



## **María Concepción Serrano López-Terradas**

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## 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.

Since my early steps as a researcher back in 2003, my research is being focused on the design and development of biomaterials for biomedical applications including a wide range of materials (ceramics, polymers, hydrogels, elastomers, carbon nanotubes, graphene, etc) and applications (neural regeneration, congenital cardiovascular pathologies, atherosclerosis, osteoporosis, bone cancer). At the Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC), I have been responsible for the set-up and functioning of two cell-tissue culture laboratories (one of them being the first at ICMM back in 2011). I have been granted with a FPU predoctoral fellow from the MEC of Spain (2003-2006), a postdoctoral contract abroad from the MICINN of Spain (2008-2010), a Juan de la Cierva postdoctoral contract from the MINECO of Spain (2010-2013) and a Miguel Servet I postdoctoral contract from the ISCIII of Spain (2014-2017). Since March, 17, 2017, I have joined CSIC as a Tenured Scientist (Científico Titular) at ICMM-CSIC in the research topic of Materials for Health. I have been PI of the Project MAT2016-78857R (121.000€) from MINECO (Plan Nacional, Retos de la Sociedad) and leader of wockpackage 3 and PI of CSIC team in the European Project FET-OPEN-RIA ByAxon (GA. 737116, 3.7 M€ total budget, 210 k€ for CSIC team). I have been responsible for the creation of the Joint Research Unit of I+D+i with CSIC "Design and development of biomaterials for neural regeneration" of the Hospital Nacional de Parapléjicos (25/07/2017-to date; 1 positive renewal in 2020). Since March 1st, 2019, I am an Associate Editor of the journal "Bioactive Materials" (IF 2019: 8.724; <http://www.keaipublishing.com/en/journals/bioactive-materials/>). I have co-authored over 50 publications in scientific journals of Q1 from the areas of Materials Science, Biomaterials and Chemistry, Multidisciplinary; and more than 70 communications to national and international conferences, besides being actively involved in outreach activities. I have supervised 1 PhD thesis (Ana Domínguez Bajo, Universidad Complutense de Madrid, Sobresaliente cum laude, 21/12/2020; co-supervision with Dr. E. López) and I am currently supervising three PhD students: (1) André Girão, Universidade de Aveiro, co-supervised with Prof. P. Marques, 2022; (2) Ana Arché, Universidad Autónoma de Madrid, co-supervision with Dr. M.T. González, 2023; and (3) Paloma Roldán, Universidad Autónoma de Madrid, co-supervision with Prof. C. López, 2023. I have got FAVORABLE recognition of 2 Sexenios de Investigación (2004-2015) by Comisión Nacional Evaluadora de la Actividad Investigadora (Ministerio de Ciencia, Innovación y Universidades) (06/06/2018) and 3 Quinquenios (Componente por Méritos Investigadores del Complemento Específico) (2003-2017) by CSIC (MINECO) (12/06/2018).



## 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.

Total publications: 61 (48 original articles, 9 reviews and 4 book chapters)

Total citations: 2402

Total co-authors: 134

h-index: 28

Source: Scopus 20/02/2021

In preparation: 7 original articles and 1 book (co-editor, Springer-Nature)



## María Concepción Serrano López-Terradas

**Surname(s):** Serrano López-Terradas  
**Name:** María Concepción  
**DNI:** 50114964B  
**ORCID:** 0000-0002-5010-644X  
**ScopusID:** 9244466100  
**ResearcherID:** D-7442-2014  
**Date of birth:** 13/03/1979  
**Gender:** Female  
**Nationality:** Spain  
**Country of birth:** Spain  
**Aut. region/reg. of birth:** Community of Madrid  
**Contact province:** Madrid  
**City of birth:** MADRID  
**Contact address:** Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC)  
**Rest of contact address:** Calle Sor Juana Inés de la Cruz, 3  
**Postcode:** 28049  
**Contact country:** Spain  
**Contact aut. region/reg.:** Community of Madrid  
**Contact city:** Madrid  
**Land line phone:** (0034) 913348984  
**Email:** mc.terradas@csic.es  
**Mobile phone:** (0034) 636757403

### Current professional situation

**Employing entity:** Consejo Superior de Investigaciones Científicas      **Type of entity:** State agency  
**Department:** Energía, Medio Ambiente y Salud, Instituto de Ciencia de Materiales de Madrid  
**Professional category:** Científico Titular/ Tenure track scientist  
**Start date:** 17/03/2017  
**Type of contract:** Civil servant      **Dedication regime:** Full time  
**Primary (UNESCO code):** 240300 - Biochemistry; 240701 - Cell culture; 240705 - Tissue culture; 249000 - Neurosciences; 331200 - Materials technology; 331400 - Medical technology  
**Performed tasks:** Palabras clave: biomaterial, biocompatibilidad, materiales para la salud, reparación neural, tejido óseo, grafeno, tejido cardiovascular, cultivo celular, polímeros, células progenitoras de endotelio, estudios in vivo, polidiol-co-citratos, scaffolds 3D, ingeniería de tejidos, medicina regenerativa, nanomateriales. Keywords: biomaterial, biocompatibility, materials for health, neural repair, bone tissue, graphene, cardiovascular tissue, cell culture, polymers, endothelial progenitor cells, in vivo studies, poly(di-ol-co-citrates), 3D scaffolds, tissue engineering, regenerative medicine, nanomaterials.  
**Identify key words:** Gels, hidrogels, aerogels; Biopolymers; Amorphous; Ceramics; Nanomaterials; Biocompatible materials; Biomaterials; Therapeutics; Laboratoy animals; Cell culture; Tissue culture

### Previous positions and activities

	Employing entity	Professional category	Start date
1	Instituto de Salud Carlos III	Investigador Postdoctoral Miguel Servet I	01/01/2014
2	Instituto de Ciencia de Materiales de Madrid	Investigador postdoctoral Juan de la Cierva	16/12/2010
3	Northwestern University - McCormick School of Engineering and Applied Science - Biomedical Engineering Department	Investigador postdoctoral	02/09/2008
4	Universidad Complutense de Madrid	Investigador postdoctoral	01/02/2007
5	Universidad Complutense de Madrid	Estudiante predoctoral (Beca FPU)	01/01/2003
6	Northwestern University - McCormick School of Engineering and Applied Science - Biomedical Engineering Department	Estudiante predoctoral	05/07/2005

- 1** **Employing entity:** Instituto de Salud Carlos III **Type of entity:** Public Research Body  
**Department:** Hospital Nacional de Paraplégicos  
**Professional category:** Investigador Postdoctoral Miguel Servet I  
**Start-End date:** 01/01/2014 - 16/03/2017 **Duration:** 3 years - 2 months - 16 days  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time
- 2** **Employing entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Department:** Biomaterials and bioinspired materials department  
**Professional category:** Investigador postdoctoral Juan de la Cierva  
**Start-End date:** 16/12/2010 - 15/12/2013 **Duration:** 3 years  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time
- 3** **Employing entity:** Northwestern University - McCormick School of Engineering and Applied Science - Biomedical Engineering Department **Type of entity:** University  
**Department:** Biomedical Engineering  
**Professional category:** Investigador postdoctoral  
**Start-End date:** 02/09/2008 - 30/11/2010 **Duration:** 2 years - 2 months - 29 days  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time
- 4** **Employing entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Department:** Departamento de Bioquímica y Biología Molecular I (UCM), Facultad de Ciencias Químicas  
**Professional category:** Investigador postdoctoral  
**Start-End date:** 01/02/2007 - 22/07/2008 **Duration:** 1 year - 5 months - 22 days  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time



- 5** **Employing entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Department:** Departamento de Bioquímica y Biología Molecular I (UCM), Facultad de Ciencias Químicas  
**Professional category:** Estudiante predoctoral (Beca FPU)  
**Start-End date:** 01/01/2003 - 31/12/2006 **Duration:** 4 years  
**Type of contract:** Grant-assisted student (pre or post-doctoral, others)  
**Dedication regime:** Full time
- 6** **Employing entity:** Northwestern University - McCormick School of Engineering and Applied Science - Biomedical Engineering Department **Type of entity:** University  
**Department:** Biomedical Engineering  
**Professional category:** Estudiante predoctoral  
**Start-End date:** 05/07/2005 - 05/10/2005 **Duration:** 3 months  
**Dedication regime:** Full time



## Education

### University education

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

**University degree:** Higher degree

**Name of qualification:** Licenciado en Biología Opción Biología Sanitaria

**Degree awarding entity:** Universidad Complutense de Madrid **Type of entity:** University

**Date of qualification:** 30/07/2002

**Prize:** Special award for degree

### Doctorates

**Doctorate programme:** Programa Oficial de Doctorado en Bioquímica y Biología Molecular

**Degree awarding entity:** Universidad Complutense de Madrid **Type of entity:** University

**Date of degree:** 20/11/2006

**DEA awarding entity:** Universidad Complutense de Madrid

**Date DEA was awarded:** 29/06/2004

**Thesis title:** Estudios de biocompatibilidad de polímeros de poli(epsilon-caprolactona): Hacia el desarrollo de un implante vascular biodegradable

**Thesis director:** M. Teresa Portolés

**Thesis co-director:** Raffaella Pagani

**Obtained qualification:** Sobresaliente cum laude

**Recognition of quality:** Yes

**Special doctorate award:** Yes

**Date of award:** 23/07/2008

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

- 1 Training title:** Introducción a la Citometría de Flujo  
**Awarding entity:** Hospital Nacional de Parapléjicos  
**End date:** 11/11/2016  
**Type of entity:** Healthcare Institutions  
**Duration in hours:** 25 hours
- 2 Training title:** Introducción a la Microscopía y Análisis de Imagen  
**Awarding entity:** Hospital Nacional de Parapléjicos  
**End date:** 24/11/2015  
**Type of entity:** Healthcare Institutions  
**Duration in hours:** 23 hours
- 3 Type of training:** Course  
**Training title:** Simposio "Los contactos neuronales vistos por Cajal"  
**Awarding entity:** Cátedra Universidad Autónoma de Madrid - Fundación Tatiana PdGB  
**End date:** 23/10/2015  
**Duration in hours:** 3 hours



- 4** **Training title:** Curso Capacitación Experimentador Animales Investigación Categoría C  
**City awarding entity:** Spain  
**Awarding entity:** Animalaria Formación y Gestión, S. L.  
**End date:** 23/12/2014 **Duration in hours:** 80 hours
- 5** **Type of training:** Course  
**Training title:** Second International Spinal Cord Injury and Neurotrauma Summer School  
**City awarding entity:** Toledo, Spain  
**Awarding entity:** Spinal Research - Wings for Life - Hospital Nacional de Parapléjicos - Queen Mary University of London  
**End date:** 23/06/2014
- 6** **Training title:** Curso Capacitación Experimentador Animales Investigación Categoría B  
**City awarding entity:** Spain  
**Awarding entity:** Fundación Hospital Nacional Parapléjicos para Investigación e Integración **Type of entity:** Healthcare Institutions  
**End date:** 30/05/2014 **Duration in hours:** 40 hours
- 7** **Type of training:** Curso de Postgrado y Especialización  
**Training title:** Preparation, characterization and applications of coatings and thin films  
**Awarding entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Training manager:** José María Albella Martín  
**End date:** 07/06/2013 **Duration in hours:** 44 hours
- 8** **Training title:** International Symposium: "Drugs, Nanomedicine and Biomaterials: A common goal"  
**City awarding entity:** Madrid, Spain  
**Awarding entity:** REAL ACADEMIA DE FARMACIA  
**Training manager:** María Vallet-Regí  
**End date:** 25/04/2012
- 9** **Type of training:** Course  
**Training title:** Summer workshop "Functionalised advanced materials and engineering of hybrids and ceramics"  
**City awarding entity:** El Escorial, Community of Madrid, Spain  
**Awarding entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Training manager:** Maria Vallet-Regí  
**End date:** 30/06/2006 **Duration in hours:** 30 hours
- 10** **Training title:** European Symposium: "Regenerative Medicine"  
**City awarding entity:** Madrid, Spain  
**Awarding entity:** ASOCIACION ESPAÑOLA DE BIOETICA Y ETICA MEDICA  
**End date:** 01/12/2004
- 11** **Type of training:** Course  
**Training title:** Summer workshop "Cannabinoids: from the laboratory to the clinic"  
**City awarding entity:** El Escorial, Community of Madrid, Spain  
**Awarding entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Training manager:** Manuel Guzmán Pastor  
**End date:** 30/07/2004 **Duration in hours:** 30 hours





**12 Training title:** Certificado de Aptitud Pedagógica (CAP)  
**Awarding entity:** Universidad Complutense de Madrid  
**End date:** 23/03/2004

**Type of entity:** University  
**Duration in hours:** 180 hours

## Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
Portuguese	B1	B1	B1	B1	B1
English	B2	B2	B2	B2	B2
Spanish	C2	C2	C2	C2	C2

## Teaching experience

### General teaching experience

- 1 Type of teaching:** Official teaching  
**Name of the course:** Frontiers in Materials Science  
**University degree:** Specialized Postgraduate Course CSIC  
**Course given:** 2018-2021  
**Start date:** 02/04/2018 **End date:** 18/03/2021  
**Type of hours/ ECTS credits:** Hours  
**Hours/ECTS credits:** 6  
**Entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
- 2 Type of teaching:** Official teaching  
**Name of the course:** Tissue Engineering  
**Type of programme:** Master's degree  
**Type of subject:** Optional  
**University degree:** Master in Biomaterials  
**Course given:** 2021  
**Start date:** 18/02/2021 **End date:** 22/02/2021  
**Type of hours/ ECTS credits:** Hours  
**Hours/ECTS credits:** 4  
**Entity:** Universidad Complutense de Madrid **Type of entity:** University
- 3 Type of teaching:** Official teaching  
**Name of the course:** 32952 (BDC15) Molecular Insights into neural function (Mecanismos Moleculares de la función neural)  
**Type of programme:** Master's degree  
**Type of subject:** Optional  
**University degree:** Master in Biomolecules and Cell Dynamics  
**Course given:** 2019-2021  
**Start date:** 06/02/2019 **End date:** 16/02/2021  
**Type of hours/ ECTS credits:** Hours  
**Hours/ECTS credits:** 1,5  
**Entity:** Universidad Autónoma de Madrid **Type of entity:** University



- 4** **Type of teaching:** Official teaching  
**Name of the course:** Prácticas Curriculares Externas Alumno Raúl López Fernández  
**Type of teaching:** Laboratory work  
**University degree:** Grado en Bioquímica  
**Start date:** 01/04/2016 **End date:** 30/07/2016  
**Type of hours/ ECTS credits:** Hours  
**Hours/ECTS credits:** 100  
**Entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Assessment entity:** Universidad de Castilla-La Mancha  
**Type of entity:** University
- 5** **Type of teaching:** Official teaching  
**Name of the course:** Tutoría Prácticas Académicas Externas Alumna Ana Domínguez Bajo  
**Type of teaching:** Laboratory work  
**University degree:** Grado en Bioquímica  
**Start date:** 01/07/2014 **End date:** 28/07/2014  
**Type of hours/ ECTS credits:** Hours  
**Hours/ECTS credits:** 125  
**Entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Assessment entity:** Univeridad Castilla-La Mancha  
**Type of entity:** University
- 6** **Type of teaching:** Official teaching  
**Name of the course:** Bioquímica  
**Type of programme:** Bachelor's degree **Type of teaching:** Laboratory work  
**Type of subject:** Core  
**University degree:** Licenciado en Biología  
**Frequency of the activity:** 3  
**Start date:** 2004 **End date:** 2008  
**Type of hours/ ECTS credits:** Credits  
**Hours/ECTS credits:** 2  
**Entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Faculty, institute or centre:** Facultad de Ciencias Biológicas  
**Department:** Bioquímica y Biología Molecular I
- 7** **Type of teaching:** Official teaching  
**Name of the course:** Técnicas Instrumentales Biológicas  
**Type of programme:** Bachelor's degree **Type of teaching:** Laboratory work  
**Type of subject:** Obligatory  
**University degree:** Licenciado en Biología  
**Frequency of the activity:** 1  
**Start date:** 2006 **End date:** 2007  
**Type of hours/ ECTS credits:** Credits  
**Hours/ECTS credits:** 2  
**Entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Faculty, institute or centre:** Facultad de Ciencias Biológicas  
**Department:** Bioquímica y Biología Molecular I



