CURRICULUM VITAE OF RAQUEL CRUZ DA CONCEIÇÃO

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URL for web site: www.linkedin.com/in/rqlcdc; http://scholar.google.ch/citations?user=Hib48fcAAAAJ&hl=en; http://ibeb.ciencias.ulisboa.pt/raquel-conceicao

• SUMMARY

Award winning researcher and professor with a significant record of peer-reviewed publications and funded European grants. First doctorate researcher in Portugal in the area of microwave medical imaging, who was the youngest COST Action chair in this area of research: COST Action TD1301. I am an Assistant Professor with habilitation at the University of Lisbon, Portugal, and also the coordinator of the Institute of Biophysics and Biomedical Engineering. My main area of research is the development of microwave imaging techniques to detect and classify breast cancer. I have other research interests which cover machine learning modelling techniques and more general biomedical engineering and applied electronic engineering topics. I am the author of 34 journal papers, 61 conference proceedings and editor/author of 4 books. I have supervised (past and ongoing) the work of 7 PhD students, 1 post-doctoral researcher, and 30 Masters students, and 24 undergraduate scientific projects, plus 5 other research projects.

• EDUCATION

2023 Habilitation ("Agregação") in Biomedical Engineering and Biophysics – Faculdade de Ciências, Universidade de Lisboa, FCUL, Portugal

2017 Post Graduate degree in Data Science [30 ECTS] – Faculdade de Ciências, Universidade de Lisboa, FCUL (Faculty of Science, University of Lisbon), Portugal

2011 PhD in Electrical & Electronic Engineering – Electrical & Electronic Engineering, College of Engineering and Informatics, National University of Ireland – Galway (NUIG), Ireland

2007 BSc+MSc in Biomedical Engineering – Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, FCTUNL (Faculty of Science and Technology, New University of Lisbon), Portugal

• CURRENT POSITIONS

2016 – Assistant Professor with Habilitation ("Agregação") – Faculdade de Ciências, Universidade de Lisboa (FCUL), Portugal: lecturer, supervisor of 28 MSc and 7 PhD students, coordinator of BSc+MSC and MSc degree in Biomedical Engineering and Biophysics between 2019-2022 and 2021-2022, respectively.

2022 – Coordinator of Institute of Biophysics and Biomedical Engineering – Faculdade de Ciências, Universidade de Lisboa (FCUL).

• PREVIOUS POSITIONS

2013 – 2016 Invited Assistant Professor – FCUL, Portugal: lecturer, and MSc and PhD students' supervisor

2016 Post-Doctoral Computer Scientist/Biomedical Engineer – Department of Oncology, University of Oxford, UK

2014 – 2016 Post-Doctoral Researcher – Institute of Biomedical Engineering, University of Oxford, UK

2012 – 2015 Post-Doctoral Researcher/Investigator – Instituto de Biofísica e Engenharia Biomédica, IBEB (Institute of Biophysics and Biomedical Engineering), FCUL, Portugal

2011 Automation and Control Engineer in the automotive industry – IASYS, Portugal

2007 – 2010 Teaching Assistant – Electrical & Electronic Engineering, Engineering and Informatics, NUIG, Ireland

2006 – 2007 Teaching Assistant – Research Technician – Department of Physics, FCTUNL, Portugal

2005 – 2006 Lecturer – Department of Electronic Engineering, FCTUNL, Portugal

• FELLOWSHIPS & GRANTS

2018 – 2022 Innovative Training Network, Marie Sklowdoska-Curie Action H2020 (Beneficiary), 764479, FCUL, Portugal

2013 – 2015 Intra-European Fellowship, Marie Curie 7th FP, 301269, FCUL, Portugal

2013 – 2017 Chair of COST Action, "Development of a Collaborative Network to Accelerate Technological, Clinical and Commercialisation Progress in the Area of Medical Microwave Imaging" (TD1301)

2012 Post-doctoral scholarship, funded by Fundação para a Ciência e a Tecnologia (Foundation for Science and Technology), SFRH/BPD/79735/2011, FCUL, Portugal

2007 – 2010 PhD scholarship, Science Foundation Ireland, "The Development of Ultra Wide Band (UWB) Scanning Techniques for Early Detection of Cancer", 07/RFP/ENEF420, NUIG, Ireland

