

# Curriculum Vitae – João Conde, PhD



## PERSONAL DETAILS

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Hobby: Painting

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Scopus ID: [56992468300](https://scopus.com/authid/detail.url?authorID=56992468300)

## EDUCATION

- **PhD in Biology**, Specialty **Nanobiotechnology**, *Summa cum laude*, **Universidade Nova de Lisboa**, Portugal and Instituto de Nanociencia de Aragón at **Zaragoza University**, Spain, 2013.
- **MSc in Biology**, *Summa cum laude*, **Universidade Lusófona de Humanidades e Tecnologias**, Portugal, 2008.

## APPOINTMENTS

- February 2020 – Present: **Invited Assistant Professor** at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- February 2020 – Present: **Group Leader** at **ToxOmics, NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- September 2019 – Present: Co-founder and Shareholder of **TargTex SA start-up company** (Portugal).
- October 2017 – January 2020: **Junior Researcher** at **Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa** (Portugal).
- April 2016 – April 2017: **Marie Curie Early-Stage Career Fellow** at School of Engineering and Materials Science at **Queen Mary University London** (UK).
- February 2014 – April 2016: **Marie Curie Early-Stage Career Fellow** at the **Massachusetts Institute of Technology (MIT), Harvard–MIT Division for Health Sciences and Technology, Institute for Medical Engineering and Science** (US).
- January 2010 – December 2013: **Science and Technology Foundation PhD Fellow** (FCT, SFRH/BD/ 62957/2009), **Universidade Nova de Lisboa** (Portugal) and **Zaragoza University** (Spain).
- January 2009 – January 2010: Research fellowship (PTDC/BIO/66514/2006), Research Centre for Human Molecular Genetics, **FCT/UNL, Universidade Nova de Lisboa** (Portugal).
- September 2007 – December 2008: Under-graduate fellowship, Molecular Genetics Department at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).

## BACKGROUND

- Cancer Nanomedicine, Nanotechnology and Materials Science.
- Oncology and Biomedicine.
- Multifunctional nanomaterials for Cancer therapy and diagnostics.
- Genetic therapies based on DNA/RNA, siRNA/miRNA.
- Gene therapy, drug delivery, tumor targeting.
- Smart clinical platforms based on new materials and technologies for local therapy in cancer.
- Gene therapy/Antisense DNA/RNA Interference/microRNA, gene editing CRISPR/Cas9.

- *In vivo* cancer mice models (breast, colon, gastric, glioblastoma, prostate, pancreatic, ovarian and lung cancer) – tumour induction and administration (systemic and local) of anti-cancer therapies.

### **TEACHING**

- 2020/Present – **Genetics** from **Master Course in Medicine** (Unidade Curricular de Genética do Mestrado Integrado em Medicina), **NOVA Medical School, Universidade Nova de Lisboa**.
- 2010/2013 – Invited Lab classes of **Molecular Diagnostics and Bionanotechnology** from **Master Course in Molecular Genetics and Biomedicine, FCT/UNL, Universidade Nova de Lisboa**.

### **MENTORING EXPERIENCE**

- Diana Castro Peixoto, **PhD student**, Universidade de Coimbra and Nova Medical School (Sept 2021-to present).
- Joana Amorim, **MSc student**, Nova Medical School (Sept 2021-to present).
- Diana Sousa, **PhD student**, Nova Medical School (Sept 2020-to present).
- Charlotte Baker, **PhD student**, Instituto de Medicina Molecular (Oct 2017-Oct 2019).
- Daniel Fulop, **MSc student**, Harvard University, Sophomore Internship (Jun 2015-Feb 2016).
- Cristina Violi, **MSc student**, student Socrates-Erasmus Programme Italy, (Feb 2013-Aug 2013).
- André Salvada, **BSc student** in Cell and Molecular Biology from New University of Lisbon, (Jan 2013-Mar 2013).
- Pedro Dionisio, **BSc student** in Cell and Molecular Biology from New University of Lisbon, (Mar 2011-Sept 2011).

### **JOURNAL REVIEWER**

- Nature Reviews Cancer; Nature Protocols; PNAS; Accounts of Chemical Research; Chemical Reviews; Advanced Drug Delivery Reviews; Progress in Polymer Science; Advanced Materials; ACS Nano; Advanced Functional Materials; Nature Asia Materials; Chemical Science; Theranostics; Small; Journal of Controlled Release; Nanoscale; Analytical Chemistry; Advanced Healthcare Materials; Scientific Reports; Nanomedicine; Nanotoxicology; Nanomedicine: NBM; Acta Biomaterialia; Journal of Materials Chemistry B; PLoS ONE; ACS Applied Materials & Interfaces; Bioconjugate Chemistry; Journal Biomedical Nanotechnology; Sensors & Actuators: B. Chemical; Advanced Science; Nanoscale Research Letters; Colloids and Surfaces B: Biointerfaces; Journal of Nanobiotechnology; Biomacromolecules; Drug Development and Industrial Pharmacy; Materials; Frontiers in Genetics; Critical Reviews in Oncology/Hematology; International Journal of Nanomedicine; Pharmaceutical Medicine; European Polymer Journal; Frontiers in Chemistry; Frontiers in Pharmacology; Journal of Biophotonics; Journal of Applied Biomedicine.

