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EDUCATION

2001-2004	**Ph. D.** in Electrical Engineering North Carolina State University (NCSU), Raleigh, NC USA.
1999-2001	**M. S.** in Electrical and Computer Engineering, University of FL, FL USA.
1993-1997	**B. S.** in Electronics Engineering Ankara University, Ankara, Turkey

PROFESSIONAL EXPERIENCE

2025-	**Professor, Deputy Head of Department-ECSE**, Monash University
July 2023-2025	**Professor, Director of Teaching-ECSE**, Monash University
Jan. 2016-2023	**Associate Professor, Graduate Coordinator**, Monash University
Jan. 2014-2019	**Australian Research Council Future Fellow**
Jan. 2015-2016	**Deputy Head,** Department of Electrical and Computer Systems Engineering, Monash University
2014-2021	**Director of Graduate Research Training,** Monash University
July 2011-2015	**Senior Lecturer,** Monash University, Victoria, Australia.
2009-July 2011	**Senior Lecturer**, University of Newcastle, Callaghan, NSW Australia.
2005-2009	**Lecturer,** University of Newcastle, Callaghan, NSW Australia.
2004-2005	**Post-Doctoral Researcher,** Univ. of California at Santa Cruz, CA USA.
2001-2004	**Research Assistant,** North Carolina State University, Raleigh, NC USA.
1998-1999	**Satellite Communication Engineer**, Ankara, Turkey.

PROFESSIONAL INTERESTS

- Wearable Devices, Biosensors, Human Machine Interfaces (HMIs)
- IoT sensors, Sensors electronics, Wireless sensors, Energy harvesting electronics
- Wireless wearable sensors, Bioelectronics, Wireless biotelemetry.
- Cuffless Blood Pressure Device Design
- Bio-MEMs, MEMs sensors
- Emerging technologies in wireless communications.
- Low-power IC, Analog/digital mixed signal VLSI design for wireless, biomedical, and RF applications.

HONORS&AWARDS

- **IEEE Fellow**, for contributions to wireless wearable body sensors and self-powered sensors.
- **ARC (Australian Research Council) College of Experts Member,** 2025-2028.
- 2021 **Good Design Award**, Design Research - Gold Winner: Hand Hygiene Management, 2021.

- One of Technical-Committee Co-chairs receiving **the Most Active TC Award** in HMS, IEEE SMCS Society for TC on "Interactive and Wearable Computing and Device". 2021.
- The 2014 Microwave Magazine **Best Paper Award** of the IEEE Microwave Theory and Techniques Society (MTT-S), 2014.
- Australian Research Council **Future Fellowship**, 2014.
- **Best performing associate editor** for *IEEE Sensors Journal* in 2013, 2014 and 2015.
- Member of **Monash Researcher Accelerator** (MRA) program, 2013-2014.
- Award for **Research Excellence** in Faculty of Engineering and Built Environment, University of Newcastle, 2010.
- IEEE Senior Member, 2010.
- **Paper Finalist** (with student Ho Chee Keong), 31st International Conference of the IEEE Engineering in Medicine and Biology Society, 2009.
- **NASA group achievement award** for developing **SOI transceiver IC** in support of NASA planetary robotic missions, August 2007.

COURSES TAUGHT

- Advanced Electronics Design,2015-2025
- ECE3161 Analog Electronics, 2019, 2020, 2021, 2022.
- RF Electronics (Monash), 2014-2015
- Electrical Energy Systems (2012, 2013, Monash).
- Systems Engineering and Reliability Analysis (2012, 2013, Monash)
- ECE2021 Electromagnetism (2011,2012, 2013, Monash)
- ELEC2320 Electric Circuits (Semester 1, 2010, Newcastle).
- ELEC4210-Electronics Design (2005 -2011) (Developed course)(Taught more than 10 times) As a part of the University of Newcastle program, I have been teaching this course in Singapore as well.
- ELEC3240 Electronics (2009, PSB).
- ELEC4840A/B Final Year Projects Semester 1&2 (2006, 2007, 2008, Newcastle), (2009 Singapore), (2010, Singapore).
- Computer Engineering-I (2005, Newcastle).