## Experience supervising doctoral thesis and/or final year projects

- 1 Project title:** PhD thesis Paloma Roldán del Cerro (Co-supervision with Prof. Cefe López)  
**Entity:** ICMM-CSIC  
**Date of reading:** 2023
- 2 Project title:** PhD thesis Ana Arché Núñez (Co-supervision with Dr. Teresa González); FPI Fellowship  
**Entity:** IMDEA Nanociencia + ICMM-CSIC  
**Date of reading:** 2022
- 3 Project title:** PhD thesis André F. Oliveira Girão (Co-supervision with Prof. Paula Marques; predoctoral fellowship FCT Ref. SFRH/BD/130287/2017)  
**Entity:** Universidade de Aveiro + ICMM-CSIC  
**Date of reading:** 2021
- 4 Project title:** PhD thesis Ana Domínguez Bajo (Co-supervision with Dr. Elisa López)  
**Type of project:** Doctoral thesis  
**Entity:** ICMM-CSIC + Hospital Nacional de Paraplégicos  
**Student:** Ana Domínguez Bajo  
**Obtained qualification:** Sobresaliente cum laude  
**Date of reading:** 21/12/2020  
**European doctorate:** 21/12/2020  
**Quality recognition:** Yes  
**Date of recognition:** 21/12/2020  
**Date of award:** 21/12/2020
- 5 Project title:** Diseño y desarrollo de biomateriales para regeneración neural  
**Type of project:** Trabajo Fin de Grado  
**Entity:** ICMM-CSIC - Universidad Politécnica de Madrid  
**Student:** Esther Benayas Martín  
**Obtained qualification:** 10/10  
**Date of reading:** 25/06/2020
- 6 Project title:** Síntesis, caracterización y estudios de biocompatibilidad in vitro de nanopartículas anisométricas magnéticas  
**Type of project:** Trabajo Fin de Grado  
**Co-director of thesis:** M. Concepción Serrano; M. Puerto Morales  
**Entity:** ICMM-CSIC - Universidad Autónoma de Madrid  
**Student:** David Sanz Gil  
**Obtained qualification:** 9.7/10  
**Date of reading:** 25/06/2020
- 7 Project title:** Fabrication and response to neural cells of metallic nanoelectrodes  
**Type of project:** Trabajo Fin de Máster (Máster en Física de la Materia Condensada y de los Sistemas Biológicos, especialidad Biofísica, Universidad Autónoma de Madrid)  
**Co-director of thesis:** M. Concepción Serrano; M. Teresa González  
**Entity:** ICMM-CSIC - IMDEA Nanociencia - Universidad Autónoma de Madrid  
**Student:** Ana Arché Núñez  
**Obtained qualification:** 9.5/10  
**Date of reading:** 28/06/2018



- 8** **Project title:** Análisis de la respuesta local y sistémica al implante subagudo y crónico de una estructura 3D porosa de óxido de grafeno en la rata con hemisección medular cervical  
**Type of project:** Trabajo Fin de Máster (Máster de Neurociencias Universidad Autónoma de Madrid)  
**Co-director of thesis:** Carmen Cavada; M. Concepcion Serrano  
**Entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Student:** Elisa López Dolado  
**Obtained qualification:** 9/10  
**Date of reading:** 26/09/2016
- 9** **Project title:** Microfibras de óxido de grafeno parcialmente reducido como atractivo biomaterial para el crecimiento de células neurales  
**Type of project:** Trabajo Fin de Grado (Grado en Bioquímica - Universidad de Castilla-La Mancha)  
**Co-director of thesis:** Oscar Gomez; M. Concepción Serrano  
**Entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Student:** Raúl López Fernández  
**Obtained qualification:** 9/10  
**Date of reading:** 29/06/2016

## Scientific and technological experience

### Research and development groups/teams

**Name of the group:** Grupo UCM 910576: Biomateriales de tercera generación y biomateriales inteligentes  
**Aims of the group:** Research  
**Name of principal investigator:** María Vallet-Regí  
**Type of collaboration:** Co-authorship of projects and their development  
**Affiliation entity:** Universidad Complutense de Madrid **Type of entity:** University

### Scientific or technological activities

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

- 1** **Name of the project:** Nanomaterials for Enzymatic Control of Oxidative Stress Toxicity and Free Radical Generation (NESTOR)  
**Entity where project took place:** Collaborative network with secondments among partners  
**Name principal investigator (PI, Co-PI...):** M. Puerto Morales (IP)  
**Funding entity or bodies:**  
H2020-MSCA-RISE-2020  
**Start-End date:** 01/07/2020 - 30/06/2024  
**Participating entity/entities:** 4 NACIONALNI INSTITUT ZA BIOLOGIJO (Slovenia); COMISION NACIONAL DE ENERGIA ATOMICA (Argentina); CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS (CONICET) (Argentina); UNIVERSITA DI PISA (Italy); Universidad de Zaragoza (Spain)  
**Total amount:** 156.400 €

- 2** **Name of the project:** MAxillofacial bone Regeneration by 3D-printed laser-activated Graphene Oxide scaffolds (MARGO) Joint Transnational Call - FLAG-ERA 2019  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Cefe López (IP)  
**Nº of researchers:** 3  
**Funding entity or bodies:** Ministerio de Ciencia e Innovación. Universidades **Type of entity:** Pública  
**Start-End date:** 01/05/2020 - 31/12/2023  
**Participating entity/entities:** DHAL Software (Greeze); Università Cattolica del Sacro Cuore (Roma, Italy); University Sapienza (Roma, Italy)  
**Total amount:** 150.000 €
- 3** **Name of the project:** Towards an active bypass for neural reconnection (GA 737116)  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** M. Concepción Serrano (WP3 Leader PI ICMM); Rodolfo Miranda (Coordinador)  
**Funding entity or bodies:** European Commision (FET-OPEN-RIA 2016/17 Call)  
**Start-End date:** 01/01/2017 - 31/12/2020 **Duration:** 4 years  
**Participating entity/entities:** CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS; FUNDACIÓN IMDEA NANOCIENCIA; Mfd-diagnostics GmbH; SCUOLA INTERNAZIONALE SUPERIORE DI STUDI AVANZATI DI TRIESTE  
**Total amount:** 210.000 €  
**Relevant results:** <http://www.byaxon-project.eu/>
- 4** **Name of the project:** Diseño y desarrollo de un biomaterial 3D bioactivo de óxido de grafeno funcionalizado para el tratamiento de la lesión medular (MAT2016-78857-R)  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** M. Concepción Serrano (PI)  
**Funding entity or bodies:** Ministerio de Economía, Industria y Competitividad  
**Start-End date:** 30/12/2016 - 31/12/2020  
**Total amount:** 121.000 €
- 5** **Name of the project:** Desarrollo de estructuras 3D basadas en grafeno y biofuncionalizadas para la reparación de sistema nervioso central (MS13/00060)  
**Entity where project took place:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Name principal investigator (PI, Co-PI....):** María Concepción Serrano (PI)  
**Nº of researchers:** 1  
**Funding entity or bodies:** Instituto de Salud Carlos III **Type of entity:** Public Research Body  
**City funding entity:** Majadahonda, Community of Madrid, Spain  
**Name of the programme:** Miguel Servet tipo I  
**Start-End date:** 01/01/2014 - 16/03/2017  
**Total amount:** 120.000 €



- 6** **Name of the project:** Preclinical investigation of a bioengineered vascular graft  
**Entity where project took place:** Northwestern University **Type of entity:** University  
**City of entity:** Chicago, United States of America  
**Name principal investigator (PI, Co-PI....):** Guillermo A. Ameer  
**Funding entity or bodies:**  
National Institutes of Health of the U.S.A.  
**Type of participation:** Others  
**Start-End date:** 2013 - 2016
- 7** **Name of the project:** Deep eutectic solvents playing a critical role in the synthesis of hierarchical carbons monoliths with tailored compositions and structure (MAT2012-34811)  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Francisco del Monte  
**Funding entity or bodies:**  
Ministerio de Economía y Competitividad  
**Type of participation:** Others  
**Start-End date:** 2013 - 2015  
**Total amount:** 155.000 €
- 8** **Name of the project:** Targeting Hernia Operation Using Sustainable Resources and Green Nanotechnologies. An Integrated Pan-European Approach (Green Nano Mesh, grant agreement no. 263289)  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Francisco del Monte  
**Funding entity or bodies:**  
European Union Seventh Framework Program  
**Type of participation:** Others  
**Start-End date:** 2011 - 2015  
**Total amount:** 111.263 €
- 9** **Name of the project:** Tridimensional and multifunctional biomimetic scaffolds based on carbon nanotubes for nerve tissue regeneration (MAT2011-25329)  
**Degree of contribution:** Researcher  
**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** M. Concepción Gutiérrez  
**Nº of researchers:** 2  
**Funding entity or bodies:**  
Ministerio de Ciencia e Innovación **Type of entity:** Pública  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/01/2012 - 31/12/2014  
**Total amount:** 60.000,27 €
- 10** **Name of the project:** Bioceramics for Tissue Engineering (S2009/MAT-1472)  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain



**Name principal investigator (PI, Co-PI....):** María Vallet-Regí; M. Teresa Portolés

**Nº of researchers:** 37

**Funding entity or bodies:**

Comunidad de Madrid

**Type of entity:** Pública

**City funding entity:** Madrid, Community of Madrid, Spain

**Type of participation:** Others

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

**Total amount:** 679.100 €

**11 Name of the project:** Design and preparation of hierarchical architectures of MWCNT as three dimensional electrodes in enzymatic fuel cells (MAT2009-10214)

**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....):** Francisco del Monte

**Funding entity or bodies:**

Comisión Interministerial de Ciencia y Tecnología

**Type of entity:** Pública

**City funding entity:** Madrid, Community of Madrid, Spain

**Type of participation:** Others

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

**Total amount:** 281.930 €

**12 Name of the project:** Multifunctional scaffolds for nerve tissue regeneration (PIE2010601017)

**Entity where project took place:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency

**Name principal investigator (PI, Co-PI....):** M. Concepción Gutiérrez

**Nº of researchers:** 1

**Funding entity or bodies:**

Consejo Superior de Investigaciones Científicas

**Type of entity:** State agency

**City funding entity:** Madrid, Community of Madrid, Spain

**Type of participation:** Others

**Start-End date:** 01/05/2011 - 30/04/2012

**Total amount:** 25.000 €

**13 Name of the project:** A revolutionary therapy for atherosclerosis: liquid cast arterial stents

**Degree of contribution:** Researcher

**Entity where project took place:** Northwestern University

**Type of entity:** University

**City of entity:** Evanston, United States of America

**Name principal investigator (PI, Co-PI....):** Guillermo A. Ameer

**Funding entity or bodies:**

National Institutes of Health USA (NIH)

**Type of entity:** State agency

**City funding entity:** United States of America

**Start-End date:** 30/09/2009 - 29/09/2011

**Total amount:** 787.194 €



- 14 Name of the project:** Third generation of biomaterials and smart biomaterials (S-0505/MAT/0324)  
**Degree of contribution:** Researcher  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** María Vallet; M. Teresa Portolés  
**Nº of researchers:** 37  
**Funding entity or bodies:** Comunidad de Madrid **Type of entity:** Pública  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/01/2006 - 31/12/2009  
**Total amount:** 709.621,65 €
- 15 Name of the project:** Biomateriales de tercera generación y biomateriales inteligentes  
**Degree of contribution:** Researcher  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** María Vallet Regí  
**Funding entity or bodies:** Universidad Complutense de Madrid **Type of entity:** University  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/01/2008 - 31/12/2008
- 16 Name of the project:** Biomateriales de tercera generación y biomateriales inteligentes  
**Degree of contribution:** Researcher  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** María Vallet Regí  
**Funding entity or bodies:** Universidad Complutense de Madrid **Type of entity:** University  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/01/2007 - 31/12/2007
- 17 Name of the project:** Tissue engineering: Design and development of implants for Neonatal Cardiovascular Surgery  
**Degree of contribution:** Researcher  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** Juan V. Comas Illas  
**Nº of researchers:** 18  
**Funding entity or bodies:** Fundación de Investigación Médica de la Mutua Madrileña Automovilística (FMMA) **Type of entity:** Foundation  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 2004 - 2007  
**Total amount:** 106.000 €





- 18** **Name of the project:** Tissue engineering: Implants for Neonatal Cardiovascular Surgery (08.4/0004.3/2001)  
**Degree of contribution:** Researcher  
**Entity where project took place:** Universidad Complutense de Madrid **Type of entity:** University  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** Juan V. Comas; Raffaella Pagani  
**Nº of researchers:** 17  
**Funding entity or bodies:** Comunidad de Madrid **Type of entity:** Pública  
**City funding entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/06/2002 - 31/05/2004  
**Total amount:** 32.200 €

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

- Name of the project:** Material Transfer Agreement with Northwestern University (Agreement between Prof. G. A. Ameer and Dr. M. C. Serrano)  
**Nº of researchers:** 2  
**Start date:** 10/07/2019

## Results

### Industrial and intellectual property

- Title registered industrial property:** BIDIRECTIONAL MEDICAL DEVICES FOR MONITORING AND STIMULATING NEURONS  
**Entity holder of rights:** IMDEA NANOCIENCIA (40%), SISSA (20%), CNRS (20%), CSIC (10%) & SESCAM (10%)  
**Nº of application:** EP20382637.5  
**Country of inscription:** Spain  
**Date of register:** 16/07/2020



## Scientific and technological activities

### Scientific production

#### Publications, scientific and technical documents

- 1** André Girão; Joana Sousa; Ana Domínguez-Bajo; Ankor González-Mayorga; Igor Bdikin; Eulalia Pujades-Otero; Nieves Casañ-Pastor; M. Jesus Hortigüela; Gonzalo Otero-Ururueta; Antonio Completo; M. Concepcion Serrano\*; Paula Marques\*. 3D Reduced Graphene Oxide Scaffolds with a Combinatorial Fibrous-Porous Architecture for Neural Tissue Engineering. ACS Applied Materials and Interfaces. 12, pp. 38962 - 38975. ACS, 2020.  
**DOI:** 10.1021/acsami.0c10599  
**Type of production:** Scientific paper  
**Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Impact index in year of publication:** 8.758 (2019)  
**Journal in the top 25%:** Yes  
**Position of publication:** 33  
**No. of journals in the cat.:** 314
- 2** María Fortes Brollo; Ana Domínguez-Bajo; Andrea Tabero; Vicente Domínguez-Arca; Victor Gisbert; Gerardo Prieto; Christen Johansson; Ricardo García; Ángeles Villanueva; M. Concepción Serrano; M. Puerto Morales. Combined Magnetoliposome Formation and Drug Loading in One Step for Efficient Alternating Current-Magnetic Field Remote- Controlled Drug Release. ACS Applied Materials and Interfaces. 12, pp. 4295 - 4307. ACS, 2020.  
**DOI:** 10.1021/acsami.9b20603  
**Type of production:** Scientific paper  
**Format:** Journal  
**Impact source:** ISI  
**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Impact index in year of publication:** 8.758 (2019)  
**Journal in the top 25%:** Yes  
**Position of publication:** 33  
**No. of journals in the cat.:** 314  
**Source of citations:** SCOPUS  
**Citations:** 6
- 3** Ana Domínguez-Bajo\*; Ankor González-Mayorga; Elisa López-Dolado; Carmen Munuera; Mar García-Hernández; M. Concepción Serrano\*. Graphene Oxide Microfibers Promote Regenerative Responses after 2 Chronic Implantation in the Cervical Injured Spinal Cord. ACS Biomaterials Science and Engineering. 6, pp. 2401 - 2414. ACS, 2020.  
**DOI:** 10.1021/acsbiomaterials.0c00345  
**Type of production:** Scientific paper  
**Format:** Journal  
**Impact source:** ISI  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Impact index in year of publication:** 4.152 (2019)  
**Journal in the top 25%:** No  
**Position of publication:** 14  
**No. of journals in the cat.:** 38  
**Source of citations:** SCOPUS  
**Citations:** 2
- 4** Ana Domínguez-Bajo; Beatriz Rodilla; Ivo Calaresu; Ana Arché-Núñez; Ankor González-Mayorga; Denis Scaini; Lucas Pérez; Julio Camarero; Rodolfo Miranda; Elisa López-Dolado; M. Teresa González\*; Laura Ballerini\*; M. Concepcion Serrano\*. Interfacing Neurons with Nanostructured Electrodes Modulates Synaptic Circuit Features. Advanced Biosystems. 2000117, pp. 1 - 13. Wiley, 2020.

