



Eva Maria Fernandez Sanchez

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**Eva Maria Fernandez Sanchez**

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 Name: **Eva Maria**
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Current professional situation

Name of institution: Universidad Nacional de Educación a Distancia **Type of institution:** University
Department, service, etc.: Física Fundamental, Facultad de Ciencias
Category/position or post: PDI postdoc (rebovable anualmente hasta Octubre 2016)
Start date: 01/11/2012
Type of contract: PDI Contrato Postdoc **Type of dedication:** Full time
Primary (UNESCO code): 221001 - Catalysis; 221016 - Interfacial chemistry; 221018 - Liquid state physics; 221100 - Solid state physics
Secondary (UNESCO code): 221018 - Liquid state physics

Previous posts and activities

	Name of institution	Category/position or post	Start date
1	Instituto de Ciencia de Materiales de Madrid	Postdoc CAM	01/01/2011
2	Instituto de Ciencia de Materiales de Madrid	Postdoc JaeDoc	16/03/2008
3	Technical University of Denmark	Postdoc	01/03/2006
4	Universidad de Valladolid	Becario FPU	01/01/2002



1 **Name of institution:** Instituto de Ciencia de Materiales de Madrid
Category/position or post: Postdoc CAM
Start-End date: 01/01/2011 - 31/10/2012

Type of institution: State agency

Duration: 1 year - 10 months

2 **Name of institution:** Instituto de Ciencia de Materiales de Madrid
Category/position or post: Postdoc JaeDoc
Start-End date: 16/03/2008 - 31/12/2010

Type of institution: State agency

Duration: 2 years - 9 months - 15 days

3 **Name of institution:** Technical University of Denmark
Category/position or post: Postdoc
Start-End date: 01/03/2006 - 29/02/2008

Type of institution: University

Duration: 2 years

4 **Name of institution:** Universidad de Valladolid
Category/position or post: Becario FPU
Start-End date: 01/01/2002 - 31/12/2005

Type of institution: University

Duration: 4 years



Official training received

University education

University degrees, engineering degrees or master's degrees

- 1 Official qualification:** DEA
Name of qualification: Diploma de Estudios Avanzados
institution issuing the qualification: Universidad de Valladolid **Type of institution:** University
Date of qualification: 30/06/2003
- 2 Official qualification:** Higher degree
Name of qualification: Licenciado en Física
institution issuing the qualification: Universidad de Valladolid **Type of institution:** University
Date of qualification: 2001

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Física
University issuing the qualification: Universidad de Valladolid **Type of institution:** University
Date of qualification: 16/12/2005
University where DEA was obtained: Universidad de Valladolid
DEA, date: 2003
Thesis title: Reactividad frente a O₂ y CO de agregados nenométricos de oro libres y soportados sobre alúmina. Estudio a partir de primeros principios.
Thesis director: Luis Carlos Balbás
Mark: Sobresaliente Cum laude
Special doctorate award: Yes **Year of special award:** 2007

Courses completed and seminars attended in order to improve and innovate teaching skills

Title of course/seminar: Certificado de Aptitud Pedagógica (CAP)
Organising institution: Universidad Complutense de Madrid **Type of institution:** University
Faculty, institute or centre: Facultad de Educación
Duration in hours: 60 hours
Start-End date: 01/10/2001 - 30/06/2002



Language skills

Language	Speaking	Reading	Writing
English	Advanced	Advanced	Advanced
French	Advanced	Advanced	Advanced

Teaching activity

Subjects given

- 1 Type of teaching:** Official teaching
Name of subject/course: Fundamentos de Física I
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Grado en Física
Number of times: 1
Start date: 2014
Date of the last time: 2014
Number of hours/credits: 6
institution: Universidad Nacional de Educación a Distancia
Faculty, institute or centre: Facultad de Ciencias

End date: 2015
Type of hours/credits: Credits
Type of institution: University
- 2 Type of teaching:** Official teaching
Name of subject/course: Física Cuántica
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Licenciado en Ciencias Físicas
Number of times: 1
Start date: 2013
Date of the last time: 2014
Number of hours/credits: 12
institution: Universidad Nacional de Educación a Distancia
Faculty, institute or centre: Facultad de Ciencias

End date: 2014
Type of hours/credits: Credits
Type of institution: University
- 3 Type of teaching:** Official teaching
Name of subject/course: Física Cuántica
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Licenciado en Ciencias Físicas
Number of times: 1
Start date: 2013
Date of the last time: 2013
Number of hours/credits: 6
institution: Universidad Nacional de Educación a Distancia

End date: 2013
Type of hours/credits: Credits
Type of institution: University



Faculty, institute or centre: Facultad de Ciencias

4 **Type of teaching:** Official teaching
Name of subject/course: Mecánica
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Licenciado en Ciencias Químicas
Number of times: 1
Start date: 2013
Date of the last time: 2013
Number of hours/credits: 12
institution: Universidad Nacional de Educación a Distancia
Faculty, institute or centre: Facultad de Ciencias

End date: 2013
Type of hours/credits: Credits
Type of institution: University

5 **Type of teaching:** Official teaching
Name of subject/course: Física
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Grado en Química
Course given: Primero
Start date: 2012
Date of the last time: 2012
Number of hours/credits: 2,1
institution: Universidad Autónoma de Madrid
Faculty, institute or centre: Facultad de Ciencias

Type of teaching: Laboratory work
Number of times: 1
End date: 2013
Type of hours/credits: Credits
Type of institution: University

6 **Type of teaching:** Official teaching
Name of subject/course: Física
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Grado en Biología
Course given: Primero
Start date: 2010
Date of the last time: 2011
Number of hours/credits: 3,6
institution: Universidad Autónoma de Madrid
Faculty, institute or centre: Facultad de Ciencias

Type of teaching: Laboratory work
Number of times: 1
End date: 2011
Type of hours/credits: Credits
Type of institution: University

7 **Type of teaching:** Official teaching
Name of subject/course: Física
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: Grado en Ciencias Ambientales
Course given: Segundo
Start date: 2009
Date of the last time: 2010
Number of hours/credits: 3,2
institution: Universidad Autónoma de Madrid
Faculty, institute or centre: Facultad de Ciencias

Type of teaching: Laboratory work
Number of times: 1
End date: 2010
Type of hours/credits: Credits
Type of institution: University