**Publons Review Metrics:** <https://publons.com/author/1358364/joao-conde#profile>

### **RESEARCH EVALUATOR**

- European Research Executive Agency, Brussels.
- The Swiss National Science Foundation, Switzerland.
- Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa, Portugal.
- Kingdom of Saudi Arabia Ministry of National Guard - Health Affairs, Saudi Arabia.

### **EDITOR**

- **Editorial Board**, Journal of Functional Biomaterials, MDPI (2021 - to present).

- **Editorial Board**, Materials, MDPI (2021 - to present).
- **Editorial Board**, Exploration, Wiley (2021 - to present).
- **Editorial Board**, VIEW, Wiley (2021 - to present).
- **Review Editor**, Frontiers Genetics - Toxicogenomics (2021 - to present).
- **Editorial Board**, Journal of Nanotheranostics, MDPI (2020 - to present).
- **Book editor**, “Handbook of Nanomaterials for Cancer Theranostics” by Elsevier (2017 - to present).
- **Volume Editor**, in the Advanced Nanomaterials Series, Elsevier (2016 - to present).
- **Editorial Board**, Nano Biomedicine and Engineering Journal (2016 - to present).
- **Associate Editor**, Frontiers in Bioengineering and Biotechnology (2015 - to present).
- **Associate Editor**, Frontiers in Molecular Biosciences (2015 - to present).
- **Associate Editor**, Frontiers in Materials (2015 - to present).
- **Guest Associate Editor**, Frontiers in Chemistry (2014 - to present).

## MEMBER

- March 2020 – Present: Active collaborator of the **Global Burden Disease (GBD)**, **Institute for Health Metrics and Evaluation (IHME)**, University of Washington (US).

## COLLABORATIONS

- **Massachusetts Institute of Technology (US)**, **Yale University (US)**, **Harvard Medical School (US)**, **Harvard University (US)**, **Broad Institute of MIT and Harvard (US)**, **Brigham and Women's Hospital (US)**, **Dana-Farber Cancer Institute (US)**, **University of Pennsylvania (US)**, Faculty of Medicine at **Tel Aviv University (Israel)**, **University of British Columbia (Canada)**, **Johns Hopkins University (US)**, **Case Western Reserve University (US)**, **University of Cambridge (UK)**, **University of Oxford (UK)**, **University Hospital Düsseldorf (Germany)**, **Dublin Institute of Technology (Ireland)**, Institute of Nano Biomedicine and Engineering at **Shanghai JiaoTong University (China)**, Centre for Cell Engineering at **University of Glasgow (UK)**, **Instituto di Cibernetica “E. Caianiello” (Italy)**, **Institute of Lung Biology and Disease at Helmholtz Zentrum München (Germany)**, **Technische Universität München (Germany)**, **Fundação Champalimaud (Portugal)**, **REQUIMTE (Portugal)**, **iMed.UL (Portugal)**.

## RESEARCH PROJECTS AS PI

- European Research Council - ERC Starting Grant: ERC-StG-2019-848325 – *GelGeneCircuit*: Profiling therapy and heterogeneity in cancer using bioresponsive nanohydrogels for the delivery of logic multicolor genetic circuits (2019-2024). *Funding 1.5M€*
- FCT Grant PTDC/BTM-MAT/4738/2020 – Biomimetic cell membrane-coated vitamin E-based micelles for multimodal pancreatic cancer nanotheranostics (2020-2023). *Funding 250K€*

## RESEARCH PROJECTS AS TEAM MEMBER

- Combined immUNotherapeutiC approach for targeting bone marrow microenvironment in Multiple Myeloma. FCT Grant, PTDC/MED-ONC/1215/2021 (2021-2024).
- Albumedix Ltd. - Recombinant albumin conjugates for cancer therapy (2018).
- SuprHAPolymers - Engineering self-assembly of hyaluronan-based glycopolymers with peptides (2016).
- NOF Corporation - Characterization of PEG-based hydrogels (2014-2015).
- NANOTRUCK- Multifunctional gold nanoparticles for gene therapy. EU, ERANET-NanoSciera<sup>+</sup> (2012-2014).