PROFESSIONAL MEMBERSHIPS

- IEEE Fellow
- IEEE Sensors Journal Member
- IEEE Solid-State Circuit Society member
- IEEE Engineering in Medicine and Biology Society
- IEEE Circuits and Systems Society

PROFESSIONAL ACTIVITIES

- **An Editor-in-Chief**-Sensors
- **Topical Editor** (2015-), IEEE Sensors Journal
- **Associate Editor** (2020-), IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology
- **Associate Editor (2012-2015)**, IEEE Sensors Journal
- **Technical Committee Co-Chair** of Interactive and Wearable Computing and Devices, IEEE Systems, Man, and Cybernetics Society.

- **Technical Program Committee Chair** for BodyNets**,** the 9th international conference on body area networks conference, London, 2014.
- **A technical committee member** of MEMS and Nanotechnology for the IEEE IES (Industrial Electronics Society), 2012- 2023.
- **Guest Editor, SI:** Human-machine Fusion Decision-making , IEEE Transactions on Automation Science and Engineering, 2023.
- **Guest Editor,** Special Issue on Next-Generation Smart Body Sensor Networks: From Autonomic Body Sensors to Cognitive Body Sensor Network Ecosystems, IEEE Sensors Journal.
- **Guest Editor,** Special Issue on Self-Powered Sensors: Architectures, Applications, and Challenges,IEEE Sensors Journal, 2023.
- **The guest editor** for IEEE Journal of Biomedical and Health Informatics in 2015.
- **Guest editor for** Information Fusion, special issue: Advances in Multi-Sensor Fusion for Body Sensor Networks, 2019.
- **Guest Editor** Special Issue on Self-powered sensors, IEEE Sensors Journal, 2021
- **Guest Editor** Special Issue on Advances and Current Trends in Sensing Physiological Parameters for Human Wellness and Patient Monitoring, IEEE Sensors Journal 2021
- **Guest editor** Special Issue on Connected Smart Sensors Systems for Water Quality Monitoring, IEEE Internet of Things Journal, 2020.
- **Several Special Issue organizer** with IEEE Sensors Journal
- **Several Special Issue Organizer** with Sensors
- **Associate Member o**f the IEEE Engineering in Medicine and Biology (EMB) Society on Wearable Biomedical Sensors and Systems Technical Committee (2015-2017).
- **Member of the Editorial Board,** Inter. Journal of Medical Engineering and Informatics.
- **Guest Editor (2013),** Mobile Networks and Applications (Springer), Special Issue on "Wireless Technology for Pervasive Healthcare".
- **Associate Editor**, Recent Patents on Electrical Engineering (2011-2014)
- **Organiser**, Workshop on Implantable wireless sensors, MIT, Cambridge USA, June 2015.
- **Associate editor,** Conference of IEEE Eng. in Medicine and Biology Society, 2014
- **A member of organizing committee**: Special session on Wireless Capsule Endoscopy at the IEEE EMBC, Chicago, USA, August 2014.
- **Member of organizing committee:** Emerging BAN technologies (IEEE ISCIT2012).
- **One of Organizers**, Workshop on Implantable wireless sensors, MIT, Cambridge USA.
- **Member of steering committee**, International Workshop on Interactive and Wearable Computing and Devices (IWCD 2016), IEEE CSCWD 2016.
- **Program/Technical Committee Member:**
  - BodyNets 2015, IEEE WPMC 2014.
  - The 2nd IEEE International Workshop on Emerging BAN Technologies (IEEE BANTECH 2014).
  - IEEE ICUWB2013, IEEE ICUWB2014, ICUWB 2015.
  - IEEE ISCIT2012, IEEE TENCON (2012)
  - International Conference on Advances in Computing, Communications and Informatics (ICACCI-2012 and 2013),
  - IEEE 1stSymposium on Wireless Systems (IDAACS- SWS, 2012),
  - First International Workshop on Wireless Mesh Networking of Human and Livestock Healthcare (2012), Smart Materials, Nano- and Micro-Technology Systems (2008),
  - IEEE ICCCN (2008,2009).
- **Session Chair**, IEEE ICUWB 2013, IEEE VTC Melbourne (Conference), 2006.
- **Reviewer of a number of IEEE and European sensor and microelectronic journals (10 journal articles and 10 conference articles per year).**
- **Reviewer** for Australian Research Council grants and for some international grants e.g. USA, Ireland, Canada, Netherlands and Switzerland.