2005 – 2006 Erasmus scholarship, Universidade Nova de Lisboa (New University of Lisbon), Portugal

- **PRIZES AND AWARDS**

2019 Prize ANACOM - URSI Portugal for the 2nd best student paper (senior co-author of paper), presented at the 13th Congress of the URSI Portuguese Committee, Lisbon, Portugal

2018 Prize ANACOM - URSI Portugal for the 3rd best student paper (senior co-author of paper), presented at the 12th Congress of the URSI Portuguese Committee, Lisbon, Portugal

2018 Young Scientist Award 2018, awarded at the 2nd URSI Atlantic Radio Science Meeting (AT-RASC), Gran Canaria, Spain

2017 Prize ANACOM-URSI Portugal for the best scientific work (co-author) in the area of radioelectricity, Portugal

2017 Young Scientist Award 2017, awarded at the 32nd URSI General Assembly and Scientific Symposium (GASS), Montreal, Canada

2015 Students, Young Researchers and Innovators - ICT 2015 award to attend the ICT 2015 Innovate, Connect, Transform event, Lisbon, Portugal

2014 Young Scientist Award 2014, awarded at the 31st URSI General Assembly and Scientific Symposium (GASS), Beijing, China

2014 Marie Curie Alumni Association (MCAA) Micro Travel Grant 2014 to attend the 8th European Conference on Antennas and Propagation (EuCAP), The Hague, The Netherlands, April 2014

2013 Prize ANACOM-URSI Portugal for the best scientific work in the area of radioelectricity, Portugal

2013 NSS/MIC/RTSD 2013 Trainee Award for IEEE Medical Imaging Conference, South Korea

2013 Best paper award at the 8th International Conference on Systems (ICONS), Spain

2012 NSS/MIC/RTSD 2012 Trainee Award for IEEE Medical Imaging Conference, USA

2010 Best presentation with Economical Potential at Research Day for College of Engineering, NUIG, Ireland

2008 2nd best poster at Research Day for College of Engineering, NUIG, Ireland

- **COMMISSIONS OF TRUST**

2020 – Topic Editor for the journal Sensors

2021 Topic Editor for the journal Processes

2019-2021 Evaluator for H2020-FET-OPEN

2019 Evaluator for H2020-MSCA-IF

2018 & 2019 FCT National Evaluation Panel for PhDs in the Scientific Panel: Bioengineering and Biotechnology

2018 Foreign Expert for Czech Technical University Prague, accreditation of Biomedical Engineering programme

2017 & 2019 Evaluator for progress and final review of H2020-RIA (Research and Innovation Action) project DESIREE

2017 European Commission project reviewer for Curam, Ireland

2013 – Associate Editor for the journal Medical Physics

2013 – Scientific Evaluator for: COST Actions

2012 – Co-responsible for the research area "Multimodal Imaging Techniques" at IBEB, FCUL, Portugal

2009 – Reviewer for several journal and peer-reviewed conferences

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2023 – Vice-president of the URSI Portuguese Committee for Commission K "Electromagnetics in Biology and Medicine"

2022 – Member of MTTs TC-28 Biological Effects and Medical Applications Committee

2017 – URSI Individual Member (MURSI), member M1730515688 (appointment for life)

2016 – The European Association on Antennas and Propagation (EurAAP) Member, member 2016/2324

2013 – Marie Curie Alumni Association (MCAA)

- **LANGUAGES**

Portuguese – Mother tongue; English – Proficiency (C2); Spanish – Proficiency (C1); French – Independent (B2)

- **HARD SKILLS**

Very good knowledge: Machine Learning, Data Mining, Data Science, programming languages for Matlab, Python, Windows Operating Systems, Microsoft Office tools such as Word, Excel, PowerPoint and Visio

Good knowledge: GATE (Geant4 Application of Tomographic Emission) for Monte Carlo simulation, HTML, C/C++, Fortran, Assembly, Visual Basic and language for LaTeX, Linux Operating System

Basic knowledge: IDL, PostgreSQL, image processing, Image Pro-Plus 6, DicomWorks and ISeg