- 8** **Type of teaching:** Official teaching
Name of subject/course: Física Atómica y Molecular
Type of programme: Bachelor's degree
Type of subject: Optional
Qualification: licenciado en Física
Course given: Quinto
Start date: 2003
Date of the last time: 2005
Number of hours/credits: 1
institution: Universidad de Valladolid
Faculty, institute or centre: Facultad de Ciencias
Department: Física Teórica Atómica y Óptica
- Type of teaching:** In person theory
Number of times: 2
End date: 2005
Type of hours/credits: Credits
Type of institution: University
- 9** **Type of teaching:** Official teaching
Name of subject/course: Técnicas Experimentales en Física Cuántica
Type of programme: Bachelor's degree
Type of subject: Obligatory
Qualification: licenciado en Física
Course given: tercer
Start date: 2003
Date of the last time: 2004
Number of hours/credits: 8
institution: Universidad de Valladolid
Faculty, institute or centre: Facultad de Ciencias
Department: Física Teórica Atómica y Óptica
- Type of teaching:** Laboratory work
Number of times: 1
End date: 2004
Type of hours/credits: Credits
Type of institution: University

Supervision of dissertations and/or final projects

- 1** **Project title:** TFM: Estudio de la estructura del estado fundamental y la adsorción de O₂ de agregados nanométricos de oro dopados con vanadio AuV_m.
University issuing the qualification: Universidad Nacional de Educación a Distancia
Doctorate student: Sergio Garcia Gonzalez
Date of reading: 2015
- Type of institution:** University
- 2** **Project title:** TFM: Estudio de las Ondas Electromagnéticas para Bachillerato y Acceso a la Universidad
University issuing the qualification: Universidad Nacional de Educación a Distancia
Doctorate student: Concepción García
Date of reading: 2015
- Type of institution:** University



Experience in science and technology

Scientific or technological activity

Participation in R&D&I projects funded in competitive calls by public or private bodies

- 1** **Name of the project:** Estructura, dinámica y propiedades electrónicas de nanoagregados atómicos, nanoaleaciones, interfases y líquidos metálicos de interés tecnológico en espintrónica, catálisis y reactores nucleares.

Project type: Basic research (including archaeological digs, etc)

Project area: Regional

Role: Researcher

Institution where project took place: Universidad de Valladolid

Type of institution: University

City: Valladolid, Castile and León, Spain

Head(s) researcher(s): A. Aguado

Funding institution or bodies:

Junta de Castilla y León

Type of institution: Public Administration

City: Valladolid, Castile and León, Spain

Name of the programme: Apoyo a proyectos de investigación de la Junta de Castilla y León

Start-End date: 01/01/2011 - 31/12/2013

Duration of the project: 2 years

- 2** **Name of the project:** Structure and Dynamic of complex fluids and their interface.

Project type: Basic research (including archaeological digs, etc)

Project area: National

Role: Researcher

Institution where project took place: Instituto de Ciencia de Materiales de Madrid

Type of institution: State agency

City: Madrid, Community of Madrid, Spain

Head(s) researcher(s): E. Chacón

Funding institution or bodies:

Ministerio de Ciencia e Innovación. Investigación

Type of institution: Public Administration

City: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2011 - 31/12/2013

Dedication: Part time

- 3** **Name of the project:** Modelling and simulation of Complex Systems.

Project type: Basic research (including archaeological digs, etc)

Project area: Regional

Role: Researcher

Institution where project took place: Instituto de Ciencia de Materiales de Madrid

Type of institution: State agency

Head(s) researcher(s): E. Chacón

Funding institution or bodies:

Comunidad de Madrid

Type of institution: Public Administration

City: Madrid, Community of Madrid, Spain



Start-End date: 01/01/2010 - 31/12/2013

Dedication: Full time

- 4 Name of the project:** Electronic and morphological properties of nanostructured materials of interest in spintronics, catalysis and new alloys.

Project type: Basic research (including archaeological digs, etc)

Project area: National

Role: Researcher

Institution where project took place: Universidad de Valladolid

Type of institution: University

Head(s) researcher(s): A. Vega

Funding institution or bodies:

Ministerio de Ciencia e Innovación

Type of institution: Public Administration

City: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2009 - 31/12/2011

Dedication: Part time

- 5 Name of the project:** Structure and Dynamic of complex fluids and their interface.

Project type: Basic research (including archaeological digs, etc)

Role: Researcher

Institution where project took place: Instituto de Ciencia de Materiales de Madrid

Type of institution: State agency

Head(s) researcher(s): E. Chacón

Funding institution or bodies:

Ministerio de Ciencia e Innovación. Investigación

Type of institution: Public Administration

City: Madrid, Community of Madrid, Spain

Start-End date: 01/01/2008 - 31/12/2009

Dedication: Part time

- 6 Name of the project:** New electrode materials for hydrogen evolution.

Project area: National

Role: Researcher

Institution where project took place: Technical University of Denmark

Type of institution: University

City: Denmark

Funding institution or bodies:

Danish Research Agency, Ministry of Science Technology and Innovation, Denmark.

Type of institution: Public Research Body

Start-End date: 01/01/2005 - 31/12/2007

Dedication: Full time

- 7 Name of the project:** Theoretical study of the structural, electronic, and thermal properties of nanometric systems of technological interest

Project type: Basic research (including archaeological digs, etc)

Project area: National

Institution where project took place: Universidad de Valladolid

Head(s) researcher(s): A. Vega

Funding institution or bodies:

Ministry of Science, and Technology

Type of institution: Public Administration

Start-End date: 01/01/2005 - 01/01/2007



Dedication: Full time

8 Name of the project: Reactivity of nanometric clusters

Project type: Basic research (including archaeological digs, etc)

Project area: European Union

Role: Researcher

Institution where project took place: Valladolid University and Osnabruck University

Head(s) researcher(s): L. C. Balbás; G. Borstel

Funding institution or bodies:

MINISTERIO DE EDUCACION Y CIENCIA

City: Spain

Name of the programme: Acciones Integradas

Start-End date: 01/01/2004 - 31/12/2005

Dedication: Full time

9 Name of the project: Modelling of electronic-molecular nanostructures and metallic compounds (Modelización electrónico-molecular de nanoestructuras)

Project type: Basic research (including archaeological digs, etc)

Project area: National

Role: Researcher

Institution where project took place: Universidad de Valladolid

Type of institution: University

City: Valladolid, Castile and León, Spain

Head(s) researcher(s): Dr. P. Iñiguez

Funding institution or bodies:

Ministry of Science, and Technology

Type of institution: Public Research Body

Start-End date: 01/01/2003 - 31/12/2005

Dedication: Full time

10 Name of the project: Electronic, structural and thermal properties of nanometric metals and metal oxides: study and simulation from first principles.

