CURRÍCULUM VÍTAE NORMALIZADO

Carlos Pecharromán García

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GOBIERNO DE ESPAÑA
MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

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.

El nexo común de la actividad investigadora ha sido el análisis científico de las propiedades físicas de los sistemas heterogéneos desde un punto de vista, tanto teórico como experimental, con el fin de utilizar estos conocimientos para las aplicaciones tecnológicas orientadas a la fabricación de nuevos materiales y dispositivos. En este sentido hay que destacar que este curriculum tiene tanto aportaciones científicas como tecnológicas.

Las aportaciones científicas que aparecen en el CVN completo son 125 (2 de diciembre de 2024), con un índice h=37 (Scopus) y 4848 citas (38,9 citas por publicación).

Varias sublíneas de la actividad investigadora han sido pioneras, y como consecuencia de ello, sus resultados se han transferido a la industria produciéndose materiales a nivel industrial basadas en estas investigaciones.

La financiación de la investigación se ha realizado gracias en parte a los 22 proyectos financiados por entidades públicas en los que se ha participado (8 como IP). De ellos 15 fueron con financiación estatal, 1 de la US Air Force, 3 de cooperación internacional del CSIC (1 como IP) y 1 europeo (NANOKER) en el que ejercí como responsable de una de las líneas (“Cerámicas transparentes”). También se negociaron13 contratos con compañías industriales (11 de ellos como IP). Como resultado de todo ello, se obtuvo una financiación acumulada de 1.794.853,82 € sin contar los proyectos regulados por organismos extranjeros (Tan solo el proyecto Nanoker tenía una financiación de 11.000.000 € por parte de la UE).

Parte de la participación en la investigación industrial estuvo basada en 9 patentes de las que soy autor, 3 de las cuales han sido transferidas a otras tantas compañías. Una de éstas, en la que se desarrolla un procedimiento de síntesis industrial de nanopartículas es la base de una nueva línea de producto de la compañía Tolsa S.A. (De la que es responsable uno de los doctores que formé, el Dr. Antonio Esteban Cubillo). Se puede consultar la página web https://www.tolsa.com/es/innovacion/.

En el ICMM-CSIC soy el responsable del servicio de espectrosocopía IR y elipsometría (abierto a toda la comunidad científica),

Participo en el curso del ICMM-CSIC que impartimos todos los años llamado Fronteras en Ciencia de Materiales (https://wp.icmm.csic.es/fronteras/).

Se han dirigido 5 tesis doctorales, y en todos los casos los doctores tienen trabajo en centros de I+D privados (4) y públicos (1). También se han supervisado 3 prácticas externas para estudiantes de grado, 2 de ellas de alumnas de la “Université Polythecnique” de Paris.

He colaborado como revisor con un gran número de revistas científicas y he sido editor asociado de la “Materials” durante 1 año. También he evaluado varios proyectos de I+D de organismos extranjeros.Para cualquier aclaración, el CV completo se puede consultar en el siguiente enlace https://cvn.fecyt.es/0000-0002-5431-1002

B.1. Breve descripción del Trabajo de Fin de Grado (TFG) y puntuación obtenida

B.2. Breve descripción del Trabajo de Fin de Máster (TFM) y puntuación obtenida

Leadership Merits

Brief presentation of the merits related to leadership activities of special relevance.

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.

5 "Sexenios" in 2024
Supervised PhD: 5 of which 2 during the last 10 years

Citations: 4848 (Diembre 2024)

Last 5 years citation average : 251 ct/year (2018/2022)

124 indexed scientific publications
First quartil publication: 88

Factor h:37 (Scopus) (12/2024)

Carlos Pecharromán García

Surname(s): **Pecharromán García**
Name: **Carlos**
ORCID: **0000-0002-5431-1002**
ScopusID: **7004631935**
ResearcherID: **B-1883-2010**
Contact aut. region/reg.: **Community of Madrid**

Current professional situation

Employing entity: Consejo Superior de Investigaciones Científicas
Type of entity: State agency
Department: Materiales Multifuncionales, Instituto de Ciencia de Materiales de Madrid
Professional category: Investigador Científico
Leadership and management (Y/N): No
City employing entity: Madrid, Community of Madrid, Spain
Phone: (34) 913348991
Email: cpg@icmm.csic.es
Start date: 09/06/2009
Type of contract: Civil servant
Dedication regime: Full time
Primary (UNESCO code): 220207 - Interaction of electromagnetic waveswith matter; 220914 - Optical properties of solids; 221102 - Composites
Secondary (UNESCO code): 331203 - Ceramics; 331208 - Máterial properties
Tertiary (UNESCO code): 331208 - Máterial properties
Identify key words: Description; Optical properties; General interest material and subjects noncovered in other parts

Previous positions and activities

	Employing entity	Professional category	Start date
1	Instituto de Ciencia de Materiales de Madrid	Científico Titular	17/08/2000
2	Instituto de Ciencia de Materiales de Madrid	Becario postdoctoral CAM	05/2000
3	Instituto de Ciencia de Materiales de Madrid	Becario postdoctoral Proyecto	01/2000
4	Instituto de Ciencia de Materiales de Madrid	Investigador Contratado (MEC)	06/1998
5	Instituto de Ciencia de Materiales de Madrid	Investigador Contratado (MEC)	01/1997
6	State University of New York at Stony Brook	Becario Postdoctoral (OTAN).	01/1996
7	Institut für Festkörperforschung (IFF),	Beca/Contrato C.E.	05/1994
8	Instituto de Ciencia de Materiales de Madrid	Becario F.P.I.	01/1990

1 **Employing entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Professional category: Científico Titular
Start-End date: 17/08/2000 - 08/06/2009

2 **Employing entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Professional category: Becario postdoctoral CAM
Start-End date: 05/2000 - 08/2000

3 **Employing entity:** Instituto de Ciencia de Materiales de Madrid
Professional category: Becario postdoctoral Proyecto
Start-End date: 01/2000 - 01/2000

4 **Employing entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Professional category: Investigador Contratado (MEC)
Start-End date: 06/1998 - 01/2000

5 **Employing entity:** Instituto de Ciencia de Materiales de Madrid
Professional category: Investigador Contratado (MEC)
Start-End date: 01/1997 - 06/1998

6 **Employing entity:** State University of New York at Stony Brook
Professional category: Becario Postdoctoral (OTAN).
Start-End date: 01/1996 - 12/1996 **Duration:** 1 year

7 **Employing entity:** Institut für Festkörperforschung (IFF),
Professional category: Beca/Contrato C.E.
Start-End date: 05/1994 - 10/1995

8 **Employing entity:** Instituto de Ciencia de Materiales de Madrid
Professional category: Becario F.P.I.
Start-End date: 01/1990 - 10/1993

Education

University education

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

University degree: Higher degree
Name of qualification: Licenciado en Ciencias Físicas Especialidad Física de Materiales
Degree awarding entity: Universidad Complutense de Madrid **Type of entity:** University
Date of qualification: 02/07/1989

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Física Aplicada
Degree awarding entity: Universidad Autónoma de Madrid **Type of entity:** University
Date of degree: 20/01/1994

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	A1	A1	A1	A1	A1
French	A2	A2	A2	A2	B1
German	B1	B1	B1	B1	C1

Teaching experience

Experience supervising doctoral thesis and/or final year projects

1 **Project title:** Metamateriales metal-cerámica para aplicaciones en transferencia inalámbrica de energía
Entity: Universidad de Oviedo **Type of entity:** University
Student: Celia Mallada Rivera
Date of reading: 18/03/2021

2 **Project title:** “Influencia del procesamiento en los mecanismos de scattering de luz en cerámicas de alúmina transparente”
Entity: Universidad Autónoma de Madrid, Facultad de Ciencias, Dpto. Física **Type of entity:** University
Student: Gustavo Mata Osoro
Obtained qualification: Sobresaliente “Cum Laude”
Date of reading: 11/01/2012

3 **Project title:** Obtención de nanopartículas oxídicas, metálicasy aleaciones en sistemas jerárquicos en base sepiolita para aplicaciones multifuncionales
Entity: Universidad Autónoma de Madrid: Facultad de Ciencias, Dpto. Química inorgánica
Student: Raúl Pina Zapardiel
Obtained qualification: Sobresaliente “Cum Laude”
Date of reading: 30/01/2011

4 **Project title:** Obtención de nanopartículas metálicas monodispersas y resistentes a la corrosión embebebidas en sepiolita
Entity: Universidad Autónoma de Madrid: Facultad de Ciencias, Dpto. Química inorgánica
Student: Antonio Esteban Cubillo
Obtained qualification: Sobresaliente “Cum Laude”
Date of reading: 13/01/2007

5 **Project title:** Nuevos Materiales Percolativos Cerámica-Metal Micro Y Nanoestructurados BaTiO3/Ni, SrTiO3/Ni Y 3Y-TZP/Ni
Entity: Universidad Autónoma de Madrid : Facultad de Ciencias, Dpto. Química inorgánicaAÑO: 2004
Student: Fátima Esteban Betegón
Obtained qualification: Sobresaliente “Cum Laude”
Date of reading: 07/05/2004

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:** Integración a gran escala de dispositivos optoelectrónicos 2D en plataformas fotónicas PIC estándar (WOW-2D)
Entity where project took place: Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Carlos Pecharromán García
Nº of researchers: 2
Funding entity or bodies:
LA MINISTRA DE CIENCIA E INNOVACIÓN **Type of entity:** Public Research Body
City funding entity: Madrid

Start-End date: 01/10/2022 - 30/09/2024
Total amount: 52.900 €

2 **Name of the project:** DESARROLLO A BAJA TEMPERATURA DE MATERIALES NANOESTRUCTURADOS DE MATRIZ INORGANICA PARA APLICACIONES DE TECNOLOGIAS AVANZADAS
Entity where project took place: Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Carlos Pecharromán García; Belén Cabal Álvarez

Nº of researchers: 7
Funding entity or bodies:
Agencia Estatal de Investigación **Type of entity:** State agency
City funding entity: Madrid, Spain

Start-End date: 01/09/2021 - 31/08/2024
Total amount: 72.600 €

3 **Name of the project:** Reemplazo de equipamiento para el servicio científico-técnico deEspectroscopía de Infrarrojo del ICMM-CSIC
Entity where project took place: Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): C. Pecharromán
Nº of researchers: 1
Funding entity or bodies:
Ministerio de Ciencia e Innovación **Type of entity:** Ministerio

