

**CURRICULUM VITAE ABREVIADO (CVA)**

**IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.**

**Part A. PERSONAL INFORMATION**

First name	Pablo		
Family name	Taboada Antelo		
Gender (*)	Male	Birth date	06/11/1974
Social Security, Passport, ID number			
e-mail	pablo.taboada@usc.es	URL Web:	<a href="https://investigacion.usc.gal/investigadores/60452/detalle?lang=es">https://investigacion.usc.gal/investigadores/60452/detalle?lang=es</a>
Open Research and Contributor ID (ORCID)(*)	0000-0002-2903-7857		

(\*) Mandatory

**A.1. Current position**

Position	Full Professor		
Initial date	21/05/2021		
Institution	Universidade de Santiago de Compostela		
Departament/Center	Particle Physics/Faculty of Physics		
Country	Spain	Phone number	
Keywords	Nanostructures and nanoparticles, (bio)polymers, molecular self-assembly, drug delivery, theranosis, tissue engineering, energy storage, catalysis		

**A.2. Previous positions (research activity interruptions, indicate total months)**

Period	Position/Institution/Country/Interruption cause
15/01/2007-20/05/2021	Associate Professor at USC
16/11/2006-14/01/2007	Interim Associate Professor at USC
15/11/2001-15/01/2006	Ramón y Cajal fellow at USC
01/06/2001-14/11/2001	Postdoctoral fellow funded by Spanish Ministry Science and Education at Univ. of Manchester (UK)
16/09/1999-31/05/2001	Postdoctoral fellow at USC funded by USC
01/10/1996-15/09/1999	PhD at USC/Univ. of Manchester funded by Fundación Caixa Galicia (2 years) and Xunta de Galicia (1 year)

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
MSc. in Environmental Consultancy	Official College of Physics	2000
PhD in Physics	Univ. of Santiago de Compostela (USC)	1999
BSc. In Physics	Univ. of Santiago de Compostela (USC)	1996

**Part B. CV SUMMARY** (max. 5000 characters, including spaces)

Pablo Taboada gained his PhD in 1999 at the Univ. of Santiago of Compostela (USC). His PhD experimental research (almost 3 years) was done at the School of Pharmacy and Pharmaceutical Sciences and the School of Biological Sciences of the University of Manchester under the supervision of Prof. D. Attwood and Prof. M.N. Jones. During this time, Pablo was involved in the analysis of the supramolecular self-assembly processes of drugs and the formation of protein-drug complexes with a direct view on their impact on their biological implications and pharmacological activity, the seminal topic of his PhD thesis. After

the PhD, he was postdoctoral fellow at USC, Univ. Manchester and Univ. College Dublin, where got familiar (Manchester and Dublin) with the synthesis and characterization of new block copolymers and their potential as drug/gene delivery nanocarriers. At the end of 2001, Pablo was recipient of a Ramón y Cajal fellowship by the Spanish Ministry of Science and Innovation for the reincorporation in the National Science System of excellent researchers working abroad. In 2007 he became Associate Professor and in 2021 Full Professor in Soft Condensed Matter Physics. Pablo have also been visiting professor in the Organic Materials Innovation Center (U. of Manchester), the Univ. of Guadalajara, Sonora and UNAM (México) and Univ. of Porto (Portugal); he is part of the academic staff board of the Nanotechnology Postgraduate Program at University of Sonora (Mexico); and Director of the International Doctorate School of the Universidad of Santiago de Compostela for the last seven years.

His current main research interests include the development of new hybrid multifunctional nanostructures and nanoparticles with capabilities for biomedical applications such as controlled drug delivery, theranosis, and tissue scaffolding; and novel hybrid materials to configure novel electrodes for energy storage and catalytic applications. In addition, his interests are also focused on the application of new methodologies for nanomaterials and device production such as self-assembly and additive manufacturing techniques for their application in tissue engineering, in novel microdevices for structure and physiological modelling (organ-on-a-chips); and energy storage.