- Silence is golden (siAu) - Silencing the silencers via multifunctional gold nanoconjugates towards cancer therapy. FFCT/FCT/UNL, PTDC/BBB-NAN/1812/2012.
- Nanosystems for delivery of caged compounds. FFCT/FCT/UNL, PTDC/QUI-QUI/ 112597/2009.
- Sensitive and selective detection of DNA/RNA based on functionalized gold nanoparticles - application to pathogen detection, mutation detection and RNA quantification. FFCT/FCT/UNL, PTDC/BIO/66514/2006.

## PRIZES AND AWARDS

- 2021 - **Nanomaterials 2020 Young Investigator Award**, MDPI.
- 2021 - **Top2% Most Cited Researchers in Nanoscience and Nanotechnologies**, PLOS Biology.
- 2021 - **2021 Biomaterials Science Emerging Investigators**, Royal Society of Chemistry.
- 2019 - **ERC Starting Grant**: ERC-StG-2019-848325, European Research Council, EU.
- 2018 - **Junior Investigator**: FCT Stimulus of Scientific Employment, (CEECIND/01688/2017) National Science Foundation, PT.
- 2017 - **Wellcome Image Awards 2017**: Wellcome Trust, UK.
- 2016 - **Nano-Micro Letters Researcher Award**, Nature Research Society.
- 2016 - **National Cancer Institute Image award**: Cancer close up, USA.
- 2013 - **Marie Curie International Outgoing Fellowship** for Career Development, Marie Skłodowska-Curie actions (FP7-PEOPLE-2013-IOF).
- 2009 - **PhD Fellowship** - National Science Foundation - PhD Grant (FCT, SFRH/BD/62957/2009), PT.

## START-UP COMPANIES

- 2019 – Present: Co-founder of *TargTex SA*, Portuguese start-up: Targeted therapies for the treatment of brain cancer. *Portugal Ventures Funding 2M€ + Private Funding 2.0M€*

## PATENTS

1. Theranostic Nanoprobes for Overcoming Cancer Multidrug Resistance and Methods. **U.S. Application No. 62/118101. MIT Case No. 17685K**, MIT Docket No. 17685.117921.
2. RNA Triple Helix Structures, Compositions, and Methods. **U.S. Application No. 62/216969. MIT Case No. 18323 PCT**, MIT Docket No. 17648-0205.
3. Hydrogel particles, compositions, and methods. **U.S. Application No. 62/339434.**
4. Micro-RNA delivery compositions, devices, and methods. **U.S. Application No. 62/353622.**
5. Functionalized nanoparticles and compositions for cancer treatment and methods. **U.S. Application No. 62/334538.**
6. TRPV2 Antagonists. **WO Application No. PCT/PT2018/050035.**

## PUBLICATIONS

- Nearly **90 articles** in high impact journals in fields of Nanomedicine, Oncology and Cancer Therapies and Biomedicine (*The Lancet* **IF79.3**, *Nature Materials* **IF43.8**, *The Lancet Oncology* **IF41.3**, *Nature Nanotechnology* **IF39.2**, *JAMA Oncology* **IF31.8**, *The Lancet Gastroenterology & Hepatology* **IF18.5**, *Nature Communications* **IF14.9**, *PNAS* **IF11.2**, *Accounts of Chemical Research* **IF22.4**, *Progress in Materials Science* **IF39.6**, *Advanced Materials* **IF30.8**, *Materials Today* **IF26.4**, *Nano Today* **IF16.9**, *ACS Nano* **IF15.9**, *JACS* **IF15.4**, *Angewandte Chemie* **IF15.3**, *Advanced Functional Materials* **IF18.8**, *Advanced Drug Delivery Reviews* **IF13.3**, *ACS Central Science* **IF14.5**, *Trends in Cancer* **IF14.2**, *Trends in Biotechnology* **IF19.5**, *Matter* **IF15.6**,

*Biomaterials* **IF12.5**, *The Lancet Child & Adolescent Health* **IF11.3**, *Journal of Controlled Release* **IF7.9**, *Biosensors & Bioelectronics* **IF10.6**, *Nature Asia Materials* **IF10.5**).

• More than **30 articles as 1<sup>st</sup> author**, and more than **35 articles as corresponding author**, all cited more than **5700 times (h-index Google Scholar 38)**. Several of them have been selected as cover page of journals such as **The Lancet**, **Nature Nanotechnology** (Covid-19 Special Issue), **The Lancet Oncology**, **Trends in Cancer**, **ACS Nano**, **ACS Central Science**, **Adv. Functional Materials**, **JACS**, **Angewandte Chemie**, **ACS Sensors**, **Biomaterials Science**, **ACS Applied Bio Mat**, **Adv. Healthcare Materials**, **Analytical and Bioanalytical Chemistry** and **BioTechniques**.