Project type: Basic research (including archaeological digs, etc)

Project area: National

Role: Researcher

Institution where project took place: Universidad de Valladolid

Type of institution: University

City: Valladolid, Castile and León, Spain

Head(s) researcher(s): L. C. Balbás

Funding institution or bodies:

Junta de Castilla y León

Type of institution: Public Administration

City: Valladolid, Castile and León, Spain

Start-End date: 01/01/2003 - 31/12/2004

Dedication: Full time

11 Name of the project: Study of new nanometric materials.

Project type: Basic research (including archaeological digs, etc)

Project area: National

Role: Researcher

Institution where project took place: Universidad de Valladolid

Type of institution: University



City: Valladolid, Castile and León, Spain

Head(s) researcher(s): L. C. Balbás

Funding institution or bodies:

Junta de Castilla y León

City: Valladolid, Castile and León, Spain

Start-End date: 01/01/2002 - 31/12/2004

Dedication: Full time

Type of institution: Public Administration

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** Eva M. Fernandez; Enrique Chacon; Pedro Tarazona; Andrew O. Parry; Carlos Rascon. Intrinsic Fluid Interfaces and Nonlocality. Phys. Rev. Lett. 111, pp. 096104 - 096104. American Physical Society, 08/2013. Available online at: <<http://link.aps.org/doi/10.1103/PhysRevLett.111.096104>>.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - PHYSICS, MULTIDISCIPLINARY

Impact index: 7.943

Journal in the top 25%: Yes

Position: 5

No. of journals in the cat.: 83

Source of quotes: WOS

Quotes: 6

Relevant publication: Yes

- 2** S Wang; V Petzold; V Tripkovic; J Kleis; JG Howalt; E Skulason; EM Fernandez; B Hvolbaek; G Jones; A Toftelund; H Falsig; M Bjorketun; F Studt; F Abild-Pedersen; J Rossmeisl; JK Norskov; T Bligaard. Universal transition state scaling relations for (de)hydrogenation over transition metals. Physical Chemistry Chemical Physics. 13 - 46, pp. 20760 - 20765. 2011.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - PHYSICS, ATOMIC, MOLECULAR & CHEMICAL

Impact index: 3.573

Journal in the top 25%: Yes

Position: 5

No. of journals in the cat.: 33

Source of quotes: WOS

Quotes: 40

Relevant publication: Yes

- 3** EM Fernandez; PG Moses; A Toftelund; et al. Scaling relationships for adsorption energies on transition metal oxide, sulfide, and nitride surfaces. ANGEWANDTE CHEMIE-INTERNATIONAL EDITION. 47 - 25, pp. 4683 - 4686. 2008.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - CHEMISTRY, MULTIDISCIPLINARY

Impact index: 10.879

Journal in the top 25%: Yes

Position: 4

No. of journals in the cat.: 127

Source of quotes: WOS

Quotes: 62

Relevant publication: Yes

- 4** MB Torres; EM Fernandez; LC Balbas. Theoretical study of isoelectronic SinM clusters ($M=\text{Sc}, \text{Ti}, \text{V}^+$; $n=14-18$). PHYSICAL REVIEW B. 75 - 20, pp. 205425. 2007.
Type of production: Article **Format:** Journal
Impact source: ISI **Category:** PHYSICS, CONDENSED MATTER
Impact index: 3.172 **Journal in the top 25%:** Yes
Position: 9 **No. of journals in the cat.:** 61
Source of quotes: WOS **Quotes:** 50
Relevant publication: Yes
- 5** EM Fernandez; JM Soler; LC Balbas. Planar and cage-like structures of gold clusters: Density-functional pseudopotential calculations. PHYSICAL REVIEW B. 73 - 23, pp. 235433. 2006.
Type of production: Article **Format:** Journal
Impact source: ISI **Category:** Science Edition - PHYSICS, CONDENSED MATTER
Impact index: 3.107 **Journal in the top 25%:** Yes
Position: 10 **No. of journals in the cat.:** 58
Source of quotes: WOS **Quotes:** 76
Relevant publication: Yes
- 6** EM Fernandez; LC Balbas. Theoretical study of CO adsorption on gold/alumina substrates. JOURNAL OF PHYSICAL CHEMISTRY B. 110 - 21, pp. 10449 - 10454. 2006.
Type of production: Article **Format:** Journal
Impact source: ISI **Category:** Science Edition - CHEMISTRY, PHYSICAL
Impact index: 4.115 **Journal in the top 25%:** Yes
Position: 17 **No. of journals in the cat.:** 108
Source of quotes: WOS **Quotes:** 9
Relevant publication: Yes
- 7** EM Fernandez; P Ordejon; LC Balbas. Theoretical study of O_2 and CO adsorption on Au_n clusters ($n=5-10$). CHEMICAL PHYSICS LETTERS. 408 - 4-6, pp. 252 - 257. 2005.
Type of production: Article **Format:** Journal
Impact source: ISI **Category:** Science Edition - PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
Impact index: 2.438 **Journal in the top 25%:** No
Position: 8 **No. of journals in the cat.:** 31
Source of quotes: WOS **Quotes:** 59
Relevant publication: Yes
- 8** MB Torres; EM Fernandez; LC Balbas. Theoretical study of structural, electronic, and magnetic properties of AunM^+ clusters ($M=\text{Sc}, \text{Ti}, \text{V}, \text{Cr}, \text{Mn}, \text{Fe}, \text{Au}$; $n \leq 9$). PHYSICAL REVIEW B. 71 - 15, pp. 155412. 2005.
Type of production: Article **Format:** Journal
Impact source: ISI **Category:** Science Edition - PHYSICS, CONDENSED MATTER
Impact index: 3.185 **Journal in the top 25%:** Yes
Position: 7 **No. of journals in the cat.:** 74



Source of quotes: WOS

Quotes: 80

Relevant publication: Yes

- 9** EM Fernandez; JM Soler; IL Garzon; LC Balbas. Trends in the structure and bonding of noble metal clusters. PHYSICAL REVIEW B. 70 - 16, pp. 165303. 2004.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - PHYSICS, CONDENSED MATTER

Impact index: 3.075

Journal in the top 25%: Yes

Position: 8

No. of journals in the cat.: 60

Source of quotes: WOS

Quotes: 316

Relevant publication: Yes

- 10** EM Fernandez; LC Balbas; G Borstel; JM Soler. First principles calculation of the geometric and electronic structure of $(Al_2O_3)_n(O-x)$ clusters with $n < 15$ and $x=0, 1, 2$. Thin Solid Films. 428 - 1-2, pp. 206 - 210. 2003.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

Impact index: 1.598

Journal in the top 25%: Yes

Position: 35

No. of journals in the cat.: 177

Source of quotes: WOS

Quotes: 8

Relevant publication: Yes

- 11** E Chacon; EM Fernandez; P Tarazona. The effect of dispersion forces on the capillary waves fluctuations of liquid surfaces. Physical Review E. 89, pp. 042406. 2014.