Start-End date: 01/01/2018 - 31/12/2019
Total amount: 207.015,62 €

4 **Name of the project:** ” MATERIALES NANOESTRUCTURADOS MULTIFUNCIONALES DE BASE INORGÁNICA O POLIMÉRICA PARA APLICACIONES EN ENERGÍA Y TECNOLOGÍAS DE LA COMUNICACIÓN”
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal
Funding entity or bodies:
DIRECCIÓN GENERAL DE INVESTIGACIÓN Y GESTIÓN DEL PLAN NACIONAL DE I+D+i. Cantidad: 147000 €

Start-End date: 01/01/2012 - 31/12/2014 **Duration:** 3 years
Total amount: 147.000 €

5 **Name of the project:** Nanocompuestos cerámicos para el rango de THz e infrarrojos (2010CZ0004).
Entity where project took place: CSIC- Academia de Ciencias de la República Checa **Type of entity:** State agency
City of entity: Praga, Czech Republic
Name principal investigator (PI, Co-PI....): C. Pecharromán; J. L. Menéndez
Nº of researchers: 2
Start-End date: 01/01/2011 - 31/12/2012
Total amount: 4.350 €

6 **Name of the project:** Proyecto de cooperación con Taiwan P2006TW01 "Multifuntional ceramic-metal composites" 2006TW0004
Entity where project took place: CSIC **Type of entity:** State agency
City of entity: Taiwan
Name principal investigator (PI, Co-PI....): José Serafín Moya Corrarl; Carlos Pecharromán García; Ramón Torrecillas; Sonia López Esteban; Luis Antonio Díaz
Nº of researchers: 5
Start-End date: 01/01/2007 - 31/12/2008
Total amount: 9.120 €

7 **Name of the project:** Materiales de electrodo para baterías de ión-litio (cátodos) y para Supercondensadores
Name principal investigator (PI, Co-PI....): J. M. Rojo Puesto ocupado: Investigador

Funding entity or bodies:
Comisión Interministerial de Ciencia y Tecnología **Type of entity:** Body, others

Start-End date: 2005 - 2008 **Duration:** 3 years
Total amount: 195.517 €

8 **Name of the project:** ” NUEVA GENERACIÓN DE FOTOCATALIZADORES ACTIVOS EN EL VISIBLE PARA CONSTRUCCIÓN: MATERIALES HÍBRIDOS NANOESTRUCTURADOS BASADOS EN SILICATOS NATURALES (NANOFOTOVISCON)” RTC-2015-3529-5
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal subproyecto CSIC
Funding entity or bodies:
04 €

DESARROLLO E INNOVACIÓN SECRETARÍA GENERAL DE CIENCIA

SECRETARÍA DE ESTADO DE INVESTIGACIÓN

TECNOLOGÍA E INNOVACIÓN DIRECCIÓN GENERAL DE INNOVACIÓN Y COMPETITIVIDAD Cantidad: 204.282

Start date: 07/2015 **Duration:** 3 years

9 **Name of the project:** ” DISPOSITIVOS BASADOS EN METAMATERIALES CON RESONADORES DE ALTAS PRESTACIONES: DESARROLLO DE LOS MATERIALES” TEC2014-53088-C3-2-R
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal
Funding entity or bodies:
00 €

DESARROLLO E INNOVACIÓN SECRETARÍA GENERAL DE CIENCIA

SECRETARÍA DE ESTADO DE INVESTIGACIÓN

TECNOLOGÍA E INNOVACIÓN DIRECCIÓN GENERAL DE INNOVACIÓN Y COMPETITIVIDAD Cantidad: 74.415

Start date: 2015 **Duration:** 2 years

10 **Name of the project:** ”DESARROLLO DE NUEVOS MATERIALES NANOESTRUCTURADOS CON PROPIEDADES MEJORADAS DE APANTALLAMIENTO FRENTE A LA RADIACIÓN ELECTROMAGNÉTICA (APANTALLA)”
Name principal investigator (PI, Co-PI....): J.L. Menéndez Puesto ocupado: Investigador
Funding entity or bodies:
46€

DESARROLLO E INNOVACIÓN SECRETARÍA GENERAL DE CIENCIA

SECRETARÍA DE ESTADO DE INVESTIGACIÓN

TECNOLOGÍA E INNOVACIÓN DIRECCIÓN GENERAL DE INNOVACIÓN Y COMPETITIVIDAD Cantidad: 165.879

Start date: 2013 **Duration:** 2 years

11 **Name of the project:** ” MATERIALES EM ULTRAFUNCIONALES: INVISIBLES, ZURDOS Y DISIPATIVOS EN EL RANGO DE LAS MW Y THZ”
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal
Funding entity or bodies:

DIRECCIÓN GENERAL DE INVESTIGACIÓN Y GESTIÓN DEL PLAN NACIONAL DE I+D+i. Cantidad: 12.000 €

Start date: 2010

12 **Name of the project:** ” Desarrollo a nivel industrial de lustres para esmaltes sobre gres porcelánicos”
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal
Funding entity or bodies:
CICYT-PETRI-TOLSA S.A-KERABEN S.A. Cantidad: 151.250 €

Start date: 2008 **Duration:** 2 years

13 **Name of the project:** ” Estudio de la obtención y caracterización (estructural, óptica y magnética) de nanopartículas metálicas (Cu, Ag, Au, Fe, Ni, Co) embebidas y/o soportadas sobre fibras de sepiolita; Estudio de obtención de nanorecubrimientos metálicos sobre sepiolita y caracterización de los productos obtenidos”.
Name principal investigator (PI, Co-PI....): J. S. Moya Puesto ocupado: Investigador
Funding entity or bodies:
TOLSA S.A Cantidad: 223.500 € Subcontrato del proyecto CENIT 2007-1001 DOMINO dotado con 14.008.610€

Start date: 01/01/2007 **Duration:** 3 years - 11 months - 30 days

14 **Name of the project:** Materiales Compuestos Nanoestructurados Cerámica-Cerámica y Cerámica-Metal para Aplicaciones Ópticas y Estructurales
Name principal investigator (PI, Co-PI....): J. S. Moya Puesto ocupado: Investigador
Funding entity or bodies:
00 €

CICYT Cantidad: 211.750

Start date: 01/10/2006 **Duration:** 2 years - 11 months - 29 days

15 **Name of the project:** ” IP NANOKER” NMP3-CT-2005-515784
Name principal investigator (PI, Co-PI....): R. Torrecillas Puesto ocupado: Investigador principal del subproyecto 07 “Optical Windows”
Start date: 01/05/2005 **Duration:** 2 years - 11 months - 29 days

16 **Name of the project:** ” Fabricación de nanopartículas metálicas soportadas sobre filosilicatos pseudolaminares”
Name principal investigator (PI, Co-PI....): C. Pecharromán Puesto ocupado: Investigador Principal
Funding entity or bodies:
CICYT-PETRI-TOLSA S.A Cantidad: 52.000 €

Start date: 03/12/2004 **Duration:** 1 year - 11 months - 30 days

17 **Name of the project:** ” NANOMAT”
Name principal investigator (PI, Co-PI....): Ramón Torrecillas (INCAR-CSIC) Puesto ocupado: Investigador.
Funding entity or bodies:
CICYT Cantidad: 190.500 €

Start date: 01/12/2003 **Duration:** 3 years

18 **Name of the project:** "Materiales para baterías recargables de litio: cátodos derivados del LiMn2O4 y electrolitos sólidos tipo Nasicon"
Name principal investigator (PI, Co-PI....): J. M Rojo Puesto ocupado: Investigador.
Funding entity or bodies:
CICYT Cantidad: 185.683 €.

Start date: 28/12/2001 **Duration:** 2 years - 11 months - 30 days

19 **Name of the project:** "Materiales compuestos cerámica-metal para aplicaciones multifuncionales"
Name principal investigator (PI, Co-PI....): J. Serafín Moya Puesto ocupado: Investigador.
Funding entity or bodies:
CICYT Cantidad: 12.9 Mptas.

Start date: 01/01/2001 **Duration:** 2 years - 11 months - 30 days

20 **Name of the project:** "Materiales compuestos cerámica-metal laminados y con función gradiente"
Name principal investigator (PI, Co-PI....): J. Serafín Moya Puesto ocupado: Contratado postdoctoral
Funding entity or bodies:
CICYT Cantidad: 14.7 Mptas.

Start date: 01/08/1997 **Duration:** 2 years - 11 months - 30 days

21 **Name of the project:** "Novel Electric-field Effects in Quantum Wells, Superlattices, and Microcavities "
Name principal investigator (PI, Co-PI....): Emilio Méndez Puesto ocupado: Becario postdoctoral.
Funding entity or bodies:
US Army Research Office

Start date: 08/1995 **Duration:** 4 years - 3 months

22 **Name of the project:** "Conductividad Iónica de Materiales Tipo Nasicon y óxidos Mixtos Bi2O3, en relación a la estructura cristalina y composición química"
Name principal investigator (PI, Co-PI....): J. María Rojo Puesto ocupado: Contratado postdoctoral.
Nº of researchers: 5
Funding entity or bodies:
Comisión Interministerial de Ciencia y Tecnología **Type of entity:** Body, others

Start date: 06/1995 **Duration:** 3 years

R&D non-competitive contracts, agreements or projects with public or private entities

1 **Name of the project:** Caracterización Multifuncional de partículas nanoestructuradas de sepiolita
Degree of contribution: Coordinator of total project, network or consortium
Nº of researchers: 1
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business

Start date: 20/12/2018 **Duration:** 1 year
Total amount: 50.000 €

2 **Name of the project:** ESTUDIO PARA LA VIABILIDAD DE FABRICACIÓN DE SUSPENSIÓN MAGNETO Y TERMO-REOLÓGICAS CON BASE EN SEPIOLITA
Name principal investigator (PI, Co-PI....): C. Pecharromán
Nº of researchers: 1

Funding entity or bodies:
Tolsa, S.A.

Type of entity: Business

Start date: 20/06/2018
Duration: 3 months
Total amount: 3.630 €

3 **Name of the project:** DETERMINACIÓN DEL ESPECTRO DE PERMEABILIDAD MAGNÉTICA DE LOS MATERIALES PULVERULENTOS
Degree of contribution: Coordinator of total project, network or consortium
Nº of researchers: 1
Participating entity/entities: Tolsa, S.A.
Funding entity or bodies:
Tolsa, S.A.

Type of entity: Business

Start date: 20/02/2018
Duration: 2 months
Total amount: 1.210 €

4 **Name of the project:** Estudio de mejora de propiedades termo-ópticas de materiales compuestos de fibra de carbono
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C.Pecharromán
Nº of researchers: 1
Funding entity or bodies:
AIRBUS DEFENCE AND SPACE, S.A.U.