## **PUBLICATIONS** (\* corresponding author)

(83 publications, Citations: 5735. h-index *Google Scholar*: 38, h-index *Scopus*: 32)

1. “The burden of non-communicable diseases in adolescents in 28 European countries, 1990-2019: A Systematic Analysis of the Global Burden of Diseases, Injuries, and Risk Factors Study.” **João Conde & GBD Consortium**. *The Lancet Child & Adolescent Health* (2022), just accepted.
2. “Nano-delivery of nucleic acids”. Bárbara B. Mendes, João Coniot, A. Avital, D. Yao, X. Jiang, X. Zhou, O. Adir, Y. Xiao, N. Sharf-Pauker, H. Liang\*, J. Shi\*, A. Schroeder\*, **João Conde\***. *Nature Reviews Methods Primers* (2022), just accepted.
3. “Global, Regional and National Burden of Colorectal Cancer, 1990-2019: A systematic examination for Global Burden of Disease 2019”. **João Conde & GBD Consortium**. *The Lancet Gastroenterology & Hepatology* (2022), just accepted.
4. “Prodrug polymeric nanoconjugates encapsulating gold nanoparticles for enhanced X-Ray radiation therapy in breast cancer” H. Nosrati, F. Seidi, A. Hosseinmirzaei, N. Mousazadeh, A. Mohammadi, Mo. Ghaffarlou, H. Danafar, **João Conde\*** and Ali Sharafi\*. *Advanced Healthcare Materials - Rising Star Issue* (2021). Featured on COVER
5. “Controlled delivery of gold nanoparticle-coupled miRNA therapeutics via an injectable self-healing hydrogel”. C.F.T. van der Ven, M.W. Tibbitt, **João Conde**, A. van Mil, J. Hjortnaes, P.A.F.M. Doevendans, J.P.G. Sluijter, E. Aikawa and Robert Langer. *Nanoscale* (2021) - Featured on COVER
6. “The global burden of adolescent and young adult cancer in 2019: An analysis of the Global Burden of Disease Study 2019”. **João Conde & GBD Consortium**. *The Lancet Oncology* (2021). Featured on COVER
7. “Cancer Incidence, Mortality, Years of Life Lost, Years Lived with Disability, and Disability-Adjusted Life Years for 29 Cancer Groups from 2010 to 2019: A Systematic Analysis of Cancer Burden Globally, Nationally, and by Socio-Demographic Index for the Global Burden of Disease Study 2019”. **João Conde & GBD Consortium**. *JAMA Oncology* (2021).
8. “Machine-readable Nanotechnology for future healthcare research”. Andzelika Lorenc, Bárbara B. Mendes, João Coniot, Diana P. Sousa, **João Conde\*** and Tiago Rodrigues\*. *Matter (Cell Press)* (2021).
9. “Global, regional, and national progress toward Sustainable Development Goal 3.2 for neonatal and child health: all-cause and cause-specific mortality findings from the Global Burden of Disease Study 2019”. **João Conde & GBD Consortium**. *The Lancet* (2021). Featured on COVER