As a result of his intense scientific activity, PT has co-authored 272 papers included in JCR (h-index 49, >9000 citations; source Google Scholar), 8 book chapters, and participated as PI or team member in more than 50 national and international competitive research projects and contracts with different public and private institutions, collaborating with important companies and institutions as Sanofi-Winthrop, Glaxo-SmithKline, Fundación Ramón Areces, Centro Tecnológico del Automóvil de Galicia, Anfacoc-ecopesca etc. He also holds four officially recognized six-year periods of research activity (sexenios), 3 patents and has imparted more than 40 plenary/invited talks and presented more than 170 works (oral and poster contributions) at different national and international congresses. He has supervised 24 PhD thesis (other 10 on-going), 20 MSc thesis and many Final Year Degree Research Works. He is also reviewer of more than 40 scientific journals; research manager of the Spanish Research Agency (Materials panel); referee of different national and international research agencies (AEI, DEVA, Poland, Georgia, Switzerland, Czech Republic, Serian Republic, Netherlands, Argentina, Mexico and Uruguay); member of the editorial board of several leading journals (Frontiers of Bioengineering, Pharmaceutics, Current Pharmaceutical Biotechnology, Liquids); and recipient of the Excellence Emerging Researcher Grant in 2010 from the Galician Government.

## **Part C. RELEVANT MERITS** (*sorted by typology*)

### **C.1. Publications** (*10 amongst 245*)

**[1] Revisiting Gold Nanoshells as Multifunctional Biomedical Nanotools.** Topete, A.; Varela, A.; Navarro-Real, M.; Rial, R.; Pardo, A.; Taboada, P. *Coord. Chem. Rev.* (2025) 523 216250.

**[2] Cholesterol Conjugated Elastin-like Recombinamers: Molecular Dynamics Simulations, Conformational Changes, and Bioactivity.** Costa, R. R.; Domínguez-Arca, V.; Velasco, B.; Reis, R. L.; Rodríguez-Cabello, J. C.; Pashkuleva, I.; Taboada, P.; Prieto, G. *ACS Appl. Mater. Interfaces* (2024) 16, 66327-66340.

**[3] Assessing the Effect of Surface Coating on the Stability, Degradation, Toxicity and Cell Endocytosis/Exocytosis of Upconverting Nanoparticles.** Arellano, L.; Martínez, R.; Pardo, A.; Diez, I.; Velasco, B.; Moreda-Piñeiro, A.; Bermejo-Barrera, P.; Barbosa, S.; Taboada, P. *J. Colloid Interface Sci.* (2024) 668, 575-586.

**[4] Inhibiting HER3 Hyperphosphorylation in HER2-Overexpressing Breast Cancer through Multimodal Therapy with Branched Gold Nanoshells.** Villar-Alvarez, E., Golán-Cancela, I., Pardo, A., ...Costoya, J.A., Taboada, P. *Small*, (2023), 19, 2303934

- [5] **3D printing of a palladium-alumina cermet monolithic catalyst: catalytic evaluation in microwave-assisted cross-coupling reactions.** Tubio, C.R., Malatini, C., ..., Taboada, P., Guitián, F., Gil, A., Coelho, A. *Materials Today Chemistry*, (2023), 27, 101355
- [6] **Magnetically-Assisted 3D Bioprinting of Anisotropic Tissue-Mimetic Constructs.** Pardo, A.; Bakht, S.M.; Gomez-Florit, Taboada, P., Domingues, R.M.A., Gomes, M.E. *Adv. Funct. Mater.* (2022), 32, 2208940.
- [7]. **Silk fibroin/cholinium gallate-based architectures as therapeutic tools.** Gomes, J. M.; Silva, S. S.; Fernandes, E. M.; Lobo, F. C. M.; Martín-Pastor, M.; Taboada, P.; Reis, R. L. *Acta Biomaterialia* (2022) 147 168-184.
- [8]. **Magnetic Nanocomposite Hydrogels for Tissue Engineering: Design Concepts and Remote Actuation Strategies to Control Cell Fate.** Pardo, A.; Gómez-Florit, M.; Barbosa, S., Taboada, P.; Domingues, R.M.A.; Gomes, M.E. *ACS Nano* (2021), 15, 175-209.
- [9]. **Synthesis, Characterization, and Evaluation of Superparamagnetic Doped Ferrites as Potential Therapeutic Nanotools.** Pardo, A.; Pelaz, B.; Gallo, J.; Bañobre-López, M.; Parak, W. J.; Barbosa, P.; Del Pino, P.; Taboada, P. *Chem. Mater.* (2020), 32, 2220-2231.
- [10]. **Cubic Anisotropic Co- And Zn-Substituted Ferrite Nanoparticles as Multimodal Magnetic Agents.** Pardo, A.; Yáñez, S., Piñeiro, Y., Iglesias-Rey, R.; Al-Modlej, A.; Barbosa, S.; Rivas, J., Taboada, P.\* *ACS Appl. Mater. Interfaces* (2020), 12, 9017-9031.