- **SOFT SKILLS**

Teamwork skills gained through writing/applying for multidisciplinary grants with several international researchers, and group research (collaborated/co-authored with up to 43 international researchers)

Good communication and organisational skills gained through my experience as lecturer, expert speaker, project management experience, outreach activities, as well as writing and reviewing for grants, peer-reviewed journal and conference papers, and applying for several individual and group research grants

Self-focused, goal-oriented and very rigorous researcher, which is reflected on the fact that my Ph.D. duration was only 3 years and also on the record of publications and awarded funding schemes

Good ability to adapt to multicultural environments gained through several academic experiences abroad, number of foreign languages spoken, volunteering abroad and travelling

- **PUBLICATION SUMMARY**

<table>
<tr><td rowspan="2">Total publications

96</td><td rowspan="2">Publications as first and senior author:
26 and 34</td><td>h-Index</td><td>Number of citations</td><td>Source of citation data</td></tr>
<tr><td>17</td><td>1131</td><td>Google Scholar</td></tr>
<tr><td></td><td></td><td>15</td><td>627</td><td>Scopus</td></tr>
<tr><td>Journal Articles
34</td><td>Books, book chapters
4</td><td>Conference Publications
61</td><td>Years since PhD
12</td><td>Years since first Academic Employment
11</td></tr>
</table>

Journal publications:

1. “Dielectric characterization of healthy human teeth from 0.5 GHz to 18 GHz with an open-ended coaxial probe”, Sensors, 2023
2. “Biometric Recognition: a Systematic Review on Electrocardiogram Data Acquisition Methods”, Sensors, 2023
3. “Evaluating the Performance of Algorithms in Axillary Microwave Imaging towards Improved Breast Cancer Staging”, Sensors, 2023
4. "Experimental Assessment of Axillary Lymph Node Microwave Tomography using Anthropomorphic Phantoms", IEEE JERM, 2023
5. “Modelling Level I Axillary Lymph Nodes Depth for Diagnostic Imaging Technologies”, Physica Medica, 2022
6. “Initial Study Using Electrocardiogram for Authentication and Identification”, Sensors, 22(6), 2202, 2022.
7. “Experimental Evaluation of an Axillary Microwave Imaging System to Aid Breast Cancer Staging”, IEEE JERM, 61(1), 68-76, accepted in 2021, 2022.
8. “Development of 3D MRI-Based Anatomically Realistic Models of Breast Tissues and Tumours for Microwave Imaging Diagnosis”, 21(24), 2021.
9. “Application of Machine Learning to Predict Dielectric Properties of In Vivo Biological Tissue”, 21(20), 2021.
10. “Development of MRI-based Axillary Numerical Models and Estimation of Axillary Lymph Node Dielectric Properties for Microwave Imaging”, MedPhys, 48, 5974-5990, 2021.
11. “Study of Freezing and Defrosting Effects on Complex Permittivity of Biological Tissues”, IEEE AWPL, 20(12), 2210-2214, 2021.
12. “Evaluation of Refraction Effects in Dry Medical Microwave Imaging Setups”, IEEE AWPL, 20(4), 617-621, 2021.
13. “Development of an Anthropomorphic Phantom of the Axillary Region for Microwave Imaging Assessment”, Sensors, 20(17), 4968, 2020.
14. “Characterisation of Ex Vivo Liver Thermal Properties for Electromagnetic-Based Hyperthermic Therapies”, Sensors, 20(10), 3004, 2020.