10. “Facts and Figures on Materials Science and Nanotechnology Progress and Investment”. S. Talebian, T. Rodrigues, J. das Neves, B. Sarmiento, R. Langer, **João Conde\***. *ACS Nano* (2021). Featured on COVER
11. “Nanotechnology-based strategies to target and modulate the tumor microenvironment”. Barbara Mendes, João Coniot, Diana Sousa, **João Conde\***. *Trends in Cancer* (2021). Featured on COVER.
12. “Allosteric Antagonist Modulation of TRPV2 by Piperlongumine Impairs Glioblastoma Progression”. **João Conde**, R.A. Pumroy, C. Baker, T. Rodrigues, A. Guerreiro, B.B. Sousa, M.C. Marques, B.P. de Almeida, S. Lee, E.P. Leites, D. Picard, A. Samanta, S.H. Vaz, F. Sieglitz, M. Langini, M. Remke, R. Roque, T. Weiss, M. Weller, Y. Liu, S. Han, F. Corzana, V.A. Morais, C.C. Faria, T. Carvalho, P. Filippakopoulos, B. Snijder, N.L. Barbosa-Morais, V.Y. Moiseenkova-Bell, G.J.L. Bernardes. *ACS Central Science* (2021) Featured on COVER.
13. “CRISPR Systems for COVID-19 Diagnosis” H. Rahimi, M. Salehiabar, M. Barsbay, M. Ghaffarlou, T. Kavetsky, A. Sharafi, S. Davaran, Subhash C. Chauhan, H. Danafar, S. Kaboli, H. Nosrati, M.M. Yallapu, and **João Conde\***. *ACS Sensors* (2021) Featured on COVER.
14. “Ultrahigh penetration and retention of graphene quantum dot mesoporous silica nanohybrids for image guided tumor regression”. R. Prasad\*, N.K. Jain, A.S. Yadav, M. Jadhav, N.N.V. Radharani, M. Gorain, G.C. Kundu, **João Conde\***, R. Srivastava\*. *ACS Applied Bio Materials* (2021) Featured on COVER.
15. “Osteogenic Differentiation of Human Mesenchymal Stem Cells by the Single Action of Luminescent Polyurea Oxide Biodendrimers”. Rita F. Pires, **João Conde\*** and Vasco D.B. Bonifacio\*. *ACS Applied Bio Materials* (2020).
16. “Revisiting Gene Delivery to the Brain: Silencing and Editing” (2021 Biomaterials Science Emerging Investigators Issue). João Coniot, Sepehr Talebian, Susana Simões, Lino Ferreira\*, **João Conde\***. *Biomaterials Science* (2020) Featured on COVER.
17. “Stepwise Assembly of Multimode Liposomal Nanotheranostic Agent for Targeted In Vivo Bioimaging and NIR Light Mediated Cancer Therapy”. R. Prasad, N.K. Jain, A.S. Yadav, D.S. Chauhan, J. Devrukhkar, M.K. Kumawat, S. Shinde, M. Gorain, A.S. Thakor, G.C. Kundu, **João Conde\***, R. Srivastava\*. *Nature Communications Biology* (2020).
18. “Biomimetic cancer cell membrane coated-nanosystems as next-generation cancer therapies”. M. Pereira-Silva, A.C. Santos, **João Conde**, C. Hoskins, A. Concheiro, C. Alvarez-Lorenzo, F. Veiga. *Expert Opinion on Drug Delivery* (2020).
19. “Why Go NANO on COVID-19 pandemic?”. Sepehr Talebian and **João Conde\***. *Matter (Cell Press)* (2020).
20. “Nanotechnology-based disinfectants and sensors for SARS-CoV-2” S. Talebian, G.G. Wallace, A. Schroeder, F. Stellacci and **João Conde\***. *Nature Nanotechnology* (2020) COVID-19 Special Issue.
21. “Localized Nanotheranostics: Recent developments in Cancer Nanomedicine”. R. Prasad, N.K. Jain, **João Conde\***, R. Srivastava. *Materials Today Advances* (2020).
22. “Above and beyond Cancer Therapy: translating biomaterials into clinics” **João Conde\*** *Trends in Cancer* (2020).
23. “Tetrazine carbon nanotubes for pretargeted in vivo ‘click-to-release’ bioorthogonal imaging” H. Li, **João Conde**, A. Guerreiro, G.J.L. Bernardes. *Angewandte Chemie International Edition* (2020). VIP paper. Featured on COVER.
24. “Platinum-triggered Bond-cleavage of Pentynoyl amide and N-propargyl handles for Drug-Activation” B.L. Oliveira, B.J. Stenton, Unnikrishnan V.B., C.R. Almeida, **João Conde**, M.