Start date: 01/10/2017
Duration: 3 months
Total amount: 3.569,5 €

5 **Name of the project:** Medición de láminas de Al PARA FTIR CON ACCESORIO DE ESFERA INTEGRADORA
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C. Pecharromán
Nº of researchers: 1
Funding entity or bodies:
FUNDACION TECNALIA R&I

Start date: 12/05/2017
Duration: 2 months
Total amount: 2.178 €

6 **Name of the project:** SERVICIO DE ESPECTROSCOPIA INFRARROJA. CARACTERIZACIÓN DE LA CORROSIÓN DE TUBERIAS Y LAMINAS DE COBRE POR ESPECTROSCOPIA INFRARROJA
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C. Pecharromán
Nº of researchers: 1
Funding entity or bodies:
MERAK SISTEMAS INTEGRADOS DE CLIMATIZACIÓN, S.A.

Start date: 14/06/2011
Duration: 1 month
Total amount: 2.006 €

7 **Name of the project:** ” DESARROLLO DE UNA NUEVA TECNOLOGÍA DE REGENERACIÓN AUTÓNOMA E INTELIGENTE DE MATERIALES”
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): José Serafín Moya Corral; Carlos Pecharromán García

Nº of researchers: 2
Participating entity/entities: Tolsa, S.A.
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business

Start date: 01/01/2011 **Duration:** 1 year
Total amount: 3.000 €

8 **Name of the project:** ” Desarrollo a nivel industrial de lustres para esmaltes sobre gres porcelánicos”.
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Carlos Pecharromán García
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business
City funding entity: Madrid, Community of Madrid, Spain

Keraben, S.A. **Type of entity:** Business
City funding entity: Nules, Valencian Community, Spain

Start date: 01/07/2007 **Duration:** 2 years
Total amount: 6.000 €

9 **Name of the project:** Fabricación de nanopartículas metálicas soportadas sobre filosilicatos pseudolaminares
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C. Pecharromán
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business

Start date: 04/05/2006 **Duration:** 1 year
Total amount: 2.000 €

10 **Name of the project:** Fabricación de nanopartículas metálicas soportadas sobre filosilicatos pseudolaminares
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C. Pecharromán
Nº of researchers: 1
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business

Start date: 03/12/2004 **Duration:** 2 years
Total amount: 52.000 €

11 **Name of the project:** Fabricación de nanopartículas metálicas soportadas sobre filosilicatos pseudolaminares
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): C. Pecharromán
Funding entity or bodies:
Tolsa, S.A. **Type of entity:** Business

Start date: 29/09/2003 **Duration:** 3 years - 2 months
Total amount: 12.000 €

12 **Name of the project:** INVESTIGACION PARA URALITA REFERENTE A PANELES Y MATERIALES PARA LA CONSTRUCCION EN GENERAL, CON PROPIEDADES AISLANTES Y/O INHIBIDORAS DE EMISIONES, ONDAS Y CAMPOS RADIOELECTRICOS Y/O MAGNETICOS

Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): C. Pecharromán; J.S. Moya
Nº of researchers: 2
Participating entity/entities: URALITA SISTEMAS DE TUBERIAS, S.A.
Funding entity or bodies:
URALITA PRODUCTOS Y SERVICIOS, S.A.

Start date: 01/11/2002 **Duration:** 1 year
Total amount: 144.000 €

13 **Name of the project:** Desarrollo de una célula lambda para el sector de automoción
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): R. Torrecillas; C. Pecharromán; j.S. Moya
Nº of researchers: 3
Funding entity or bodies:
FAE

Start date: 01/02/2002 **Duration:** 1 year
Total amount: 60.000 €

Results

Industrial and intellectual property

1 **Title registered industrial property:** MATERIAL COMPUESTO FOTOCATALÍTICO Y USO DEL MISMO
Inventors/authors/obtainers: José Serafín MOYA Corral; Carlos Pecharromán García; Belén Cabal Álvarez; Adolfo Fernández Valdés; Sonia López Esteban
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: ES 2 837 526 B2
Country of inscription: Spain, Community of Madrid
Date of register: 30/12/2019
Conferral date: 25/10/2021

2 **Title registered industrial property:** METODO DE OBTENCION DE UN MATERIAL COMPUESTO NANOESTRUCTURADO DE MATRIZ CERAMICA Y MECANIZABLE POR ELECTROEROSION, Y PRODUCTO OBTENIBLE PORDICHO METODO
Inventors/authors/obtainers: José Serafín Moya Corral; Ramón TORRECILLAS SAN MILLAN; CARLOS PECHARROMAN GARCIA; LUIS ANTONIO DIAZ RODRIGUEZ; SONIA LOPEZ ESTEBAN; TERESA RODRIGUEZ SUAREZ; CARLOS FIDEL GUTIERREZ GONZALEZ; GUSTAVO MATA OSORO
Entity holder of rights: CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC) (100,00%)
Nº of application: P200930551
Country of inscription: Spain, Community of Madrid
Date of register: 31/07/2009
Conferral date: 09/01/2012

3 **Title registered industrial property:** POLVO DE COMPOSICIÓN VÍTREA CON ACTIVIDAD BIOCIDA
Type of industrial property: Patent of invention
Inventors/authors/obtainers: José Moya; Leticia Esteban; Carlos Pecharromán; Francisco Malpartida.
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: P200931137
Country of inscription: Spain

Date of register: 09/12/2009
Spanish patent: Yes **EU patent:** Yes
International non-EU patent: Yes

4 **Title registered industrial property:** PROCEDIMIENTO DE DOPAJE PARA LA SINTERIZACIÓN DE ?-ALÚMINA Y MATERIAL DE ?-ALÚMINA POLICRISTALINA
Inventors/authors/obtainers: Marta Suárez Menéndez; Adolfo Fernández Valdés; Ramón Torrecillas San Millán; José Luis Menéndez Río; Carlos Pecharromán García.
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: P200702690
Country of inscription: Spain
Date of register: 15/10/2007
Companies: 8

5 **Title registered industrial property:** PROCEDIMIENTO DE OBTENCIÓN DE ESMALTES METALIZADOS EN PAVIMENTOS CERÁMICOS.
Inventors/authors/obtainers: Antonio Esteban Cubillo; José Serafín Moya Corral; Carlos Pecharroman García; J. F. Fernández Lozano; Raúl Pina Zapardiel; Julián Jiménez Reinosa; .
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: 2008/0701
Country of inscription: Spain
Date of register: 13/06/2007
Companies: Kerafrit S.A. 7

6 **Title registered industrial property:** MATERIAL NANOESTRUCTURADO ÓXIDO CERÁMICO/N-W, PROCEDIMIENTO DE OBTENCIÓN Y SUS APLICACIONES.
Inventors/authors/obtainers: José S. Moya Corral; Carlos Pecharromán García; Sonia López Esteban; Teresa Rodríguez Suárez; Luis A. Díaz Rodríguez; Ramón Torrecillas San Millán
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: 200602968
Country of inscription: Spain
Date of register: 21/11/2006
Companies: Bioker (licenciada). 6

7 **Title registered industrial property:** SENSOR DE HUMEDAD BASADO EN NANOPARTÍCULAS DE ÓXIDO DE HIERRO SOPORTADAS EN SEPIOLITA.
Inventors/authors/obtainers: José S. Moya; Antonio Esteban Cubillo; Carlos Pecharromán; Jean Marc Tulliani; Alfredo Negro; Laura Montanaro.
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: 200501554
Country of inscription: Spain
Date of register: 24/06/2005
Companies: 5

8 **Title registered industrial property:** PROCEDIMIENTO PARA PREPARAR NANOPARTÍCULAS METÁLICAS SOPORTADOS SOBRE FILOSILICATOS PSEUDOLAMINARES
Inventors/authors/obtainers: J. S. Moya Corral; C. Pecharromán García; A. Álvarez Berenguer; J. Limpo Orozco; E. Aguilar Díez; J. Santarén Romé.
Entity holder of rights: TOLSA S.A.
Nº of application: 2004/0004
Date of register: 15/10/2003
Spanish patent: Yes **EU patent:** Yes

International non-EU patent: Yes **PCT patent:** Yes
Operating aut.region/region: Central African Republic
Companies: TOLSA S.A. 4
Creating an innovative enterprise: Yes

9 **Title registered industrial property:** PROCEDIMIENTO DE OBTENCION DE MATERIALES COMPUESTOS FERRITA-CIRCONA
Inventors/authors/obtainers: José Serafín MOYA CORRAL; José Florindo BARTOLOMÉ GÓMEZ; Sonia LÓPEZ ESTEBAN; Carlos PECHARROMÁN GARCÍA; Joaquín REQUENA BALMASEDA; Miguel Angel PARIS TORRES; Juan Manuel ARCAS GUIJARRO
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: P200302560
Country of inscription: Spain
Date of register: 01/10/2003
Companies: 3

10 **Title registered industrial property:** PROCEDIMIENTO DE OBTENCIÓN DE MATERIALES HOMOGÉNEOS COMPUESTOS FERROELÉCTRICO-METAL
Inventors/authors/obtainers: C. Pecharromán García y J. S. Moya Corral
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Nº of application: P200001701
Country of inscription: Spain
Date of register: 07/07/2000
Companies: 2

Scientific and technological activities

Scientific production

H index: 37
Date of application: 01/02/2024
Source of H-Index: SCOPUS

Publications, scientific and technical documents

1 A. Tolosana-Moranchel; C. Pecharromán; M. Faraldos; A. Bahamonde. Strong effect of light scattering by distribution of TiO<inf>2</inf> particle aggregates on photocatalytic efficiency in aqueous suspensions. Chemical Engineering Journal. 403, 2021. Available on-line at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85088276569&doi=10.1016%2fj.cej.2020.126186&partnerID=40&md5=7be837eb4daae8d7da8860fb995e1cf5>.
Type of production: Scientific paper **Format:** Journal
Position of signature: 2
Total no. authors: 4 **Corresponding author:** No
Source of citations: SCOPUS **Citations:** 30

Relevant publication: Yes

2 Jose Angel Pariente; Niccolò Caselli; Carlos Pecharromán; Alvaro Blanco; Cefe López. Vacancies in Self-Assembled Crystals: An Archetype for Clusters Statistics at the Nanoscale. Small. n/a - n/a, pp. 2002735 - 2002735. 25/09/2020. Available on-line at: <https://onlinelibrary.wiley.com/doi/abs/10.1002/smll.202002735>.

Type of production: Scientific paper
Format: Journal
Corresponding author: No
Relevant publication: Yes

3 M.F. Acosta; S.G. Rodrigo; L. Martín-Moreno; C. Pecharromán; R.I. Merino. Micropillar Templates for Dielectric Filled Metal Arrays and Flexible Metamaterials. Advanced Optical Materials. 5 - 3, pp. 1600670. 2017. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-85003794435&partnerID=MN8TOARS>.

