

Date of the CVA

07/05/2019

## Section A. PERSONAL DATA

Name and Surname	Ramon Torrecillas San Millan		
DNI/NIE/Passport		Age	
Researcher's identification number	Researcher ID	G-7851-2011	
	Scopus Author ID		
	ORCID	0000-0003-3856-0217	

### A.1. Current professional situation

Institution	Consejo Superior de Investigaciones Científicas		
Dpt. / Centre			
Address			
Phone		Email	
Professional category	Profesor de investigación	Start date	2008
UNESCO spec. code			
Keywords			

### A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
	Université de Lyon	1994
	Universidad Nacional de Educación a Distancia	1990

### A.3. General quality indicators of scientific production

## Section B. SUMMARY OF THE CURRICULUM

### Section C. MOST RELEVANT MERITS (ordered by typology)

#### C.1. Publications

- 1 **Scientific paper.** Torrecillas Ramon; et al. 2018. Development of a novel 3D glass-ceramic scaffold for endometrial cell in vitro culture Ceramics International. 44-12, pp.14920-14924.
- 2 **Scientific paper.** De la Iglesia, PG; et al. 2018. Microstructural development and mechanical performance of mullite-alumina and hibonite-alumina ceramics with controlled addition of a glass phase Ceramics International. 44-2, pp.2292-2299.
- 3 **Scientific paper.** Roberto López-Píriz; et al. 2018. Prevention of periodontitis by the addition of a bactericidal particulate glass/glass-ceramic to a dental resin: A pilot study in dogs Coatings. 8-8.
- 4 **Scientific paper.** Goyos-Ball, L; et al. 2018. The effects of laser patterning 10CeTZP-Al2O3 nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro Ceramics International. 44-8, pp.9472-9478.
- 5 **Scientific paper.** Grigoriev, S.; et al. 2017. Effect of graphene addition on the mechanical and electrical properties of Al2O3-SiCw ceramics Journal of the European Ceramic Society. 37-6, pp.2473-2479.
- 6 **Scientific paper.** Leticia Esteban-Tejeda; et al. 2017. Effect of the Medium Composition on the Zn2+ Lixivation and the Antifouling Properties of a Glass with a High ZnO Content Materials. 10-2.
- 7 **Scientific paper.** ; et al. 2017. Electrically conductor black zirconia ceramic by SPS using graphene oxide Journal of Electroceramics. 38-1, pp.119-124.
- 8 **Scientific paper.** Preethi Balasubramanian; et al. 2017. Influence of dissolution products of a novel Ca-enriched silicate bioactive glass-ceramic on VEGF release from bone marrow stromal cells Biomedical Glasses. 3-1, pp.104-110.