- Negrão, F.S.S. Schneider, C. Cordeiro, M.G. Ferreira, G.F. Caramori, J.B Domingos, R. Fior and G.J.L. Bernardes. *Journal of the American Chemical Society* (2020). Featured on COVER.
25. “Prolonged Local In Vivo Delivery of Stimuli-Responsive Nanogels That Rapidly Release Doxorubicin in Triple-Negative Breast Cancer Cells”. Y. Zhang, P. Dosta, **João Conde**, N. Oliva, M. Wang and N. Artzi. *Advanced Healthcare Materials* (2020). Featured on COVER.
  26. “Oral pH sensitive GNS@ab Nanoprobes for targeted therapy of Helicobacter Pylori without disturbance gut microbiome” X. Zhi, Y. Liu, L. Lin, M. Yang, L. Zhang, L. Zhang, Y. Liu, G. Alfranca, L. Ma, Q. Zhang, H. Fu, **João Conde**, X. Di, J. Ni, J. Song, D. Cui. *Nanomedicine: Nanotechnology, Biology and Medicine* (2019).
  27. “Gastric parietal cell and Intestinal goblet cell secretion: a novel cell-mediated in vivo nanoparticle clearance pathway enhanced with diarrhea via Chinese Herbs”. Y. Liu, K. Liu, M. Yang, Y. Han, Q. Zhang, **João Conde**, Y. Yang, Y. Han, G. Alfranca, Y. Wang, J. Song, Y. Zhang, J. Ni, J.M. de la Fuente, D. Cui. *Nanoscale Research Letters* (2019).
  28. “Biopolymers for anti-tumor implantable drug delivery systems: Recent advances and future outlook”. S. Talebian, S. Wadeb, J. Foroughi, K. L. Vineb, A. Dolatshahi-pirouz, M. Mehrali, **João Conde**, G. Wallace. *Advanced Materials* (2018).
  29. “Ferritin nanocarrier traverses the blood brain barrier and kills glioma”. K. Fan, X. Jia, M. Zhou, **João Conde**, J. He, J. Tian, X. Yan. *ACS Nano* (2018).
  30. “Nanoparticle-antagomiR based targeting of miR-31 to induce osterix and osteocalcin expression in mesenchymal stem cells”. M. McCully, **João Conde**, P.V. Baptista, M. Mullin, M.J. Dalby, C.C. Berry. *PLOS ONE* (2018).
  31. “Plasmonic gold nanoparticles for detection of fungi and human cutaneous fungal infections” T. Sojinrin, **João Conde\***, K. Liu, J. Curtin, H.J. Byrne H, D. Cui, F. Tian\*. *Analytical and Bioanalytical Chemistry* (2017). Featured on COVER.
  32. “Fullerene: Biomedical Engineers Get to Revisit an Old Friend” S. Goodarzi, T. Da Ros, **João Conde**, F. Sefat and M. Mozafari. *Materials Today* (2017).
  33. “Designing Hydrogels for On-Demand Therapy” N. Oliva, **João Conde**, K. Wang and N. Artzi. *Accounts of Chemical Research* (2017).
  34. Smart NIR linear and nonlinear optical nanomaterials for cancer theranostics: Prospects in photomedicine”. T.M. Liu, **João Conde\***, T. Lipiński, A. Bednarkiewicz and C-C. Huang. *Progress in Materials Science* (2017).
  35. “Gold Nanostars for real-time intracellular and in vivo SERS detection combined with drug delivery via plasmonic-tunable Raman/FTIR imaging”. F. Tian, **João Conde\***, C. Bao, Y. Chen, J. Curtin and D. Cui. *Biomaterials* (2016).
  36. “Revisiting the ‘one material fits all’ rule for cancer nanotherapy”. **João Conde\***, N. Oliva, N. Artzi\*. *Trends in Biotechnology* (2016).
  37. “Biomaterials for Metastasis: Bridging the Gap between Basic and Translational Research” **João Conde**, N. Shomron and N. Artzi. *Advanced Healthcare Materials* (2016). VIP paper. Featured on COVER.
  38. “Revisiting the classification of NIR absorbing/emitting Nanomaterials for in vivo bio-applications”. T-M. Liu, **João Conde\***, T. Lipinski, A. Bednarkiewicz, C-C. Huang. *Nature Asia Materials* (2016).
  39. “3D hydrogel scaffold doped with 2D materials for biosensors and bioelectronics”. H.S. Song, O.S. Kwon, **João Conde\*** and N. Artzi. *Biosensors & Bioelectronics* (2016).