Type of production: Article

Format: Journal

Impact source: ISI

Category: Science Edition - PHYSICS, MATHEMATICAL

Impact index: 2.326

Journal in the top 25%: Yes

Position: 6

No. of journals in the cat.: 55

- 12** P. G. Moses; L. C. Grabow; E. M. Fernandez; B. Hinnemann; H. Topsøe; K. G. Knudsen; J. K. Nørskov. Trends in hydrodesulfurization catalysis based on realistic surface models. Catalysis Letters. 2014.

Type of production: Article

Format: Journal

Impact source: ISI

Category: CHEMISTRY, PHYSICAL

Impact index: 2.291

Journal in the top 25%: No

Position: 62

No. of journals in the cat.: 135

- 13** Eva M. Fernández; Andrés Vega; L. Carlos Balbás. Theoretical study of Al_nV^+ clusters and their interaction with Ar. Journal of Chemical Physics. 11/2013.

Type of production: Article

Category: PHYSICS, ATOMIC, MOLECULAR & CHEMICAL

Impact source: ISI

Journal in the top 25%: Yes

Impact index: 3.164

No. of journals in the cat.: 34

Position: 8

Source of quotes: WOS

Quotes: 1



- 14** H Cantera-López; EM Fernandez; LC Balbas; G. Borstel. Adsorption of H, H₂, and H₂O inside and outside of (M@Si₁₆F)₆ tube-like aggregates and wires (M = V, Ta). A first principles study. *Materials Chemistry and Physics*. 139, pp. 247 - 255. Sending, 2013.
- Type of production:** Article
Impact source: ISI
Impact index: 2.234
Position: 51
Source of quotes: WOS
- Format:** Journal
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Journal in the top 25%: Yes
No. of journals in the cat.: 232
Quotes: 1
- 15** EM Fernandez; E Chacon; P Tarazona. Capillary wave spectrum at adsorbed liquid films. *Physical Review B*. 86 - 8, pp. 085401. 2012.
- Type of production:** Article
Impact source: ISI
Impact index: 3.691
Position: 13
Source of quotes: WOS
- Format:** Journal
Category: Science Edition - PHYSICS, CONDENSED MATTER
Journal in the top 25%: Yes
No. of journals in the cat.: 69
Quotes: 5
- 16** EM Fernandez; MB Torres; LC Balbas. First Principles Study of CO Adsorption-CO₂ Desorption Mechanisms on Oxidized Doped-Gold Cationic Clusters MAunOm⁺ (M = Ti, Fe; n=1, 4-7; m=1-2). *International Journal of Quantum Chemistry*. 111 - 2, pp. 510 - 519. 2011.
- Type of production:** Article
Impact source: ISI
Impact index: 1.357
Position: 25
Source of quotes: WOS
- Format:** Journal
Category: MATHEMATICS, INTERDISCIPLINARY APPLICATIONS
Journal in the top 25%: No
No. of journals in the cat.: 25
Quotes: 2
- 17** LC Balbas; EM Fernandez. GGA versus van der Waals density functional results for mixed gold/mercury molecules and pure Au and Hg cluster properties. *Physical Chemistry Chemical Physics*. 13 - 46, pp. 20863 - 20870. 2011.
- Type of production:** Article
Impact source: ISI
Impact index: 3.573
Position: 5
Source of quotes: WOS
- Format:** Journal
Category: Science Edition - PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
Journal in the top 25%: Yes
No. of journals in the cat.: 33
Quotes: 15
- 18** MB Torres; E Fernandez; LC Balbas. Study of the Structural and Electronic Properties of [Ti@Si-16](n), [Sc@Si16K](n), and [V@Si16F](n) (n <= 9) Aggregates from First Principles. *Journal of Physical Chemistry C*. 115 - 2, pp. 335 - 350. 2011.
- Type of production:** Article
Impact source: ISI
Impact index: 4.805
Position: 26
Source of quotes: WOS
- Format:** Journal
Category: Science Edition - CHEMISTRY, PHYSICAL
Journal in the top 25%: Yes
No. of journals in the cat.: 26
Quotes: 12



- 19** MB Torres; EM Fernandez; LC Balbas. Theoretical Study of the Structural and Electronic Properties of Aggregates, Wires, and Bulk Phases Formed from M@Si-16 Superatoms (M = Sc-, Ti, V+). International Journal of Quantum Chemistry. 111 - 2, pp. 444 - 462. 2011.
Type of production: Article
Impact source: ISI
Impact index: 1.357
Position: 22
Source of quotes: WOS
Format: Journal
Category: MATHEMATICS, INTERDISCIPLINARY APPLICATIONS
Journal in the top 25%: No
No. of journals in the cat.: 95
Quotes: 7
- 20** EM Fernandez; E Chacon; P Tarazona. Thickness and fluctuations of free and adsorbed liquid films. Physical Review B. 84 - 20, pp. 205435. 2011.
Type of production: Article
Impact source: ISI
Impact index: 3.691
Position: 13
Source of quotes: WOS
Format: Journal
Category: Science Edition - PHYSICS, CONDENSED MATTER
Journal in the top 25%: Yes
No. of journals in the cat.: 69
Quotes: 4
- 21** GL Lurrabaquio; MB Torres; EM Fernandez; LC Balbas. Trends in the formation of aggregates and crystals from M@Si-16 clusters: a study from first principle calculations. Journal of Mathematical Chemistry. 48 - 1, pp. 109 - 117. 2010.
Type of production: Article
Impact source: ISI
Impact index: 1.259
Position: 70
Format: Journal
Category: CHEMISTRY, MULTIDISCIPLINARY
Journal in the top 25%: No
No. of journals in the cat.: 147
- 22** E Chacon; EM Fernandez; D Duque; R Delgado-Buscalioni; P Tarazona. Comparative study of the surface layer density of liquid surfaces. Physical Review B. 80 - 19, pp. 195403. 2009.
Type of production: Article
Impact source: ISI
Impact index: 3.475
Position: 12
Source of quotes: WOS
Format: Journal
Category: Science Edition - PHYSICS, CONDENSED MATTER
Journal in the top 25%: Yes
No. of journals in the cat.: 12
Quotes: 18
- 23** JI Martinez; EM Fernandez. Optical absorption spectra of Ag-11 isomers. European Physical Journal D. 52 - 1-3, pp. 199 - 202. 2009.
Type of production: Article
Impact source: ISI
Impact index: 1.420
Position: 20
Source of quotes: WOS
Format: Journal
Category: PHYSICS, ATOMIC, MOLECULAR & CHEMICA
Journal in the top 25%: No
No. of journals in the cat.: 33
Quotes: 6



