

João F. Mano - SHORT CV (September 2020)

João F. Mano, PhD in Chemistry (1996, Technical Univ. Lisbon), D.Sc. in Tissue Engineering Regenerative Medicine and Stem Cells (2012, Univ. Minho), is a full professor at the Department of Chemistry of the University of Aveiro (Portugal). During his career he has been teaching courses related to biomaterials science and technology, tissue engineering and physical chemistry of polymers and materials, in both undergraduate and graduate levels. He is the director of both Master and Doctoral Degrees in Biotechnology at the Univ. of Aveiro. He has also an appointment as Invited Professor (classe exceptionnelle, since 2014) at University of Lorraine (France), and Visiting Professor in KAIST (South Korea) - 2019.

He belongs to the associate laboratory CICECO – Aveiro Institute of Materials where he is coordinating the *research line on sustainability* and where he is directing the *COMPASS Research Group*, founded in April 2016. His current research interests include the use of biomaterials and cells towards the development of transdisciplinary concepts especially aimed at being used in regenerative and personalised medicine. In particular, biomimetic and nano/micro-technology approaches have been applied to natural-derived biomaterials and surfaces in order to obtain biomedical devices with improved structural and (multi-)functional properties, or in the engineering of microenvironments to control cell behaviour and organization, to be used in therapies or in drug screening.

João F. Mano is author of 645+ original research or review papers in international journals (27000+ citations, $h=83$ – Web of Science) and 40+ book chapters. João F. Mano co-edited 9 special issues in international journals and 3 books. João F. Mano has been invited to review manuscripts from 290+ different international journals and to routinely evaluate projects from numerous private and state funding agencies from 18 different countries. He is the LS9 panel chair for the peer review ERC Advanced Grants. João F. Mano supervised or co-supervised 57 MSc, 24 PhD students, and 40+ post-doctoral fellows. He filed 6 patents as senior inventor. João F. Mano is the co-founder (2018) and chairman of METATISSUE, a company developing human-derived hydrogels for 3D cells culture (4 prizes and owner of two patents).

He is the Editor-in-Chief of *Materials Today Bio* (Elsevier). He has been also part of a series of scientific societies and editorial boards of international journals, including *Tissue Engineering (parts A, B and C)*, *Advanced Healthcare Materials*, *Advanced Engineering Materials*, *Materials Today*, *Materials Letters*, *Materials Today Chemistry*, *Materials Today Physics*, *Materials Today Advances*, and *Journal of Bioactive and Compatible Polymers*. He has been coordinating or involved in many national and European research projects and participated in the organization of scientific events in the area of polymer/materials science and biomaterials/tissue engineering.

Professor João F. Mano has been member of scientific committees, organizing committees, referee and chairman in different international meetings. He was invited to present more than 100 invited/keynote/plenary talks in international conferences including EUROMAT, ESTAC, TERMIS (EU and AP chapters and World conferences), BIOMED, FBPS, NANOMED, COLAOB, ESB, SFB, World Biomaterials Conference, E-MRS, ESAO, EPF, ACS, CBECIMAT, NICE, Inter. HYMA, APME, APCChE, PPM, EPNOE, SELECTBIO.

João F. Mano has received different honours and awards: (i) fellow of the IUPAC (International Union of Pure and Applied Chemistry) since 2004; (ii) the Stimulus to Excellence Award by the Portuguese Minister for Science and Technology in 2005; (iii) the Materials Science and Technology Prize, attributed by the Federation of European Materials Societies (FEMS) in 2007 (iv) UNESCO Chair on Biomaterials attributed in 2008 from the University of Havana (Cuba); (v) the major BES innovation award in 2010 (at that time, one of the most recognised innovation prize in Portugal); (vi) recipient

an Advanced Grant from the European Research Council (ERC-AdG), in 2015; (vii) received the title of Professor@Lorraine from the University of Lorraine, France, in 2018; (viii) recipient a Proof of Concept Grant from the European Research Council (ERC-PoC), in 2018; (ix) received the title of Doctor Honoris Causa, given by University of Lorraine, in 2019; (x) awarded with a Gutenberg Chair, supported by the Great East Region of France, in 2020; (xi) recipient a second ERC-AdG, in 2020; (xii) recipient a second ERC-PoC, in 2020; (xiii) elected fellow of the European Academy of Sciences; (xiv) Bluepharma | University of Coimbra Innovation Award 2019.

Representative Publications

J. Borges, J.F. Mano - Molecular interactions driving the layer-by-layer assembly of multilayers. *Chemical Reviews*, 114, 8883 (2014)

C.A. Custódio, M.T. Cerqueira, A.P. Marques, R.L. Reis, J.F. Mano - Cell selective chitosan microparticles as injectable cell carriers for tissue regeneration. *Biomaterials*, 43, 23 (2015)

C.R. Correia, R.P. Pirraco, M.T. Cerqueira, A.P. Marques, R.L. Reis, J.F. Mano - Semipermeable capsules wrapping a multifunctional and self-regulated co-culture microenvironment for osteogenic differentiation. *Scientific Reports*, 6, 21883 (2016)

S. Azevedo, A.M.S. Costa, A. Andersen, I.S. Choi, H. Birkedal, J.F. Mano - Bioinspired ultratough hydrogel with fast recovery, self-healing, injectability and cytocompatibility. *Advanced Materials*, 29, 1700759 (2017)

M.B. Oliveira, H.X.S. Bastos, J.F. Mano - Sequentially Moldable and Bondable Four-Dimensional Hydrogels Compatible with Cell Encapsulation. *Biomacromolecules*, 19(7), 2742-2749 (2018)

L.P. Ferreira, V.M. Gaspar, J.F. Mano - Bioinstructive microparticles for self-assembly of mesenchymal stem Cell-3D tumor spheroids. *Biomaterials*. 185, 240-275 (2018)

L.F. Santos, A.S. Silva, C.R. Correia, J.F. Mano - Physical immobilization of particles inspired by pollination. *Proceedings of the National Academy of Sciences (USA)*, 116(12), 5405-5410 (2019)

I. Borge, I. Choi, C.R. Correia, J.F. Mano - Nanogrooved microdiscs for bottom-up modulation of osteogenic differentiation. *Nanoscale*, 11(35), 16214-16221 (2019)

A.S. Silva, L.F. Santos, M.C. Mendes, J.F. Mano - Multi-layer pre-vascularized magnetic cell sheets for bone regeneration. *Biomaterials*, 231, 119664 (2020)

A.R. Sousa, C.M. Cruz, M.B. Oliveira, J.F. Mano - One-Step Rapid Fabrication of Cell-Only Living Fibers. *Advanced Materials*, 32(2), 1906305 (2020)

C.F. Monteiro, S.C. Santos, C.A. Custódio, J.F. Mano - Human platelet lysates-based hydrogels: a novel personalized 3D platform for spheroid invasion assessment. *Advanced Science*, 7(7), 1902398 (2020)

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