CURRENT/COMPLETED GRADUATE STUDENTS/SUPERVISIONS

- Stephanie Imelda:
- Mohammad Alim:
- Hongqiang Xu : Wearable IoT for Vital Signs
- Maggie Gendy : Indoor Contact Tracing with IoT Technology
- Vishal Roha: Machine learning for vital signs and wearable computing

Completed (Main Supervisor):

- Neil Tom, Wearable radar
- Weiqiao Han: Radar Sensing and Human-Machine Interfaces
- Muhammad Arslan Ali : Wireless Capsule, Antenna Design
- Kareeb Hasan, Radar Sensing and IoT
- Adikari Rathnayaka: Contact Tracing with Wearables
- Fatima Heydari: Wearable Blood Pressure Measurement
- Melika Pourebrahim, Wearable Radar and Blood Pressure Monitoring
- Chunkai Qiu : Self-powered IoT HMIs with Triboelectric Sensors
- Fahad Alsunaydih, Motion Control and Tracking of Wireless Capsule Devices
- David Vera Anaya : Wearabale Triboelectric HMIs
- Abdulla Mamun : Indoor localisation with IoT platforms
- Fan Wu, IoT Devices and Applications (received the 2020 Lampard prize in the department of Electrical and Computer Systems Engineering)
- Taiyang Wu, Wearable and Implantable Sensor Systems with Energy Harvesting for IoT-connected Healthcare Applications
- Shamsul Arefin, MEMS Multisensor Microsystem with Integrated Interface Circuits for Wireless Capsule and Biomedical Applications, 2016 (the 2016 Lampard prize in the department of Electrical and Computer Systems Engineering, Monash University, Best thesis)
- Dilpreet Buxi, Sensing Technologies for Ambulatory Blood Pressure Monitoring using Pulse Transit Time (Main Supervisor), 2016
- Kasun Maduranga Thotahewa, Ultra Wide Band (UWB) sensor design and channel modeling for on-body and in-body communication, (Main Supervisor), May 2014.(the 2014 Lampard prize in the department of Electrical and Computer Systems Engineering, Monash University-Best Thesis).
- Ali Mohammadi (Main Supervisor)- High Precision MEMS Displacement Sensors, 2014.(the postgraduate research prize from the University of Newcastle in 2013)
- Michael Ho, Ultra Wideband Design Techniques for Wireless Medical Monitoring, 2011.
- Anthony Laskovski, Implantable Microelectronics for Biological Signals, 2011.

GRANTS

External Competitive Grants:

- Dr. Tuguy Esgin, **Prof Mehmet Yuce**, Dr Mark Halaki, Prof Martin Ugander, Djiridji Koodjal "Two Hearts" Connection and cooperation between technology and indigenous community health, **2024 NHMRC Development Grants**, 2025-2028.
- M. Majumder, *et al*., Integrated Functional Printing Facility for Advanced Material Technologies,,**Australian Research Council (ARC) Linkage Infrastructure, Equipment and Facilities (LIEF),** 1/01/20 → 31/12/20, $605,000.
- **M.R. Yuce,** J-M. Redoute**,** K. Joe, M. Hebblewhite, Wearable Device Design with Continuous Cuff-less Blood Pressure Measurement**, ARC Linkage Project,** 2017-2020. $435,000.