- 24** EM Fernandez; MB Torres; LC Balbas. Theoretical study of the coadsorption of CO and O-2 on doped cationic gold clusters MAun+ (M = Ti, Fe, Au; n=1, 6, 7). European Physical Journal D. 52 - 1-3, pp. 135 - 138. 2009.
Type of production: Article
Impact source: ISI
Impact index: 1.420
Position: 20
Source of quotes: WOS
Format: Journal
Category: PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
Journal in the top 25%: No
No. of journals in the cat.: 33
Quotes: 6
- 25** MB Torres; EM Fernandez; LC Balbas. Theoretical study of oxygen adsorption on pure Au-n+1(+) and doped MAun+ cationic gold clusters for M = Ti, Fe and n=3-7. JOURNAL OF PHYSICAL CHEMISTRY A. 112 - 29, pp. 6678 - 6689. 2008.
Type of production: Article
Impact source: ISI
Impact index: 2.871
Position: 7
Source of quotes: WOS
Format: Journal
Category: Science Edition - PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
Journal in the top 25%: Yes
No. of journals in the cat.: 7
Quotes: 33
- 26** EM Fernandez; RI Eglitis; G Borstel; LC Balbas. Ab initio calculations of H2O and O-2 adsorption on Al2O3 substrates. COMPUTATIONAL MATERIALS SCIENCE. 39 - 3, pp. 587 - 592. 2007.
Type of production: Article
Impact source: ISI
Impact index: 1.135
Position: 80
Source of quotes: WOS
Format: Journal
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Journal in the top 25%: No
No. of journals in the cat.: 80
Quotes: 25
- 27** EM Fernandez; MB Torres; LC Balbas. Density functional studies of noble metal clusters. Adsorption of O-2 and CO on gold and silver clusters. Recent Advances in the Theory of Chemical and Physical Systems. 15, pp. 407 - 432. 2006.
Type of production: Chapters of books
Source of quotes: WOS
Format: Book
Quotes: 4
- 28** EM Fernandez; LC Balbas. Theoretical study of CO adsorption on Au/alumina substrates. PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE. 203 - 6, pp. 1277 - 1283. 2006.
Type of production: Article
Impact source: ISI
Impact index: 1.211
Position: 70
Source of quotes: WOS
Format: Journal
Category: MATERIALS SCIENCE, MULTIDISCIPLINARY
Journal in the top 25%: No
No. of journals in the cat.: 70
Quotes: 5
- 29** EM Fernandez; R Eglitis; G Borstel; LC Balbas. Adsorption and dissociation of water on relaxed alumina clusters: a first principles study. PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS. 242 - 4, pp. 807 - 809. 2005.
Type of production: Article
Format: Journal



Impact source: ISI

Impact index: 0.836

Position: 36

Source of quotes: WOS

Category: Science Edition - PHYSICS, CONDENSED MATTER

Journal in the top 25%: No

No. of journals in the cat.: 36

Quotes: 10

- 30** MB Torres; EM Fernandez; LC Balbas. Density functional study of the stability and magnetic behaviour of AunTM+ clusters (TM = An, Sc, Ti, V, Cr, Mn, Fe; $1 \leq n \leq 9$). PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS. 242 - 4, pp. 819 - 821. 2005.

Type of production: Article

Impact source: ISI

Impact index: 0.836

Position: 36

Source of quotes: WOS

Format: Journal

Category: Science Edition - PHYSICS, CONDENSED MATTER

Journal in the top 25%: No

No. of journals in the cat.: 36

Quotes: 2

- 31** EM Fernandez; K Michaelian; LC Balbas; LA Perez; IL Garzon. Structural properties of bimetallic clusters from density functional calculations. INTERNATIONAL JOURNAL OF MODERN PHYSICS B. 19 - 15-17, pp. 2339 - 2344. 2005.

Type of production: Article

Impact source: ISI

Impact index: 0.381

Position: 51

Source of quotes: WOS

Format: Journal

Category: Science Edition - PHYSICS, CONDENSED MATTER

Journal in the top 25%: No

No. of journals in the cat.: 51

Quotes: 25

- 32** EM Fernandez; JM Soler; IL Garzon; LC Balbas. Trends in the structure and bonding of neutral and charged noble metal clusters. INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. 101 - 6, pp. 740 - 745. 2005.

Type of production: Article

Impact source: ISI

Impact index: 1.192

Position: 27

Source of quotes: WOS

Format: Journal

Category: Science Edition - MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

Journal in the top 25%: No

No. of journals in the cat.: 27

Quotes: 21

- 33** EM Fernandez; MB Torres; LC Balbas. Trends in the bonding of the first-row transition metal compounds: V(001) surface, TM-oxide and nitride molecules, and AunTi ($2 \leq n \leq 7$) clusters. INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. 99 - 1, pp. 39 - 46. 2004.

Type of production: Article

Impact source: ISI

Impact index: 1.392

Position: 17

Source of quotes: WOS

Format: Journal

Category: Science Edition - MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

Journal in the top 25%: No

No. of journals in the cat.: 17

Quotes: 15



- 34** EM Fernandez; G Borstel; JM Soler; LC Balbas. Study of $(Al_2O_3)_n(O-x)$ clusters with $n \leq 16$ and $x=0, 1, 2$ from first principles calculations. European Physical Journal D. 24 - 1-3, pp. 245 - 248. 2003.
- Type of production:** Article
Impact source: ISI
Impact index: 1.612
Position: 14
Source of quotes: WOS
- Format:** Journal
Category: PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
Journal in the top 25%: No
No. of journals in the cat.: 33
Quotes: 8

Work presented in conferences at the national or international level

- 1** **Title:** Intrinsic Fluid Interfaces and Non-Locality
Name of the conference: International Conference Statistical Physics
City: Rhodes, Greece
Date: 07/07/2014
End date: 11/07/2014
Organising institution: Politecnico di Torino
City: Italy
E. M. Fernández; E. Chacón; P. Tarazona; A. O. Parry; C. Rascón. "Intrinsic Fluid Interfaces and Non-Locality".
- 2** **Title:** Study of The H₂ Physisorption on (TM@Si₁₆F)₆ Clusters and Wires: Contribution of The Van Der Waals Dispersion Forces
Name of the conference: International Congress on Energy Efficiency and Energy Related Materials
City: Antalya, Turkey
Date: 2013
End date: 2013
Organising institution: Gebze Institute of Technology
E. M. Fernández; L. C. Balbás.
- 3** **Title:** Theoretical study of Al_n+1+ clusters and their interaction with Ar
Name of the conference: ISSPIC XVI
Type of participation: Poster
City: Leuven, Belgium
Date: 2012
E. M. Fernández; L. C. Balbás.
- 4** **Title:** Fluctuaciones de Películas Adsorbidas
Name of the conference: FISES11
Type of event: Conference
Type of participation: Poster
City: Barcelona, Spain
Date: 2011
E. M. Fernández; E. Chacón; P. Tarazona.
- 5** **Title:** H₂ and H₂O adsorption by [TM@Si₁₆F]₆ nanotubes from DFT
Name of the conference: ISMPC11
Type of event: Conference
Type of participation: Poster