**DOI:** 10.1002/adbi.202000117

**Type of production:** Scientific paper

**Format:** Journal

**Corresponding author:** Yes

- 5** Laura Casarrubios; Natividad Gómez-Cerezo; Sandra Sánchez-Salcedo; M. José Feito; M. Concepción Serrano; M. Saiz-Pardo; L. Ortega; D. de Pablo; I. Díaz-Güemes; B. Fernández-Tomé; S. Enciso; F.M. Sánchez-Margallo; M. Teresa Portolés; Daniel Arcos; María Vallet-Regí. Silicon substituted hydroxyapatite/VEGF scaffolds stimulate bone regeneration in osteoporotic sheep. *Acta Biomaterialia*. 101, pp. 544 - 553. Elsevier, 2020.

**DOI:** 10.1016/j.actbio.2019.10.033

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** 7.242 (2019)

**Journal in the top 25%:** Yes

**Position of publication:** 5

**No. of journals in the cat.:** 38

**Source of citations:** SCOPUS

**Citations:** 7

- 6** André Girão\*; María C. Serrano; Antonio Completo; Paula Marques\*. Do biomedical engineers dream of graphene sheets?. *Biomaterials Science*. 7, pp. 1228. Royal Society of Chemistry, 2019.

**DOI:** 10.1039/c8bm01636d

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** 6.183

**Journal in the top 25%:** Yes

**Position of publication:** 6

**No. of journals in the cat.:** 38

**Source of citations:** SCOPUS

**Citations:** 5

- 7** A. Domínguez-Bajo; A. González-Mayorga; C.R. Guerrero; F.J. Palomares; R. García; Elisa López-Dolado; M.C. Serrano\*. Myelinated axons and functional blood vessels populate mechanically compliant rGO foams in chronic cervical hemisectioned rats. *Biomaterials*. 192, pp. 461 - 474. Elsevier, 2019.

**DOI:** 10.1016/j.biomaterials.2018.11.024

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** 10.317

**Journal in the top 25%:** Yes

**Position of publication:** 1

**No. of journals in the cat.:** 38

**Source of citations:** SCOPUS

**Citations:** 18

- 8** I. Izquierdo-Barba; L. Santos-Ruiz; J. Becerra; M.J. Feito; D. Fernández-Villa; M.C. Serrano; I. Díaz-Güemes; B. Fernández-Tomé; S. Enciso; F.M. Sánchez-Margallo; D. Monopoli; H. Afonso; M.T. Portolés; D. Arcos; M. Vallet-Regí. Synergistic effect of Si-hydroxyapatite coating and VEGF adsorption on Ti6Al4V-ELI scaffolds for bone regeneration in an osteoporotic bone environment. *Acta Biomaterialia*. 83, pp. 456 - 466. Elsevier, 2019.

**DOI:** 10.1016/j.actbio.2018.11.017

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** 7.242

**Journal in the top 25%:** Yes

**Position of publication:** 5

**No. of journals in the cat.:** 38

**Source of citations:** SCOPUS

**Citations:** 24



- 9** Gil Gonçalves; Jerome Borme; Igor Bdkin; Ankor González-Mayorga; Gonzalo Irurueta; Helena I.S. Nogueira; María C. Serrano; Pedro Alpuim; Paula Marques. Reductive nanometric patterning of graphene oxide paper using electron beam lithography. Carbon. 129, pp. 63 - 75. Elsevier, 2018.  
**DOI:** 10.1016/j.carbon.2017.11.067  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 7.466  
**Position of publication:** 27  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 271  
**Citations:** 10
- 10** M. Concepcion Serrano\*; Ankor González-Mayorga; Rosalia Diez-Rojas; M. Concepcion Matesanz; M. Teresa Portolés\*. Response of macrophages and neural cells in contact with reduced graphene oxide microfibers. Biomaterials Science. 6, pp. 2987 - 2997. Royal Society of Chemistry, 2018.  
**DOI:** 10.1039/c8bm00902c  
**Type of production:** Scientific paper  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Impact index in year of publication:** 5.251  
**Position of publication:** 5  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 32  
**Citations:** 16
- 11** Ankor Gonzalez-Mayorga; Elisa López-Dolado; M. Concepcion Gutierrez; Jorge E. Collazos-Castro; Maria Luisa Ferrer; M. Concepcion Serrano (\*). Favorable biological responses of neural cells and tissue interacting with graphene oxide microfibers. ACS Omega. pp. 8253 - 8263. ACS, 2017.  
**DOI:** 10.1021/acsomega.7b01354  
**Type of production:** Scientific paper  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Impact index in year of publication:** -  
**Position of publication:** 76  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY  
**Journal in the top 25%:** No  
**No. of journals in the cat.:** 172  
**Citations:** 13
- 12** Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; M. Concepcion Serrano. Graphene-Derived Materials Interfacing the Spinal Cord: Outstanding in Vitro and in Vivo Findings. Frontiers in Systems Neuroscience. 11, pp. 71. 2017.  
**DOI:** 10.3389/fnsys.2017.00071  
**Type of production:** Scientific paper  
**Corresponding author:** Yes  
**Format:** Journal
- 13** Stefania Nardecchia; M. Concepcion Serrano; Sara García-Argüelles; Marcelo Maia da Costa; M. Luisa Ferrer; M. Concepcion Gutierrez. Ice as a Green-Structure-Directing Agent in the Synthesis of Macroporous MWCNTs and Chondroitin Sulphate Composites. Materials. 10, pp. 355. MDPI, 2017.  
**DOI:** 10.3390/ma10040355  
**Type of production:** Scientific paper  
**Format:** Journal

- 14** M. Jose Feito; M. Concepcion Serrano; Mercedes Oñaderra; M. Concepcion Matesanz; Sandra Sanchez-Salcedo; Daniel Arcos; Maria Vallet-Regi; M. Teresa Portoles. Effects of immobilized VEGF on endothelial progenitor cells cultured on silicon substituted and nanocrystalline hydroxyapatites. RSC Advances. 6, pp. 92586 - 92595. Royal Society of Chemistry, 2016.  
**DOI:** 10.1039/c6ra19154a  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 3.108  
**Position of publication:** 49  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY  
**Journal in the top 25%:** No  
**No. of journals in the cat.:** 163  
**Citations:** 5
- 15** Elisa López-Dolado; Ankor González-Mayorga; M. Concepcion Gutierrez; M. Concepcion Serrano (\*). Immunomodulatory and angiogenic responses induced by graphene oxide scaffolds in chronic spinal hemisectioned rats. Biomaterials. 99, pp. 72 - 81. Elsevier, 2016.  
**DOI:** 10.1016/j.biomaterials.2016.05.012  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 8.402  
**Position of publication:** 1  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 33  
**Citations:** 36
- 16** Andre Espinha; Giulia Guidetti; M. Concepcion Serrano; Bruno Frka-Petesic; Ahu Gümrah Dumanli; Wadood Hamad; Alvaro Blanco; Cefe Lopez; Silvia Vignolini. Shape memory cellulose-based photonic reflectors. ACS Applied Materials and Interfaces. 8, pp. 31935 - 31940. American Chemistry Society, 2016.  
**DOI:** 10.1021/acsami.6b10611  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 7.504  
**Position of publication:** 25  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 271  
**Citations:** 38
- 17** Ramón J. Peláez; Ankor González-Mayorga; M. Concepción Gutiérrez; Concepción García-Rama; Carmen N. Afonso; M. Concepción Serrano (\*). Tailored fringed platforms produced by laser interference for aligned neural cell growth. Macromolecular Bioscience. 16, pp. 255 - 265. Wiley-VCH, 2016.  
**DOI:** 10.1002/mabi.201500253  
**Type of production:** Scientific paper  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Impact index in year of publication:** 3.238  
**Position of publication:** 11  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - POLYMER SCIENCE  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 85  
**Citations:** 4
- 18** María Concepción Serrano (\*); Stefania Nardecchia; María Concepción Gutiérrez; María Luisa Ferrer; Francisco del Monte (\*). Mammalian cell cryopreservation by using liquid marbles. ACS Applied Materials and Interfaces. 7, pp. 3854 - 3860. American Chemistry Society, 2015.

**DOI:** 10.1021/acsami.5b00072

**Type of production:** Scientific paper

**Corresponding author:** Yes

**Impact source:** ISI

**Impact index in year of publication:** 7.145

**Position of publication:** 25

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 271

**Citations:** 28

- 19** Sara García-Argüelles; Carolina García; María Concepción Serrano; María Concepción Gutiérrez (\*); María Luisa Ferrer; Francisco del Monte (\*). Near-to-eutectic mixtures as bifunctional catalysts in the low-temperature-ring-opening-polymerization of  $\epsilon$ -caprolactone. *Green Chemistry*. 17, pp. 3632 - 3643. Royal Society of Chemistry, 2015.

**DOI:** 10.1039/c5gc00348b

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 8.506

**Position of publication:** 16

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 163

**Citations:** 16

- 20** André Espinha; M. Concepción Serrano (\*); Álvaro Blanco (\*); Cefe López. Random Lasing in Novel Dye-Doped White Paints with Shape Memory. *Advanced Optical Materials*. 3, pp. 1080 - 1087. Wiley-VCH, 2015.

**DOI:** 10.1002/adom.201500128

**Type of production:** Scientific paper

**Corresponding author:** Yes

**Impact source:** ISI

**Impact index in year of publication:** 5.359

**Position of publication:** 33

**Source of citations:** SCOPUS

**Relevant results:** Invited Frontispiece

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 271

**Citations:** 8

- 21** Elisa López-Dolado; Ankor González-Mayorga; M. Teresa Portolés; M. José Feito; M. Luisa Ferrer; Francisco del Monte; M. Concepcion Gutiérrez; M. Concepcion Serrano (\*). Subacute tissue response to 3D graphene oxide scaffolds implanted in the injured rat spinal cord. *Advanced Healthcare Materials*. 4 - 12, pp. 1861 - 1868. Wiley-VCH, 2015.

**DOI:** 10.1002/adhm.201500333

**Type of production:** Scientific paper

**Corresponding author:** Yes

**Impact source:** ISI

**Impact index in year of publication:** 5.760

**Position of publication:** 3

**Source of citations:** SCOPUS

**Relevant results:** Invited Back Cover

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 33

**Citations:** 29

- 22** M. Concepcion Serrano\*; Julián Patiño; Concepción García-Rama; María Luisa Ferrer; José Luis Fierro; Aitana Tamayo; Jorge E. Collazos-Castro; Francisco del Monte; M. Concepción Gutiérrez\*. 3D free-standing porous scaffolds made of graphene oxide as substrates for neural cell growth. *Journal of Materials Chemistry B*. 2, pp. 5698 - 5706. Royal Society of Chemistry, 2014.  
**DOI:** 10.1039/c4tb00652f  
**Type of production:** Scientific paper  
**Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Impact index in year of publication:** 4.726  
**Journal in the top 25%:** Yes  
**Position of publication:** 6  
**No. of journals in the cat.:** 33  
**Source of citations:** SCOPUS  
**Citations:** 69
- 23** María Concepción Serrano (\*); Stefania Nardecchia; Concepción García-Rama; María Luisa Ferrer; Jorge Collazos-Castro; Francisco del Monte; María Concepción Gutiérrez (\*). Chondroitin sulphate-based 3D scaffolds containing MWCNTs for nervous tissue repair. *Biomaterials*. 35, pp. 1543 - 1551. Elsevier, 2014.  
**DOI:** 10.1016/j.biomaterials.2013.11.017  
**Type of production:** Scientific paper  
**Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Impact index in year of publication:** 8.557  
**Journal in the top 25%:** Yes  
**Position of publication:** 1  
**No. of journals in the cat.:** 33  
**Source of citations:** SCOPUS  
**Citations:** 35
- 24** Francisco Del Monte (\*); Daniel Carriazo; María Concepción Serrano; María Concepción Gutiérrez; María Luisa Ferrer. Deep eutectic solvents in polymerizations: a greener alternative to conventional syntheses. *ChemSusChem*. 7, pp. 999 - 1009. Wiley-VCH, 2014.  
**DOI:** 10.1002/cssc.201300864  
**Type of production:** Scientific paper  
**Format:** Journal  
**Impact source:** ISI  
**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY  
**Impact index in year of publication:** 7.657  
**Journal in the top 25%:** Yes  
**Position of publication:** 18  
**No. of journals in the cat.:** 157  
**Source of citations:** SCOPUS  
**Citations:** 151
- 25** Maria Concepcion Serrano (\*); Maria Concepcion Gutierrez; Francisco del Monte. Role of polymers in the design of 3D carbon nanotube-based scaffolds for biomedical applications. *Progress in Polymer Science*. 39, pp. 1448 - 1471. Elsevier, 2014.  
**DOI:** 10.1016/j.progpolymsci.2014.02.004  
**Type of production:** Scientific paper  
**Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI  
**Category:** Science Edition - POLYMER SCIENCE  
**Impact index in year of publication:** 26.932  
**Journal in the top 25%:** Yes  
**Position of publication:** 1  
**No. of journals in the cat.:** 82  
**Source of citations:** SCOPUS  
**Citations:** 60



- 26** André Espinha; M. Concepcion Serrano (\*); Álvaro Blanco; Cefe López. Shape-memory effect for self-healing and biodegradable photonic systems. *Proceedings of SPIE*. 9127 - 91270B, pp. 1 - 13. 2014.  
**Type of production:** Scientific paper **Format:** Journal  
**Impact source:** ISI  
**Impact index in year of publication:** 0.20
- 27** André Espinha; Maria Concepcion Serrano (\*); Álvaro Blanco; Cefe López. Thermoresponsive shape-memory photonic nanostructures. *Advanced Optical Materials*. 2, pp. 516 - 521. Wiley-VCH, 2014.  
**DOI:** 10.1002/adom.201300532  
**Type of production:** Scientific paper **Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Impact index in year of publication:** 4.062 **Journal in the top 25%:** Yes  
**Position of publication:** 37 **No. of journals in the cat.:** 260  
**Source of citations:** SCOPUS **Citations:** 35  
**Relevant results:** Invited Inside Cover. Selected within the best 15 articles of the year 2014 from the journal (<http://www.materialsviews.com/best-of-advanced-optical-materials-2014/>)
- 28** Sara García-Argüelles; M. Concepción Serrano (\*); María C. Gutiérrez (\*); María Luisa Ferrer; Luis Yuste; Fernando Rojo; Francisco del Monte. Deep eutectic solvent-assisted synthesis of biodegradable polyesters with utility as antibacterial wound dressings. *Langmuir*. 29, pp. 9525 - 9534. American Chemical Society, 2013.  
**DOI:** 10.1021/la401353r  
**Type of production:** Scientific paper **Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Impact index in year of publication:** 4.384 **Journal in the top 25%:** Yes  
**Position of publication:** 31 **No. of journals in the cat.:** 251  
**Source of citations:** SCOPUS **Citations:** 40
- 29** Yurena Luengo; Stefania Nardecchia; Maria Puerto Morales; Maria Concepcion Serrano (\*). Different cell response induced by exposure to maghemite nanoparticles. *Nanoscale*. 5, pp. 11428 - 11437. 2013.  
**DOI:** 10.1039/c3nr02148c  
**Type of production:** Scientific paper **Format:** Journal  
**Corresponding author:** Yes  
**Impact source:** ISI **Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Impact index in year of publication:** 6.739 **Journal in the top 25%:** Yes  
**Position of publication:** 19 **No. of journals in the cat.:** 148  
**Source of citations:** SCOPUS **Citations:** 28
- 30** Stefania Nardecchia; M. Concepcion Serrano (\*); M. Concepcion Gutierrez; M. Luisa Ferrer; Francisco del Monte (\*). Modulating the cytocompatibility of tridimensional carbon nanotube-based scaffolds. *Journal of Materials Chemistry B*. 1, pp. 3064 - 3072. Royal Society of Chemistry, 2013.  
**DOI:** 10.1039/c3tb20253d  
**Type of production:** Scientific paper **Format:** Journal  
**Corresponding author:** Yes





**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** -

**Source of citations:** SCOPUS

**Citations:** 21

- 31** Daniel Carriazo; M. Concepcion Serrano; M. Concepcion Gutierrez; M. Luisa Ferrer; Francisco del Monte. Deep eutectic solvents playing multiple roles in the synthesis of polymers and related materials. *Chemical Society Reviews*. 41, pp. 4996 - 5014. Royal Society of Chemistry, 2012.