15. "Development of a 3D Anthropomorphic Phantom Generator for Microwave Imaging Applications of the Head and Neck Region", Sensors, 20(7), 2029, 2020.
16. "Classification of Breast Tumor Models with a Prototype Microwave Imaging System", MedPhys, 47(4), 1860-1870, 2020.
17. "Optimal b-values for Diffusion Kurtosis Imaging in Invasive Ductal Carcinoma versus Ductal Carcinoma In Situ Breast Lesions", Australasian Physical & Engineering Sciences in Medicine, 1-15, 2019.
18. "Gamma Distribution Model in the Evaluation of Breast Cancer through Diffusion-Weighted MRI: A Preliminary Study", JMRI, vol. 50(1), 230-238, 2019.
19. "Diagnosing Breast Cancer with Microwave Technology: remaining challenges and potential solutions with machine learning", Diagnostics, vol. 8(2), 36, 1-22, 2018.
20. "Development of Clinically-Informed 3D Tumor Models for Microwave Imaging Applications", IEEE AWPL, 99, 2015.
21. "Other Applications of Medical Microwaves – Breast Tumour Classification", New Horizons in Translational Medicine, 2, 2, 62-63, 2015.
22. "Compressive-Sampling for Time Critical Microwave Imaging Applications", IET HTL, 1, 1, 6-12, 2014.
23. "Optimization of Convergent Collimators for Pixelated SPECT Systems", MedPhys, 40, 6, 062501, 2013.
24. "Numerical Modelling for Ultra Wideband Radar Breast Cancer Detection and Classification", PIERB, 34, 145-171, 2011.
25. "Evolving Spiking Neural Network Topologies for Breast Cancer Classification in a Dielectrically Heterogeneous Breast", PIERL, 25, 153-162, 2011.
26. "The Effects of Compression on Ultra Wideband Radar Signals", PIER, 117, 51-65, 2011.
27. "Spiking Neural Networks for Breast Cancer Classification in a Dielectrically Heterogeneous Breast", PIER, 113, 413-428, 2011.
28. "Effects of Dielectric Heterogeneity in the Performance of Breast Tumour Classifiers", PIERM, 17, 73-86, 2011.
29. "Evaluation of Features and Classifiers for Classification of Early-Stage Breast Cancer", JEMWA, 25, 1-14, 2011.
30. "Spiking Neural Networks for Breast Cancer Classification Using Radar Target Signatures", PIER C, 17, 79-94, 2010.
31. "Support Vector Machines for the Classification of Early-Stage Breast Cancer Based on Radar Target Signatures", PIER B, 23, 311-327, 2010.
32. "Investigation of Classifiers for Early-Stage Breast Cancer Based on Radar Target Signatures", PIER, 105, 295-311, 2010.
33. "Comparison of Planar and Circular Antenna Configurations for Breast Cancer Detection Using Microwave Imaging", PIER, 99, 1-20, 2009.
34. "FDTD Modeling of the Breast: A Review", PIER B, 18, 1-24, 2009.

Conference publications:

1. "Breast MRI Multi-Tumor Segmentation using 3D Region Growing", CIARP, Coimbra, Portugal.
2. "Breast MRI Multi-Tumor Segmentation Using 3D Region Growing: Preliminary Results", RECPAD 2023, Coimbra, Portugal.
3. "Electrocardiogram for Biometric Recognition: Collectability, Stability and Application Challenges", EPIA2023, Faial, Portugal.
4. "Radiologic-histopathologic registration for biological validation of prostate cancer radiomics signatures", 22nd International Cancer Imaging Society Meeting and Annual Teaching Course, London, UK, 2023.
5. "Repository of Anthropomorphic Models of the Breast Including Normal Tissues, and Benign and Malignant Tumors for Microwave Imaging Research", EuCAP 2023
6. "Validation of Dielectric Properties Estimation from Magnetic Resonance Images to Accelerate Medical Microwave Applications", EuCAP 2023
7. "Harmonisation of measurement method and reporting method of dielectric properties of tissues", EuCAP 2023
8. Development of mechanically and dielectrically realistic breast models for microwave therapy and healing simulations", EuCAP 2023
9. Experimental Assessment of the Effects of Increasing Illumination Angles to Maximise Useful Information in Axillary Microwave Tomography, IEEE CAMA, 2022
10. Initial observations regarding the measurement of dielectric properties of human teeth, 3rd URSI AT-AP-RASC, 2022.
11. "Preliminary Development of Anatomically Realistic Breast Tumor Models for Microwave Imaging", 16th EuCAP, Madrid, Spain, 2022.
12. "Target Selection in Multistatic Microwave Breast Imaging Setup Using Dielectric Lens", 16th EuCAP, Madrid, Spain, 2022.