Date: 2011

City: Jyväskylä, Finland

E. M. Fernández; H. Cantera-López; L. C. Balbás; G. Borstel.

- 6** **Title:** Thickness and compressibility on free and adsorbed liquid films
Name of the conference: LMC8
Type of participation: Poster
City: Viena,
Date: 2011
E. M. Fernández; E. Chacón; P. Tarazona.
- 7** **Title:** Static polarizability of Ar-AuX complexes (X = F, Hg) and Aun clusters. DFT calculations with a non local correlation van der Waals functional compared to GGA results.
Name of the conference: ISSPIC XV
Type of event: Conference
Type of participation: Speaker
City: Oaxaca, Mexico
Date: 2010
Organising institution: Universidad Nacional Autonoma de Mexico
E. M. Fernández; L. C. Balbás.
- 8** **Title:** First principles study of CO adsorption-CO₂ desorption mechanisms on MAu-nOm+ (M = Ti, Fe; n = 1, 4-7; m =1-2) clusters.
Name of the conference: ICTAC 13
Type of event: Conference
Type of participation: Poster
Date: 2010
City: Sendai, Japan
E. M. Fernández; M. B. Torres; L. C. Balbás. 2010.
- 9** **Title:** First principles calculation of CO adsorption on MAun+-O₂ doped cationic gold-oxygen complexes for m = Ti, Fe (n=3-7).
Name of the conference: XIV EUROPACAT IX.
Type of event: Conference
Type of participation: Poster
Date: 2009
City: Salamanca, Spain
E. M. Fernández; M. B. Torres; L. C. balbás. 2009.
- 10** **Title:** First principles calculation of co adsorption on MAun+-O₂ doped cationic gold-oxygen complexes for M =Tti, Fe (n=3-7).
Name of the conference: FPMPMO-2009.
Type of event: Conference
Type of participation: Poster
Date: 2009
City: Madrid, Spain
E. M. Fernández; M. B. Torres; L. C. Balbás. 2009.
- 11** **Title:** Aplicación del ISM al estudio de la transición de mojado
Name of the conference: FISES09
Type of participation: Speaker



City: Huelva, Spain

Date: 2009

E. M. Fernández; E. Chacón; P. Tarazona.

- 12** **Title:** Scaling Relations for Adsorption Energies on Transition Metal Oxide, Sulfide and Nitride surfaces
Name of the conference: 12th International Conference on Theoretical Aspects of Catalysis
Type of participation: Poster
City: Varna, Bulgaria
Date: 2008
E. M. Fernández, P. G. Moses, A. Toftelund, H. A. Hansen, J. I. Martínez, F. Abild-Pedersen, J. Klei.
- 13** **Title:** Study of the stability of crystals formed by Si₁₆Ti, Si₁₆ScK, and Si₁₆VF super-atom units.
Name of the conference: XIV International Symposium on Small Particles and Inorganic Cluster (ISSPIC)
Type of participation: Poster
City: Valladolid, Spain
Date: 2008
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 14** **Title:** Theoretical study of oxygen adsorption on pure Au_{n+1+} and doped MAu_{n+} cationic gold cluster for M = Ti, Fe (n = 3-7). Is it viable the co-adsorption of CO and O₂ on MAu₇₊?
Name of the conference: XIV International Symposium on Small Particles and Inorganic Cluster (ISSPIC)
Type of participation: Poster
City: Valladolid, Spain
Date: 2008
M. B. Torres, E. M. Fernández y L. C. Balbás.
- 15** **Title:** Trends in the formation of aggregates of silicon doped super-molecular units
Name of the conference: XIV International Symposium on Small Particles and Inorganic Cluster (ISSPIC)
Type of participation: Poster
City: Valladolid, Spain
Date: 2008
M. B. Torres; G. López; E. M. Fernández; L. C. Balbás.
- 16** **Title:** Density Functional Calculations of Ammonia Synthesis on gamma-Mo₂N
Name of the conference: Europacat VIII
Type of participation: Poster
City: Turku, Finland
Date: 2007
E. M. Fernández; T. Bligaard; J. K. Nørskov.
- 17** **Title:** Electrocatalysis at the sub-nanometer scale: Structure and function of supported Mo₃S₄+4 cluster
Name of the conference: NanoDay
Type of participation: Poster
City: Lingby, Denmark
Date: 2006
T. F. Jaramillo, S. Saadi, E. M. Fernández, J. Zhang, B. L. Ooi, J. Bonde, J. Ulstrup, J. K. Nørskov.
- 18** **Title:** Density functional Studies of noble metal clusters. Adsorption of O₂ and CO on gold and silver clusters
Name of the conference: Simposium on Size Selected clusters (S3C)
Type of event: Conference



Type of participation: Poster

City: Brand,

Date: 2005

E. M. Fernández; M. B. Torres; L. C. Balbás.

- 19** **Title:** First principles study of the size dependent selective behaviour of O₂ adsorption on free silver and gold clusters
Name of the conference: 7th Iberian Joint Meeting on Atomic and Molecular Physics
Type of participation: Poster
City: Lisboa, Portugal
Date: 2005
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 20** **Title:** O₂ adsorption on cationic gold clusters pure and doped with a 3d transition metal
Name of the conference: XXX Reunión bienal de la Real Sociedad Española de Física
Type of participation: Speaker
Date: 2005
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 21** **Title:** Theoretical study of O₂ and CO adsorption on gold clusters in gas phase and supported on alumina nano-particles and surfaces
Name of the conference: X-th Symposium on Surface Physics (SSP10)
Type of participation: Speaker
City: Praga, Czech Republic
Date: 2005
E. M. Fernández; L. C. Balbás.
- 22** **Title:** Theoretical study of O₂ and CO adsorption on gold clusters in gas phase and supported on alumina nano-particles and surfaces
Name of the conference: XXX Reunión bienal de la Real Sociedad Española de Física
Type of participation: Speaker
City: Orense, Spain
Date: 2005
E. M. Fernández; L. C. Balbás.
- 23** **Title:** Theoretical study of O₂ and CO adsorption on gold clusters in gas phase and supported on alumina nano-particles and surfaces
Name of the conference: Theoretical Biophysics Symposium (TEOBIO05)
Type of participation: Poster
City: Orebrö, Sweden
Date: 2005
E. M. Fernández; L. C. Balbás.
- 24** **Title:** Theoretical study of O₂ and CO adsorption on gold clusters in gas phase and supported on alumina nano-particles and surfaces
Name of the conference: Trends in Nanotechnology (TNT-2005)
Type of participation: Poster
City: Oviedo, Spain
Date: 2005
E. M. Fernández; L. C. Balbás.