**DOI:** 10.1039/c2cs15353j

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Impact index in year of publication:** 28.760

**Journal in the top 25%:** Yes

**Position of publication:** 2

**No. of journals in the cat.:** 152

**Source of citations:** SCOPUS

**Citations:** 406

- 32** Stefania Nardecchia; M. Concepcion Gutierrez; M. Concepcion Serrano; Mariella Dentini; Andrea Barbetta; M. Luisa Ferrer; Francisco del Monte. In-situ precipitation of amorphous calcium phosphate and ciprofloxacin crystals during the formation of chitosan hydrogels and its application for drug delivery purposes. *Langmuir*. 28, pp. 15937 - 15946. American Chemical Society, 2012.

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY

**Impact index in year of publication:** 4.186

**Journal in the top 25%:** Yes

**Position of publication:** 30

**No. of journals in the cat.:** 232

**Source of citations:** SCOPUS

**Citations:** 36

- 33** Stefania Nardecchia; M. Concepcion Serrano (\*); M. Concepcion Gutierrez; M. Teresa Portoles; M. Luisa Ferrer (\*); Francisco del Monte. Osteoconductive performance of carbon nanotube scaffolds homogeneously mineralized by flow-through electrodeposition. *Advanced Functional Materials*. 22, pp. 4411. Wiley-VCH, 2012.

**DOI:** 10.1002/adfm.201200684

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Impact index in year of publication:** 10.179

**Journal in the top 25%:** Yes

**Position of publication:** 10

**No. of journals in the cat.:** 152

**Source of citations:** SCOPUS

**Citations:** 38

- 34** Daniel Lozano; Maria Jose Feito; Sergio Portal-Nuñez; Rosa Maria Lozano; M. Concepcion Matesanz; M. Concepcion Serrano; Maria Vallet-Regi; M. Teresa Portoles. Osteostatin improves the osteogenic activity of fibroblast growth factor-2 immobilized on Si-doped hydroxyapatite in osteoblastic cells. *Acta Biomaterialia*. 8, pp. 2770 - 2777. Elsevier, 2012.

**DOI:** 10.1016/j.actbio.2012.04.002

**Type of production:** Scientific paper

**Format:** Journal

**Impact source:** ISI

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Impact index in year of publication:** 4.865

**Journal in the top 25%:** Yes

**Position of publication:** 2

**No. of journals in the cat.:** 25

**Source of citations:** SCOPUS

**Citations:** 36

- 35** Michele C. Jen (1); M. Concepcion Serrano (1); Robert van Lith; Guillermo A. Ameer. Polymer-based nitric oxide therapies: recent insights in biomedical applications. *Advanced Functional Materials*. 22, pp. 239 - 260. Wiley-VCH, 2012.

**DOI:** 10.1002/adfm.201101707

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 10.179

**Position of publication:** 10

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 152

**Citations:** 98

- 36** M. Concepcion Serrano; Guillermo A. Ameer. Recent insights into the biomedical applications of shape-memory polymers. *Macromolecular Bioscience*. 12, pp. 1156 - 1171. Wiley-VCH, 2012.

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 3.886

**Position of publication:** 3

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 25

**Citations:** 91

- 37** M. Concepcion Serrano (\*); M. Concepcion Gutierrez; Ricardo Jimenez; M. Luisa Ferrer; Francisco del Monte (\*). Synthesis of lidocaine-releasing poly(diol-co-citrates) elastomers by using deep eutectic solvents. *Chemical Communications*. 48, pp. 579 - 581. Royal Society of Chemistry, 2012.

**DOI:** 10.1039/c1cc15284j

**Type of production:** Scientific paper

**Corresponding author:** Yes

**Impact source:** ISI

**Impact index in year of publication:** 6.169

**Position of publication:** 17

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 152

**Citations:** 62

- 38** M. Concepcion Serrano; Luis Carbajal; Guillermo A. Ameer. Novel biodegradable shape-memory elastomers with enhanced drug release capabilities. *Advanced Materials*. 23, pp. 2211 - 2215. Wiley-VCH, 2011.

**DOI:** 10.1002/adma.201004566

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 13.877

**Position of publication:** 6

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 152

**Citations:** 117

**Relevant results:** Invited Inside Cover



- 39** M. Concepcion Serrano; Ashley K. Vavra; Michele Jen; Melissa E. Hogg; Jozef Murar; Janet Martinez; Larry K. Keefer; Guillermo A. Ameer; Melina R. Kibbe. Poly(diols-co-citrates) as novel elastomeric perivascular wraps for the reduction of neointimal hyperplasia. *Macromolecular Bioscience*. 11, pp. 700 - 709. Wiley-VCH, 2011.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 3.886  
**Position of publication:** 3  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 25  
**Citations:** 22
- 40** M. Concepcion Serrano; Raffaella Pagani; Juan Peña; Maria Vallet-Regi; Juan V. Comas; M. Teresa Portoles. Progenitor-derived endothelial cells response, platelet reactivity and hemocompatibility parameters indicate the potential of NaOH-treated polycaprolactone for vascular tissue engineering. *Journal of Tissue Engineering and Regenerative Medicine*. 5, pp. 238 - 247. John Wiley & Sons, Ltd., 2011.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 3.278  
**Position of publication:** 10  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - ENGINEERING, BIOMEDICAL  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 72  
**Citations:** 7
- 41** M. Concepcion Serrano (1); Eunji Chung (1); Guillermo A. Ameer. Advances and applications of biodegradable elastomers in regenerative medicine. *Advanced Functional Materials*. 20, pp. 1 - 17. Wiley-VCH, 2010.  
**DOI:** 10.1002/adfm.200901040  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 8.508  
**Position of publication:** 10  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 225  
**Citations:** 138
- 42** Haichao Zhao; M. Concepcion Serrano; Daniel A. Popowich; Melina R. Kibbe; Guillermo A. Ameer. Biodegradable nitric oxide-releasing poly(diols citrate) elastomers. *Journal of Biomedical Materials Research Part A*. 93, pp. 356 - 363. Wiley-VCH, 2010.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 3.044  
**Position of publication:** 12  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - ENGINEERING, BIOMEDICAL  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 70  
**Citations:** 30
- 43** Maria Alcaide; M. Concepcion Serrano; Jesus Roman; M. Victoria Cabañas; Juan Peña; Elena Sanchez-Zapardiel; Maria Vallet-Regi; M. Teresa Portoles. Suppression of anoikis by collagen coating of interconnected macroporous nanometric carbonated hydroxyapatite/agarose scaffolds. *Journal of Biomedical Materials Research Part A*. 95, pp. 793 - 800. Wiley-VCH, 2010.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Format:** Journal  
**Category:** Science Edition - ENGINEERING, BIOMEDICAL



**Impact index in year of publication:** 3.044  
**Position of publication:** 12

**Source of citations:** SCOPUS

**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 70

**Citations:** 15

- 44** Maria Alcaide; M. Concepcion Serrano; Raffaella Pagani; Sandra Sanchez-Salcedo; Maria Vallet-Regi; M. Teresa Portoles. Biocompatibility markers for the study of interactions between osteoblasts and composite biomaterials. *Biomaterials*. 30, pp. 45 - 51. Elsevier, 2009.

**DOI:** 10.1016/j.biomaterials.2008.09.012

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 7.365

**Position of publication:** 1

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 25

**Citations:** 48

- 45** Maria Alcaide; M. Concepcion Serrano; Raffaella Pagani; Sandra Sanchez-Salcedo; Alejandra Nieto; Maria Vallet-Regi; M. Teresa Portoles. L929 fibroblast and Saos-2 osteoblast response to hydroxyapatite-bTCP/agarose biomaterial. *Journal of Biomedical Materials Research Part A*. 89, pp. 539 - 549. Wiley-VCH, 2009.

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 2.816

**Position of publication:** 14

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - ENGINEERING, BIOMEDICAL

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 59

**Citations:** 29

- 46** M. Concepcion Serrano; Raffaella Pagani; Maria Vallet-Regi; Juan Peña; Juan V. Comas; M. Teresa Portoles. Nitric oxide production by endothelial cells derived from blood progenitors culture on NaOH-treated polycaprolactone films: a biofunctionality study. *Acta Biomaterialia*. 5, pp. 2045 - 2053. Elsevier, 2009.

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 3.975

**Position of publication:** 3

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 25

**Citations:** 21

- 47** Josephine Allen; Sadiya Khan; M. Concepcion Serrano; Guillermo A. Ameer. Characterization of porcine circulating progenitor cells: towards a functional endothelium. *Tissue Engineering Part A*. 14, pp. 183 - 194. Mary Ann Liebert Inc., 2008.

**DOI:** 10.1089/ten.a.2007.0265

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 4.699

**Position of publication:** 13

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 144

**Citations:** 35



- 48** M. Concepcion Serrano; Raffaella Pagani; Guillermo A. Ameer; Maria Vallet-Regi; M. Teresa Portoles. Endothelial cells derived from circulating progenitors as an effective source to functional endothelialization of NaOH-treated poly(e-caprolactone) films. *Journal of Biomedical Materials Research Part A*. 87, pp. 964 - 971. Wiley-VCH, 2008.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 2.706  
**Position of publication:** 13  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - ENGINEERING, BIOMEDICAL  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 52  
**Citations:** 25
- 49** M. Concepcion Serrano; M. Teresa Portoles; Raffaella Pagani; Julia Saez de Guinoa; Eduardo Ruiz-Hernandez; Daniel Arcos; Maria Vallet-Regi. In vitro positive biocompatibility evaluation of glass-glass ceramic thermoseeds for hiperthermic treatment of bone tumours. *Tissue Engineering Part A*. 14, pp. 617 - 627. Mary Ann Liebert Inc., 2008.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 4.699  
**Position of publication:** 13  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 144  
**Citations:** 24
- 50** Raffaella Pagani; M. Concepcion Serrano; Juan V. Comas; Gracian Triviño; M. Teresa Portoles. Ingeniería de Tejidos: Aplicaciones en el diseño de implantes cardiovasculares. *Anales Real Academia Nacional de Farmacia*. 73, pp. 873 - 900. Real Academia Nacional de Farmacia, 2007.  
**Type of production:** Scientific paper  
**Degree of contribution:** Author or co-author of review  
**Impact source:** ISI  
**Impact index in year of publication:** 0.240  
**Position of publication:** 204  
**Format:** Journal  
**Category:** Science Edition - PHARMACOLOGY & PHARMACY  
**Journal in the top 25%:** No  
**No. of journals in the cat.:** 204
- 51** Juan Peña; Teresa Corrales; Isabel Izquierdo-Barba; M. Concepcion Serrano; M. Teresa Portoles; Raffaella Pagani; Maria Vallet-Regi. Alkaline treated poly(e-caprolactone) films: degradation in the presence or absence of fibroblasts. *Journal of Biomedical Materials Research Part A*. 76, pp. 788 - 797. Wiley-VCH, 2006.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 2.497  
**Position of publication:** 3  
**Source of citations:** SCOPUS  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 14  
**Citations:** 34
- 52** Eduardo Ruiz-Hernandez; M. Concepcion Serrano; Daniel Arcos; Maria Vallet-Regi. Glass-glass ceramic thermoseeds for hyperthermic treatment of bone tumours. *Journal of Biomedical Materials Research Part A*. 79, pp. 533 - 543. Wiley-VCH, 2006.  
**Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 2.497  
**Position of publication:** 3  
**Format:** Journal  
**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 14

**Source of citations:** SCOPUS**Citations:** 39

- 53** M. Concepcion Serrano; Raffaella Pagani; Miguel Manzano; Juan V. Comas; M. Teresa Portoles. Mitochondrial membrane potential and reactive oxygen species content of endothelial and smooth muscle cells cultured on poly(e-caprolactone) films. *Biomaterials*. 27, pp. 4706 - 4714. Elsevier, 2006.

**DOI:** 10.1016/j.biomaterials.2006.05.007**Type of production:** Scientific paper**Impact source:** ISI**Impact index in year of publication:** 5.196**Position of publication:** 1**Source of citations:** SCOPUS**Format:** Journal**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS**Journal in the top 25%:** Yes**No. of journals in the cat.:** 14**Citations:** 40

- 54** Gracian Triviño; M. Concepcion Serrano; Raffaella Pagani; M. Teresa Portoles. A customizable instrument for measuring the mechanical properties of thin biomedical membranes. *Macromolecular Materials and Engineering*. 290, pp. 953 - 960. Wiley-VCH, 2005.

**Type of production:** Scientific paper**Impact source:** ISI**Impact index in year of publication:** 1.421**Position of publication:** 46**Source of citations:** SCOPUS**Format:** Journal**Category:** Science Edition - MATERIALS SCIENCE, MULTIDISCIPLINARY**Journal in the top 25%:** No**No. of journals in the cat.:** 178**Citations:** 1

- 55** M. Concepcion Serrano; Raffaella Pagani; Juan Peña; M. Teresa Portoles. Transitory oxidative stress in L929 fibroblasts cultured on poly(e-caprolactone) films. *Biomaterials*. 26, pp. 5827 - 5834. Elsevier, 2005.

**DOI:** 10.1016/j.biomaterials.2005.02.039**Type of production:** Scientific paper**Impact source:** ISI**Impact index in year of publication:** 4.698**Position of publication:** 1**Source of citations:** SCOPUS**Format:** Journal**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS**Journal in the top 25%:** Yes**No. of journals in the cat.:** 15**Citations:** 35

- 56** M. Concepcion Serrano; M. Teresa Portoles; Maria Vallet-Regi; Isabel Izquierdo-Barba; Lorenzo Galletti; Juan V. Comas; Raffaella Pagani. Vascular endothelial and smooth muscle cell culture on NaOH-treated poly(e-caprolactone) films as a preliminary study for vascular graft development by tissue engineering. *Macromolecular Bioscience*. 5, pp. 415 - 423. Wiley-VCH, 2005.

**DOI:** 10.1002/mabi.200400214**Type of production:** Scientific paper**Impact source:** ISI**Impact index in year of publication:** 1.891**Position of publication:** 13**Source of citations:** SCOPUS**Format:** Journal**Category:** Science Edition - POLYMER SCIENCE**Journal in the top 25%:** Yes**No. of journals in the cat.:** 77**Citations:** 63

- 57** M. Concepcion Serrano; Raffaella Pagani; Maria Vallet-Regi; Juan Peña; A. Ramila; Isabel Izquierdo; M. Teresa Portoles. In vitro biocompatibility assessment of poly(e-caprolactone) films using L929 mouse fibroblasts. *Biomaterials*. 25, pp. 5603 - 5611. Elsevier, 2004.