Type of production: Scientific paper
Format: Journal
Corresponding author: No
Impact source: ISI
Category: Atomic and Molecular Physics, and Optics
Impact index in year of publication: 6.875
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 92

Relevant publication: Yes

4 Sean S. E. Collins; Michela Cittadini; Carlos Pecharroman; Alessandro Martucci; Paul Mulvaney. Hydrogen Spillover between Single Gold Nanorods and Metal Oxide Supports: A Surface Plasmon Spectroscopy Study. Acs Nano. 9 - 8, pp. 7846 - 7856. 2015. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Total no. authors: 5
Source of citations: SCOPUS
Citations: 57

Relevant publication: Yes

5 J. S. Moya; S. Lopez-Esteban; C. Pecharroman. The challenge of ceramic/metal microcomposites and nanocomposites. Progress in Materials Science. 52 - 7, pp. 1017 - 1090. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Total no. authors: 3
Source of citations: SCOPUS
Citations: 273

Relevant publication: Yes

6 P. Mulvaney; J. Perez-Juste; M. Giersig; L. M. Liz-Marzan; C. Pecharroman. Drastic surface plasmon mode shifts in gold nanorods due to electron charging. Plasmonics. 1 - 1, pp. 61 - 66. 2006. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Position of signature: 5
Total no. authors: 5
Corresponding author: Yes
Source of citations: SCOPUS
Citations: 138

Relevant publication: Yes

7 C. Pecharroman; A. Esteban-Cubillo; I. Montero; J. S. Moya; E. Aguilar; J. Santaren; A. Alvarez. Monodisperse and corrosion-resistant metallic nanoparticles embedded into sepiolite particles for optical and magnetic applications. Journal of the American Ceramic Society. 89 - 10, pp. 3043 - 3049. 2006. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Position of signature: 1

Total no. authors: 7
Source of citations: SCOPUS **Citations:** 62

Relevant publication: Yes

8 C. Pecharroman; J. F. Bartolome; J. Requena; J. S. Moya; S. Deville; J. Chevalier; G. Fantozzi; R. Torrecillas. Percolative mechanism of aging in zirconia-containing ceramics for medical applications. Advanced Materials. 15 - 6, pp. 507 - 511. 2003. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 8
Source of citations: SCOPUS **Citations:** 77

Relevant publication: Yes

9 C. Pecharroman; F. Esteban-Betegon; J. F. Bartolome; S. Lopez-Esteban; J. S. Moya. New percolative BaTiO3-Ni composites with a high and frequency-independent dielectric constant (epsilon(r) approximate to 80,000). Advanced Materials. 13 - 20, pp. 1541 - +. 2001. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 5
Source of citations: SCOPUS **Citations:** 343

Relevant publication: Yes

10 C. Pecharroman; J. S. Moya. Experimental evidence of a giant capacitance in insulator-conductor composites at the percolation threshold. Advanced Materials. 12 - 4, pp. 294 - 297. 2000. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 2
Source of citations: SCOPUS **Citations:** 295

Relevant publication: Yes

11 C. Pecharroman; I. Sobrados; J. E. Iglesias; T. Gonzalez-Carreno; J. Sanz. Thermal evolution of transitional aluminas followed by NMR and IR spectroscopies. Journal of Physical Chemistry B. 103 - 30, pp. 6160 - 6170. 1999. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 5
Source of citations: SCOPUS **Citations:** 190

Relevant publication: Yes

12 C. Pecharroman; T. Gonzalezcarreno; J. E. Iglesias. THE INFRARED DIELECTRIC-PROPERTIES OF MAGHEMITE, GAMMA-FE2O3, FROM REFLECTANCE MEASUREMENT ON PRESSED POWDERS. Physics and Chemistry of Minerals. 22 - 1, pp. 21 - 29. 1995. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:A

Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 3
Source of citations: SCOPUS **Citations:** 151

Relevant publication: Yes

13 Alpha sensing, NIR to green light emission in Er doped PbWO4 nanoparticles with modification of calcination atmosphere. 2025.
Type of production: Scientific paper

14 Bottom up anatase monodisperse nanoparticles grown on sepiolite showing high thermal stability and optimal optical properties for self-cleaning applications. Applied Clay Science. 107189, pp. 107189. Elsevier, 2024.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes

15 Trapping an Elusive Fe(IV)-Superoxo Intermediate Inside a Self-Assembled Nanocage in Water at Room Temperature. Journal of the American Chemical Society. 146 - 31, pp. 21729 - 21741. 2024.
Type of production: Scientific paper
Corresponding author: No

16 Vidrio de baja temperatura de fusión perteneciente al sistema P₂O₅-CaO-Na₂O, aplicado como revestimiento sobre cerámica técnica (alúmina, circona) y tradicional (gres porcelánico). Boletin de la Sociedad Espanola de Ceramica y Vidrio. 63 - 2, pp. 104 - 114. 2024.
Type of production: Scientific paper
Corresponding author: No

17 José Ángel Pariente; Farzaneh Bayat; Álvaro Blanco; Antonio García Martín; Carlos Pecharromán; Manuel Marqués; Cefe López. Fano-Like Resonance from Disorder Correlation in Vacancy-Doped Photonic Crystals. Small. pp. 2302355 (1) - 2302355 (10). Wiley-VCH GmbH, 06/06/2023.
DOI: 10.1002/smll.202302355
Type of production: Scientific paper **Format:** Journal
Position of signature: 5 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7 **Corresponding author:** No
Relevant results: By preparing colloidal crystals with random missing scatterers, crystals are created where disorder is embodied as vacancies in an otherwise perfect lattice. In this special system, there is a critical defect concentration where light propagation undergoes a transition from an all but perfect reflector (for the spectral range defined by the Bragg condition), to a metamaterial exhibiting an enhanced transmission phenomenon. It is shown that this behavior can be phenomenologically described in terms of Fano-like resonances. The results show that the Fano's parameter q experiences a sign change signaling the transition from a perfect crystal exhibiting a reflectance Bragg peak, through a state where background scattering is maximum and Bragg reflectance reaches a minimum to a point where the system reenters a low scattering state recovering ordinary Bragg diffraction. A simple dipolar model considering the correlation between scatterers and vacancies is proposed and the reported evolution of the Fano-like scattering is explained in terms of the emerging covariance between the optical paths and polarizabilities and the effect of field enhancement in photonic crystal (PhC) defects.

18 In situ photogenerated hydroxyl radicals in the reaction atmosphere for the accelerated crystallization of solution-processed functional metal oxide thin films. Journal of Materials Chemistry C. 11 - 7, pp. 2619 - 2629. Royal Society of Chemistry, 2023.
Type of production: Scientific paper **Format:** Journal

19 Sepiolite promotes photodegradation of pyrene under visible light. Ecotoxicology and Environmental Safety. 266, pp. 115573. Elsevier, 2023.
Type of production: Scientific paper
Corresponding author: Yes

20 Portland cement clinkers turned into garnets by spark plasma sintering. 2022.
Type of production: Scientific paper

21 0000-0003-2243-8452; 0000-0001-5132-1996; 0000-0003-2032-4144; Garbiec D.; Moya J.S.; 0000-0002-2222-3411; Pecharroman C.. Portland cement clinkers turned into garnets by spark plasma sintering. Ceramics International. 2022. ISSN 02728842
DOI: 10.1016/j.ceramint.2022.11.146
Type of production: Scientific paper **Format:** Journal

22 Nascimento, Rodney Marcelo do; Rodrigues, Joao Elias F. S.; Favarin, Bruno Z.; Ramos, Ana P.; Ciancaglini, Pietro; Pecharroman, Carlos; Rahouadj, Rachid; Hernandes, Antonio Carlos; Bechtold, Ivan Helmuth. Thermal annealing of natural rubber films controls wettability and enhances cytocompatibility. SURFACES AND INTERFACES. 31, 2022. ISSN 2468-0230
DOI: 10.1016/j.surfin.2022.102048
Type of production: Scientific paper

23 Marcelo, Gema; Salardon, Noemi; Pecharroman, Carlos; Mendicuti, Francisco; Trabado, Isabel; Batanero, Belen. Tuneable fluorescence and structural colour in PNIPAM microgel assemblies. EUROPEAN POLYMER JOURNAL. 173, 2022. ISSN 0014-3057
DOI: 10.1016/j.eurpolymj.2022.111319
Type of production: Scientific paper

24 Pecharromán C.; Beltrán J.I.; Esteban-Betegón F.; López-Esteban S.; Bartolomé J.F.; Munõz M.C.; Moya J.S.. Zirconia/nickel interfaces in micro- A nd nanocomposites. International Journal of Materials Research. 96, pp. 507 - 514. 2022. ISSN 18625282
DOI: 10.3139/ijmr-2005-0091
Type of production: Scientific paper **Format:** Journal

25 Gema Marcelo; Maria del Mar Lopez-Gonzalez; Milena Vega; Carlos Pecharroman. Colored Surfaces Made of Synthetic Eumelanin. NANOMATERIALS. 11 - 9, 09/2021.
Type of production: Scientific paper **Format:** Journal

26 Rodney Marcelo do Nascimento; Jean-Francois Schmitt; Udi Sarig; Joao Elias Figueiredo Soares Rodrigues; Carlos Pecharroman; Ana Paula Ramos; Pietro Ciancaglini; Fabricio Luiz Faita; Rachid Rahouadj; Antonio Carlos Hernandes; Ivan Helmuth Bechtold. Surface Wettability of a Natural Rubber Composite under Stretching: A Model to Predict Cell Survival. LANGMUIR. 37 - 15, pp. 4639 - 4646. 04/2021. ISSN 0743-7463
Type of production: Scientific paper **Format:** Journal

27 S. Lopez-Esteban; B. Cabal; A. Borrell; J. F. Bartolome; A. Fernandez; M. Faraldos; A. Bahamonde; J. S. Moya; C. Pecharroman. Lead-free low-melting-point glass as bonding agent for TiO2 nanoparticles. CERAMICS INTERNATIONAL. 47 - 5, pp. 6114 - 6120. 03/2021. ISSN 0272-8842
Type of production: Scientific paper **Format:** Journal

28 J.E.F.S. Rodrigues; C.A. Escanhoela; B. Fragoso; G. Sombrio; M.M. Ferrer; C. Álvarez-Galván; M.T. Fernández-Díaz; J.A. Souza; F.F. Ferreira; C. Pecharromán; J.A. Alonso. Experimental and Theoretical Investigations on the Structural, Electronic, and Vibrational Properties of Cs2AgSbCl6 Double Perovskite. Industrial and Engineering Chemistry Research.