- 25** **Title:** Adsorption and dissociation of water on nonideal surface of alumina. A first principle study
Name of the conference: IX European conference on organised films (ECOF)
Type of participation: Poster
City: Valladolid, Spain
Date: 2004
E. M. Fernández; R. Eglitis; G. Borstel; L. C. Balbás.
- 26** **Title:** Adsorption and dissociation of water on relaxed alumina clusters: a first principle study
Name of the conference: Electronic structure principles and applications (ESPA)
Type of participation: Poster
City: Valladolid, Spain
Date: 2004
E. M. Fernández; R. Eglitis; G. Borstel; L. C. Balbás .
- 27** **Title:** Density functional study if the electronic delocalization and magnetic behaviour in $AunX+$ ($x= Sc, Ti, V, Cr, Mn, Fe; n \neq 9$) clusters.
Name of the conference: IX European conference on organised films (ECOF)
Type of participation: Poster
City: Valladolid, Spain
Date: 2004
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 28** **Title:** Golden fullerenes? A first principle study of $Au_{18}, Au_{20}, Au_{32}, Au_{50}, Au_{162}$ and Au_{1982} - metal cluster
Name of the conference: Electronic structure principles and applications (ESPA)
Type of participation: Poster
City: Valladolid, Spain
Date: 2004
E. M. Fernández; J. M. Soler; I. L. Garzón; L. C. Balbás.
- 29** **Title:** Size dependent selective behavior of O_2 on free silver cluster anions. A first principles study
Name of the conference: Electronic structure principles and applications (ESPA)
Type of participation: Poster
City: Valladolid, Spain
Date: 2004
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 30** **Title:** Structural properties of bimetallic clusters from density functional calculations
Name of the conference: XII International Symposium on Small Particles and Inorganic Cluster (ISSPIC).
City: Nanjung, China
Date: 2004
E. M. Fernández; J. M. Soler; I. L. Garzón; L. C. Balbás .
- 31** **Title:** Trends in the structure and bonding of neutral and charged noble metal clusters
Name of the conference: Siesta meetig
Type of participation: Speaker
City: Madrid, Spain
Date: 2004
E. M. Fernández; J. M. Soler; I. L. Garzón; L. C. Balbás.



- 32** **Title:** Trends in the structure and bonding of neutral and charged noble metal clusters
Name of the conference: Electronic structure simulations of nanostructures
Type of participation: Poster
City: Jyväskylä, Finland
Date: 2004
E. M. Fernández; J. M. Soler; I. L. Garzón; L. C. Balbás .
- 33** **Title:** Trends in the structure and bonding of pure and doped noble metal clusters. Application to O₂ and CO adsorption
Name of the conference: Quantum system in chemistry & physics
Type of participation: Invited speaker
City: Les Houches, France
Date: 2004
E. M. Fernández; L. C. Balbás.
- 34** **Title:** Tendencias en la estructura atómica y enlace químico de agregados neutros y cargados de metales nobles
Name of the conference: Segunda reunión mexicana de físico-química teórica
Type of participation: Speaker
City: Guanajuato, Mexico
Date: 2003
E. M. Fernández; I. L. Garzón; L. C. Balbás.
- 35** **Title:** Tendencias en la estructura atómica y enlace químico de agregados neutros y cargados de metales nobles
Name of the conference: XLVI Congreso nacional de física
Type of participation: Poster
City: Mérida, Mexico
Date: 2003
E. M. Fernández; I. L. Garzón; L. C. Balbás.
- 36** **Title:** Trends in the bonding of the first-row transition metal compounds: V (001) surface, TM-oxide and nitride molecules and AunTi (2 < n < 7) clusters.
Name of the conference: Density functional theory in chemistry and physics (DFT-03)
Type of participation: Poster
City: Bruselas,
Date: 2003
M. B. Torres; E. M. Fernández; L. C. Balbás.
- 37** **Title:** Trends in the structure and bonding of neutral and charged noble metal clusters
Name of the conference: Second European school on computational chemistry, reaction and molecular dynamics
Type of participation: Speaker
City: Barcelona, Spain
Date: 2003
E. M. Fernández; L. C. Balbás.
- 38** **Title:** Trends in the structure and bonding of neutral and charged noble metal clusters
Name of the conference: Density functional theory in chemistry and physics (DFT-03)
Type of participation: Poster
City: Bruselas,



Date: 2003

E. M. Fernández; J. M. Soler; I. L. Garzón; L. C. Balbás .

39 Title: Trends in the structure and bonding of neutral and charged noble metal clusters.

Name of the conference: XXIX Reunión bienal de la Real Sociedad Española de Física PUBLICACIÓN: Conference Proceedings: Vol. I, p.226-227 Ed. L. Vázquez, 2002 ISBN=84-655-2771-9

Type of participation: Poster

City: Madrid, Spain

Date: 2003

E. M. Fernández; J. M. Soler; I. Seijo; I. L. Garzón; L. C. Balbás .

40 Title: First principles calculation of the geometric and electronic structure of $(Al_2O_3)_n(O_x)$ clusters with $n < 15$ and $x=0,1,2$.

Name of the conference: E-MRS spring meeting 2002

Type of participation: Poster

City: Strasbourg, France

Date: 2002

E. M. Fernández; G. Borstel; J. M. Soler; L. C. Balbás.

41 Title: Study of $(Al_2O_3)_n(O_x)$ clusters with $n < 16$ and $x = 0,1,2$ from first principles calculation.

Name of the conference: XI International Symposium on Small Particles and Inorganic Cluster (ISSPIC) PUBLICACIÓN: Conference Proceedings: J-9

Type of participation: Poster

City: Strasbourg, France

Date: 2002

E. M. Fernández; G. Borstel; J. M. Soler; L. C. Balbás.

Other publishing activities

Title or object: Organización de la Semana de la Ciencia (Universidad de Valladolid).