**DOI:** 10.1016/j.biomaterials.2004.01.037

**Type of production:** Scientific paper

**Impact source:** ISI

**Impact index in year of publication:** 3.799

**Position of publication:** 1

**Source of citations:** SCOPUS

**Format:** Journal

**Category:** Science Edition - MATERIALS SCIENCE, BIOMATERIALS

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 15

**Citations:** 204

- 58** André Espinha; Ana Domínguez-Bajo; Ankor González-Mayorga; María C. Serrano\*. Graphene-based Composites with Shape Memory Effect: Properties, Applications and Future Perspectives. In: Handbook of Graphene: Volume 4 (Ed. Cengiz Ozkan). pp. 233 - 259. Scrivener Publishing LLC, 2019. ISBN 1119469686

**Type of production:** Book chapter

**Format:** Book

**Corresponding author:** Yes

- 59** Mario Viñambres; Ana Domínguez-Bajo; María Teresa Portolés; María C. Serrano; Marzia Marciello. Non-Viral Gene Therapy: Design and Application of Inorganic Nanoplexes. In: Nucleic Acid nanotheranostics: Biomedical Applications (Ed. Marco Filice & Jesús Ruiz-Cabello). pp. 365 - 390. Elsevier, 2019. ISBN 978-0-12-814470-1

**Type of production:** Book chapter

**Format:** Book

- 60** Mercedes Vila (Editor); Paula Marques (Editor); Gil Golçalves (Editor); M. Teresa Portoles; M. Concepcion Serrano (\*). Potentiality of graphene-based materials for neural repair. In: Graphene-based Materials in Health and Environment (New paradigms). pp. 161 - 184. Springer, 2016.

**DOI:** 10.1007/978-3-319-45639-3

**Type of production:** Book chapter

**Format:** Book

**Corresponding author:** Yes

- 61** Daniel Carriazo; Maria Concepcion Serrano; Maria Concepcion Gutierrez; Maria Luisa Ferrer; Francisco Del Monte (\*). Deep eutectic solvents playing multiple roles in the synthesis of porous carbon materials. Applications of Ionic Liquids in Polymer Science and Technology (DOI 10.1007/978-3-662-44903-5\_2). pp. 23 - 67. Springer-Verlag Berlin Heidelberg, 2015.

**Type of production:** Book chapter

**Format:** Book

## Works submitted to national or international conferences

- 1** **Title of the work:** Flexible nanostructured electrodes as promising interfaces for neural cells and tissues: Effect of the topography

**Name of the conference:** World Biomaterials Conference 2020 VIRTUAL

**Type of event:** Conference

**Type of participation:** Participatory - poster

**Date of event:** 11/12/2020

**End date:** 15/12/2020

**Organising entity:** European, North American and Asian Biomaterials Societies  
Ana Domínguez-Bajo; et al.; M. Concepción Serrano\*.

- 2** **Title of the work:** Nanotechnology-based neural interfaces for spinal cord reconnection

**Name of the conference:** World Biomaterials Conference 2020 VIRTUAL

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**Date of event:** 11/12/2020

**End date:** 15/12/2020

**Organising entity:** European, North American and Asian Biomaterials Societies  
M. Teresa González; M. Concepción Serrano; et al.

**3 Title of the work:** Promoting favorable regenerative outcomes at the injured spinal cord by using a combined therapy based on graphene oxide foams and a motor training protocol

**Name of the conference:** World Biomaterials Conference 2020 VIRTUAL

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**Date of event:** 11/12/2020

**End date:** 15/12/2020

**Organising entity:** European, North American and Asian Biomaterials Societies

Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; M. Concepción Serrano\*.

**4 Title of the work:** Mechanical compliance of graphene biomaterials for neural repair by force microscopy

**Name of the conference:** VIII Multifrequency AFM Conference

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**City of event:** Madrid, Spain

**Date of event:** 27/10/2020

**End date:** 30/10/2020

**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency  
de Madrid

M. Concepción Serrano; et al. "Additional participation as chair person of one session".

**5 Title of the work:** Development of a 3D reduced graphene oxide scaffold with a combinatorial fibrous-porous architecture for neural tissue engineering

**Name of the conference:** 3rd Spanish Conference on Biomedical Applications of Nanomaterials SBAN

**Type of participation:** Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 03/09/2020

**End date:** 03/09/2020

**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency  
de Madrid

André F. Girao; et al.

**6 Title of the work:** Planar and sharp nanotechnology-based electrodes for neural electric measurements

**Name of the conference:** 3rd Spanish Conference on Biomedical Applications of Nanomaterials SBAN

**Type of participation:** Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 03/09/2020

**End date:** 03/09/2020

**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency  
de Madrid

Ana Arché Núñez; et al.

**7 Title of the work:** Reduced Graphene Oxide Biomaterials as Potential Platforms for the Chronic Treatment of Spinal Cord Injury

**Name of the conference:** 3rd Spanish Conference on Biomedical Applications of Nanomaterials SBAN

**Type of participation:** Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 03/09/2020





**End date:** 03/09/2020

**Organising entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency

Ana Domínguez-Bajo; et al.

**8 Title of the work:** Biocompatibility studies of novel nanostructures electrodes for neural repair in spinal cord injury

**Name of the conference:** 2nd International Conference on Nanomaterials Applied to Life Sciences (NALS)

**Type of participation:** Participatory - oral communication

**City of event:** Madrid, Spain

**Date of event:** 29/01/2020

**End date:** 31/01/2020

**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA

Ana Domínguez-Bajo; et al.

**9 Title of the work:** Nanostructured electrodes for electrophysiological measurements

**Name of the conference:** 2nd International Conference on Nanomaterials Applied to Life Sciences (NALS)

**Type of participation:** Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 29/01/2020

**End date:** 31/01/2020

**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA

Ana Arché-Núñez; et al.

**10 Title of the work:** Nanostructured electrodes for neural stimulation

**Name of the conference:** 2nd International Conference on Nanomaterials Applied to Life Sciences (NALS)

**Type of participation:** Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 29/01/2020

**End date:** 31/01/2020

**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA

Beatriz L. Rodilla; et al.

**11 Title of the work:** Graphene oxide microfibers as supportive platforms for neural repair after spinal cord injury

**Name of the conference:** 18 National Congress of the Spanish Society of Neuroscience

**Type of participation:** Participatory - poster

**Corresponding author:** Yes

**City of event:** Santiago de Compostela, Spain

**Date of event:** 04/09/2019

**End date:** 06/09/2019

**Organising entity:** SOCIEDAD ESPAÑOLA DE NEUROCIENCIA

Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; M. Concepcion Serrano.

**12 Title of the work:** Metallic nanoelectrodes as biocompatible neural interfaces

**Name of the conference:** 18 National Congress of the Spanish Society of Neuroscience

**Type of participation:** Participatory - poster

**Corresponding author:** Yes

**City of event:** Santiago de Compostela, Spain

**Date of event:** 04/09/2019

**End date:** 06/09/2019



**Organising entity:** SOCIEDAD ESPAÑOLA DE NEUROCIENCIA

M. Concepcion Serrano; Ana Domínguez-Bajo; Ankor González-Mayorga; Beatriz Rodilla; Ana Arché; Julio Camarero; Lucas Pérez; Teresa González; Elisa López-Dolado.

- 13** **Title of the work:** Bioactive neural interfaces made of nanostructured electrodes for spinal cord injury  
**Name of the conference:** 9th Early Stage Researchers Workshop in Nanoscience  
**Type of participation:** Participatory - oral communication  
**City of event:** Madrid, Spain  
**Date of event:** 27/06/2019  
**End date:** 27/06/2019  
**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA  
Ana Domínguez-Bajo; et al.; M. Concepción Serrano\*.
- 14** **Title of the work:** Nanostructured electrodes for electrophysiological extra and in tracellular recordings on cells  
**Name of the conference:** 9th Early Stage Researchers Workshop in Nanoscience  
**Type of participation:** Participatory - poster  
**City of event:** Madrid, Spain  
**Date of event:** 27/06/2019  
**End date:** 27/06/2019  
**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA  
Ana Arché-Núñez; et al.
- 15** **Title of the work:** Doxorubicin delivery control through magnetoliposomes in MDA-MB-231 cells under an alternating magnetic field  
**Name of the conference:** 2nd Spanish Conference on Biomedical Applications of Nanomaterials SBAN  
**Type of participation:** Participatory - oral communication  
**Corresponding author:** Yes  
**City of event:** Madrid, Spain  
**Date of event:** 06/06/2019  
**End date:** 07/06/2019  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid  
M. Puerto Morales; María Brollo; Ana Domínguez-Bajo; M. Concepción Serrano.
- 16** **Title of the work:** Flexible nanostructured electrodes as neural tissue interfaces  
**Name of the conference:** Spring Meeting European Materials Research Society  
**Type of participation:** Participatory - oral communication  
**City of event:** Nice, France  
**Date of event:** 27/05/2019  
**End date:** 31/05/2019  
**Organising entity:** European Materials Research Society
- 17** **Title of the work:** Nanostructured electrodes as bioactive interfaces for spinal cord injury  
**Name of the conference:** Spring Meeting European Materials Research Society  
**Type of participation:** Participatory - oral communication  
**Corresponding author:** Yes  
**City of event:** Nice, France  
**Date of event:** 27/05/2019  
**End date:** 31/05/2019  
**Organising entity:** European Materials Research Society



- 18** **Title of the work:** Silicon-hydroxyapatites scaffolds decorated with VEGF for in vivo bone regeneration in osteoporotic sheep  
**Name of the conference:** TERMIS European Chapter Meeting 2019  
**Type of participation:** Participatory - oral communication  
**City of event:** Rhodes, Greece  
**Date of event:** 27/05/2019  
**End date:** 31/05/2019  
**Organising entity:** TERMIS European Chapter  
N. Gómez-Cerezo; S. Sánchez-Salcedo; L. Casarrubios; M.J. Feito; M. Sainz-Pardo; L. Ortega; D. de Pablo; I. Díaz-Güemes; B. Fernández-Tomé; S. Enciso; F. M. Sánchez-Margallo; M. Concepcion Serrano; María Vallet-Regi; M. Teresa Portoles; Daniel Arcos.
- 19** **Title of the work:** 3D Graphene oxide scaffolds as pro-regenerative biomaterials in the rat injured spinal cord  
**Name of the conference:** 2019 Annual Meeting and Exposition of Society for Biomaterials  
**Corresponding author:** Yes  
**City of event:** Seattle, United States of America  
**Date of event:** 03/04/2019  
**End date:** 06/04/2019  
**Organising entity:** Society for Biomaterials North America  
María C. Serrano\*; Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado.
- 20** **Title of the work:** Graphene oxide mediates biocompatible and pro-regenerative responses in neural cells and tissues  
**Name of the conference:** XLV ESAO Congress  
**Type of participation:** Participatory - oral communication  
**Corresponding author:** Yes  
**City of event:** Madrid, Spain  
**Date of event:** 12/09/2018  
**End date:** 15/09/2018  
**Organising entity:** European Society for Artificial Organs  
Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; María C. Serrano\*.
- 21** **Title of the work:** Tissue response of the injured rat spinal cord to the implantation of reduced graphene oxide scaffolds and microfibers  
**Name of the conference:** Graphene Week  
**Type of participation:** Participatory - oral communication  
**City of event:** San Sebastián, Spain  
**Date of event:** 10/09/2018  
**End date:** 14/09/2018  
**Organising entity:** Graphene Flagship  
María C. Serrano\*; Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado.
- 22** **Title of the work:** Reduced graphene oxide-based materials for neural regeneration at the injured spinal cord  
**Name of the conference:** International Conference on Nanomaterials Science and Mechanical Engineering  
**Type of participation:** Participatory - invited/keynote talk  
**Corresponding author:** Yes  
**City of event:** Aveiro, Portugal  
**Date of event:** 16/07/2018  
**End date:** 18/07/2018



**Organising entity:** Universidade de Aveiro  
María C. Serrano\*.

- 23** **Title of the work:** Biological responses of neural cells and tissues to nanomaterials to interface the injured spinal cord  
**Name of the conference:** 11th FENS Forum of Neuroscience  
**Type of participation:** Participatory - oral communication  
**Corresponding author:** Yes  
**City of event:** Berlín, Germany  
**Date of event:** 07/07/2018  
**End date:** 11/07/2018  
**Organising entity:** Federation of European Neurosciences Societies  
Ana Domínguez-Bajo; Ankor González-Mayorga; Beatriz Rodilla; Lucas Pérez; M. Teresa González; Elisa López-Dolado; María C. Serrano\*.
- 24** **Title of the work:** Graphene nanomaterials as a new opportunity for neural repair after spinal cord injury  
**Name of the conference:** 1st Spanish Conference on Biomedical Applications of Nanomaterials SBAN  
**Type of participation:** Participatory - invited/keynote talk  
**Corresponding author:** Yes  
**City of event:** Madrid, Spain  
**Date of event:** 07/06/2018  
**End date:** 08/06/2018  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid
- 25** **Title of the work:** Graphene-based scaffolds as biocompatible implants for the injured spinal cord  
**Name of the conference:** 1st Spanish Conference on Biomedical Applications of Nanotechnology SBAN 2018  
**Type of participation:** Participatory - poster  
**City of event:** Madrid, Spain  
**Date of event:** 07/06/2018  
**End date:** 08/06/2018  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid  
Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; María C. Serrano\*.
- 26** **Title of the work:** Nanostructured electrodes for neural electrical stimulation  
**Name of the conference:** 1st Spanish Conference on Biomedical Applications of Nanotechnology SBAN 2018  
**Type of participation:** Participatory - oral communication  
**City of event:** Madrid, Spain  
**Date of event:** 07/06/2018  
**End date:** 08/06/2018  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid  
Beatriz Rodilla; Ana Arché; Lucas Pérez; Ana Domínguez-Bajo; Ankor González-Mayorga; María C. Serrano; Rodolfo Miranda; M. Teresa González.
- 27** **Title of the work:** Diseñando biomateriales con potencial terapéutico: De los vasos sanguíneos a la médula espinal  
**Name of the conference:** II CONGRESO DE JÓVENES QUÍMICOS Y BIOQUÍMICOS TERAPÉUTICOS "II QUIMBIOQUIM-2017"



**Type of event:** Conference

**Type of participation:** Participatory - Plenary session

**Reasons for participation:** Upon invitation

**City of event:** Móstoles (Madrid), Spain

**Date of event:** 04/10/2017

**End date:** 05/10/2017

**Organising entity:** Universidad Rey Juan Carlos

**Type of entity:** University

María C. Serrano. Available on-line at: <Miembro del Comité Científico del Congreso>.

**28 Title of the work:** Exploring graphene-based substrates as novel biomaterials for neural repair in the injured spinal cord

**Name of the conference:** 17 National Congress of the Spanish Society of Neuroscience

**Type of participation:** 'Participatory - poster

**Corresponding author:** Yes

**City of event:** Alicante, Spain

**Date of event:** 27/09/2017

**End date:** 30/09/2017

**Organising entity:** SOCIEDAD ESPAÑOLA DE NEUROCIENCIA

Ana Domínguez-Bajo; Ankor González-Mayorga; Elisa López-Dolado; M. Concepcion Serrano.

**29 Title of the work:** Pre-osteoblast and endothelial cell response to 3D silicon substituted hydroxyapatite scaffolds treated at different temperatures with adsorbed VEGF

**Name of the conference:** EUROMAT 2017

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**City of event:** Tesalónica, Greece

**Date of event:** 17/09/2017

**End date:** 22/09/2017

**Organising entity:** Federation of European Materials Societies

Natividad López-Cerezo; Laura Casarrubios; Daniel Fernández-Villa; Sandra Sánchez-Salcedo; María C. Serrano; María José Feito; Daniel Arcos; María Vallet-Regí; M. Teresa Portolés.