2021. Available on-line at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114853350&doi=10.1021%2facs.iecr.1c02188&partnerID=40&md5=2aa8ae34c204e41c31437ccce97a14b7>.
Type of production: Scientific paper **Format:** Journal

29 J.E.F.S. Rodrigues; M.M. Ferrer; M.L. Moreira; J.R. Sambrano; R.C. Costa; A.D. Rodrigues; P.S. Pizani; Y. Huttel; J.A. Alonso; C. Pecharromán. Unveiling the infrared complex dielectric function of ilmenite CdTiO<inf>3</inf>. Journal of Alloys and Compounds. 813, 2020. Available on-line at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072046196&doi=10.1016%2fj.jallcom.2019.152136&partnerID=40&md5=5375ac68dddea8838754550e7d4399
Type of production: Scientific paper **Format:** Journal

30 A. Roy; M. Morales; I. Israelashvili; A. Breskin; S. Bressler; D. Gonzalez-Diaz; C. Pecharrom{á}n; S. Shchemelinin; D. Vartsky; L. Arazi. First results of Resistive-Plate Well ({RPWELL}) detector operation at 163 K. Journal of Instrumentation. 14 - 10, pp. P10014 - P10014. {IOP} Publishing, 10/2019. Available on-line at: <https://doi.org/10.1088%2F1748-0221%2F14%2F10%2Fp10014>.
Type of production: Scientific paper **Format:** Journal

31 W. Liu; J. Sanz; C. Pecharromán; I. Sobrados; S. Lopez-Esteban; R. Torrecillas; D.-Y. Wang; J.S. Moya; B. Cabal. Synthesis, characterization and applications of low temperature melting glasses belonging to P <inf>2</inf> O <inf>5</inf> –CaO–Na <inf>2</inf> O system. Ceramics International. 45 - 9, pp. 12234 - 12242. 2019. Available on-line at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063374574&doi=10.1016%2fj.ceramint.2019.03.133&partnerID=40&md5=2358446d8a3ef14f6d3a8afbdfde01a
Type of production: Scientific paper **Format:** Journal

32 Vega, Milena; Martin del Valle, Eva M.; Perez, Maximiliano; Pecharroman, Carlos; Marcelo, Gema. Color Engineering of Silicon Nitride Surfaces to Characterize the Polydopamine Refractive Index. CHEMPHYSCHEM. 19, ChemPubSoc Europe, 2018. ISSN 1439-4235
DOI: 10.1002/cphc.201800747
PMID: 30308115
Type of production: Scientific paper **Format:** Journal
Position of signature: 4
Total no. authors: 5 **Corresponding author:** Yes
Impact source: ISI **Category:** Chemical Physics
Impact index in year of publication: 2.947 **Journal in the top 25%:** No
Position of publication: 62 **No. of journals in the cat.:** 146

33 Gaspar Armelles; Alfonso Cebollada; Fernando Garcia; Carlos Pecharroman. Magnetic modulation of mid-infrared plasmons using Giant Magnetoresistance. Optics Express. 25 - 16, pp. 18784 - 18796. 2017. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
DOI: https://doi.org/10.1364/OE.25.018784
Type of production: Scientific paper **Format:** Journal
Impact source: ISI **Category:** Optics
Impact index in year of publication: 3.35 **Journal in the top 25%:** Yes
Position of publication: 19 **No. of journals in the cat.:** 96

34 A. Smirnov; J.I. Beltrán; T. Rodriguez-Suarez; C. Pecharromán; M.C. Muñoz; J.S. Moya; J.F. Bartolomé. Unprecedented simultaneous enhancement in damage tolerance and fatigue resistance of zirconia/Ta composites. Scientific Reports. 7 - 21, pp. 44922. 2017. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-85016018730&partnerID=MN8TOARS>.
Type of production: Scientific paper **Format:** Journal
Impact source: ISI **Category:** Science Edition - MULTIDISCIPLINARY SCIENCES

Impact index in year of publication: 4.259
Journal in the top 25%: Yes
Position of publication: 10
No. of journals in the cat.: 64

35 D. Montesdeoca; F. Bayat; A. Espinha; Á. Blanco; C. Pecharromán; C. López. Monodisperse Silica Spheres Ensembles with Tailored Optical Resonances in the Visible. Particle & Particle Systems Characterization. 33 - 12, pp. 871 - 877. 2016. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-84995595638&partnerID=MN8TOARS>.

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 4.474
Journal in the top 25%: Yes
Position of publication: 44
No. of journals in the cat.: 275

36 L.A. Díaz; W. Solís; P. Peretyagin; A. Fernández; M. Morales; C. Pecharromán; J.S. Moya; R. Torrecillas. Spark plasma sintered Si<inf>3</inf>N<inf>4</inf>/TiN nanocomposites obtained by a colloidal processing route. Journal of Nanomaterials. 2016, pp. 3170142. 2016. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-84961950227&partnerID=MN8TOARS>.

Type of production: Scientific paper
Format: Journal

37 L. Fernández-García; M. Suárez; J.L. Menéndez; C. Pecharromán; R. Torrecillas; P.Y. Peretyagin; J. Petzelt; M. Savinov; Z. Frait. Antiresonance in (Ni,Zn) ferrite-carbon nanofibres nanocomposites. Materials Research Express. 2 - 5, pp. 055003. 2015. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-84953455639&partnerID=MN8TOARS>.

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 0.968
Journal in the top 25%: No
Position of publication: 204
No. of journals in the cat.: 275

38 Carlos Pecharroman; Enrico Della Gaspera; Alessandro Martucci; Ramon Escobar-Galindod; Paul Mulvaney. Determination of the Optical Constants of Gold Nanoparticles from Thin-Film Spectra. Journal of Physical Chemistry C. 119 - 17, pp. 9450 - 9459. 2015. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - CHEMISTRY, PHYSICAL
Impact index in year of publication: 4.509
Journal in the top 25%: Yes
Position of publication: 30
No. of journals in the cat.: 144

39 Lucia Fernandez-Garcia; Marta Suarez; Jose Luis Menendez; Carlos Pecharroman; Rosa Menendez; Ricardo Santamaria. Dielectric behavior of ceramic-graphene composites around the percolation threshold.Nanoscale research letters. 10, pp. 216 - 216. 2015. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=MEDLINE&KeyUT=MEDLIN

Type of production: Scientific paper
Format: Journal

40 J. L. Menendez; L. Fernandez-Garcia; C. Pecharroman; I. Montero; A. Esteban-Cubillo; P. Tiemblo; N. Garcia. Faraday activity in flexible maghemite/polymer matrix composites. Optical Materials Express. 5 - 9, pp. 1927 - 1933. 2015. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal

Impact source: ISI
Category: Atomic and Molecular Physics, and Optics
Impact index in year of publication: 2.657
Journal in the top 25%: Yes
Position of publication: 19
No. of journals in the cat.: 90

41 Maviael J. Da Silva; Jose S. Moya; Carlos Pecharroman; Jesus Sanz; Sonia Mello-Castanho. High barium content lead and alkaline-free glasses. Materials Letters. 136, pp. 345 - 348. 2014. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper
Format: Journal

42 M. Morales; C. Pecharroman; G. Mata-Osoro; L. A. Diaz; J. A. Garzon. Conductivity and charge depletion aging of resistive electrodes for high rate RPCs. Journal of Instrumentation. 8, 2013. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper
Format: Journal

43 Lucia Fernandez-Garcia; Marta Suarez; Jose Luis Menendez; Carlos Pecharroman; Dmitry Nuzhnyy; Viktor Bovtun; Maxim Savinov; Martin Kempa; Jan Petzelt. Dielectric properties of carbon nanofibre/alumina composites. Carbon. 57, pp. 380 - 387. 2013. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 6.160
Journal in the top 25%: Yes
Position of publication: 24
No. of journals in the cat.: 251

44 R. Pina-Zapardiel; A. Esteban-Cubillo; J. F. Bartolome; C. Pecharroman; J. S. Moya. High wear resistance white ceramic glaze containing needle like zircon single crystals by the addition of sepiolite n-ZrO2. Journal of the European Ceramic Society. 33 - 15-16, pp. 3379 - 3385. 2013. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, CERAMICS
Impact index in year of publication: 2.307
Journal in the top 25%: Yes
Position of publication: 2
No. of journals in the cat.: 25

45 L. Esteban-Tejeda; A.C. Da Silva; S.R. Mello-Castanho; C. Pacharroman; J.S. Moya. Kinetics of dissolution of a biocide soda-lime glass powder containing silver nanoparticles. Journal Of Nanoparticle Research. 15 - 2, pp. 1447. 2013. Available on-line at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-84873338567&partnerID=MN8TOARS>.
Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 2.278
Journal in the top 25%: Yes
Position of publication: 59
No. of journals in the cat.: 251

46 L. Fernandez-Garcia; C. Pecharroman; A. Esteban-Cubillo; P. Tiemblo; N. Garcia; J. L. Menendez. Magneto-optical Faraday activity in transparent FeCo-sepiolite/polystyrene nanocomposites. Journal of Nanoparticle Research. 15 - 12, 2013. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 2.278
Journal in the top 25%: Yes
Position of publication: 59
No. of journals in the cat.: 251

47 I. Alvarez-Clemares; G. Mata-Osoro; A. Fernandez; S. Lopez-Esteban; C. Pecharroman; R. Torrecillas; J. S. Moya. Ceria doped alumina by Spark Plasma Sintering for optical applications. Journal of the European Ceramic Society. 32 - 11, pp. 2917 - 2924. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, CERAMICS
Impact index in year of publication: 2.36
Journal in the top 25%: Yes
Position of publication: 1
No. of journals in the cat.: 27

48 G. Mata-Osoro; J. S. Moya; M. Morales; L. A. Diaz; H. Schneider; C. Pecharroman. Faradaic current in different mullite materials: single crystal, ceramic and cermets. International Journal of Materials Research. 103 - 4, pp. 408 - 411. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal

49 P. Tiemblo; E. Benito; N. Garcia; A. Esteban-Cubillo; R. Pina-Zapardiel; C. Pecharroman. Multiscale gold and silver plasmonic plastics by melt compounding. Rsc Advances. 2 - 3, pp. 915 - 919. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - CHEMISTRY, MULTIDISCIPLINARY
Impact index in year of publication: 2.562
Journal in the top 25%: No
Position of publication: 46
No. of journals in the cat.: 152

50 M. Stuer; P. Bowen; M. Cantoni; C. Pecharroman; Z. Zhao. Nanopore Characterization and Optical Modeling of Transparent Polycrystalline Alumina. Advanced Functional Materials. 22 - 11, pp. 2303 - 2309. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 9.756
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 241

51 M. Palacios; P. Bowen; M. Kappl; H. J. Butt; M. Stuer; C. Pecharroman; U. Aschauer; F. Puertas. Repulsion forces of superplasticizers on ground granulated blast furnace slag in alkaline media, from AFM measurements to rheological properties. Materiales De Construccion. 62 - 308, pp. 489 - 513. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal

52 G. Mata-Osoro; J. S. Moya; C. Pecharroman. Transparent alumina by vacuum sintering. Journal of the European Ceramic Society. 32 - 11, pp. 2925 - 2933. 2012. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, CERAMICS
Impact index in year of publication: 2.36
Journal in the top 25%: Yes
Position of publication: 1
No. of journals in the cat.: 27

53 J. S. Moya; C. Pecharroman; I. Montero; R. Pina-Zapardiel; A. Esteban-Cubillo; J. J. Reinosa; J. F. Fernandez. Fabrication of Nanostructured Metallized Glazes by Conventional Fast-Firing Route. Journal of the American Ceramic Society. 94 - 7, pp. 2067 - 2073. 2011. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, CERAMICS
Impact index in year of publication: 2.272
Journal in the top 25%: Yes
Position of publication: 2
No. of journals in the cat.: 25

54 J. S. Moya; L. Esteban-Tejeda; C. Pecharroman; S. R. H. Mello-Castanho; A. C. da Silva; F. Malpartida. Glass Powders with a High Content of Calcium Oxide: A Step Towards a "Green" Universal Biocide. Advanced Engineering Materials. 13 - 6, pp. B256 - B260. 2011. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 1.185
Journal in the top 25%: No
Position of publication: 112
No. of journals in the cat.: 232

55 R. Pina-Zapardiel; I. Montero; A. Esteban-Cubillo; J. S. Moya; W. D. Kaplan; T. Paramasivam; C. Pecharroman. Palladium nanoparticles on silica-rich substrates by spontaneous reduction at room temperature. Journal of Nanoparticle Research. 13 - 10, pp. 5239 - 5249. 2011. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.287
Journal in the top 25%: Yes
Position of publication: 38
No. of journals in the cat.: 323

56 J. Chevalier; P. Taddei; L. Gremillard; S. Deville; G. Fantozzi; J. F. Bartolome; C. Pecharroman; J. S. Moya; L. A. Diaz; R. Torrecillas; S. Affatato. Reliability assessment in advanced nanocomposite materials for orthopaedic applications. Journal of the Mechanical Behavior of Biomedical Materials. 4 - 3, pp. 303 - 314. 2011. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - ENGINEERING, BIOMEDICAL

Impact index in year of publication: 2.814
Position of publication: 15 **No. of journals in the cat.:** 72

57 C. Pecharroman; F. Esteban-Betegon; R. Jimenez. Electric Field Enhancement and Conduction Mechanisms in Ni/BaTiO3 Percolative Composites. Ferroelectrics. 400, pp. 81 - 88. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal

58 S. Lopez-Esteban; C. F. Gutierrez-Gonzalez; G. Mata-Osoro; C. Pecharroman; L. A. Diaz; R. Torrecillas; J. S. Moya. Electrical discharge machining of ceramic/semiconductor/metal nanocomposites. Scripta Materialia. 63 - 2, pp. 219 - 222. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal
Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 2.82 **Journal in the top 25%:** Yes
Position of publication: 39 **No. of journals in the cat.:** 225

59 L. Esteban-Tejeda; F. Malpartida; C. Pecharroman; J. S. Moya. High Antibacterial and Antifungal Activity of Silver Monodispersed Nanoparticles Embedded in a Glassy Matrix. Advanced Engineering Materials. 12 - 7, pp. B292 - B297. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal

60 A. Esteban-Cubillo; R. Pina-Zapardiel; J. S. Moya; C. Pecharroman. Stabilization of superparamagnetic nickel nanoparticles in a sepiolite matrix. Journal of Nanoparticle Research. 12 - 4, pp. 1221 - 1229. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal
Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.253 **Journal in the top 25%:** Yes
Position of publication: 35 **No. of journals in the cat.:** 225

61 I. Alvarez-Clemares; G. Mata-Osoro; A. Fernandez; S. Lopez-Esteban; C. Pecharroman; J. Palomares; R. Torrecillas; J. S. Moya. Transparent Alumina/Ceria Nanocomposites By Spark Plasma Sintering. Advanced Engineering Materials. 12 - 11, pp. 1154 - 1160. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal

62 L. Esteban-Tejeda; F. Malpartida; A. Esteban-Cubillo; C. Pecharroman; J. S. Moya. Antibacterial and antifungal activity of a soda-lime glass containing copper nanoparticles. Nanotechnology. 20 - 50, 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0
Type of production: Scientific paper **Format:** Journal
Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.137 **Journal in the top 25%:** Yes
Position of publication: 31 **No. of journals in the cat.:** 214

63 P. Jaquotot; A. Campillo; J. J. Reinosa; J. J. Romero; M. A. Bengochea; A. Esteban-Cubillo; J. Santaren; E. Aguilar; R. Pina; C. Pecharroman; J. S. Moya; J. F. Fernandez. Development of nanostructured multifunctional glazes. Boletin De La Sociedad Espanola De Ceramica Y Vidrio. 48 - 2, pp. 95 - 98. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

64 C. Pecharroman. Influence of the close sphere interaction on the surface plasmon resonance absorption peak. Physical Chemistry Chemical Physics. 11 - 28, pp. 5922 - 5929. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - CHEMISTRY, PHYSICAL

Impact index in year of publication: 4.116

Position of publication: 24 **No. of journals in the cat.:** 121

65 C. Pecharroman; G. Mata-Osoro; L. A. Diaz; R. Torrecillas; J. S. Moya. On the transparency of nanostructured alumina: Rayleigh-Gans model for anisotropic spheres. Optics Express. 17 - 8, pp. 6899 - 6912. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - OPTICS

Impact index in year of publication: 3.278

Position of publication: 3 **No. of journals in the cat.:** 71

66 T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman; J. S. Moya; H. El Attaoui; C. Benaqqa; J. Chevalier. Slow crack growth resistance and bridging stress determination in alumina-rich magnesium aluminate spinel/tungsten composites. Acta Materialia. 57 - 7, pp. 2121 - 2127. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

Impact index in year of publication: 3.760 **Journal in the top 25%:** Yes

Position of publication: 27 **No. of journals in the cat.:** 214

67 C. Pecharroman; A. Esteban-Cubillo; H. Fernandez; L. Esteban-Tejeda; R. Pina-Zapardiel; J. S. Moya; J. Solis; C. N. Afonso. Synthesis, Conforming, Linear, and Non-linear Optical Properties of Gold Nanoparticles-sepiolite Compacts. Plasmonics. 4 - 4, pp. 261 - 266. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

Impact index in year of publication: 3.723 **Journal in the top 25%:** Yes

Position of publication: 28 **No. of journals in the cat.:** 214

68 L. Esteban-Tejeda; F. Malpartida; A. Esteban-Cubillo; C. Pecharroman; J. S. Moya. The antibacterial and antifungal activity of a soda-lime glass containing silver nanoparticles. Nanotechnology. 20 - 8, 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.137
Journal in the top 25%: Yes
Position of publication: 31
No. of journals in the cat.: 214

69 D. Gonzalez-Diaz; M. Morales; L. F. Ferreira; J. A. Garzon; D. Gonzalez-Castano; C. Pecharroman. The role of the Resistive Plate response function in bringing an RPC to a stationary situation. Nuclear Instruments & Methods in Physics Research Section a-Accelerators Spectrometers Detectors and Associated Equipment. 602 - 3, pp. 713 - 718. 2009. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal

70 T. Rodriguez-Suarez; L. A. Diaz; S. Lopez-Esteban; C. Pecharroman; A. Esteban-Cubillo; L. Gremillard; R. Torrecillas; J. S. Moya. Epitaxial growth of tungsten nanoparticles on alumina and spinel surfaces. Nanotechnology. 19 - 21, 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.446
Position of publication: 25
No. of journals in the cat.: 192

71 J. F. Bartolome; J. I. Beltran; C. F. Gutierrez-Gonzalez; C. Pecharroman; M. C. Munoz; J. S. Moya. Influence of ceramic-metal interface adhesion on crack growth resistance of ZrO2-Nb ceramic matrix composites. Acta Materialia. 56 - 14, pp. 3358 - 3366. 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.729
Journal in the top 25%: Yes
Position of publication: 20
No. of journals in the cat.: 192

72 A. Beran; E. Libowitzky; M. Burianek; M. Muhlberg; C. Pecharroman; H. Schneider. Infrared and Raman spectroscopy of mullite-type Bi2Ga4O9. Crystal Research and Technology. 43 - 11, pp. 1230 - 1239. 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal

73 A. Esteban-Cubillo; J. F. Marco; J. S. Moya; C. Pecharroman. On the nature and location of nanoparticulate iron phases and their precursors synthetized within a sepiolite matrix. Journal of Physical Chemistry C. 112 - 8, pp. 2864 - 2871. 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

Type of production: Scientific paper
Format: Journal
Impact source: ISI
Category: Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY
Impact index in year of publication: 3.396
Journal in the top 25%: Yes

Position of publication: 26 **No. of journals in the cat.:** 192

74 C. Pecharroman; J. Perez-Juste; G. Mata-Osoro; L. M. Liz-Marzan; P. Mulvaney. Redshift of surface plasmon modes of small gold rods due to their atomic roughness and end-cap geometry. Physical Review B. 77 - 3, 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - PHYSICS, CONDENSED MATTER

Impact index in year of publication: 3.322 **Journal in the top 25%:** Yes

Position of publication: 10 **No. of journals in the cat.:** 62

75 A. Esteban-Cubillo; R. Pina-Zapardiel; J. S. Moya; M. F. Barba; C. Pecharroman. The role of magnesium on the stability of crystalline sepiolite structure. Journal of the European Ceramic Society. 28 - 9, pp. 1763 - 1768. 2008. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, CERAMICS

Impact index in year of publication: 1.58 **Journal in the top 25%:** Yes

Position of publication: 2 **No. of journals in the cat.:** 24

76 A. Morales-Rodriguez; D. Gomez-Garcia; T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman; J. S. Moya; A. Dominguez-Rodriguez. Anomalous high activation energy for creep in nanostructured 3YTZP/Ni cermets. Journal of the European Ceramic Society. 27 - 11, pp. 3295 - 3299. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, CERAMICS

Impact index in year of publication: 1.562 **Journal in the top 25%:** Yes

Position of publication: 2 **No. of journals in the cat.:** 25

77 J. S. Moya; T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman; R. Torrecillas; L. A. Diaz; M. Nygren. Diamond-like hardening of alumina/Ni nanocomposites. Advanced Engineering Materials. 9 - 10, pp. 898 - 901. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