Name of the event: Semana de la Ciencia

Type of event: Fairs and exhibitions

City: Valladolid, Spain

Date: 2011

Organising institution: Universidad de Valladolid **Type of institution:** University



Experience in R&D&I management and participation in scientific committees

Experience in assessment and review of R&D&I projects and articles

- 1 **Responsibility held:** Evaluadora de proyectos para la Universidad de Leuven (Bélgica)
Organising institution: Universidad de Leuven **Type of institution:** University
City: Belgium
Start-End date: 2013 - 2013
- 2 **Responsibility held:** Referee of The European Physical Journal D
Organising institution: Springer
Start date: 2006
- 3 **Responsibility held:** Referee of the Journal of Physical Chemistry
Organising institution: ACS
Start date: 2006

Other achievements

Stays in public or private R&D&I centres

- 1 **institution:** Technical University of Denmark **Type of institution:** University
City: Lyngby, Denmark
Start-End date: 01/03/2006 - 29/02/2008 **Duration:** 2 years
Funding institution: Danish Research Agency, Ministry of Science Technology and Innovation
Aims of the stay: Post-doctoral
- 2 **institution:** Instituto de Ciencia de los Materiales de Barcelona
City: Barcelona, Spain **Type of institution:** State agency
Start-End date: 01/06/2004 - 10/08/2004 **Duration:** 2 months - 15 days
Aims of the stay: Doctorate
- 3 **institution:** National Autonomous University of Mexico **Type of institution:** University
Faculty, institute or centre: Institute of Physics
City: Mexico, Mexico
Start-End date: 18/09/2003 - 12/12/2003 **Duration:** 2 months - 25 days
Aims of the stay: Doctorate
- 4 **institution:** Universidad Autónoma de Madrid **Type of institution:** University
Faculty, institute or centre: Facultad de Ciencias
City: Madrid, Spain
Start-End date: 01/10/2002 - 20/12/2002 **Duration:** 2 months - 20 days
Aims of the stay: Doctorate



Grants and scholarships obtained

- 1** **Name of the grant:** Comunidad de Madrid contract associated to project
Aims: Post-doctoral
Conferring institution: Comunidad de Madrid **Type of institution:** Public Administration
Conferral date: 01/01/2011 **Duration of the grant:** 2 years
End date: 31/10/2012
- 2** **Name of the grant:** PostDoc contract funded by "Junta para la Ampliación de estudios" JaeDoc
Aims: Post-doctoral
Conferring institution: Consejo Superior de Investigaciones Científicas **Type of institution:** State agency
Conferral date: 15/03/2008 **Duration of the grant:** 3 years
End date: 31/12/2010
- 3** **Name of the grant:** Danish Research Agency contract associated to project
Aims: Post-doctoral
Conferring institution: Danish Research Agency **Duration of the grant:** 2 years
Conferral date: 01/03/2006
End date: 29/02/2008
- 4** **Name of the grant:** Formación del Personal Universitario (FPU)
Aims: Pre-doctoral
Conferring institution: Dirección Provincial del Ministerio de Educación y Cultura **Type of institution:** Publico
Conferral date: 01/01/2002 **Duration of the grant:** 4 years
End date: 31/12/2005
- 5** **Name of the grant:** Ayuda a la asistencia a cursos para el desarrollo de la Tesis Doctoral: pago de la inscripción y el transporte
City:
Aims: Pre-doctoral
Conferring institution: Universidad de Valladolid **Type of institution:** University
Amount of the grant: 574,89
Conferral date: 2005
- 6** **Name of the grant:** Ayuda a la asistencia a cursos para el desarrollo de la Tesis Doctoral: pago de la inscripción y el transporte
City:
Aims: Pre-doctoral
Conferring institution: Universidad de Valladolid **Type of institution:** University
Amount of the grant: 725,8
Conferral date: 2004



Membership of scientific societies and professional associations

Name: Real Sociedad Española de Física

City: Madrid, Spain

Start date: 01/06/2004

Recognitions, distinctions and awards received throughout the career

- 1 Description:** Premio Extraordinario de Doctorado
Conferring institution: Universidad de Valladolid **Type of institution:** University
Conferral date: 2007
- 2 Description:** Premio de Real Sociedad Española de Física - Fundación BBVA para Investigadores Noveles en Física Teórica
Conferring institution: Real Sociedad Española de Física - Fundación BBVA
Conferral date: 2007

Recognition/accreditation for teaching work and compensation received

- 1 Description:** Acreditación como Profesor Contratado doctor
Conferring institution: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of institution:** Public Administration
Date of recognition: 20/10/2011
- 2 Description:** Acreditación como Profesor de Universidad Privada
Conferring institution: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of institution:** Publica
Date of recognition: 20/10/2011
- 3 Description:** Acreditación como Profesor Ayudante Doctor
Conferring institution: Agencia de Calidad, Acreditacion y Prospectiva de las Universidades de Madrid **Type of institution:** Publico
City: Madrid, Community of Madrid, Spain
Date of recognition: 07/04/2011
- 4 Description:** Acreditación como Profesor Contratado doctor
Conferring institution: Agencia de Calidad, Acreditacion y Prospectiva de las Universidades de Madrid **Type of institution:** Publico
City: Madrid, Community of Madrid, Spain
Date of recognition: 07/04/2011
- 5 Description:** Acreditación como Profesor de Universidad Privada
Conferring institution: Agencia de Calidad, Acreditacion y Prospectiva de las Universidades de Madrid **Type of institution:** Publico
City: Madrid, Community of Madrid, Spain



Date of recognition: 07/04/2011

- 6** **Description:** Acreditación como Profesor Ayudante Doctor
Conferring institution: Agencia Nacional de Evaluación de la Calidad y Acreditación
Date of recognition: 25/05/2010
Type of institution: Publica

Summary of other achievements

- 1** **Description of the achievement:** Estancia Universidad de Osnabrück (Alemania) 10 days in May 2005
City: Osnabrück,
- 2** **Description of the achievement:** Estancia Universidad de Osnabrück (Alemania) 10 days in November 2004
City: Osnabrück,
- 3** **Description of the achievement:** Estancia Universidad de Osnabrück (Alemania) 10 días in November 2005
City: Osnabrück,
- 4** **Description of the achievement:** Estancia Universidad de Osnabrück (Alemania) 2 weeks in March 2004
City: Osnabrück,
- 5** **Description of the achievement:** International research collaboration with the "Universidad Nacional Autónoma de México (UNAM)" from 2003-2005
- 6** **Description of the achievement:** International research collaboration with the Technical University of Denmark (Denmark) from 2008 to 2012
- 7** **Description of the achievement:** International research collaboration with the University of Osnabruck (Germany) from 2002
- 8** **Description of the achievement:** Referee of The European Physical Journal D