13. "Effect of Varying Prior Information in Axillary 2D Microwave Tomography", EuCAP 2022, Madrid, Spain, 2022.
14. "Estimating Dielectric Properties of the Axillary Region from Magnetic Resonance Imaging", 13th ICHO, Rotterdam, The Netherlands, 2021.
15. "Differentiation of Brain Stroke Type by Using Microwave-Based Machine Learning Classification", ICEAA-IEEE APWC, Honolulu, Hawaii, USA, 2021. DOI: 10.1109/ICEAA52647.2021.9539740
16. "Prostate Index-Lesion Segmentation Using U-NET: Impact of T2w and ADC", ISMRRM & SMRT, Vancouver, Canada, 2021.
17. "Optimizing T2 Mapping of Knee Cartilage with Dictionary-based Methods", ISMRM Iberian Chapter Annual Meeting, 2021.
18. "Comparison of T1-maps and Late Gadolinium Enhancement in the Detection of Myocardial Fibrosis in Hypertrophic Cardiomyopathy", ISMRM Iberian Chapter Annual Meeting, 2021.
19. "Optimization of Artefact Removal Algorithm for Microwave Imaging of the Axillary Region using Experimental Prototype Signals", 15th EuCAP, Düsseldorf, Germany, 2021. DOI: 10.23919/EuCAP51087.2021.9411134
20. #M. Savazzi, J.R. Costa, C.A. Fernandes, J.M. Felício, R.C. Conceição, "Numerical Assessment of Microwave Imaging for Axillary Lymph Nodes Screening Using Anthropomorphic Phantom", 15th EuCAP, Düsseldorf, Germany, 2021. DOI: 10.23919/EuCAP51087.2021.9410925
21. "Study of the Refraction Effects in Microwave Breast Imaging Using a Dry Setup", IEEE EMBC, Montreal, Canada, 2020. DOI: 10.1109/EMBC44109.2020.9176439.
22. "Axillary Region Numerical Models for a Microwave Imaging System", EMBC, Montreal, Canada, 2020
23. "Extracting Dielectric Properties for MRI-based Phantoms for Axillary Microwave Imaging Device", 14th EuCAP, Copenhagen, Denmark, 2020. DOI: 10.23919/EuCAP48036.2020.9135980.
24. "Head and Neck Numerical Phantom Development for Cervical Lymph Node Microwave Imaging", 14th EuCAP, Copenhagen, Denmark, 2020. DOI: 10.23919/EuCAP48036.2020.9135898.
25. "Development of a Transmission-Based Open-Ended Coaxial-Probe Suitable for Axillary Lymph Node Dielectric Measurements", 14th EuCAP, Copenhagen, Denmark, 2020. DOI: 10.23919/EuCAP48036.2020.9135778.
26. "Thermal Properties of Ex Vivo Biological Tissue at Room and Body Temperature", EuCAP, Copenhagen, Denmark, 2020. DOI: 10.23919/EuCAP48036.2020.9135854.
27. "Feasibility Study of Focal Lens for Multistatic Microwave Breast Imaging", ICECOM 2019, Dubrovnik, Croatia, 2019.
28. "Development of Axillary Region Models based on MRI Segmented Data to Aid Breast Cancer Staging", 1st EMF-Med World Conference on Biomedical Applications of Electromagnetic Fields (EMF-MED), Split, Croatia, 2018.
29. "Webcam-based Distance and Surface Estimation System for Microwave Imaging", 2018 IEEE APS USNC-URSI, Boston, USA, 2018.
30. #R.C. Conceição, D.M. Godinho, "Extracting Features from Multistatic Signals in a Radar Microwave Imaging System for Breast Cancer Detection", 2nd URSI AT-RASC, Gran Canaria, Spain, 2018.
31. "Support Vector Machines to Aid Breast Cancer Diagnosis Using a Microwave Radar Prototype", 32nd URSI-GASS, Montreal. Canada, 2017. DOI: 10.23919/URSIGASS.2017.8105088.
32. "Deep Learning for Tumour Classification in Homogeneous Breast Tissue in Medical Microwave Imaging", IEEE EUROCON 2017, Ohrid, North Macedonia, 2017. DOI: 10.1109/EUROCON.2017.8011175.
33. "Digital Analysis of Tumour Microarchitecture as an Independent Prognostic Tool in Breast Cancer", United States & Canadian Academy of Pathology (USCAP) Meeting, San Antonio, Texas, USA, 2017.
34. "Overview of Microwave Medical Applications in Europe Since the Beginning of the COST Action TD1301 – MiMed", 11th EuCAP, Paris, France, 2017. DOI: 10.23919/EuCAP.2017.7928067.
35. "Diffusion Kurtosis Breast Imaging model – Which Should Be the Higher b-Value?", ISMRM, Singapore, 2016.
36. "Initial Study for the Investigation of Breast Tumour Response with Classification Algorithms Using a Microwave Radar Prototype", 10th EuCAP, Davos, Switzerland, 2016. DOI: 10.1109/EuCAP.2016.7481464.
37. "Quantification Models for Breast Tumors ROC Curve Analysis", 32nd Annual ESMRMB Meeting, Edinburgh, United Kingdom, 2015.
38. "Microwave Imaging of the Breast: Investigating Tumour Response with Classification", PIERS, Prague, Czech Republic, 2015.
39. "Combined Breast Microwave Imaging and Diagnosis System", PIERS, Prague, Czech Republic, 2015.
40. "Spectral Filtering in Phase Delay Beamforming for Multistatic UWB Breast Cancer Imaging", 9th EuCAP, Lisbon, Portugal, 2015.

