work:** Multiexciton emission in Quenatum Dots: Spectroscopic evidence forr a fast exciton thermalization.
Name of the conference: 24th International Conference on the Physics of Semiconductors (ICPS-24)
Type of participation: Participatory - oral communication

City of event: Jerusalén, Israel
Date of event: 1998
Organising entity: International Union of Pure and Applied Physics (IUPAP)
E. Dekel; D. Gershoni; E. Ehrenfreund; D. Spektor; J.M. García; P.M. Petroff.

89 **Title of the work:** Satellite Spectroscopy Performed on InAs Self Assembled Quantum Dots
Name of the conference: 24th International Conference on the Physics of Semiconductors (ICPS)
Type of participation: 'Participatory - poster
City of event: Jerusalem, Israel,
Date of event: 1998
Organising entity: International Union of Pure and Applied Physics (IUPAP)
P. O. Holtz; S. Wongmanerod; J.M. Garcža; W. Schoenfeld; P.M. Petroff.

90 **Title of the work:** Satellite Spectroscopy Performed on InAs Self Assembled Quantum Dots.
Name of the conference: 24th International Conference on the Physics of Semiconductors
Type of participation: 'Participatory - poster
City of event: Jerusalem, Israel
Date of event: 1998
Organising entity: International Union of Pure and Applied Physics (IUPAP)
P. O. Holtz; S. Wongmanerod; W. Schoenfeld; J.M. García; P.M. Petroff..

91 **Title of the work:** Diffraction limited studies of single self assembled quantum dots
Name of the conference: Modulated Semiconductors Structures 8 (MSS-8)
Type of participation: 'Participatory - poster
City of event: Santa Barbara, United States of America
Date of event: 1997
E. Dekel; D. Spektor; D. Gershoni; E. Ehrenfreund; J.M. García; P.M.Petroff.

92 **Title of the work:** Formation and properties of nanosize ferromagnetic MnAs particles in low temperature GaAs by Manganese Implantation.
Name of the conference: MRS Spring
Type of participation: Participatory - oral communication
City of event: Boston, United States of America
Date of event: 1997
Organising entity: MRS
P.J. Wellman; J. M. García; J.-LFeng; P.M. Petroff. "MRS-proceedings 97".

93 **Title of the work:** Formation and properties of nanosize ferromagnetic MnAs particles in low temperature GaAs by Manganese Implantation.
Name of the conference: MRS 97 Spring
City of event: Boston, United States of America
Date of event: 1997
P.J. Wellman; J. M. García; J.-Lfeng; P.M. Petroff.

94 **Title of the work:** Multi-Exciton Spectroscopy of a Single Self Assembled Quantum Dot
Name of the conference: Modulated Semiconductor Structures 8 (MSS8)
Type of participation: 'Participatory - poster
City of event: Santa Barbara,
Date of event: 1997
E. Dekel; D. Gershoni; E. Ehrenfreund; D. Spektor; J.M. García; P.M.Petroff.

95 **Title of the work:** Synthesys and properties of nanoscale ferromagnetics MnAs Crystallites using Low-Temperature grown GaAs.
Name of the conference: Modulated Semiconductor Structures 8 (MSS8)
Type of participation: 'Participatory - poster
City of event: Santa Barbara, California, United States of America
Date of event: 1997
P.J. Wellman; J. M. García; J.-LFeng; P.M. Petroff.

96 **Title of the work:** Capacitance and Photoluminescence spectroscopy of electronic states in InAs self assembled quantum dots
Name of the conference: Escuela de Verano, NATO Advanced Study Institute
Type of participation: 'Participatory - poster
City of event: Ankara, Turkey
Date of event: 1996
Organising entity: NATO
J. M. García; K. Schmidt; G. Medeiros-Ribeiro; P. M. Petroff.

97 **Title of the work:** First stages of Fe overgrowth on Au(100): Autosurfactance effect
Name of the conference: Conference on Surface Crystallography
Type of participation: 'Participatory - poster
City of event: Kloster Banz, Germany
Date of event: 1995
J. M. García; O. Sachez; P. Segovia; J. Alvarez; A. L.Vazquez de Parga; J. E. Ortega; M. Prietsh; R. Miranda.

98 **Title of the work:** Lateral confinement of Surface Stares on stepped Cu(111)
Name of the conference: APS Meeting
Type of participation: 'Participatory - poster
City of event: San Jose, United States of America
Date of event: 1995
Organising entity: America Physical Society
O. Sáchez; J. M. García; P. Segovia; J. Alvarez; A. L.Vazquez de Parga; J. E. Ortega; M. Prietsh; R. Miranda.