78 A. Esteban-Cubillo; J. M. Tulliani; C. Pecharroman; J. S. Moya. Iron-oxide nanoparticles supported on sepiolite as a novel humidity sensor. Journal of the European Ceramic Society. 27 - 4, pp. 1983 - 1989. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, CERAMICS

Impact index in year of publication: 1.562 **Journal in the top 25%:** Yes

Position of publication: 2 **No. of journals in the cat.:** 25

79 C. Pecharroman; A. Esteban-Cubillo; R. Torrecillas; J. S. Moya. Micro/nano composites: a simple and safe way to fabricate nanomaterials. International Journal of Nanotechnology. 4 - 3, pp. 282 - 297. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

80 J. E. Iglesias; C. Pecharroman. Scaling the h-index for different scientific ISI fields. Scientometrics. 73 - 3, pp. 303 - 320. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS

Impact index in year of publication: 1.472 **Journal in the top 25%:** No

Position of publication: 24 **No. of journals in the cat.:** 92

81 J. F. Bartolome; C. F. Gutierrez-Gonzalez; C. Pecharroman; J. S. Moya. Synergistic toughening mechanism in 3Y-TZP/Nb composites. Acta Materialia. 55 - 17, pp. 5924 - 5933. 2007. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

Impact index in year of publication: 3.624 **Journal in the top 25%:** Yes

Position of publication: 19 **No. of journals in the cat.:** 190

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

Impact source: ISI **Category:** Science Edition - MATERIALS SCIENCE, COATINGS & FILMS

Impact index in year of publication: 2.483 **Journal in the top 25%:** Yes

Position of publication: 1 **No. of journals in the cat.:** 18

83 M. Ocana; C. Pecharroman; F. Gracia; J. P. Holgado; A. R. Gonzalez-Elipe. Analysis of texture and microstructure of anatase thin films by Fourier transform infrared spectroscopy. Thin Solid Films. 515 - 4, pp. 1585 - 1591. 2006. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

84 A. Esteban-Cubillo; C. Pecharroman; E. Aguilar; J. Santaren; J. S. Moya. Antibacterial activity of copper monodispersed nanoparticles into sepiolite. Journal of Materials Science. 41 - 16, pp. 5208 - 5212. 2006. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0

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

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

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Type of production: Book chapter **Format:** Book
Corresponding author: Yes

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Type of production: Scientific book or monograph **Format:** Book

Works submitted to national or international conferences

1 **Title of the work:** Assessment of a Sepiolite-Titania Hybrid Catalyst for its Application in the Photocatalytic Degradation of Pesticides
Name of the conference: 11th European Conference on Solar chemistry and Photocatalysis: Environmental Applications (SPEA11).
Corresponding author: No
City of event: Turín, Italy
Date of event: 06/06/2022
S. Lopez-Esteban; C. Pecharroman; A. Esteban-Cubillo; D. Hermosilla; A. Gasco; A. Bahamonde.

2 **Title of the work:** Eficiencia de las nanopartículas de TiO2 dispersadas e inmovilizadas en sepiolita y vidrio de bajo punto de fusión en la degradación de pesticidas.
Name of the conference: Reunión Bienal de la Sociedad Española de Catálisis (SECAT21)
Corresponding author: No
City of event: Valencia, Spain
Date of event: 18/10/2021
B. Villajos; S. López-Esteban; S. Mesa-Medina; C. Pecharromán; K. Jiménez; D. Hermosilla; A. Gascó; M. Faraldos; A. Bahamonde.

3 **Title of the work:** CARACTERIZACIÓN DE COMPUESTOS TiO2 NANOPARTICULADO/VIDRIO DE BAJO PUNTO DE FUSIÓN
Name of the conference: LVII Congreso Nacional de la SECV
Corresponding author: No
City of event: Castellón, Spain
Date of event: 26/10/2020
S. Lopez-Esteban; B. Cabal; A. Borrell; J.F. Bartolomé; A. Fernandez; M. Faraldos; A. Bahamonde; J.S. Moya; C. Pecharroman.

4 **Title of the work:** Additive manufacturing of ceramic/low temperaturemelting glass (~500ºC) composite materials.
Name of the conference: Spain Chapter of the American Ceramic Society
Corresponding author: No
City of event: Castellón, Valencian Community, Spain
Date of event: 20/02/2020
End date: 20/02/2020
Organising entity: Instituto de Tecnología Cerámica
José Serafín Moya Corral; Álvaro Gil; Carlos Pecharromán García; Adolfo Fernández Valdés; Sonia López Esteban; María Belén Cabal Alvarez.

5 **Title of the work:** Self-assembled disorder in photonic materials
Name of the conference: META'16 Lugar Torremolinos España
Corresponding author: Yes
Date of event: 07/2016
Alvaro Blanco; Denise Montesdeoca; Cefe Lopez; Jose Angel Pariente; Carlos Pecharroman.

6 **Title of the work:** Tunable Negative Nano Composites for Low Frequency Metamaterials
Name of the conference: META'16 Lugar Torremolinos España
Date of event: 07/2016
Carlos Pecharroman; Lucia Fernandez; Miguel Morales; Celia Mallada; Jose Luis Menendez.

7 **Title of the work:** Magnetoimpedancia en composites granate de itrio y hierro/grafeno
Name of the conference: XIV CONGRESO NACIONAL DE MATERIALES
Corresponding author: No
City of event: Gijón, Spain
Date of event: 08/06/2016
C.Mallada; J.L.Menédez; M.Morales; C.Pecharromán; R. Menéndez; R.Santamaría.

8 **Title of the work:** Metal-dielectric microstructures with directionally solidified eutectics as templates
Name of the conference: The 6th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META 2015)
Corresponding author: No
City of event: New York, United States of America
Date of event: 04/08/2015
S.G. Rodrigo; C. Pecharromán; L. Martín-Moreno; J. Sesé; R.I. Merino.

9 **Title of the work:** High dielectric constant in Barium titanate-graphene composites around the percolation threshold
Name of the conference: 14th International Conference of the European Ceramic Society
Corresponding author: No
City of event: Toledo, Spain

Date of event: 22/06/2015
Organising entity: European Ceramic Society
J. L. Menéndez; C. Pecharromán; R. Menéndez; R. Santamaría; C. Blanco.

10 **Title of the work:** Magnetically Tunable Composites Exhibiting a Pseudo Plasmonic Resonance
Name of the conference: ETOPIM 10 Lugar Yad Hashmona, Israel
Corresponding author: Yes
Date of event: 21/06/2015
Carlos Pecharromán; Gustavo Mata-Osoro; José S. Moya.

11 **Title of the work:** Tuning the dielectric constant in ferrite-carbon nanofibres composites
Name of the conference: Energy, Materials, Nanotechnology Ceramics Meeting
Corresponding author: No
City of event: United States of America
Date of event: 26/01/2015
Lucía Fernández-García; Marta Suárez; José Luis Menéndez; Carlos Pecharromán; Jan Petzelt; Maxim Savinov.

12 **Title of the work:** Conductivity and dielectric response of carbon based composites in a broad frequency range
Name of the conference: 19TH INTERNATIONAL CONFERENCE ON COMPOSITE MATERIALS
Corresponding author: No
City of event: Paris, France
Date of event: 28/07/2013
D. Nuzhnyy; J. Petzelt; M. Savinov; V. Bovtun; M. Kempa; B. Mayoral; T. McNally; L. Fernandez-Garcia; J. L. Menendez; C. Pecharroman.

13 **Title of the work:** broad-Band AC Conductivity and Dielectric Spectroscopy of Nanocarbon Composites Around Their Percolation Threshold
Name of the conference: COST ACTION MP0902 Composites of inorganic nanotubes and polymers, Workshop of all working groups
Corresponding author: No
Date of event: 20/03/2013
M. Savinov; D. Nuzhnyy; V. Bovtun; M. Kempa; J. Petzelt; B. Mayoral; T. McNally; L. Fernandez-Garcia; J. L. Menendez; C. Pecharroman.

14 **Title of the work:** Interaction between Conjugated Polymers and Gold Nanoparticles in Hierarchical Hybrids
Name of the conference: 7th International Conference on Nanostructured Polymers and Nanocomposites
City of event: Czech Republic
Date of event: 24/04/2012
N. García; J. Guzmán; C. Pecharromán; P. Tiemblo.

15 **Title of the work:** Critical processing in the microstucture and dc conductivity of carbon nanofibers-alumina nanocomposites
Name of the conference: Cost Action MP0209: Composites of inorganic nanotubes and polymers
Corresponding author: No
City of event: Praga, Czech Republic
Date of event: 17/04/2012
L Fernández García; M. Suarez; C. Pecharromán; J.L Menéndez; J. Petzelt; M. Savinov.

16 **Title of the work:** Understanding the ageing process in RPC's from an ion conductivity approach.
Name of the conference: X Workshop on Resistive Plate Chambers and related Detectors Lugar GSI Darmstadt, Alemania
Date of event: 09/02/2012
C. Pecharromán; M. Morales; G. Mata-Osoro; L. A. Díaz; V. Valcárcel; J. A. Garzón.

17 **Title of the work:** Microstructure and dielectric behaviour of carbon nanofibers-alumina
Name of the conference: 8th International Workshop on Interfaces at the boundary between natural and synthetic materials
Corresponding author: No
City of event: Santiago de Compostela, Spain
Date of event: 26/06/2011
Organising entity: Universidad de Santiago de Compostela **Type of entity:** University
L. Fernández-García; M. Suarez; C. Pecharroman; J.L. Menendez; J. Petzelt; M. Savinov.

18 **Title of the work:** Multiscale gold and silver plasmonic plastics by melt compounding
Name of the conference: European Polymer Congress 2011
Date of event: 26/06/2011
N. García; P. Tiemblo; E. Benito; A. Esteban; R. Pina; Carlos Pecharromán García.

19 **Title of the work:** Modelling of transparent ceramics
Name of the conference: ECERS 2011 Lugar Estocolmo, Suecia
Date of event: 21/06/2011
Carlos Pecharromán; Gustavo Mata-Osoro; José S. Moya.

20 **Title of the work:** Giant magneto-optical/faraday. Effect in flexible non-magnetic/ plasmonic polymer matrix composites
Name of the conference: INTERNATIONAL WORKSHOP ON NANOPLASMONICS FOR ENERGY AND ENVIROMENT
Corresponding author: Yes
City of event: Spain
Date of event: 08/06/2011
Menéndez, J.L.; García, N.; Tiemblo, P.; Pina, R.; Esteban, A.; Fernández-García, L.; Mata-Osoro, G; Pecharromán, C.