41. "Initial Study for Detection of Multiple Lymph Nodes in the Axillary Region Using Microwave Imaging", 9th EuCAP, Lisbon, Portugal, 2015.
42. "Contribution of Diffusion Models in Diffusion–Weighted Magnetic Resonance Imaging (DWI) for Improved Breast Tumor Characterization", Associação Portuguesa de Investigação de Cancro (ASPIC), Lisbon, Portugal, 2014.
43. "SVM-based Classification of Breast Tumour Phantoms Using a UWB Radar Prototype System", 31st URSI-GASS, Beijing, China, 2014. DOI: 10.1109/URSIGASS.2014.6930131.
44. "Initial Study with Microwave Imaging of the Axilla to Aid Breast Cancer Diagnosis", IEEE APS USNC-URSI, Memphis, TN, USA, 2014. DOI: 10.1109/USNC-URSI.2014.6955689.
45. "Avoiding Unnecessary Breast Biopsies: Clinically-Informed 3D Breast Tumour Models for Microwave Imaging Applications", IEEE APS-URSI, Memphis, TN, USA, 2014. DOI: 10.1109/APS.2014.6904898.
46. "Development of Anatomically and Dielectrically Accurate Breast Phantoms for Microwave Imaging Applications", Baltimore, MD, USA, 2014. DOI:10.1117/12.2049853.
47. "Development of Axilla Phantoms to Aid Breast Cancer Staging via Sentinel Lymph Node Detection", 8th EuCAP, The Hague, Netherlands, 2014. DOI: 10.1109/EuCAP.2014.6901808.
48. "Image Processing Methods for PET/MR Multi-Modality Imaging: Initial Study Regarding Binding of MR images", IEEE NSS-MIC, Seoul, South Korea, 2013. DOI: 10.1109/NSSMIC.2013.6829139.
49. "Initial Classification of Breast Tumour Phantoms using a UWB radar prototype", ICEAA, Turin, Italy, 2013. DOI: 10.1109/ICEAA.2013.6632339.
50. "Imaging and Classification of Breast Cancer with Multimodal PEM-UWB Techniques", ICEAA, Turin, Italy, 2013. DOI: 10.1109/ICEAA.2013.6632271.
51. "Bladder-State Monitoring Using Ultra Wideband Radar", 7th EuCAP, Gothenburg, Sweden, 2013.
52. "Novel Multimodal PEM-UWB Approach for Breast Cancer Detection: Initial Study for Tumour Detection and Consequent Classification", 7th EuCAP, Gothenburg, Sweden, 2013.
53. "Classification and Monitoring of Early Stage Breast Cancer Using Ultra Wideband Radar", ICONS-IARIA, (paper 20175) 46-51, Seville, Spain, 2013.
54. "A Comparison of MapReduce and Parallel Database Management Systems", ICONS-IARIA, (paper 20187) 64-68, Seville, Spain, 2013.
55. "Breast Tumor Differentiation Through Diffusional Kurtosis Imaging (DKI) in Magnetic Resonance Imaging", A One Day Symposium with Carlos Caldas sponsored by EACR (European Association for Cancer Research), Porto, Portugal, 2012.
56. "Development of Breast and Tumour Models for Simulation of Novel Multimodal PEM-UWB Technique for Detection and Classification of Breast Tumours", IEEE NSS-MIC 2012, 2769 - 2772, Anaheim, CA, USA, 2012. DOI: 10.1109/NSSMIC.2012.6551631.
57. "Initial Analysis of Novel Multimodal PEM-UWB Technique for Breast Cancer Detection: Localization of Cancer in Homogeneous Model of the Breast", 1st International Symposium in Applied Bioimaging Bridging Development and Application, Porto, Portugal, 2012.
58. "Tumor Classification Using Radar Target Signatures", PIERS, Cambridge, MA, USA, 346-349, 2010.
59. "Antenna Configurations for Ultra Wide Band Radar Detection of Breast Cancer", SPIE BIOS West, San José, CA, USA, vol. 7169, No. 9, [71691M, 12], 2009. DOI: 10.1117/12.808253.
60. "Classification of Suspicious Regions within Ultrawideband Radar Images of the Breast", 16th IET ISSC, Galway, Ireland, vol. 1, 60-65, 2008. DOI: 10.1049/cp:20080639.
61. "Statistical Analysis of the Motility of Nano-Objects Propelled by Molecular Motors", SPIE BIOS West, San José, CA, USA, vol. 6865, 686506.1-12, 2008. DOI:10.1117/12.759116.