- **M. R. Yuce,** J-M, Redoute, J. Keith, M. Hebblewhite**,** "Connected Health," Vic. Government, Department of Economic Development, Jobs, Transport and Resources, 2017-2018, $280,000.
- Dr. T. Alan, Dr. J-M. Redoute, **A/Prof. M. R. Yuce**, Low Observable Platform Detection (LOPD), Department of Defence Science and Technology (COMM) , 2018, $185,00
- **M. R. Yuce,** "Autonomous body sensors in humans," **ARC Future Fellowships**, 2014-2018, $748,320
- **M. R. Yuce**, " New Approaches for Wireless Implantable Biomedical Devices," 2007-2010, **Australian Research Council (ARC),** Discovery Grant, $183,000.
- R. Moheimani & **M. R. Yuce**, "Robust Control of Electrostatic Microactuators," 2007-2011, **Australian Research Council,** Discovery Grant, $870,000.

University Grants:

- **M. R. Yuce, "**Monash Researcher Accelerator Grant (MRA)" 2013-1014, $77,000.
- **D. Shmilovitz, M. Yuce,** Energy harvesting and supply for sensors, **AFTAM (Monash-Tel Aviv collaboration),** 2015, 12,000.
- D. Li, W. Shen, **M. Yuce**, B. Wang, S. Wan, Development of graphene gels for energy and biomedical applications, **Monash IDR Major Grant**, 2014, 240k.
- **M. R. Yuce, "**Development of a high resolution electronic pill for medical diagnosis**,"** Engineering Faculty Research Office**, Monash University,** 2012, $24,400.
- **M. R. Yuce** and Eugene Nalivaiko, "Wireless Data Detection and Power Delivery Methods for Deeply Implanted/Inserted Biomedical Devices," **University of Newcastle**, 2011, $ 25000.
- J. Khan & **M. R. Yuce**, "Underwater Communication Architecture," 2007-2010, **ATSA Defense Services Pty Ltd**, Scholarship, $105600.
- **M.R. Yuce**, Travel Grant, **University of Newcastle,** 2007, $1700.
- J. Khan, **M. R. Yuce, "**Power Optimisation Techniques for Wireless Sensor Networks," **University of Newcastle**, 2006, Project - Pilot Grant, $10,000
- **M. R. Yuce**, Travel Grant, **University of Newcastle,** 2006, $1500.
- **M. R. Yuce**, "Low-Power Wireless Communication System Designs for Biomedical Devices," **University of Newcastle,** Project - Early Career Researcher Grant, $15,000.

Keynote/Invited Talks:

- **Cuffless Blood Pressure Monitoring using Wearable Body Sensors, Keynote Speaker,** 16th International Conference on Body Area Networks: Smart IoT and big data for intelligent health management 2021.
- **Non-contact Radar Sensors, Invited Talk,** the 2021 Asia Pacific Microwave Conference (APMC 2021).
- **Invited Speaker** at the 13th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Singapore 2018.
- **Wearable IoT Sensors Design**, Invited speaker, the Emerging Sensing Technologies Summit, Melbourne, 2016
- **Low power electronics design and energy harvesting techniques for the Internet of Things (IoT),** Workshop: Next-Generation Wireless Communication Systems and Networks, Newcastle Asutralia, 2014.
- **Wireless body sensors: design and implementation**, one of invited speeches at IEEE MTT-S International Microwave Workshop Series on RF and Wireless Technologies for Biomedical and Healthcare Applications (IMWS-Bio 2013), Singapore, December 20013.

- **Electronics Design for M2M Communications**, the 11 th Annual, National SCADA Conference, Wednesday 30 th May, Melbourne 2012.
- **Implantable and wearable bioelectronics systems**. Technical Seminar, Institute of Microelectronics, Singapore, 12 August, 2009.
- **Implantable bioelectronics systems: can we use wideband technolog**y? Technical Seminar, organized by IEEE MTT/AP Chapter & Institute for Infocomm Research, Singapore, July 16, 2009.
- **Wireless technologies for wearable and implantable body area networks**, Technical Seminar, IEEE MTT/AP Chapter & Institute for Infocomm Research, Singapore, July 9, 2009.
- "**Frequency Bands and Wireless Technologies for Wearable and Implantable Wireless Body Area Networks**" 2nd Annual Unither Nanomedical & Telemedical Technology Conference, Quebec, Canada, February 2009.
- "**A Wireless Body Sensor Network System for Medical Monitoring**" University of California, Santa Cruz, USA, October 2006.