99 **Title of the work:** Lateral confinement of Surface States on stepped Cu(111)
Name of the conference: APS Meeting,
Type of participation: 'Participatory - poster
City of event: San Jose,
Date of event: 1995
Organising entity: America Physical Society
O. Sachez; J. M. García; P. Segovia; J. Alvarez; A. L.Vazquez de Parga; J. E. Ortega; M. Prietsh; R. Miranda. "procedeengs APS.".

100 **Title of the work:** Scanning Tunneling Microscope study of epitaxial films of Fe on Au(100).
Name of the conference: II international summerschool “Nicolas Cabrera”, Advances in Surface Science
Type of participation: Participatory - oral communication
City of event: Miraflores de la Sierra, Community of Madrid, Spain
Date of event: 1995
J.M.Garcia; C.J.Pastor; J. Gomez-Goñi; J J.J. Hinarejos; E.Ortega; R.Miranda.

101 **Title of the work:** Hydrogen adsorption on epitaxial ?-FeSi2/Si(111), ?-FeSi2/Si(100) and single crystal ?-FeSi2(100)
Name of the conference: 14th General Conference Condensed Matter Division
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 1994
J.M.Garcia; C.J.Pastor; J.E.Ortga; J.J.Hinarejos; J.Chrost; E.G.Michel; G.R.Castro; R.Miranda.

102 **Title of the work:** A structural characterization of the buffer layer for growth of Magnetically-coupled Co/Cu superlattices.
Name of the conference: Symposium on Magnetic Ultrathin Films, Multilayers and Surfaces
Type of participation: 'Participatory - poster
City of event: Lion, France
Date of event: 1992
J.L. Martínez-Albertos; J. Camarero; J.M. García; C. J. Pastor; J.M. Gallego; C. Limones; J. E. Prieto; A. L. Vázquez de Parga; C. Ocal; R. Miranda.

103 **Title of the work:** Growth of epitaxial iron disilicide on Si(100)
Name of the conference: 12th European Conference on Surface Science (ECOSS-12)
Type of participation: 'Participatory - poster
City of event: Estocolmo, Sweden
Date of event: 1991
J.M. Gallego; J.M. García; J. E. Ortega; A. L. Vázquez de Parga; J. de la Figuera; C. Ocal; R. Miranda.

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

1 **Committee title:** Jurado concurso FOTCIENCIA - EDICION 19
Primary (UNESCO code): 330000 - Technological Science.
Secondary (UNESCO code): 220000 - Physics
Tertiary (UNESCO code): 240000 - Life Science
Affiliation entity: Fundación Española para la Ciencia y la Tecnología **Type of entity:** FECYT
Start-End date: 15/11/2022 - 14/12/2022

2 **Committee title:** Jurado concurso FOTCIENCIA - EDICION 18
Primary (UNESCO code): 330000 - Technological Science.
Secondary (UNESCO code): 220000 - Physics
Tertiary (UNESCO code): 240000 - Life Science
Affiliation entity: Fundación Española para la Ciencia y la Tecnología **Type of entity:** FECYT
Start-End date: 15/11/2021 - 14/12/2021

3 **Committee title:** Jurado concurso FOTCIENCIA - EDICION 17
Primary (UNESCO code): 330000 - Technological Science.
Secondary (UNESCO code): 220000 - Physics
Tertiary (UNESCO code): 240000 - Life Science
Affiliation entity: Fundación Española para la Ciencia y la Tecnología **Type of entity:** FECYT

Start-End date: 26/12/2019 - 16/01/2020

R&D management

1 **Name of the activity:** Director
Type of management: Management of body
Performed tasks: Direccion del Instituto de Micro y Nanotecnología-CNM, CSIC
Entity: Instituto de Micro y Nanotecnología-CNM, CSIC **Type of entity:** State agency
Start date: 18/04/2017

2 **Name of the activity:** Comisión de Postgrado y Doctorado de la Asociación para el Desarrollo del CEI UAM+CSIC
Type of management: Management of body
Performed tasks: Representante del CSIC
Entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Start date: 09/07/2014

3 **Name of the activity:** Comisión de Campus de la Asociación para el desarrollo del Campus de Excelencia Internaciona UAM+CSIC
Type of management: Management of body
Performed tasks: Representante de la Comisión
Entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Start date: 10/06/2014

4 **Name of the activity:** Director
Type of management: Management of body
Performed tasks: Direccion del Instituto de Microelectrónica de Madrid, CNM, CSIC
Entity: Instituto de Microelectrónica de Madrid, CNM, CSIC **Type of entity:** State agency
Start date: 18/04/2013 **Duration:** 4 years