Books:

1. "Electromagnetic Imaging for a Novel Generation of Medical Devices: Fundamental Issues, Methodological Challenges and Practical Implementation", editors: F. Vipiana, L. Crocco, Springer. Contribution with chapter "The Dielectric Properties of Axillary Lymph Nodes" by authors: M. Savazzi, D.M. Godinho, N. Ištuk, T. Castela, N.A. Silva, M.L. Orvalho, E. Porter, M. O'Halloran, C.A. Fernandes, J.M. Felício, R.C. Conceição, 2023. ISBN 978-3-031-28665-0.
2. "Electromagnetic Technologies for Medical Diagnostics: Fundamental Issues, Clinical Applications and Perspectives", editors: L. Crocco and P. Kosmas; authors: S. Ahsa, L. Anishchenko, B. Bazrafshan, J. Bernard, J. Cano, M. Cavagnaro, R.C. Conceição, C. Conessa, L. Crocco, B. Duchene, L. Duchesne, A. Fasoula, A. Fhager, R. Foster, S. Geimer, M. Glavin, D. Godinho, Y. Hao, F. Hubner, N. Joachimowicz, E. Jones, M. Jones, P. Kosmas, V. Krozer, A. La Gioia, P. Lawrence, V. Lopresto, P. Meaney, I. Merunka, O. Meyer, Z. Miao, J. Moll, M. O'Halloran, B. Oliveira, M. Persson, R. Pinto, E. Porter, G. Robin, T. Rydholm, K. Saito, S.

Salahuddin, R. Scapaticci, A. Shahzad, M. Sugiyama, T. Vogl, D. Wortge, T. Yilmaz; MDPI, Diagnostics, 2019. ISBN 978-3-03897-676-9 (Pbk), ISBN 978-3-03897-677-6 (PDF).

3. "Emerging Electromagnetic Technologies for Brain Diseases Diagnostics and Monitoring", editors: L. Crocco, I. Karanasiou, M.L. James, R.C. Conceição, Springer book, 2018. ISBN 978-3-319-75007-1.
4. "An Introduction to Microwave Imaging for Breast Cancer Detection", editors: R.C. Conceição, M. O'Halloran, J. Mohr; authors: D. Byrne, Y. Chen, E. Elahi, R.C. Conceição, M. Glavin, E. Jones, M. Jones, P. Kosmas, J. Mohr, M. O'Halloran, T. Rubæk; Author of chapters "Anatomy and Dielectric Properties of the Breast and Breast Cancer", "Confocal Microwave Imaging" and "Tumour Classification". Springer book series in Biological and Medical Physics, Biomedical Engineering, 2016. ISBN 978-3-319-27866-7.