Contributions outside academia:

P. Lal Das, M. Lukac, SC Beisswenger, MR Yuce, and S. Mangalam, "Internet of things : the new government to business platform - a review of opportunities, practices, and challenges" Washington, D.C. : World Bank Group.
http://documents.worldbank.org/curated/en/610081509689089303/.

PUBLICATIONS:

Books:

[1]. S. H. Daneshvar, **M. R. Yuce** J-M Redouté, "Design of Miniaturized Variable-Capacitance Electrostatic Energy Harvesters," ISBN 978-3-030-90251-3 Springer, Cham,2022.

[2]. Khan, JY & **Yuce, MR**, 'Internet of Things (IoT): Systems and Applications', Pan Stanford, 2019

[3]. K. M. S. Thotahewa, J.-M. Redoute, and **M. R. Yuce,** Ultra Wideband Wireless Body Area Networks – Springer, May 2014.

[4]. **M. R. Yuce (ed),** *Ultra-Wideband and 60 GHz Communications for Biomedical Applications,* Springer, ISBN 978-1-4614-8895-8, October 2013.

[5]. **M. R. Yuce** and J. Khan, *Wireless Body Area Networks: Technology, implementation and Applications*, *Pan Stanford Publishing,* ISBN 978-981-431-6712, December 2011.

Book Chapters:

[1] C Qiu, MR Yuce," Interface electronics and conditioning circuits for triboelectric flexible sensors" IPP Book: Systems for Printed Flexible Sensors, Design and implementation,2022

[2] M. P Ebrahim, Neil Tom, D. N. Gençoğlan, Ş. Çolak, M. R Yuce, Radar and Non-Contact Sensing, Elsevier, *Encyclopedia of Sensors and Biosensors*, pp: 287-307, 2022.

[3] F. N. Alsunaydih, M.A. Ali, **M.R. Yuce**, Wireless Capsule Design, and its Locomotion and Navigation within the Body, Handbook of Biochips, M. Sawan (Ed.), Springer, 2020.

[4] Wu, T, Redouté, JM & Yuce, M 2019, 'A wearable, low-power, real-time ECG monitor for smart t-shirt and IoT healthcare applications', *Internet of Things*, pp. 165-173.

[5] Wu, F, Rüdiger, C, Redouté, JM & Rasit Yuce, M 2019, 'A wearable multi-sensor IoT network system for environmental monitoring',*Internet of Things*, pp. 29-38.

[6] Y. Zhu, S. O. R. Moheimani, M. R. Yuce, A. Bazaei, Control Issues of MEMS Nanopositioning Devices (Book Chapter) Nanopositioning Technologies: Fundamentals and Applications, Springer, 2016.

[7] Md. S. Arefin, J.-M. Redoute, and **M. R. Yuce**, Wireless biosensors for POC medical applications, in Book: Medical Biosensors for Point of Care (POC) Applications Woodhead Publishing, Elsevier, 2016.

[8] **M. R. Yuce** and J.-M Redoute, Implanted wireless biotelemetry," accepted for Implantable *Bioelectronics - Devices, Materials and Applications, E. Katz (Ed.),* Wiley-VCH*,* March 2014.

[9] K. M. S. Thotahewa, A.I. AL-Kalbani, J.-M. Redoute, and **M. R. Yuce**, Electromagnetic effects of wireless transmission for neural implants, *Neural Computation, Neural Devices, and Neural Prosthesis*, Springer, New York, 2014.

[10] K. M. S. Thotahewa, J.-M. Redoute, and **M. R. Yuce,** Implementation of Ultra-Wideband (UWB) Sensor Nodes for WBAN applications, *Ultra-Wideband and 60 GHz Communications for Biomedical Applications*, Springer, 2013.

[11] K. M. S. Thotahewa, J.-M. Redoute, and **M. R. Yuce**, Medium Access Control (MAC) Protocols for Ultra-Wideband (UWB) based Wireless Body Area Networks (WBAN), *Ultra-Wideband and 60 GHz Communications for Biomedical Applications*, Springer, 2013.