## C.2. Congress

- [1] **Biomimetic nanostructures for combined therapy and tissue engineering.** *Materials 2025*. June 2025. Lisbon (Portugal). **INVITED**
- [2] **Hybrid nanostructures for theranostics.** *Nanotechnology 2024*. July 2024. Tesalónica (Greece). **INVITED.**
- [3] **Nature as a model to develop therapeutic tools.** II International Conference on Interdisciplinary Research in Biological Science and Health. April 2024. Hermosillo (Mexico). **PLENARY**
- [4] **Approaches for combined therapeutics and theranosis using sensitive nanoparticles.** VI Colloquium on Materials with technological interest "Human Health Perspectives". October 2023. Ciudad Obregón (México). **PLENARY.**
- [5] **Hybrid nanostructures for combined therapeutics and tissue repair.** *Nanotech France 2023*. June 2023. Paris (France). **INVITED**
- [6] **Biomedical applications of stimuli-responsive nanomaterials.** 4<sup>th</sup> Conference on Biochemical Sciences. November 2022. Hermosillo (Mexico). **INVITED.**
- [7] **Stimuli-responsive hybrid nanoplatfoms for combined therapeutics and theranosis.** Spanish Conference on Biomedical Applications of Nanomaterials 2021. June 2021. Madrid (Spain). **INVITED.**
- [8]. **Modulation of nanoparticle activity and associated complex biological responses by the nanointerface.** CEEC-TAC5 & MEDICTA 2019. August 2019. Rome (Italy). **INVITED.**
- [9]. **Unreaveling protein oligomerization and fibrillation pathways as a therapeutic tool against neurodegenerative-associated diseases.** 8th Iberian Meeting on Colloids and Interfaces. July 2019. Aveiro (Portugal). **PLENARY.**
- [10]. **Approaches for combined therapeutics and theranosis using sensitive particles.** XIV Congreso de la Sociedad Española de Farmacia Industrial y Galénica. Santiago de Compostela (Spain). January 2019. **PLENARY.**

## C.3. Research projects

- [1]. **Edición genética dirigida como herramienta terapéutica contra la aterosclerosis empleando nanocélulas artificiales.** *Funding Entity:* AEI. PID2022-142682OB-I00. 01/09/2023- 31/08/2027. 337.500€. **PI: Pablo Taboada, Silvia Barbosa Fernández.**
- [2] **Optimization of bi-therapy inhibition of *Staphylococcus aureus* in persistent and bactericemic infections.** *Funding Entity:* JPIAMR ACTION/AMR2 DRUID COFUND-AEI. PCI2022-134981-2. 30/12/2022- 29/12/2015. 179.580€ (USC). **PI: Pablo Taboada.**