- 9 **Scientific paper.** ; et al. 2017. Longer-lasting Al<sub>2</sub>O<sub>3</sub>-SiCw-TiC cutting tools obtained by spark plasma sintering International Journal of Applied Ceramic Technology. 14-3, pp.367-373.
- 10 **Scientific paper.** Lidia Goyos-Ball; et al. 2017. Mechanical and biological evaluation of 3D printed 10CeTZP-Al<sub>2</sub>O<sub>3</sub>structures Journal of the European Ceramic Society. 37, pp.3151-3158.
- 11 **Scientific paper.** De la Iglesia, PG; et al. 2017. Microstructural development and mechanical performance of mullite-alumina and hibonite-alumina ceramics with controlled addition of a glass phase Ceramics International. 44-2, pp.2292-2299.
- 12 **Scientific paper.** Lidia Goyos-Ball; et al. 2017. Osseous differentiation on freeze casted 10CeTZP-Al<sub>2</sub>O<sub>3</sub> structures Journal of the European Ceramic Society. 37, pp.5009-5016.
- 13 **Scientific paper.** Esteban-Tejeda, L.; et al. 2016. Antimicrobial activity of submicron glass fibres incorporated as a filler to a dental sealer Biomedical Materials. 11-4.
- 14 **Scientific paper.** N.W. Solis; et al. 2016. Black zirconia-graphene nanocomposite produced by spark plasma sintering AIP Conference Proceedings. 1785.
- 15 **Scientific paper.** Esteban-Tejeda, L.; et al. 2016. Bone tissue scaffolds based on antimicrobial SiO<sub>2</sub>-Na<sub>2</sub>O-Al<sub>2</sub>O<sub>3</sub>-CaO-B<sub>2</sub>O<sub>3</sub> glass Journal of Non-Crystalline Solids. 432, pp.73-80.
- 16 **Scientific paper.** Gutiérrez-González, C.F.; et al. 2016. Effect of TiC addition on the mechanical behaviour of Al<sub>2</sub>O<sub>3</sub>-SiC whiskers composites obtained by SPS Journal of the European Ceramic Society. 36-8, pp.2149-2152.
- 17 **Scientific paper.** Novikov, S.V.; et al. 2016. Formation of Structure in Hard-Alloy Coatings from Powders Under Passage of a Powerful Pulse of Electric Current Metal Science and Heat Treatment. 5-10, pp.1-7.
- 18 **Scientific paper.** Diaz, LA; et al. 2016. High-velocity suspension flame sprayed (HVSFS) soda-lime glass coating on titanium substrate: Its bactericidal behaviour Journal of the European Ceramic Society. 36-10, pp.2653-2658.
- 19 **Scientific paper.** Diaz, LA; et al. 2016. High-velocity suspension flame sprayed (HVSFS) soda-lime glass coating on titanium substrate: Its bactericidal behaviour Journal of the European Ceramic Society. 36-10, pp.2653-2658.
- 20 **Scientific paper.** ; et al. 2016. Histological response of soda-lime glass-ceramic bactericidal rods implanted in the jaws of beagle dogs Scientific Reports. 6.
- 21 **Scientific paper.** Esteban-Tejeda, L.; et al. 2016. Multifunctional ceramic-metal biocomposites with Zinc containing antimicrobial glass coatings Ceramics International. 42-6, pp.7023-7029.
- 22 **Scientific paper.** Lopez-Píriz, R.; et al. 2016. Performance of a new Al<sub>2</sub>O<sub>3</sub>/Ce-TZP ceramic nanocomposite dental implant: A pilot study in dogs Materials. 10-6.
- 23 **Scientific paper.** L. A. Díaz; et al. 2016. Spark Plasma Sintered Si<sub>3</sub>N<sub>4</sub>/TiN Nanocomposites Obtained by a Colloidal Processing Route Journal of Nanomaterials. 3170142.
- 24 **Scientific paper.** D. I. Yushin; et al. 2016. Spark Plasma Sintering of Cutting Plates Russian Engineering Research. 36-5, pp.410-413.
- 25 **Scientific paper.** A. V. Smirnov; et al. 2016. Spark Plasma Sintering of Nanostructured Powder Materials Russian Engineering Research. 36-3, pp.249-254.
- 26 **Scientific paper.** ; et al. 2016. Specifics of Wear of Ceramic Cutting Tool Inserts Featuring Al<sub>2</sub>O<sub>3</sub>-TiC Dies when Face Milling Hardened Cast Iron Materials Science Forum. 876, pp.43-49.
- 27 **Scientific paper.** Sierra MI; et al. 2016. The effect of exposure to nanoparticles and nanomaterials on the mammalian epigenome International Journal of Nanomedicine. 11, pp.6297-6306.
- 28 **Scientific paper.** Zhuravlev, M.V.; et al. 2016. Threshold intensity and coefficient of raman scattering amplification in a high-Q bilayer microresonator during the formation of internal and external submicron photonic jets: A photonic nanojet in the near field Technical Physics. 61-4, pp.584-590.
- 29 **Scientific paper.** Esteban-Tejeda, L; et al. 2015. Antibacterial and Antifungal Activity of ZnO Containing Glasses PLOS ONE. e0136490.
- 30 **Scientific paper.** Lucía Fernández García; et al. 2015. Antiresonance in (Ni,Zn) ferrite-carbon nanofibres nanocomposites Materials Research Express. 2-5.

- 31 Scientific paper.** Yushin D.I.; et al. 2015. Cutting tools: finite element modeling of spark plasma sintering to improve their quality Mechanics & Industry. 16-7.
- 32 Scientific paper.** Yushin D.I.; et al. 2015. Cutting tools: finite element modeling of spark plasma sintering to improve their quality Mechanics & Industry. 16-7.
- 33 Scientific paper.** E. Fernandez-Garcia; et al. 2015. Effect of yttria-titanium shell-core structured powder on strength and ageing of zirconia/titanium composites Materials Science and Engineering: A. 646, pp.96-100.
- 34 Scientific paper.** López-Píriz R; et al. 2015. Evaluation in a Dog Model of Three Antimicrobial Glassy Coatings: Prevention of Bone Loss around Implants and Microbial Assessments PLOS ONE. 10-e0140374.
- 35 Scientific paper.** Adolfo Fernández; et al. 2015. Functionalization of Carbon Nanofibres Obtained by Floating Catalyst Method Journal of Nanomaterials. 2015-395014.
- 36 Scientific paper.** BENAVENTE, R.; et al. 2015. Microwave, Spark Plasma and Conventional Sintering to Obtain Controlled Thermal Expansion b-Eucryptite Materials International Journal of Applied Ceramic Tech. 12-S2, pp.E187-E193.
- 37 Scientific paper.** Yushin, D.I.; et al. 2015. Modeling process of spark plasma sintering of powder materials by finite element method Materials Science Forum. 834, pp.41-50.
- 38 Scientific paper.** Carlos F. Gutierrez-Gonzalez; et al. 2015. Spark plasma sintering of zirconia/nano-nickel composites Mechanics & Industry. 16-7.
- 39 Scientific paper.** Gutierrez-Gonzalez, C.F.; et al. 2015. Wear behavior of graphene/alumina composite Ceramics International. 41-6, pp.7434-7438.
- 40 Scientific paper.** Suarez, M; et al. 2014. Analysis of the upconversion processes of Nd<sup>3+</sup> ions in transparent YAG ceramics Ceramics International. 40-10 Part A, pp.15951-15956.
- 41 Scientific paper.** Martinez A; et al. 2014. Bone Loss at Implant with Titanium Abutments Coated by Soda Lime Glass Containing Silver Nanoparticles: A Histological Study in the Dog PLoS ONE. 9-1, pp.e86926.
- 42 Scientific paper.** C.F. Gutierrez-Gonzalez; et al. 2014. Ceramic/metal nanocomposites by lyophilization: Spark plasma sintering and hardness Ceramics International. 40, pp.4135-4140.
- 43 Scientific paper.** L. A. Díaz; et al. 2014. Mechanical Behavior of alumina toughened zirconia nanocomposites with different alumina additions Advances in Science and Technology. 96, pp.61-66.
- 44 Scientific paper.** S. López-Esteban; et al. 2014. Mechanical performance of a biocompatible biocide soda-lime glass-ceramic Journal of the Mechanical Behavior of Biomedical Materials. 34, pp.302-312.
- 45 Scientific paper.** Gelbstein, Y; et al. 2014. Physical, Mechanical, and Structural Properties of Highly Efficient Nanostructured n- and p-Silicides for Practical Thermoelectric Applications Journal of Electronic Materials. 43-6, pp.1703-1711.
- 46 Scientific paper.** C. F. Gutierrez-Gonzalez; et al. 2014. Processing, spark plasma sintering, and mechanical behavior of alumina/titanium composites Journal of Materials Science. 49, pp.3823-3830.
- 47 Scientific paper.** M. Suarez; et al. 2014. Synthesis and processing of spinel powders for transparent ceramics Ceramics International. 40, pp.4065-4069.
- 48 Scientific paper.** H. Belhouchet; et al. 2014. The non-isothermal kinetics of mullite formation in boehmite-zircon mixtures Journal of Thermal Analysis and Calorimetry. 116, pp.795-803.
- 49 Scientific paper.** Luis A. Díaz; et al. 2014. Zirconia-alumina-nanodiamond composites with gemological properties Journal of Nanoparticle Research. 2257.