[12] **M. R. Yuce**, "Collective sensing for Healtcare," Book: *Autonomous Sensor Networks: Collective Sensing Strategies for Analytical Purposes*, Springer, January 2013, ISBN 978-3-642-34647-7.

[13] A. N. Laskovski and **M. R. Yuce**. Power Amplifiers for Electronic Bio-Implants. *Biomedical Engineering, Trends in Electronics, Communications and Software*, Book edited by: Anthony N. Laskovski, ISBN: 978-953-307-475-7, Publisher: InTech, Publishing date: January 2011.

[14] **M. R. Yuce** and J. Khan, Introduction to Wireless Body Area Networks, *Wireless Body Area Networks: Technology, implementation and Applications*, 2011.

[15] **M. R. Yuce,** Hardware Development and Systems for Wireless body Area Networks, *Wireless Body Area Networks: Technology, implementation and Applications*, Pan Stanford Publishing, in 2011.

[16] **M. R. Yuce** and Ho Chee Keong, Ultra Wideband for Wireless Body Area Networks, *Wireless Body Area Networks: Technology, implementation and Applications*, Pan Stanford Publishing, 2011.

[17] **M. R. Yuce**, Wireless Technologies: Potential Use in Emergencies and Disaster, book chapter in *Telemedicine for Trauma and Disaster Management* (Ed. Prof. Dr. Rifat Latifi). Artech House Publishers, 2010.

[18] V. Chenniapan, S. O. R. Moheimani, and **M. R. Yuce**. A pendulum-like structure for design of oscillators. In S. Teo, L. H. Li, and B. Tarik, editors, *NEMS/MEMS Technology and Devices*, volume 74 of *Advanced Materials Research*, pages 207–210. Trans Tech Publications, 2009.

[19] J. Y. Khan and **M. R. Yuce**, Wireless Body Area Network (WBAN) for medical applications, in *New Developments in Biomedical Engineering*, published by IN-TECH, ISBN 978-953-7619-57-2, pp. 591-627, published January 2010.

[20] **M. R. Yuce**, T. Dissanayake, and Ho Chee Keong, Wideband technology for medical detection and monitoring, Book: *Recent Advances in Biomedical Engineering*, IN-TECH, ISBN 978-953-307-004-9, pp. 335-360, published October 2009.

[21] A. Laskovski, T. Dissanayake and **M. R. Yuce**, Wireless power technology for biomedical implants, *Biomedical Engineering*, by IN-TECH, ISBN 978-953-307-013-1, pp. 119-132, published October 2009.

Journals:

[1]. Hongqiang Xu, W. Han, and M. R. Yuce, A Wearable Device with Triboelectric Nanogenerator Sensing for Respiration and Spirometry Monitoring, *ACS Sensors* 2025 *10* (1), 264-271.

[2]. M. E. G. Gendy, A. Rathnayaka, S. J. Curtis, A. J. Stewardson and M. R. Yuce, "Future Prediction of Close Contacts in IoT-based Contact Tracing System using a New Real-Life Dataset," in *IEEE Journal of Biomedical and Health Informatics*,2025.

[3]. W. Han, Chunkai Qiu, M. R. Yuce, “Three-phase coded triboelectric nanogenerator disk: A novel approach for generating diverse control instructions in human–machine interactions,” *Nano Energy*, vol. 128, Part A, September 2024.

[4]. K. Hasan, Beng Oh, N. Nadarajah b, M. R. Yuce “mm-CasGAN: A cascaded adversarial neural framework for mmWave radar point cloud enhancement, *Information Fusion,* Volume 108, August 2024, 102388.

[5]. K. Hasan, M. P. Ebrahim, H. Xu and M. R. Yuce, "Analysis of Spectral Estimation Algorithms for Accurate Heart Rate and Respiration Rate Estimation Using an Ultra-Wideband Radar Sensor," in *IEEE Reviews in Biomedical Engineering*, vol. 17, pp. 297-309, 2024.