**30 Title of the work:** 3D nanocrystalline silicon substituted hydroxyapatite scaffolds with adsorbed VEGF for bone regeneration by promoting angiogenesis and osteogenesis

**Name of the conference:** TERMIS-EU 2017

**Type of event:** Conference

**Type of participation:** 'Participatory - poster

**City of event:** Davos, Greece

**Date of event:** 26/06/2017

**End date:** 30/06/2017

**Organising entity:** Tissue Engineering and Regenerative Medicine Society Europe

Laura Casarrubios; Natividad Gómez-Cerezo; Sandra Sánchez-Salcedo; María C. Serrano; María José Feito; Daniel Arcos; María Vallet-Regí; M. Teresa Portolés.

**31 Title of the work:** Endothelial progenitor cell response to nanocrystalline silicon substituted hydroxyapatite coated 3D macroporous Ti6Al4V scaffolds with adsorbed VEGF

**Name of the conference:** TERMIS-EU 2017

**Type of event:** Conference

**Type of participation:** 'Participatory - poster

**City of event:** Davos, Greece

**Date of event:** 26/06/2017

**End date:** 30/06/2017



**Organising entity:** Tissue Engineering and Regenerative Medicine Society Europe

María José Feito; Daniel Fernández-Villa; Daniel Pedraza; María C. Serrano; H. Afonso; D. Monopoli; Daniel Arcos; Isabel Izquierdo-Barba; María Vallet-Regí; M. Teresa Portolés.

**32 Title of the work:** Cellulose-based multifunctional photonic structure

**Name of the conference:** 2016 MRS Fall Meeting and Exhibit

**Type of participation:** Participatory - oral communication

**City of event:** Boston, United States of America

**Date of event:** 27/11/2016

**End date:** 02/12/2016

**Organising entity:** Materials Research Society

Giulia Guidetti; Bruno Frka-Petesic; André Espinha; María Serrano; Ahu Gumrah Dumanli; Siham Atifi; Wadood Hamad; Álvaro Blanco; Cefe López; Silvia Vignolini.

**33 Title of the work:** Graphene oxide scaffolds as promising substrates for advanced neuro-regenerative therapies in spinal cord injury

**Name of the conference:** 55th ISCOS Annual Scientific Meeting

**Type of participation:** 'Participatory - poster

**City of event:** Vienna, Austria

**Date of event:** 14/09/2016

**End date:** 16/09/2016

**Organising entity:** International Spinal Cord Society

Elisa Lopez-Dolado; Ankor Gonzalez-Mayorga; M. Concepcion Gutierrez; M. Teresa Portoles; M. Concepcion Serrano (\*).

**34 Title of the work:** Optical transmittance of fringes produced by laser in reduced graphene oxide films

**Name of the conference:** E-MRS 2016 Spring Meeting

**Type of participation:** 'Participatory - poster

**City of event:** Lille Grand Palais, France

**Date of event:** 02/05/2016

**End date:** 06/05/2016

**Organising entity:** European Materials Research Society

B. Lopez-Miranda; C. E. Rodriguez; F. Vega; M. Concepcion Serrano; J. M. Lopez-Alonso; Ramon J. Pelaez.

**35 Title of the work:** Microfibers composed of partially reduced graphene oxide as an attractive platform for neural cell growth

**Name of the conference:** 3rd Symposium in Biomedical Research "Advances and perspectives in Neuroscience"

**Type of participation:** 'Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 22/04/2016

**Organising entity:** Instituto de Investigaciones Biomédicas Alberto Sols

**Type of entity:** State agency

Raul Lopez-Fernandez; Ankor Gonzalez-Mayorga; M. Concepcion Serrano (\*).

**36 Title of the work:** VEGF effects on endothelial progenitor cells cultured on silicon substituted and nanocrystalline hydroxyapatites

**Name of the conference:** BioNanoMed 2016 - 7th International Congress Nanotechnology in Biology & Medicine

**Type of participation:** 'Participatory - poster

**City of event:** Krems, Austria



**Date of event:** 06/04/2016

**End date:** 08/04/2016

**Organising entity:** Techkonnex, Danube University Krems, Medical University of Graz

Maria Jose Feito; M. Concepcion Serrano; Mercedes Oñaderra; M. Concepcion Matesanz; Sandra Sanchez-Salcedo; Daniel Arcos; Maria Vallet-Regi; M. Teresa Portoles (\*).

**37 Title of the work:** Unraveling the tissue response of the injured spinal cord to 3D graphene oxide scaffolds

**Name of the conference:** 1st Spinal Cord Injury Iberian Symposium

**Type of participation:** Participatory - oral communication

**City of event:** Alcoitão, Lisboa, Portugal

**Date of event:** 30/11/2015

**End date:** 01/12/2015

**Organising entity:** University of Minho, Santa Casa da Misericórdia, Centro de Medicina de Reabilitação de Alcoitão

Ankor Gonzalez-Mayorga; Elisa Lopez-Dolado; M. Concepcion Serrano (\*).

**38 Title of the work:** Interfacing 3D Graphene Oxide Scaffolds with the Injured Rat Spinal Cord

**Name of the conference:** 27th European Conference on Biomaterials

**Type of participation:** Participatory - oral communication

**City of event:** Kraków, Poland

**Date of event:** 30/08/2015

**End date:** 03/09/2015

**Organising entity:** European Society of Biomaterials

Ankor González-Mayorga; Elisa López-Dolado; Jorge Collazos-Castro; María Luisa Ferrer; Francisco del Monte; M. Concepción Gutiérrez; M. Concepción Serrano.

**39 Title of the work:** "All-in-one" DESs, a great instruments in the search and development of sustainable processes for preparation of biodegradable polyesters

**Name of the conference:** Iberoamerican Meeting on Ionic Liquids

**City of event:** Madrid, Spain

**Date of event:** 02/07/2015

**End date:** 03/07/2015

**Organising entity:** Universidad Autónoma de Madrid, Universidad Complutense de Madrid, Universidad Politécnica de Madrid

Sara García-Argüelles; M. Concepción Serrano; M. Concepción Gutiérrez; M. Luisa Ferrer; Francisco del Monte.

**40 Title of the work:** Tailored platforms for aligned neuron growth produced by laser interference

**Name of the conference:** 2015 Spring Meeting EMRS

**Type of participation:** Participatory - poster

**City of event:** Lille, France

**Date of event:** 11/05/2015

**End date:** 15/05/2015

**Organising entity:** European Materials Research Society

Ramón J. Peláez; Ankor González-Mayorga; M. Concepción Gutiérrez; Concepción García-Rama; Carmen N. Afonso; M. Concepción Serrano.

**41 Title of the work:** Engineering light transport in titania-doped multifunctional elastomers

**Name of the conference:** ImagineNano2015

**Type of participation:** Participatory - oral communication

**City of event:** Bilbao, Spain

**Date of event:** 10/03/2015



**End date:** 13/03/2015

**Organising entity:** FUNDACION PHANTOMS

André Espinha; M. Concepción Serrano; Álvaro Blanco; Cefe López.

**42 Title of the work:** Engineering light transport in titania-doped multifunctional elastomers

**Name of the conference:** ImagineNano2015

**Type of participation:** 'Participatory - poster

**City of event:** Bilbao, Spain

**Date of event:** 10/03/2015

**End date:** 13/03/2015

**Organising entity:** FUNDACION PHANTOMS

André Espinha; M. Concepción Serrano; Álvaro Blanco; Cefe López.

**43 Title of the work:** Nanocomposite materials for shaping the diffusive transport of light

**Name of the conference:** 2015 NanoPortugal International Conference

**Type of participation:** 'Participatory - poster

**City of event:** Oporto, Portugal

**Date of event:** 11/02/2015

**End date:** 13/02/2015

**Organising entity:** FUNDACION PHANTOMS

André Espinha; M. Concepción Serrano; Álvaro Blanco; Cefe López.

**44 Title of the work:** 2D and 3D graphene oxide substrates for neural cell growth

**Name of the conference:** 2nd International Conference on Bioinspired and Biobased Chemistry and Materials

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**City of event:** Nice, France

**Date of event:** 15/10/2014

**End date:** 17/10/2014

**Organising entity:** E-MRS, MRS

María Concepción Serrano (presenting author); Julián Patiño; Concepción García-Rama; María Luisa Ferrer; Jorge Collazos-Castro; Francisco del Monte; María Concepción Gutiérrez.

**45 Title of the work:** Electroconducting biomaterials for the treatment of spinal cord injury

**Name of the conference:** 2nd International Spinal Cord Injury and Neurotrauma Summer School

**Type of event:** Summer School

**Type of participation:** 'Participatory - poster

**City of event:** Toledo, Castile-La Mancha, Spain

**Date of event:** 23/06/2014

**End date:** 27/06/2014

**Organising entity:** Spinal Research - Wings for Life - Hospital Nacional de Paraplégicos

Jorge E. Collazos-Castro; Elisa López-Dolado; Alexandra Alves-Sampaio; Hugo Vara; María Concepción Serrano; Edgar Peñuela-Rueda; Concepción García-Rama; Francisco A. González-Mayorga.

**46 Title of the work:** Shape-memory effect for self-healing and biodegradable photonic systems

**Name of the conference:** SPIE Photonic Europe 2014

**Type of event:** Conference

**Type of participation:** Participatory - oral communication

**City of event:** Brussels, Belgium

**Date of event:** 15/04/2014





**Organising entity:** SPIE

André Espinha (presenting author); M. Concepcion Serrano; Álvaro Blanco; Cefe López.

**47 Title of the work:** Reprogrammable two-dimensional surface patterns using multifunctional polymers

**Name of the conference:** NanoSpain 2014

**Type of event:** Conference

**Geographical area:** National

**Type of participation:** 'Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 13/03/2014

**Organising entity:** FUNDACION PHANTOMS

André Espinha (presenting author); M. Concepcion Serrano (\*); Álvaro Blanco; Cefe López.

**48 Title of the work:** Research at the Group of Bioinspired Materials

**Name of the conference:** First Joint CSIC-CNRS Workshop "Nanomaterials for Health"

**Type of participation:** 'Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 18/11/2013

**End date:** 19/11/2013

**Organising entity:** CNRS - CSIC

Maria Concepcion Serrano (presenting author); Maria Concepcion Gutierrez; Maria Luisa Ferrer; Francisco Del Monte.

**49 Title of the work:** Tridimensional bioinspired scaffolds for biomedical applications

**Name of the conference:** First Joint CSIC-CNRS Workshop "Nanomaterials for Health"

**Type of participation:** Participatory - invited/keynote talk

**City of event:** Madrid, Spain

**Date of event:** 18/11/2013

**End date:** 19/11/2013

**Organising entity:** CNRS - CSIC

Maria Concepcion Serrano; Maria Luisa Ferrer; Francisco Del Monte; Maria Concepcion Gutiérrez (presenting author).

**50 Title of the work:** Cytocompatibility Studies of Carbon Nanotube-based 3D Scaffolds

**Name of the conference:** 25th European Conference on Biomaterials

**Type of participation:** Participatory - oral communication

**City of event:** Madrid, Spain

**Date of event:** 12/09/2013

**End date:** 12/09/2013

**Organising entity:** European Society of Biomaterials

Maria Concepcion Serrano (presenting author); Stefania Nardecchia; Maria Concepcion Gutierrez; Maria Luisa Ferrer; Francisco del Monte.

**51 Title of the work:** Enzymatic Synthesis of Amorphous Calcium Phosphate-Ciprofloxacin-Chitosan Nanocomposites as Potential Bone Substitutes

**Name of the conference:** 25th European Conference on Biomaterials

**Type of participation:** 'Participatory - poster

**City of event:** Madrid, Spain

**Date of event:** 08/09/2013

**End date:** 12/09/2013

**Organising entity:** European Society of Biomaterials



Stefania Nardecchia; Maria Concepcion Serrano; Maria Concepcion Gutierrez; Maria Luisa Ferrer; Francisco del Monte.

- 52** **Title of the work:** Interfacing Carbon Nanotube-based Substrates with Embryonic Neural Cells  
**Name of the conference:** 25th European Conference on Biomaterials  
**Type of participation:** Participatory - oral communication  
**City of event:** Madrid, Spain  
**Date of event:** 08/09/2013  
**End date:** 12/09/2013  
**Organising entity:** European Society of Biomaterials  
Maria Concepcion Serrano (presenting author); Stefania Nardecchia; Maria Concepcion Gutierrez; Concepcion Garcia-Rama; Jorge E. Collazos-Castro; Maria Luisa Ferrer; Francisco del Monte.
- 53** **Title of the work:** "Flow-through" Electrodeposition Process for the Mineralization of 3D Scaffolds as Osteoconductive Matrices for Bone Healing and Regeneration  
**Name of the conference:** 25th European Conference on Biomaterials  
**Type of participation:** Participatory - poster  
**City of event:** Madrid, Spain  
**Date of event:** 08/09/2013  
**End date:** 12/09/2013  
**Organising entity:** European Society of Biomaterials  
Stefania Nardecchia; Maria Concepcion Serrano; Maria Concepcion Gutierrez; Maria Luisa Ferrer; Francisco del Monte.
- 54** **Title of the work:** Safe and efficient uniform magnetic nanoparticles synthesized by an improved aqueous route with tailored surface properties  
**Name of the conference:** E-MRS 2013 Symposium U "Design of multifunctional nano-objects for biomedical applications"  
**Type of event:** Conference  
**Type of participation:** Participatory - poster  
**City of event:** Strasbourg, France  
**Date of event:** 27/05/2013  
**End date:** 31/05/2013  
**Organising entity:** European Materials Research Society  
Yurena Luengo; María Concepción Serrano; M. Calero; A. Villanueva; F. Herranz; P. de la Presa; Sabino Veintemillas-Verdaguer; Carlos Serna; Puerto Morales.
- 55** **Title of the work:** Carbon nanotube scaffolds homogeneously mineralized by flow-through electrodeposition  
**Name of the conference:** Third International Conference on Multifunctional, Hybrid and Nanomaterials (HYMA 2013)  
**Type of participation:** Participatory - oral communication  
**City of event:** Sorrento, Italy  
**Date of event:** 04/03/2013  
**End date:** 07/03/2013  
**Publication in conference proceedings:** Yes  
Stefania Nardecchia; M. Concepcion Serrano; Maria C. Gutierrez; Maria Luisa Ferrer (presenting author); Francisco del Monte.
- 56** **Title of the work:** Deep eutectic solvents playing multiple roles in the synthesis of polymers and related materials  
**Name of the conference:** Spring Meeting Materials Research Society  
**Type of participation:** Participatory - oral communication



**City of event:** San Francisco, United States of America

**Date of event:** 09/04/2012

**End date:** 13/04/2012

**Organising entity:** American Materials Research Society

**City organizing entity:** United States of America

Francisco del Monte (presenting author); Daniel Carriazo; M. Concepcion Serrano; M. Concepcion Gutierrez; M. Luisa Ferrer.

**57 Title of the work:** Deep eutectic solvents playing multiple roles in the synthesis of polymers and related materials

**Name of the conference:** Workshop ILMAT: Ionic liquids derived materials

**Type of participation:** Participatory - oral communication

**City of event:** Vienna, Austria

**Date of event:** 05/12/2011

**End date:** 06/12/2011

**Organising entity:** International Sol-Gel Society

Francisco del Monte (presenting author); Daniel Carriazo; M. Concepcion Serrano; M. Concepcion Gutierrez; M. Luisa Ferrer.

**58 Title of the work:** Osteostatin improves the osteogenic capacity of fibroblast growth factor-2 coated onto Si-doped hydroxyapatite in osteoblastic cells

**Name of the conference:** 33rd Annual Meeting of the American Society for Bone and Mineral Research

**Type of participation:** Participatory - poster

**City of event:** San Diego, United States of America

**Date of event:** 16/09/2011

**End date:** 20/09/2011

**Organising entity:** American Society for Bone and Mineral Research

**City organizing entity:** United States of America

Daniel Lozano; Maria Jose Feito; Sergio Portal-Nuñez; Rosa Maria Lozano; M. Concepcion Matesanz; M. Concepcion Serrano; Maria Vallet-Regi; M. Teresa Portoles; Pedro Esbrit.