40. “Gold Nanoprisms as a hybrid in vivo Cancer Theranostic platform for in situ Photoacoustic Imaging, Angiography and localized Hyperthermia”. C. Bao, **João Conde**, F. Pan, C. Li, C. Zhang, F. Tian, S. Liang, J.M. de la Fuente and D. Cui. *Nano Research* (2016).
41. “Chiral Antioxidant-based Gold Nanoclusters Reprogram DNA Epigenetic Patterns”. Y. Ma, H. Fu, C. Zhang, S. Cheng, J. Gao, Z. Wang, W. Jin, **João Conde\*** and D. Cui. *Scientific Reports* (2016).
42. “Local triple-combination therapy results in tumour regression and prevents recurrence in a colon cancer model”. **João Conde\***, N. Oliva, Y. Zhang and N. Artzi. *Nature Materials* (2016). Highlighted in *Science Translational Medicine* and *Science Bulletin*.
43. “Local microRNA delivery targets Palladin and prevents metastatic breast cancer”. A. Gilam, **João Conde**, D. Weissglas-Volkov, N. Oliva, N. Artzi, N. Shomron. *Nature Communications* (2016).
44. “Self-assembled RNA-triple-helix hydrogel scaffold for microRNA modulation in the tumour microenvironment”. **João Conde\***, N. Oliva, M. Atilano, H.S. Song, N. Artzi. *Nature Materials* (2016). Highlighted in *Science Translational Medicine* and *The Scientist*.
45. “Dual-Color Emissive Upconversion Nanocapsules for Differential Cancer Bioimaging in vivo”. O.S. Kwon, H.S. Song, **João Conde**, H. Kim, N. Artzi and J.H. Kim. *ACS Nano* (2016).
46. “Implantable hydrogel embedded dark-gold nanoswitch as a theranostics probe to sense and overcome cancer multidrug resistance”. **João Conde\***, N. Oliva, N. Artzi. *PNAS* (2015). Highlighted in *Nature Reviews Drug Discovery*.
47. “Bioresponsive antisense DNA gold nanobeacons as a hybrid in vivo theranostics platform for the inhibition of cancer cells and metastasis”. C. Bao, **João Conde\***, J. Curtin, N. Artzi, F. Tian, D. Cui. *Scientific Reports* (2015).
48. “Personalizing biomaterials for precision nanomedicine in light of local tissue microenvironment”. N. Oliva, S. Unterman, Y. Zhang, **João Conde**, H.S. Song and N. Artzi. *Advanced Healthcare Materials* (2015). Featured on COVER.
49. “Dual targeted immunotherapy via in vivo delivery of bio-hybrid RNAi-peptide nanoparticles to tumour-associated macrophages and cancer cells”. **João Conde\***, C. Bao, Y. Tan, D. Cui, E.R. Edelman, H.S. Azevedo, H.J. Byrne, N. Artzi, F. Tian. *Advanced Functional Materials* (2015). VIP paper. Featured on COVER.
50. “RNAi nanomaterials targeting immune cells as an anti-tumor therapy: the missing link in cancer treatment? **João Conde\***, C. Arnold, F. Tian and N. Artzi. *Materials Today* (2015)
51. “The next generation of smart gold nanobeacons: nanotheranostics is ready for prime-time”. **João Conde\*** and N. Artzi. *Nanomedicine (Lond.)* (2015).
52. “Are RNAi and miRNA therapeutics truly dead?”. **João Conde\***, N. Artzi. *Trends in Biotechnology* (2015).
53. “Target-Responsive DNA/RNA nanomaterials for microRNA sensing and inhibition: the jack-of-all-trades in cancer nanotheranostics?”. **João Conde\***, E.R. Edelman, N. Artzi. *Advanced Drug Delivery Reviews* (2015).
54. “15 years on siRNA delivery: beyond the State-of-the-Art on inorganic nanoparticles for RNAi therapeutics”. **João Conde\***, A. Ambrosone, Y. Hernandez, F. Tian, M. McCully, C.C. Berry, P.V. Baptista, C. Tortiglione, J.M. de la Fuente. *Nano Today* (2015).
55. “Editorial: Cancer Nanotheranostics - What have we learned so far?”. **João Conde\***, F. Tian, J.M. de la Fuente, P.V. Baptista. *Frontiers in Chemistry* (2015).
56. “The Golden Age in Cancer Nanobiotechnology: Quo vadis?”. **João Conde\***. *Frontiers in Bioengineering and Biotechnology* (2015).



57. "RNAi-based glyconanoparticles trigger apoptotic pathways for in vitro and in vivo enhanced cancer-cell killing". **João Conde**, F. Tian, Y. Hernandez, C. Bao, P.V. Baptista, D. Cui, T. Stoöger and J.M. de la Fuente. *Nanoscale* (2015).
58. "Significance of the balance between intracellular glutathione and polyethylene glycol for successful release of small interfering RNA from gold nanoparticles" M. McCully, Y. Hernandez, **João Conde**, P.V. Baptista, J.M. de la Fuente, A. Hursthouse, D. Stirling and C.C. Berry. *Nano Research* (2015).
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78. “Genotoxic effects of occupational exposure to lead and influence of polymorphisms in genes involved in lead toxicokinetics and in DNA repair”. J. García-Lestón, J. Roma-Torres, M. Vilares, R. Pinto, J. Prista, J.P. Teixeira, O. Mayan, **João Conde**, M. Pingarilho, J.F. Gaspar, E. Pásaro, J. Méndez and B. Laffon. *Environment International* (2012).
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80. “In vitro Transcription and Translation Inhibition via DNA functionalized Gold Nanoparticles” **João Conde**, J.M. de la Fuente and P.V. Baptista. *Nanotechnology* (2010).
81. “Use of Cyclodextrins as Scavengers of Inhibitory Photo-products in Light controlled in vitro Synthesis of RNA”. A. Vidal Pinheiro, **João Conde**, A.J. Parola, J.C. Lima and P.V. Baptista. *Journal of Photochemistry and Photobiology A: Chemistry* (2010).
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#### **BOOKS and BOOK CHAPTERS** (\* corresponding author)