[6]. H. Xu, F. Heydari, A. Rathnayaka, F. Wu and M. R. Yuce, "Evaluation of One-Point Calibration for Cuffless BP Wearable Sensor Devices: Stiffness Index," in IEEE Sensors Journal, vol. 24, no. 7, pp. 11374-11385, 1 April1, 2024.

[7]. Ali, M.A.; Tom, N.; Alsunaydih, F.N.; Yuce, M.R. Recent Advancements in Localization Technologies for Wireless Capsule Endoscopy: A Technical Review. Sensors 2025, 25, 253.

[8]. M. A. Ali, F. N. Alsunaydih, A. Rathnayaka and M. R. Yuce, "Implementing an Autonomous Navigation System for Active Wireless Capsule Endoscopy," in *IEEE Sensors Journal*, vol. 24, no. 12, pp. 19190-19201, 15 June15, 2024.

[9]. D. Vera Anaya, M. R. Yuce, “Forearm Dual-Triboelectric Sensor (FDTS) for assistive Human-Machine-Interfaces (HMIs) and robotic control with potential uses in prosthetic devices,” Nano Energy, Volume 111,2023,108366.

[10]. A. Rathnayaka *et al*., "An Autonomous IoT-Based Contact Tracing Platform in a COVID-19 Patient Ward," in *IEEE Internet of Things Journal*, vol. 10, no. 10, pp. 8706-8717, 15 May15, 2023.

[11]. M. E. G. Gendy and M. R. Yuce, "Emerging Technologies Used in Health Management and Efficiency Improvement During Different Contact Tracing Phases Against COVID-19 Pandemic," in *IEEE Reviews in Biomedical Engineering*, vol. 16, pp. 38-52, 2023.

[12]. Hasan, K.; Tom, N.; Yuce, M.R. “Navigating Battery Choices in IoT: An Extensive Survey of Technologies and Their Applications.” *Batteries* 2023, 9, 580.

[13]. M. P. Ebrahim, N. Tom, J. -M. Redoute and M. R. Yuce, "A Low-Frequency Portable Continuous Wave Radar System for Vital Signs Monitoring," in *IEEE Sensors Journal*, vol. 23, no. 8, pp. 8876-8886, 15 April15, 2023.

[14]. Kaur I, Tieu T, Deepagan VG, Ali MA, Alsunaydih F, Rudd D, Moghaddam MA, Bourgeois L, Adams TE, Thurecht KJ, et al. Combination of Chemotherapy and Mild Hyperthermia Using Targeted Nanoparticles: A Potential Treatment Modality for Breast Cancer. *Pharmaceutics*. 2023; 15(5):1389.

[15]. S. Mumtaz *et al*., "Guest Editorial Special Issue on Self-Powered Sensors: Architectures, Applications, and Challenges," in *IEEE Sensors Journal*, vol. 23, no. 18, pp. 20473-20473, 15 Sept.15, 2023.

[16]. Gendy MEG, Tham P, Harrison F, Yuce MR. Comparing Efficiency and Performance of IoT BLE and RFID-Based Systems for Achieving Contract Tracing to Monitor Infection Spread among Hospital and Office Staff. *Sensors*. 2023; 23(3):1397.

[17]. C. Qiu, F. Wu, W. Han and M. R. Yuce, "A Wearable Bioimpedance Chest Patch for Real-Time Ambulatory Respiratory Monitoring," in *IEEE Transactions on Biomedical Engineering*, vol. 69, no. 9, pp. 2970-2981, Sept. 2022.

[18]. W. Han, S. Dai and M. R. Yuce, "Real-Time Contactless Respiration Monitoring From a Radar Sensor Using Image Processing Method," in IEEE Sensors Journal, vol. 22, no. 19, pp. 19020-19029, 1 Oct.1, 2022.

[19]. Weiqiao Han et al, “Self-powered wearable sensors design considerations.” J*. Micromech. Microeng*. 32 083002, 2022.