**59 Title of the work:** A novel nitric oxide-releasing periadventitial wrap for the prevention of neointimal hyperplasia

**Name of the conference:** 96th Annual Clinical Congress of the American College of Surgeons

**Type of participation:** Participatory - poster

**City of event:** Washington D.C., United States of America

**Date of event:** 03/10/2010

**End date:** 07/10/2010

**Organising entity:** American College of Surgeons

**City organizing entity:** United States of America

Ashley K. Vavra; M. Concepcion Serrano; V.R. Lee; Janet Martinez; Melissa E. Hogg; Jozef Murar; B. Fu; Guillermo A. Ameer; Melina R. Kibbe. En: Journal of American College of Surgeons. 211, pp. S137.

**60 Title of the work:** Novel hydrophobic poly(di-ol-co-citrates) as implemented elastomers for local nitric oxide delivery

**Name of the conference:** Annual Meeting and Exposition of the Society for Biomaterials

**Type of participation:** Participatory - oral communication

**City of event:** Seattle, United States of America

**Date of event:** 21/04/2010

**End date:** 24/04/2010

**Organising entity:** Society for Biomaterials of North America

M. Concepcion Serrano (presenting author); Guillermo A. Ameer.

- 61** **Title of the work:** Novel nitric oxide releasing poly(diol citrate) elastomers for soft tissue engineering  
**Name of the conference:** Central Regional Meeting  
**Type of participation:** Participatory - oral communication  
**City of event:** Cleveland, United States of America  
**Date of event:** 20/05/2009  
**End date:** 23/05/2009  
**Organising entity:** American Chemical Society  
**City organizing entity:** United States of America  
M. Concepcion Serrano (presenting author); Haichao Zhao; Michele Jen; Melina Kibbe; Guillermo A. Ameer.
- 62** **Title of the work:** Osteoblast interaction with macroporous nanometric carbonated hydroxyapatite/agarose scaffolds  
**Name of the conference:** 2nd International Symposium on Interface Biology of Implants  
**Type of participation:** 'Participatory - poster  
**City of event:** Rostock, Germany  
**Date of event:** 17/05/2009  
**End date:** 19/05/2009  
Maria Alcaide; M. Concepcion Serrano; Jesus Roman; M. Victoria Cabañas; Juan Peña; Elena Sanchez-Zapardiel; Raffaella Pagani; Maria Vallet-Regi; M. Teresa Portoles. En: Biomaterialen. 10 - S1, pp. 50. 2009.
- 63** **Title of the work:** Biocompatibility studies of glass-glass ceramic thermoseeds for hyperthermic treatment of bone tumours  
**Name of the conference:** 8th World Biomaterials Congress  
**Type of participation:** 'Participatory - poster  
**City of event:** Amsterdam, Holland  
**Date of event:** 28/05/2008  
**End date:** 01/06/2008  
**Organising entity:** Societies for Biomaterials  
M. Concepcion Serrano; M. Teresa Portoles; Raffaella Pagani; Julia Saez de Guinoa; Eduardo Ruiz-Hernandez; Daniel Arcos; Maria Vallet-Regi.
- 64** **Title of the work:** L929 fibroblast and Saos-2 osteoblast response to hydroxyapatite/b-TCP/agarose biomaterial  
**Name of the conference:** 8th World Biomaterials Congress  
**Type of participation:** 'Participatory - poster  
**City of event:** Amsterdam, Holland  
**Date of event:** 28/05/2008  
**End date:** 01/06/2008  
**Organising entity:** Societies for Biomaterials  
Maria Alcaide; M. Concepcion Serrano; Raffaella Pagani; Sandra Sanchez-Salcedo; Alejandra Nieto; Maria Vallet-Regi; M. Teresa Portoles.
- 65** **Title of the work:** Biocompatibilidad in vitro de termosemillas vidrio-vitrocéramica magnética para el tratamiento de tumores óseos por hipertermia  
**Name of the conference:** XXXI Reunión Bienal de la Real Sociedad Española de Química  
**Type of participation:** 'Participatory - poster  
**City of event:** Toledo, Castile-La Mancha, Spain  
**Date of event:** 09/09/2007  
**End date:** 14/09/2007



**Organising entity:** Real Sociedad Española de Química

**Type of entity:** Sociedad

Eduardo Ruiz-Hernandez; Daniel Arcos; M. Concepcion Serrano; M. Teresa Portoles; Raffaella Pagani; Julia Saez de Guinoa; Maria Vallet-Regi.

**66 Title of the work:** Isolation and differentiation of porcine progenitor cells into endothelial-like cells for vascular Tissue engineering

**Name of the conference:** Fall Meeting

**Type of participation:** Participatory - oral communication

**City of event:** San Francisco, United States of America

**Date of event:** 12/11/2006

**End date:** 17/11/2006

**Organising entity:** American Institute of Chemical Engineers

**City organizing entity:** United States of America

Josephine Allen (presenting author); Sadiya Khan; Delara Motlagh; M. Concepcion Serrano; A. Shekaran; Guillermo A. Ameer.

**67 Title of the work:** Differentiation of porcine progenitor cells into endothelial-like cells for Tissue engineering

**Name of the conference:** Fall Annual Meeting

**Type of participation:** Participatory - oral communication

**City of event:** Chicago, United States of America

**Date of event:** 11/10/2006

**End date:** 14/10/2006

**Organising entity:** Biomedical Engineering Society

**City organizing entity:** United States of America

Josephine Allen (presenting author); Sadiya Khan; Delara Motlagh; M. Concepcion Serrano; A. Shekaran; Guillermo A. Ameer.

**68 Title of the work:** Glass-glass ceramic therooseeds for hyperthermic treatment of bone tumours

**Name of the conference:** 20th European Conference on Biomaterials

**Type of participation:** Participatory - poster

**City of event:** Nantes, France

**Date of event:** 27/09/2006

**End date:** 01/10/2006

**Organising entity:** European Society for Biomaterials

**Type of entity:** Associations and Groups

Eduardo Ruiz-Hernandez; M. Concepcion Serrano; Daniel Arcos; M. Teresa Portoles; Raffaella Pagani; S. Vasseur; E. Duguet; Maria Vallet-Regi.

**69 Title of the work:** Mechanical properties and biocompatibility of poly(e-caprolactone) films for vascular grafts

**Name of the conference:** International Meeting New Era in Congenital Heart Management

**Type of participation:** Participatory - oral communication

**City of event:** Madrid, Community of Madrid, Spain

**Date of event:** 29/09/2005

**End date:** 01/10/2005

**Organising entity:** Hospital Universitario 12 de Octubre

**Type of entity:** Healthcare Institutions

**City organizing entity:** Madrid, Community of Madrid, Spain

Raffaella Pagani (presenting author); M. Concepcion Serrano; Gracian Triviño; M. Teresa Portoles.



- 70** **Title of the work:** Development of Biodegradable Grafts in Paediatric Cardiovascular Surgery by Tissue Engineering Techniques  
**Name of the conference:** 19th European Conference on Biomaterials  
**Type of participation:** 'Participatory - poster  
**City of event:** Sorrento (Naples), Italy  
**Date of event:** 11/09/2005  
**End date:** 15/09/2005  
**Organising entity:** European Society for Biomaterials  
Maria Vallet-Regi; Raffaella Pagani; M. Teresa Portoles; M. Concepcion Serrano; Juan Peña; Isabel Izquierdo-Barba; Eduardo Garcia-Poblete; Hector Fernandez; Ernesto Moro; M. Soledad Garcia; Myriam Catala; Jose Antonio Uranga; M.P. Nieto; Gracian Triviño; Juan V. Comas; Lorenzo Galletti.
- 71** **Title of the work:** Long term degradation of poly(e-caprolactone) films in biologically reated fluids  
**Name of the conference:** 19th European Conference on Biomaterials  
**Type of participation:** 'Participatory - poster  
**City of event:** Sorrento (Naples), Italy  
**Date of event:** 11/09/2005  
**End date:** 15/09/2005  
**Organising entity:** European Society for Biomaterials  
Juan Peña; Teresa Corrales; Isabel Izquierdo-Barba; M. Concepcion Serrano; M. Teresa Portoles; Raffaella Pagani; Maria Vallet-Regi.
- 72** **Title of the work:** Tissue Engineering  
**Name of the conference:** International Meeting New Era in Congenital Heart Management  
**Type of participation:** Participatory - oral communication  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 20/10/2004  
**End date:** 23/10/2004  
**Organising entity:** Hospital Universitario 12 de Octubre  
**Type of entity:** Healthcare Institutions  
**City organizing entity:** Madrid, Community of Madrid, Spain  
Raffaella Pagani (presenting author); M. Concepcion Serrano; M. Teresa Portoles.
- 73** **Title of the work:** Tissue Engineering: Polycaprolactone polymer biocompatibility  
**Name of the conference:** International Meeting New Era in Congenital Heart Management  
**Type of participation:** Participatory - oral communication  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 02/10/2003  
**End date:** 04/10/2003  
**Organising entity:** Hospital Universitario 12 de Octubre  
**Type of entity:** Healthcare Institutions  
**City organizing entity:** Madrid, Community of Madrid, Spain  
Raffaella Pagani (presenting author); M. Concepcion Serrano; M. Teresa Portoles.



## Other dissemination activities

- 1** **Title of the work:** De la Mano de Grandes Mujeres  
**Name of the event:** 11F International Day of Women and Girls in Science  
**Type of event:** Conferences given  
**City of event:** Madrid,  
**Date of event:** 12/02/2020  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid  
M. Puerto Morales; M. Concepcion Serrano.
- 2** **Title of the work:** Outreach talk: "What happens when neurons get disconnected?"  
**Name of the event:** 10º Researchers' European Night  
**City of event:** Madrid, Spain  
**Date of event:** 27/09/2019  
**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA  
M. C. Serrano.
- 3** **Title of the work:** The way towards a neural bypass  
**Name of the event:** Pint of Science España  
**City of event:** Madrid, Spain  
**Date of event:** 23/05/2019  
**Organising entity:** Pint of Science Spain
- 4** **Title of the work:** Outreach talk: "What happens when neurons get disconnected?"  
**Name of the event:** 9º Researchers' European Night  
**City of event:** Madrid, Spain  
**Date of event:** 28/09/2018  
**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA  
M. C. Serrano.
- 5** **Title of the work:** Designing biomaterials: From blood vessels to the spinal cord  
**Name of the event:** Invited Talk  
**Type of event:** Conferences given  
**City of event:** Zaragoza, Spain  
**Date of event:** 17/02/2017  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** University Research Institute de Aragón  
M. Concepcion Serrano.
- 6** **Title of the work:** Designing biomaterials: From blood vessels to the spinal cord  
**Name of the event:** Invited Talk  
**Type of event:** Conferences given  
**City of event:** Barcelona, Spain  
**Date of event:** 12/09/2016  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Barcelona  
M. Concepcion Serrano.



- 7** **Title of the work:** Biomateriales y sus aplicaciones en Biomedicina  
**Name of the event:** I Jornada de Promoción de la Investigación Básica para Estudiantes de Ciencias e Ingenierías  
**Type of event:** Conferences given  
**City of event:** Móstoles, Community of Madrid, Spain  
**Date of event:** 08/04/2016  
**Organising entity:** Universidad Rey Juan Carlos **Type of entity:** University  
M. Concepcion Serrano.
- 8** **Title of the work:** Actividades divulgativas  
**Name of the event:** Semana del Cerebro  
**Type of event:** Divulgación con ponencia oral  
**City of event:** Toledo, Spain  
**Date of event:** 16/03/2016  
**Organising entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
M. Concepción Serrano. "Talk given: "Biomateriales y sus aplicaciones en Biomedicina: Una nariz superbioelectrónica"".
- 9** **Title of the work:** Biomateriales y sus aplicaciones en biomedicina  
**Name of the event:** Seminario impartido a alumnos de Grado  
**Type of event:** Conferences given  
**City of event:** Madrid, Spain  
**Date of event:** 17/11/2015  
**Organising entity:** Universidad Rey Juan Carlos **Type of entity:** University  
María Concepción Serrano.
- 10** **Title of the work:** Investigación en regeneración neural en el Hospital Nacional de Parapléjicos  
**Name of the event:** Artículo divulgativo  
**Corresponding author:** Yes  
**Date of event:** 01/10/2015  
**Organising entity:** Colegio Oficial de Biólogos Comunidad de Madrid (COBCM)  
**Type:** Popular science article  
M. Concepción Serrano; Elisa López-Dolado. En: "Biólogos" Revista Oficial del COBCM.
- 11** **Title of the work:** Actividades divulgativas  
**Name of the event:** Semana del Cerebro  
**Type of event:** Divulgación con ponencia oral  
**City of event:** Toledo, Spain  
**Date of event:** 17/03/2015  
**Organising entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
M. Concepción Serrano. "Talk given: "Biomateriales: Búsqueda de nuevas interfaces para reparar el sistema nervioso"".
- 12** **Title of the work:** Biomateriales y sus aplicaciones en biomedicina  
**Name of the event:** Seminario impartido a alumnos de Grado en Ingeniería de Materiales (1º)  
**Type of event:** Conferences given  
**City of event:** Madrid, Spain  
**Date of event:** 18/12/2014  
**Organising entity:** Universidad Complutense de Madrid **Type of entity:** University  
María Concepción Serrano.



- 13** **Title of the work:** Designing materials for biomedical applications  
**Name of the event:** Ponencia invitada  
**Type of event:** Conferences given  
**Reasons for participation:** Upon invitation  
**City of event:** Madrid, Spain  
**Date of event:** 31/10/2014  
**Organising entity:** FUNDACIÓN IMDEA NANOCIENCIA
- 14** **Title of the work:** Actividades divulgativas  
**Name of the event:** Retos y avances en lesión medular (International meeting)  
**Type of event:** Divulgación  
**City of event:** Toledo, Spain  
**Date of event:** 22/10/2014  
**Organising entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions
- 15** **Title of the work:** Nanomateriales en Ingeniería de tejidos  
**Name of the event:** Curso de Verano ¿Puede la Nanociencia cambiar nuestra vida?  
**Type of event:** Conferences given  
**City of event:** Toledo, Castile-La Mancha, Spain  
**Date of event:** 09/07/2014  
**Organising entity:** Universidad de Castilla-La Mancha **Type of entity:** University
- 16** **Title of the work:** Estrés oxidativo y biomateriales  
**Name of the event:** Seminario impartido a alumnos Grado en Biología (1º)  
**Type of event:** Conferences given  
**City of event:** Madrid, Spain  
**Date of event:** 08/04/2014  
**Organising entity:** Universidad Complutense de Madrid **Type of entity:** University  
María Concepción Serrano.
- 17** **Title of the work:** Visita guiada a alumnos de 4ºESO  
**Name of the event:** "4ºESO+Empresa"  
**Type of event:** Visita guiada  
**Date of event:** 04/2014  
**Organising entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency
- 18** **Title of the work:** Actividades divulgativas  
**Name of the event:** Semana del Cerebro  
**Type of event:** Divulgación  
**City of event:** Toledo, Spain  
**Date of event:** 10/03/2014  
**Organising entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions
- 19** **Title of the work:** Biomateriales y su aplicación en biomedicina  
**Name of the event:** Seminario impartido a alumnos de Grado en Ingeniería de Materiales (1º)  
**Type of event:** Conferences given  
**City of event:** Madrid, Spain



**Date of event:** 18/12/2013

**Organising entity:** Universidad Complutense de Madrid

María Concepción Serrano.