- [3]. **Plataforma miniaturizada para la modelización de fármacos y formulaciones destinadas al tratamiento de la aterosclerosis.** *Funding Entity:* AEI. PDC2022-133658-I00. 01/12/2022- 30/11/2024. 138.000€. **PI: Pablo Taboada, Silvia Barbosa Fernández.**
- [4]. **Nanomateriales derivados de MOF basados en silicio para la fabricación aditiva por impresión 3D de la próxima generación de ánodos para baterías de litio.** *Funding Entity:* AEI. TED2021-132522B-I00. 01/12/2022- 30/11/2024. 254.380€. **PI: Pablo Taboada.**
- [5]. **Revealing drug tolerant persistent cells in cancer using contrast enhanced optical coherence and photoacoustic tomography.** *Funding entity:* H2020-ICT-2018-20; 2021 – 2024. 453,903 €. **PI: Beatriz Pelaz.**
- [6] **Consolidación y estructuración de unidades de investigación competitivas.** *Funding Entity:* Xunta de Galicia. ED431C 2022/26. 01/01/2022-31/12/2025. 400.000€. **PI: Silvia Barbosa Fernández.**
- [7]. **CoVTES: Prueba rápida para la detección precoz de SARS-Cov-2 basada en inmunocromatografía.** *Funding Entity:* Agencia Gallega de Investigación (GAIN). IN845D 2020/15. 01/12/2020-31/12/2021. 40.350€. **PI: José A. Costoya & Pablo Taboada.**
- [8]. **Switchable magneto-plasmonic agents and molecular imaging technologies (SWIMMOT).** *Funding Entity:* UE-H2020. 2019-PI028/899612. 01/10/2020-30/09/2024. 546.035€. **PI: Beatriz Pelaz.**
- [9]. **Nuevos transportadores biomiméticos y plataformas in vitro para la validación exitosa de la teragnóstica para la aterosclerosis.** *Funding Entity:* AEI. PID2019-109517RB-I00. 01/06/2020-31/05/2023. 278.300€. **PI: Pablo Taboada. Silvia Barbosa Fernández.**
- [10]. **Nanosondas híbridas inteligentes para bioimagen, monitorización, localización y terapia celular combinada.** *Funding Entity:* AEI. MAT2016-80266-R. 01/01/2017-21/06/2021. 181.500€. **PI: Pablo Taboada.**

#### C.4. Contracts, technological or transfer merits

##### C.4.1 Contracts

- [1]. **Title:** Characterization and validation of microfluidic chips for cell culturing. **Funding entity:** BFLOW S.L. 01/12/2024-30/11/2025. **PI:** Pablo Taboada Antelo. **Total amount:** 5.900€.
- [2]. **Title:** Scientific mentoring and guidance about R&D activities at King Saud University. **Funding entity:** King Saud University. 01/06/2020-30/06/2022. **PI:** Pablo Taboada Antelo. **Total amount:** 22.000€.
- [3]. **Title:** Nanostructured composite nanomaterials **Funding Entity:** CTAG. 09/01/2015 - 11/02/2015. **PI:** Pablo Taboada. **Total Amount:** 4.865€.
- [4]. **Title:** “Análise estrutural e visual de 20 mostras elaboradas a partir do potón (“Dositidicus gigas”) a través de espectroscopía Raman e microscopía electrónica crío-SEM”. **Funding Entity:** CDTI/Anfac-Cecopesca. 2011-2014. **PI:** Pablo Taboada Antelo. **Total amount:** 30.000€.
- [5]. **Title:** Nuevos materiales nanoestructurados multifuncionales para aplicaciones biomédicas. **Funding Entity:** Fundación Ramón Areces. Duración: 2010-2013. **PI:** Pablo Taboada Antelo. **Total Amount:** 125.411€

##### C.4.2 Patents

- [1]. **Title:** Producto sanitario para tratamiento antimicrobiano mediante fototerapia. **Authors:** Cabana, S.; Barbosa, S.; Taboada, P.; Concheiro, A.; Alvarez-Lorenzo, C.; **Priority:** 31/03/2017. **Number:** P201730591. Universidad de Santiago de Compostela.
- [2]. **Title:** Treatment for synucleinopathies using bisbiguanide inhibitors of non-amyloidogenic alpha-synuclein aggregation. **Authors:** Martins, P.; Sarkany, S.; Macedo, S.; Nogueira, F. A.; Taboada, P.; Ribeiro, A. J. **Priority:** 20/04/2020. **Number:** 20201000020387. Universidad de Oporto (Portugal).
- [3]. **Title:** Treatment for synucleinopathies using thonzonium bromide and related compounds inhibitors of non-amyloidogenic alpha-synuclein aggregation. **Authors:** Martins, P.; Sarkany, S.; Macedo, S.; Nogueira, F. A.; Taboada, P.; Ribeiro, A.J. **Priority:** 20/04/2020. **Number:** 20201000020389. Universidad de Oporto (Portugal).