21 **Title of the work:** Understanding the ageing process in RPC¿s from an ion conductivity approach
Name of the conference: X Workshop on Resistive Plate Chambers and related detectors
Corresponding author: Yes
City of event: Darmstadt, Germany
Date of event: 09/02/2010
C. Pecharromán; M. Morales; G. Mata-Osoro; L.A. Díaz; V. Valcárcel; J. A. Garzón.

22 **Title of the work:** "Estudio del crecimiento por cohalescencia del grano de Ni en composites BaTiO3/Ni y su efecto en las propiedades eléctricas y mecánicas"
Name of the conference: VII Congreso Nacional de Materiales
City of event: Madrid, Spain
Date of event: 2010
F. Esteban-Betegón; R. Jiménez-Riobóo; J.S. Moya; C. Pecharromán.

23 **Title of the work:** "Preparación y estudio de las propiedades mecánicas en compuestos 3Y-TZP/Ni con partículas de Ni de tamaño micro y nanométrico"
Name of the conference: VII Congreso Nacional de Materiales
City of event: Madrid, Spain
Date of event: 2010
C. Pecharromán; F. Esteban-Betegón; J. F. Bartolomé; R. Jiménez-Riobóo; J.S. Moya.

24 **Title of the work:** Superhardness in ceramic-metal nanocomposites
Name of the conference: NanoSMat 2009. 4th International Conference on Surfaces, Coatings and Nanostructured Materials.
Corresponding author: No
City of event: Roma, Italy
Date of event: 19/10/2009
S. Lopez-Esteban; T. Rodriguez-Suarez; L.A. Diaz; C. Pecharroman; R. Torrecillas; J.S. Moya.

25 **Title of the work:** Superhardness in ceramic-metal nanocomposites
Name of the conference: Euromat 2009. European Congress and Exhibition on Advanced Materials and Processes. Federation of European Materials Societies
Corresponding author: No
City of event: Glasgow, United Kingdom
Date of event: 07/09/2009
S. Lopez-Esteban; T. Rodriguez-Suarez; L.A. Diaz; C. Pecharroman; R. Torrecillas; J.S. Moya.

26 **Title of the work:** "Dielectric and Ferroelectric Properties of BaTiO3/Ni cermets under high electric fields"
Name of the conference: 10º International Meeting on Ferroelectricity
City of event: Madrid, Spain
Date of event: 03/07/2009
R. Jiménez; F. Esteban-Betegón; C. Pecharromán; J.S. Moya.

27 **Title of the work:** Ceramic-metal nanocomposites
Name of the conference: IPEN 2008
Corresponding author: No
City of event: Sao Paulo, Brazil
Date of event: 05/12/2008
J. S. Moya; T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman.

28 **Title of the work:** Materiales compuestos nanoestructurados cerámica/semiconductor/metal
Name of the conference: XLVIII Congreso Anual de la Sociedad Española de Cerámica y Vidrio
Corresponding author: No
City of event: Toledo, Spain
Date of event: 29/10/2008
Organising entity: Sociedad Española de Cerámica y Vidrio
S. Lopez-Esteban; C.F. Gutierrez-Gonzalez; L.A. Diaz; G. Mata-Osoro; C. Pecharroman; R.Torrecillas; J.S. Moya.

29 **Title of the work:** Ceramic-metal nanocomposites
Name of the conference: Seventh International Conference on Diffusion in Materials; DIMAT 2008
Corresponding author: No
City of event: Lanzarote, Spain
Date of event: 28/10/2008
J. S. Moya; T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman.

30 **Title of the work:** Hardening effect of metal nanoparticles in ceramic-matrix composites
Name of the conference: Trends in Nanotechnology Conference; TNT2008
Corresponding author: No
City of event: Oviedo, Spain
Date of event: 01/09/2008
T. Rodriguez-Suarez; S. Lopez-Esteban; C. Pecharroman; L.A. Diaz; R. Torrecillas.

31 **Title of the work:** Zirconia/nickel/titanium carbide nanocomposites for electro discharge machining
Name of the conference: 7th International Workshop on Interfaces. New materials via interfacial control.
Corresponding author: No
City of event: Santiago de Compostela, Spain
Date of event: 22/06/2008
Organising entity: Universidad de Santiago de Compostela **Type of entity:** University
S. Lopez-Esteban; C.F. Gutierrez-Gonzalez; L.A. Diaz; G. Mata-Osoro; C. Pecharroman; R. Torrecillas; J.S. Moya.

32 **Title of the work:** "Zirconia/Nickel Interfaces in Micro- and Nanocomposites"
Name of the conference: EuroConference on Interfaces in Nanostructured Materials
Corresponding author: Yes
City of event: Schwäbisches Bildungszentrum,
Date of event: 06/11/2006
C. Pecharromán; J. I. Beltrán; M.C. Muñoz and J.S. Moya.

33 **Title of the work:** IR soft modes in ceramic lithium/sodium lanthanum titanate superionic conductors
Name of the conference: 30th International Symposium on Dynamical Properties of Solids (DYPROSO 2005) Lugar Cesky Krumlov, República Checa
Corresponding author: Yes
Date of event: 27/09/2005
C. Pecharromán; J. Sanz; R Jiménez; A. Várez; T Ostapchuk.

34 **Title of the work:** Alumina nanocomposites for structural applications
Name of the conference: IX Conference & Exhibition of the European Ceramic Society (ECERS)
Corresponding author: No
City of event: Ljubliana, Slovenia
Date of event: 19/06/2005
Organising entity: European Ceramic Society
S.Deville; J.Fantozzi; J.Chevalier; J.F.Bartolomé; Carlos Pecharromán; J.S.Moya; J.L.Menéndez; L.A. Diaz; R. Torrecillas.

35 **Title of the work:** Relationship between Transparency and Texturing in Alumina Ceramics: Theoretical Model and New Fabrication Route
Name of the conference: PACRIM8 Lugar Vancouver, Canada
Corresponding author: Yes
City of event: Vancouver, Canada
Date of event: 31/05/2005
Organising entity: American Ceramic Society
Carlos Pecharromán; Gustavo Mata-Osoro; José S. Moya.

36 **Title of the work:** “Ceramic-based nanocomposites for multifunctional applications”
Name of the conference: NATO workshop “Nanocomposites for Secure Society”
City of event: Hotel Theoxenia,
Date of event: 2005
C. Pecharromán.

37 **Title of the work:** “Wet Processing and Characterization of BaTiO3/Ni Composites with High Dielectric Constant Based on the Percolative Theory”
Name of the conference: International Conference on the Advances in Materials & Processing Technologies (AMPT’01)
City of event: Leganés, Spain
Date of event: 15/09/2001
F. Esteban-Betegón; S. López-Esteban; J.F. Bartolomé; C. Pecharromán; J.S. Moya.

38 **Title of the work:** “Stability of ZrO2-Ni Powder in Liquids media”
Name of the conference: 7th International Conference on Ceramic Processing Science.
City of event: Inuyama, Japan
Date of event: 15/05/2000
S. López-Esteban; J.F. Bartolomé; C. Pecharromán; J.S. Moya; J. Requena.

39 **Title of the work:** “Temperature dependence of Luminiscence from Semiconductor Microcavities”.
Name of the conference: Mar98 Meeting of the American Physical Society.
City of event: United States of America
Date of event: 03/1998
J. K. Son; I. W. Tao; C. Pecharromán; E.E. Méndez; R. Ruf.

40 **Title of the work:** “Signatures of exciton-cavity coupling in semiconductor microcavities”
Name of the conference: 8th. International Conference on Modulated Semiconductor Structures
City of event: Santa Barbara, United States of America
Date of event: 14/07/1997
I. W. Tao; J. K. Son; C. Pecharroman; E. E. Mendez; R. Ruf.

41 **Title of the work:** “Neutron Scattering study of the picosecond dynamics of polyisobutylene”
Name of the conference: 7th Meeting of the European Macromolecular Club.
City of event: Estrasburgo, France
Date of event: 23/05/1995
C. Pecharromán; D. Richter; B. Frick; U. Buchenau.

42 **Title of the work:** “Time-Domain evaluation technique for neutron TOF data.”
Name of the conference: Spring-Conference of the German Physical Society”
City of event: Jülich, Germany
Date of event: 20/03/1995
C. Pecharromán; U. Buchenau.

43 **Title of the work:** Dielectric behavior of ceramic-nano carbon composites around the percolation threshold
Name of the conference: EMN Meeting on Ceramics
Corresponding author: No
City of event: Orlando, United States of America
L. Fernández-García; M. Suárez; J.L. Menéndez; C. Pecharromán; R. Menéndez; R. Santamaría.

R&D management and participation in scientific committees

R&D management

Name of the activity: Scientific supervisor of the Infrared and ellipsometry service of the ICMM-CSIC
Type of management: Management of body
Performed tasks: Scientific consulting, Infrastructure Project applications, Maintenance, Spectroscopic techniques teaching.
Entity: Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
Start date: 01/01/2001 **Duration:** 18 years - 3 months

Other achievements

Stays in public or private R&D centres

1 **Entity:** Chemistry School, University of Melbourne.
City of entity: Melbourne, Australia
Start date: 2011
Name of programme: Plasmónica de agregados de nanopartículas metálicas sobre un sustrato.
Goals of the stay: : O (sabático)

2 **Entity:** Instituto de Física; Academia de Ciencias de la República Checa.
City of entity: Praga, Czech Republic
Start date: 2004
Name of programme: Modificación de la frec. de modos blandos en nanocerámicas de BaTiO3
Goals of the stay: : I

3 **Entity:** Max Plank Institut für Metalforschung,
City of entity: Stuttgart, Germany
Start date: 2003
Name of programme: Estudio de las interfase cerámica/metal en ZrO2/Ni composites
Goals of the stay: : O (Uso microscopio)

4 **Entity:** Instituto de Física; Academia de Ciencias de la República Checa.
City of entity: Praga, Czech Republic
Start date: 2000
Name of programme: Propiedades Ópticas en el IR de agregados de partículas.
Goals of the stay: : I

5 **Entity:** State University of New York at Stony Brook, Department of Physics.
City of entity: Stony Brook, United States of America
Start date: 1996
Name of programme: Modificación de la emisión de pozos cuánticos de heteroestructuras de semiconductores por confinamiento en cavidades de semiconductores.
Goals of the stay: : P

6 **Entity:** Instituto Laue Langevin (ILL)
City of entity: Grenoble, France
Start date: 1995
Name of programme: Medida de QENS en polímeros amorfos
Goals of the stay: : O

7 **Entity:** Institut für Feskörperforschung (IFF), KFA-Jülich
City of entity: Jülich, Germany
Start date: 1994
Name of programme: Estudio de la influencia del Scattering multiple en espectrocopía de tiempo de vuelo de neutrones aplicado a sistemas poliméricos.
Goals of the stay: : C P