**Type of entity:** University

- 20** **Title of the work:** Biomateriales y sus aplicaciones en biomedicina  
**Name of the event:** Seminario impartido para alumnos de "Fundamentos de biomateriales"  
**Type of event:** Conferences given  
**City of event:** Móstoles, Spain  
**Date of event:** 27/11/2013  
**Organising entity:** Universidad Rey Juan Carlos **Type of entity:** University  
María Concepción Serrano.
- 21** **Title of the work:** Biomateriales para Ingeniería de Tejidos  
**Name of the event:** Seminario impartido a alumnos del Grado de Biología (1º curso)  
**Type of event:** Conferences given  
**City of event:** Madrid, Spain  
**Date of event:** 05/04/2013  
**Organising entity:** Universidad Complutense de Madrid **Type of entity:** University
- 22** **Title of the work:** Visita práctica y teórica para alumnos del LYCEE FRANCAIS de Madrid  
**Type of event:** Visita guiada al ICMM-CSIC  
**City of event:** Madrid, Spain  
**Date of event:** 14/03/2013  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid
- 23** **Title of the work:** Visita guiada a alumnos del Colegio Internacional SEK-Cuidalcampo  
**Name of the event:** "Cómo es un laboratorio de investigación científica por dentro?"  
**Type of event:** Visita guiada  
**Date of event:** 08/02/2013  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid
- 24** **Title of the work:** Visita práctica y teórica para alumnos del LYCEE FRANCAIS de Madrid  
**Type of event:** Visita guiada al ICMM-CSIC  
**City of event:** Madrid, Spain  
**Date of event:** 13/03/2012  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid
- 25** **Title of the work:** Biomaterials for tissue engineering: bioinspired solutions to repair damaged tissues  
**Name of the event:** Seminario: Aplicación de las Tecnologías a las Ciencias Naturales  
**Type of event:** Conferences given  
**City of event:** Aranjuez, Community of Madrid, Spain  
**Date of event:** 05/03/2012  
**Organising entity:** Consejería Educacion y Empleo Comunidad de Madrid  
M. Concepcion Serrano.



- 26** **Title of the work:** Ingeniería de Tejidos y Biomateriales: Fusión de la Química y la Biología para el diseño de tejidos artificiales  
**Name of the event:** Invited talk in the subject "Fundamentals on Biomaterials"  
**Type of event:** Conferences given  
**City of event:** Móstoles, Community of Madrid, Spain  
**Date of event:** 22/11/2011  
**Organising entity:** Universidad Rey Juan Carlos **Type of entity:** University  
M. Concepcion Serrano.
- 27** **Title of the work:** Tissue Engineering and Biomaterials: Merging Chemistry and Biology for biomedical applications  
**Name of the event:** Invited talk  
**Type of event:** Conferences given  
**City of event:** Tres Cantos, Community of Madrid, Spain  
**Date of event:** 08/07/2011  
**Organising entity:** GSK GlaxoSmithKline **Type of entity:** Business  
M. Concepcion Serrano.
- 28** **Title of the work:** Biomateriales e Ingeniería de tejidos: combinando Química y Biología en aplicaciones biomédicas  
**Name of the event:** Invited talk at the Biochemistry and Molecular Biology Department I  
**Type of event:** Conferences given  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 20/05/2011  
**Organising entity:** Universidad Complutense de Madrid **Type of entity:** University  
M. Concepcion Serrano.
- 29** **Title of the work:** Biomateriales: Biología y Química en el diseño de tejidos artificiales  
**Name of the event:** La ciencia al alcance de la mano  
**Type of event:** Online publication  
**City of event:** Spain  
**Date of event:** 01/03/2011  
**Organising entity:** Sociedad Española de Bioquímica y Biología Molecular **Type of entity:** Associations and Groups  
**City organizing entity:** Spain  
**Type:** Scientific paper  
M. Concepción Serrano. "Biomateriales: Biología y Química en el diseño de tejidos artificiales". Available on-line at: <[http://sebbm.es/ES/divulgacion-ciencia-para-todos\\_10/biomateriales-biologia-y-quimica-en-el-diseno-de-tejidos-artificiales\\_496](http://sebbm.es/ES/divulgacion-ciencia-para-todos_10/biomateriales-biologia-y-quimica-en-el-diseno-de-tejidos-artificiales_496)>.
- 30** **Title of the work:** Tissue engineering and biomaterials: Merging chemistry and biology for the design of artificial tissues for biomedical applications  
**Name of the event:** Invited talk at the Department of Biomaterials and Bioinspired Materials  
**Type of event:** Conferences given  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 13/01/2011  
**Organising entity:** Instituto de Ciencia de Materiales **Type of entity:** State agency de Madrid  
M. Concepcion Serrano.



- 31 Title of the work:** Proyecto divulgación científica Año de la Ciencia 2007 (CCT005-07-00264)  
**Name of the event:** "¿Sabías que...?"  
**Type of event:** Conferences given **Geographical area:** Regional  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 2007  
**Organising entity:** Fundación Española para la Ciencia y la Tecnología **Type of entity:** Pública  
**City organizing entity:** Spain  
M. Concepción Serrano.

## R&D management and participation in scientific committees

### Scientific, technical and/or assessment committees

**Committee title:** Coordinator of Materials for Health Research Topic  
**Affiliation entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**Start date:** 2019

### Organization of R&D activities

**Title of the activity:** Simposium Científico por el Día Mundial de la Mujer y la Niña en la Ciencia  
**Type of activity:** I Jornadas de Neurocientíficas **Geographical area:** Regional  
**City of event:** Toledo (Hospital Nacional de Parapléjicos),  
**Convening entity:** SOCIEDAD ESPAÑOLA DE NEUROCIENCIA - Comité Mujeres en Neurociencia  
**City convening entity:** Spain  
**Type of participation:** Organiser  
**Nº assistants:** 100  
**Start-End date:** 12/02/2018 - 12/02/2018 **Duration:** 1 day

### R&D management

**Name of the activity:** Joint Research Unit with CSIC: "Design and development of biomaterials for neural repair"  
**Type of management:** Management of R&D&I actions and projects  
**Performed tasks:** Responsible for the creation and development of the Unit at CSIC  
**Entity:** Hospital Nacional de Parapléjicos **Type of entity:** Healthcare Institutions  
**Start date:** 25/07/2017

## Other achievements

### Stays in public or private R&D centres

- 1** **Entity:** Hospital Nacional de Paraplégicos **Type of entity:** Healthcare Institutions  
**City of entity:** Toledo, Spain  
**Start-End date:** 01/01/2014 - 16/03/2017  
**Funding entity:** Instituto de Salud Carlos III **Type of entity:** Public Research Body  
**Name of programme:** Miguel Servet I  
**Goals of the stay:** Post-doctoral
- 2** **Entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency  
**City of entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 16/12/2010 - 15/12/2013 **Duration:** 3 years  
**Funding entity:** Ministerio de Ciencia e Innovación **Type of entity:** Estatal  
**City funding entity:** Spain  
**Name of programme:** Juan de la Cierva  
**Goals of the stay:** Post-doctoral
- 3** **Entity:** Northwestern University **Type of entity:** University  
**Faculty, institute or centre:** McCormick School of Engineering and Applied Science  
**City of entity:** Evanston, United States of America  
**Start-End date:** 02/09/2008 - 30/11/2010 **Duration:** 2 years - 2 months - 29 days  
**Funding entity:** Northwestern University, Fundación Martín Escudero, Ministerio de Ciencia e Innovación  
**Goals of the stay:** Post-doctoral
- 4** **Entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Faculty, institute or centre:** Facultad de Ciencias Químicas  
**City of entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/02/2007 - 22/07/2008 **Duration:** 1 year - 5 months - 22 days  
**Funding entity:** Comunidad de Madrid  
**City funding entity:** Community of Madrid, Spain  
**Goals of the stay:** Post-doctoral  
**Provable tasks:** Postdoctoral research
- 5** **Entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Faculty, institute or centre:** Facultad de Ciencias Químicas  
**City of entity:** Madrid, Community of Madrid, Spain  
**Start-End date:** 01/01/2003 - 31/12/2006 **Duration:** 4 years  
**Funding entity:** MINISTERIO DE EDUCACION Y CIENCIA  
**Name of programme:** Formación del Profesorado Universitario  
**Goals of the stay:** Doctorate  
**Provable tasks:** PhD Thesis
- 6** **Entity:** Northwestern University **Type of entity:** University  
**Faculty, institute or centre:** McCormick School of Engineering and Applied Science  
**City of entity:** Evanston, United States of America  
**Start-End date:** 05/07/2005 - 05/10/2005 **Duration:** 3 months

**Funding entity:** MINISTERIO DE EDUCACION Y CIENCIA

**Name of programme:** Ayuda de movilidad en el extranjero

**Goals of the stay:** Doctorate

**Provable tasks:** Short-term research stay abroad

## Obtained grants and scholarships

- 1** **Name of the grant:** Postdoctoral Fellow Miguel Servet type I  
**Aims:** Post-doctoral  
**Awarding entity:** Instituto de Salud Carlos III - MINECO - FEDER  
**Conferral date:** 01/01/2014  
**End date:** 16/03/2017  
**Entity where activity was carried out:** Hospital Nacional de Paraplégicos
- 2** **Name of the grant:** Research Postdoctoral Contract Juan de la Cierva (JCI-2010-06631)  
**Aims:** Post-doctoral  
**Awarding entity:** Ministerio de Ciencia e Innovación **Type of entity:** Pública  
**Conferral date:** 16/12/2010 **Duration:** 3 years  
**End date:** 15/12/2013  
**Entity where activity was carried out:** Consejo Superior de Investigaciones Científicas  
**Faculty, institute or centre:** Instituto de Ciencia de Materiales de Madrid
- 3** **Name of the grant:** Ayuda de estancia de movilidad postdoctoral en el extranjero  
**Aims:** Post-doctoral  
**Awarding entity:** Ministerio de Ciencia e Innovación **Type of entity:** Universidades  
**Conferral date:** 01/12/2008 **Duration:** 2 years  
**End date:** 30/11/2010  
**Entity where activity was carried out:** Northwestern University  
**Faculty, institute or centre:** McCormick School of Engineering and Applied Science
- 4** **Name of the grant:** Beca movilidad en el extranjero  
**Aims:** Post-doctoral  
**Awarding entity:** Fundación Martín Escudero **Type of entity:** Foundation  
**Conferral date:** 01/10/2008 **Duration:** 2 months  
**End date:** 30/11/2008  
**Entity where activity was carried out:** Northwestern University  
**Faculty, institute or centre:** McCormick School of Engineering and Applied Science
- 5** **Name of the grant:** Beca Formación de Profesorado Universitario  
**Aims:** Pre-doctoral  
**Awarding entity:** MINISTERIO DE EDUCACION Y CIENCIA  
**Conferral date:** 01/01/2003 **Duration:** 4 years  
**End date:** 31/12/2006  
**Entity where activity was carried out:** Universidad Complutense de Madrid  
**Faculty, institute or centre:** Facultad de Ciencias Químicas
- 6** **Name of the grant:** Ayuda movilidad predoctoral en el extranjero  
**Aims:** Pre-doctoral  
**Awarding entity:** Ministerio de Ciencia e Innovación  
**Conferral date:** 05/07/2005 **Duration:** 3 months



**End date:** 05/10/2005

**Entity where activity was carried out:** Northwestern University

**Faculty, institute or centre:** McCormick School of Engineering and Applied Science

**7 Name of the grant:** Beca colaboración

**Aims:** Undergraduate research

**Awarding entity:** MINISTERIO DE EDUCACION Y CIENCIA

**Conferral date:** 29/11/2001

**Duration:** 1 year

**End date:** 31/07/2002

**Entity where activity was carried out:** Universidad Complutense de Madrid

**Faculty, institute or centre:** Facultad de Biología

**8 Name of the grant:** Research Postdoctoral Contract Junta Ampliación Estudios (JAEDOC082)

**Aims:** Post-doctoral

**Awarding entity:** Consejo Superior de Investigaciones Científicas

**Type of entity:** State agency

**Conferral date:** 09/04/2010

**Entity where activity was carried out:** Consejo Superior de Investigaciones Científicas

**Faculty, institute or centre:** Instituto de Ciencia de Materiales de Madrid

## Scientific societies and professional associations

**1 Name of the society:** Tissue Engineering and Regenerative Medicine International Society

**City affiliation entity:** United States of America

**Start-End date:** 06/12/2008 - 31/12/2009

**2 Name of the society:** Real Sociedad Española de Química (RSEQ)

**Affiliation entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency

**Start date:** 10/02/2019

**3 Name of the society:** Sociedad Española de Neurociencia (SENC)

**Affiliation entity:** Instituto de Ciencia de Materiales de Madrid **Type of entity:** State agency

**Start date:** 07/11/2017

**4 Name of the society:** Colegio Oficial de Biólogos de la Comunidad de Madrid

**City affiliation entity:** Madrid, Community of Madrid, Spain

**Start date:** 06/05/2003

## Prizes, mentions and distinctions

**1 Description:** Honored collaborator

**Awarding entity:** Universidad Rey Juan Carlos

**Type of entity:** University

**City awarding entity:** Madrid, Community of Madrid, Spain

**Conferral date:** 02/08/2017



- 2** **Description:** XII Premio IES Juanelo Turriano al ingenio profesional  
**Awarding entity:** Instituto de Educación Secundaria Juanelo Turriano  
**Conferral date:** 22/06/2017
- 3** **Description:** Honored collaborator at the Biochemistry and Molecular Biology Department I  
**Awarding entity:** Universidad Complutense de Madrid **Type of entity:** University  
**City awarding entity:** Madrid, Community of Madrid, Spain  
**Conferral date:** 01/10/2002  
**Recognition linked:** Effects from 01/10/2002 through 30/09/2003

### Obtained accreditations/recognitions

**Description:** Evaluación positiva como "Profesor Ayudante Doctor"  
**Accrediting entity:** ANECA y Ministerio de Educación  
**City accrediting entity:** Spain  
**Date of recognition:** 11/05/2011

### Summary of other achievements

- 1** **Description of the achievement:** Associate Editor of the journal "Bioactive Materials" (IF 2019: 8.724; <http://www.keaipublishing.com/en/journals/bioactive-materials/>). Impact factor 2020: 8.72  
**Conferral date:** 01/03/2019
- 2** **Description of the achievement:** Member of the PhD Defense Committee of Pablo García  
**Accrediting entity:** Universidad Autónoma de Madrid **Type of entity:** University  
**Conferral date:** 15/02/2019
- 3** **Description of the achievement:** Member of the PhD Defense Committee of Natividad Gómez  
**Accrediting entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Conferral date:** 17/09/2018
- 4** **Description of the achievement:** 3 Quinquenios (Componente por Méritos Investigadores del Complemento Específico) VALORADOS POSITIVAMENTE (2003-2017)  
**Accrediting entity:** CSIC (Ministerio de Ciencia, Innovación y Universidades)  
**City accrediting entity:** Spain  
**Conferral date:** 12/06/2018
- 5** **Description of the achievement:** 2 Sexenios de Investigación VALORADOS POSITIVAMENTE (2004-2009 y 2010-2015)  
**Accrediting entity:** Comisión Nacional Evaluadora de la Actividad Investigadora (Ministerio de Ciencia, Innovación y Universidades)  
**City accrediting entity:** Spain  
**Conferral date:** 06/06/2018
- 6** **Description of the achievement:** Member of the PhD Defense Committee of María Concepción Matesanz  
**Accrediting entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Conferral date:** 07/07/2015





- 7** **Description of the achievement:** Member of the PhD Defense Committee of Mónica Cicuéndez Maroto  
**Accrediting entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Conferral date:** 23/04/2014
- 8** **Description of the achievement:** Reconocimiento de servicios previos en Administración Pública: TRIENIOS GRUPO A (2010 - 2019)
- 9** **Description of the achievement:** Reviewer of scientific peer-review journals including: Acta Biomaterialia, ACS Applied Materials and Interfaces, Advanced Materials, Advanced Science, Colloids and Surfaces B Biointerfaces, Journal of Materials Chemistry B, Macromolecular Bioscience, Macromolecular Rapid Communications, PLoSOne, Polymers, Small, Tissue Engineering, Toxicology Research