Other achievements

Stays in public or private R&D centres

1 **Entity:** Columbia University **Type of entity:** University
City of entity: New York, United States of America
Start-End date: 02/05/2009 - 02/05/2012 **Duration:** 3 years
Goals of the stay: Guest
Provable tasks: Growth of Graphene by MBE

2 **Entity:** Bell Labs **Type of entity:** Business
Faculty, institute or centre: Materials for Communications
City of entity: Murray Hill, United States of America
Start-End date: 01/05/2007 - 01/05/2009 **Duration:** 2 years
Funding entity: Ministerio Español

Name of programme: Salvador de Madariaga
Goals of the stay: Sabatico
Provable tasks: Growth of Graphene by MBE

3 **Entity:** Universidad Católica de Lovaina **Type of entity:** University
Faculty, institute or centre: Departamento de Física
City of entity: Lovaina, Belgium
Start-End date: 04/07/2006 - 12/07/2006 **Duration:** 7 days
Goals of the stay: Realización de medidas EUROMAGNET
Provable tasks: Caracterización de anillos cuánticos con altos (50T) campos magnéticos.

4 **Entity:** ESRF **Type of entity:** R&D Centre
City of entity: Grenoble, Rhône-Alpes, France
Start-End date: 13/03/1999 - 18/03/1999 **Duration:** 5 days
Goals of the stay: Medidas en sincrotrón
Provable tasks: Determinación de la anisotropía en el plano de crecimiento en Hilos Cuánticos auto-organizados de InAs en InP

5 **Entity:** Ludwig-Maximilians de Munich **Type of entity:** University
Faculty, institute or centre: Departamento de Física de la Universidad
City of entity: Munich, Oberbayern, Germany
Start-End date: 12/01/1998 - 11/02/1998 **Duration:** 1 month
Goals of the stay: Guest
Provable tasks: Caracterización eléctrica y óptica de Puntos Cuánticos de InAs/GaAs(100)

6 **Entity:** Universidad de California Santa Barbara
Faculty, institute or centre: Materials Department
City of entity: Santa Barbara, United States of America
Start-End date: 01/01/1997 - 31/12/1997 **Duration:** 2 years
Goals of the stay: Post-doctoral

7 **Entity:** Bessy
City of entity: Berlin, Berlin, Germany
Start-End date: 06/05/1994 - 15/05/1994 **Duration:** 9 days
Goals of the stay: Medidas en sincrotrón
Provable tasks: Caracterización de Siliciuros de Hierro

Prizes, mentions and distinctions

1 **Description:** Finalista de la sexta edición del concurso Ciencia y Sugerencia 2010
Awarding entity: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Conferral date: 03/06/2010

2 **Description:** Premio Especial Fotociencia 2006 a la mejor fotográfía general sobre ciencia y tecnología de cerámica y vidrio
Awarding entity: Fundación Española para la Ciencia y la Tecnología **Type of entity:** 500€
Conferral date: 26/01/2007

3 **Description:** Premio al mejor póster en el congreso internacional: “Trends in Nanotecnology, TNT2003”, por la presentación del trabajo: “Stacked layers of Self Assembled Quantum Rings for 980nm Lasers”
Awarding entity: FUNDACION PHANTOMS
City awarding entity: Salamanca, Spain
Conferral date: 19/09/2003

4 **Description:** Premio al mejor póster en el 12th European Conference on Surface Science (ECOSS-12) por la presentación del trabajo: “ A new method for the growth of Epitaxial Iron Silicides on Si(100)
Awarding entity: Stockolm University
City awarding entity: Estocolmo, Sweden
Conferral date: 12/09/1991

Periods of research activity

1 **Nº of recognized periods:** 5
Certifying entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** Sexenio
Date of recognition: 17/06/2021

2 **Nº of recognized periods:** 1
Certifying entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** SEXENIO TRANSFERENCIA
Date of recognition: 14/05/2020

Obtained accreditations/recognitions

1 **Description:** Quinquenio de investigacion 2015-2020
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA
Date of recognition: 17/06/2021

2 **Description:** Quinquenio de investigacion 1991-1995
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA

3 **Description:** Quinquenio de investigacion 1995-2000
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA

4 **Description:** Quinquenio de investigacion 2001-2005
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA

5 **Description:** Quinquenio de investigacion 2006-2010
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA

6 **Description:** Quinquenio de investigacion 2011-2015
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** ANECA