[20]. Stephanie J. Curtis, Asanka Rathnayaka, Fan Wu, Abdulla Al Mamun, Craig Spiers, Gordon Bingham, Colleen L. Lau, Anton Y. Peleg, Mehmet Rasit Yuce, Andrew J. Stewardson, “Feasibility of Bluetooth Low Energy wearable tags to quantify healthcare worker proximity networks and patient close contact: A pilot study,” Infection, Disease & Health,Volume 27, Issue 2,2022, Pages 66-70.

[21]. S. H. Daneshvar, M. Maymandi-Nejad, M. R. Yuce and J. -M. Redouté, "A Variable-Capacitance Energy Harvester With Miniaturized Inductor Targeting Implantable Devices," in *IEEE Transactions on Industrial Electronics*, vol. 69, no. 1, pp. 475-484, Jan. 2022.

[22]. Xu, H.; Ebrahim, M.P.; Hasan, K.; Heydari, F.; Howley, P.; Yuce, M.R.” Accurate Heart Rate and Respiration Rate Detection Based on a Higher-Order Harmonics Peak Selection Method Using Radar Non-Contact Sensors.” *Sensors* 2022, 22, 83.

[23]. K. Wang, F. Lin, D.T.H. Lai, S. Gong, B. Kibret, M.A. Ali, *et al.* “Soft gold nanowire sponge antenna for battery-free wireless pressure sensors,” *Nanoscale*, 13 (2021), pp. 3957-3966.

[24]. M. S. Mirshekarloo, M. C. D. Cooray, P. Jovanović, C. D. Easton, F. Wu, T. D. Gamot, M. J. Abedin, M. R. Yuce, M. Shaibani, M. Majumder, Liquid-Crystal Mediated Assembly of Iodinated Graphene Oxide for Ultra-Dense Supercapacitors as Safe Power Source for Internet of Things Data Transmission,” *Batteries & Supercaps* 2021, *4*, 1175.

[25]. D. V. Anaya, K. Zhan, Li Tao, Chengkuo Lee, M. R. Yuce, T. Alan, “Contactless tracking of humans using non-contact triboelectric sensing technology: Enabling new assistive applications for the elderly and the visually impaired,” *Nano Energy*, Volume 90, Part A,2021,106486, 2021.

[26]. Vera Anaya, D. and Yuce, M.R. (2021), Stretchable triboelectric sensor for measurement of the forearm muscles movements and fingers motion for Parkinson's disease assessment and assisting technologies. *Med Devices Sens*, 4: e10154.

[27]. F. N. Alsunaydih M.R. Yuce, Next-generation ingestible devices: sensing, locomotion and navigation *Physiol. Meas.* 42, 2021.

[28]. S. Kennedy, D. Morrison, D. Delic, M. R. Yuce and J. -M. Redouté, "Fully-Integrated Dickson Converters for Single Photon Avalanche Diode Arrays," in *IEEE Access*, vol. 9, pp. 10523-10532, 2021.

[29]. Mamun, M.A.A.; Anaya, D.V.; Wu, F.; Yuce, M.R. Landmark-Assisted Compensation of User’s Body Shadowing on RSSI for Improved Indoor Localisation with Chest-Mounted Wearable Device. *Sensors* **2021**, *21*, 5405.

[30]. F. Wu, C. Qiu, T. Wu and M. R. Yuce, "Edge-Based Hybrid System Implementation for Long-Range Safety and Healthcare IoT Applications," in *IEEE Internet of Things Journal*, vol. 8, no. 12, pp. 9970-9980, 15 June15, 2021.

[31]. F. Piron, D. Morrison, M. R. Yuce and J. -M. Redouté, "A Review of Single-Photon Avalanche Diode Time-of-Flight Imaging Sensor Arrays," in *IEEE Sensors Journal*, vol. 21, no. 11, pp. 12654-12666, 1 June1, 2021.

[32]. D.V. Anaya, T. He, C. Lee and M. R. Yuce, "Self-powered Eye Motion Sensor based on Triboelectric Interaction and Near-field Electrostatic Induction for Wearable Assistive Technologies," *Nano Energy,* vol 72*,* 104675, 2020.

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