## C.2. Participation in R&D and Innovation projects

- 1 Grupo de Investigación en Síntesis, preparación y caracterización de materiales multifuncionales Ramón Torrecillas San Millán. (CENTRO DE INVESTIGACION DE NANOMATERIALES Y NANOTECNOLOGIA). 01/01/2018-31/12/2020. 155.625 €.
- 2 Los hidroximetilomas del cáncer colorectal Mario Fernández Fraga. 01/01/2016-31/12/2018. 195.415 €.
- 3 Grupo operativo para la definición de estrategias para la disminución de contaminación microbiana en los productos cárnicos Ramón Torrecillas San Millán. 01/05/2018-30/09/2018. 5.666 €.

- 4 Grupo de investigación del Principado de Asturias en Nanocomposites y Materiales Multifuncionales Ficyt. Ramón Torrecillas San Millán. 22/12/2014-21/12/2017. 199.200 €.
- 5 Desarrollo de un nuevo material cerámico nanocompuesto para su utilización en la fabricación de prótesis de cadera 1. (CENTRO DE INVESTIGACION DE NANOMATERIALES Y NANOTECNOLOGIA). 01/01/2014-31/12/2015. 78.000 €.
- 6 Hybrid sintering and non-conventional machining of advanced technical ceramics Comisión Europea. Ramón Torrecillas San Millán. 12/2013-12/2015.

### **C.3. Participation in R&D and Innovation contracts**

- 1 Solución no invasiva para enfermedades periodontal y periimplantaria, INPERIO,H2020-SMEInst-2018-2020-2 Nanoker Research SL. Luis Antonio Díaz Rodriguez. 01/09/2018-31/12/2019. 98.750 €.
- 2 Ultramateriales de carbono para gestión térmica obtenidos por Spark Plasma Sintering Nanoker Research SL. Ramón Torrecillas San Millán. 08/06/2018-P2Y. 120.000 €.
- 3 LUXPAT - Redireccionamiento de la luz solar en patios de edificios mediante elementos ópticos holográficos García Rama. Ramón Torrecillas San Millán. 23/06/2016-P9M7D. 39.500 €.
- 4 Aplicación de biovidrio ATEG3 en el desarrollo de una segunda generación de concentrados paquetarios ricos en fibrina Alma Tissue Engineering SL. 19/01/2016-P3M10D. 45.610 €.
- 5 Biomateriales y Sensores Basados en Grafeno y Nanoparticulas para Medicina Regenerativa.MEDGRAPH Industrial Química del Nalón S.A. 01/12/2015-P2Y6M. 30.000 €.
- 6 Desarrollo de nueva generacion de vidrios avanzados y sostenibles con propiedades antimicrobianas y Luminiscentes Saint-Gobain Cristalería S.L.. 08/10/2015-P1Y2M.
- 7 SPECTRA CITY-Smart PErsonal Co2-free TRAnsport in the CITY Francisco Albero S.A.. 01/09/2015-P4Y. 105.000 €.
- 8 Preparación de sepiolitas conductoras eléctricas mediante modificación superficial con estructuras tipo grafeno Tolsa SA. 09/02/2015-P1Y. 30.000 €.

### **C.4. Patents**