1. “Handbook of Nanomaterials for Cancer Theranostics” 1<sup>st</sup> Edition, *Editor: João Conde*, Elsevier, 2018.
2. “Displaying biofunctionality on materials through templated self-assembly”, K. Shuturminska, C. O'Malley, D. W. P. Collis, **João Conde**, H. S. Azevedo, *in Self-Assembling Biomaterials: Molecular Design, Characterization and Application in Biology and Medicine*, Elsevier, 2018.
3. “Empowering the potential of cell-penetrating peptides for targeted intracellular delivery via molecular self-assembly”, Y. Shi, **João Conde**, H. S. Azevedo, *in Peptides and Peptide-based Biomaterials and their Biomedical Applications*, Eds. A. Sunna, A. Care, P. Bergquist, *Springer International Publishing AG*, Cham.
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5. “RNA Quantification Using Noble Metal Nanoprobes: Simultaneous Identification of Several Different mRNA Targets Using Colour Multiplexing and Application to Cancer Diagnostics.” **João Conde**, G. Doria, J.M. de la Fuente and P.V. Baptista\*. *in* Nanoparticles in Biology and Medicine: Methods and Protocols Series (2012). *Humana Press, Springer Protocols*.

### CONFERENCE & SEMINAR PRESENTATIONS

- Biotech in Action S2: Water Cooler Talk - Massachusetts Institute of Technology (MIT), Harvard–MIT Division for Health Sciences and Technology, July 2021, Boston, Massachusetts, USA (*Invited*).
- “The story behind my path in Cancer NanoMedicine” at the PostDoc ShowCase 2<sup>nd</sup> edition - Department of Pharmacy, University of Naples Federico II, June 2021, Italy (*Invited*).
- 9<sup>th</sup> Session IST- MedNetworking – To see or not to see: How Nanotechnology is redefining Medicine, Instituto Superior Técnico (IST), May 2021, Portugal (*Invited*).
- Keynote Speaker - 13<sup>o</sup> Encontro Nacional de Química Orgânica/6<sup>o</sup> Encontro Nacional de Química Terapêutica (13ENQO/6ENQT), January 2020, Portugal (*Invited*).
- Seminar, March 2017, University of Glasgow, Institute of Molecular Cell and Systems Biology, Glasgow, Scotland (*Invited*).
- Nanomedicine Seminars, February 2017, Trinity College Dublin, School of Medicine, Dublin, Ireland (*Invited*).
- 10<sup>th</sup> World Biomaterials Congress, May 2016, Montreal, Canada.
- 11<sup>th</sup> Annual Broad Retreat - Broad Institute of MIT and Harvard, December 2015, Boston, Massachusetts, USA.
- Society for Biomaterials 2015, April 2015, North Carolina, USA.
- 4<sup>th</sup> International Conference on Multifunctional, Hybrid and Nanomaterials, March 2015, Barcelona, Spain.
- 8<sup>th</sup> International Conference of Coelenterate Biology, December 2013, North Beach, Eilat, Israel.
- Collaborative Congress of the European Society for Gene and Cell Therapy and the Spanish Society for Gene and Cell Therapy, October 2013, Madrid, Spain.
- International Conference on Materials for Advanced Technologies 2013. Symposium R: Ecological and Health Impact of Nanomaterials and Nanotechnology, July 2013, Singapore.
- European Conference of Human Genetics 2013, June 2013, Paris, France.
- E-MRS 2013 SPRING MEETING, Bionanomaterials for imaging, sensing and actuating, May 2013, Strasbourg, France.
- Elsevier 3<sup>rd</sup> International Conference on Multifunctional, Hybrid and Nanomaterials (Hybrid Materials 2013), March 2013, Sorrento, Italy.
- Materials Research Society Fall Meeting, November 2012, Boston, Massachusetts, USA.
- NanoMed2012, International Conference on Nanotechnology in Medicine, November 2012, University College London, London, UK.
- American Chemical Society Spring 2012 National Meeting, March 2012, San Diego, California, USA.
- Miami 2012 Winter Symposium: Nanotechnology in Biomedicine, February 2012, Miami, USA.
- SPIE West 2012, San Francisco, USA.
- SPIE West 2011, Colloidal Quantum Dots/Nanocrystals for Biomedical Applications VI, February 2011, San Francisco, USA.
- TNT2010 – Trends in Nanotechnology, September 2010, Braga, Portugal.
- National Congress MicroBiotec'09, 2009, Vilamoura, Portugal.

- EURONANOFORUM 2009. Nanotechnology for Sustainable Economy. European and International Forum on Nanotechnology, June 2009, Prague, Czech Republic.
- XXXIV Genetic Journeys - Human Cancer Genetics and Genotoxicity, Portuguese Society of Human Genetics, 2009, Lisbon, Portugal.