## University Academic Curriculum Vitae

Education since leaving school	<ul> <li>11/2017 - 07/2021 - Doctoral degree in "Food Engineering and Biotechnology", Faculty of Science and Technology, Free University of Bozen-Bolzano, Bozen-Bolzano (Italy). Funded in collaboration with Istituto Italiano di Tecnologia (IIT).</li> <li>Project title: "Development of Electrical Impedance Spectroscopy Methods for the Characterization of Fruit Quality".</li> <li>Supervisor: Prof. Paolo Lugli.</li> <li>01/2020 - 07/2020 - Visiting researcher at the Oslo Bioimpedance and Medical Technology Group, University of Oslo, Oslo (Norway)</li> <li>Project title: "Machine Learning Methods for Fruit Ripening Classification from Bio-impedance Data".</li> <li>Supervisor: Prof. Ørjan G. Martinsen.</li> <li>02/2017 - M.Sc. in "Sicurezza e Qualità Agroalimentare" ("Food Quality and Safety" - (LM-70)), Universitá degli Studi della Tuscia, Viterbo (Italy) Thesis title: "SOS WINE - Precision Viticulture Through the Use of Internet of Things (IOT) and Near-Infrared Spectroscopy".</li> <li>09/2015 - 01/2016 - Visiting student within the Erasmus+ Programme,</li> </ul>
	10/2014 - <b>B.Sc</b> . in "Biotecnologie Agrarie e Industriali" ("Industrial and Agricultural Biotechnology"), Università degli Studi della Tuscia, Viterbo (Italy) Thesis title: "Evaluation of Arsenic Resistant Fungi from Contaminated Soils". Grade: 86/110, Supervisor: Prof. Silvia Crognale.
Professional experience	<ul> <li>04/2022 – 04/2025 – Fixed-term assistant professor (RTDa), Faculty of Engineering, Free University of Bozen-Bolzano, Bozen-Bolzano (Italy). Research areas: Bio-impedance spectroscopy, precision agriculture, data analysis</li> <li>03/2024 – 07/2024 - Visiting Research Fellow, Departamento de Electrónica y Tecnología de Computadores, Universidad de Granada, Granada (Spain). Research areas: Sustainable electronics, precision agriculture, data analysis</li> <li>01/2022 – 04/2022 - Research Assistant (AR), Faculty of Science and Technology, Free University of Bozen-Bolzano, Bozen-Bolzano (Italy). Project: "Miglioramento elettronico di sistemi bio-fotosintetici (ELPLANT)". Tasks: Interface of engineered nanoparticles (e.g., conjugated polymer nanoparticles) with bio-photosynthetic materials (e.g., plants, algae, bacteria) for the improvement of their photosynthetic activity. Supervisor: Prof. Luisa Petti.</li> </ul>

	01/2021 – 01/2022 - <b>Research Assistant (AR)</b> , Faculty of Science and Technology, Free University of Bozen-Bolzano, Bozen-Bolzano (Italy). Project: "BIOFRUIT: New directions in statistical methods for BIO- impedance analysis of FRUIT ripeness". Supervisor: Prof. Luisa Petti Tasks: (i) Acquisition and handling of large on-plant and post-harvest fruit bio-impedance datasets. (ii) Fruit quality prediction model building and growth curve modeling (MATLAB). (III) Data-driven optimization of custom-made the portable impedance analyzer <i>FruitMeter</i> . (IV) Coordination and mentoring of two PhD students. Supervisor: Prof. Luisa Petti.
	05/2017 – 09/2017 - <b>Research Assistant (AR),</b> Aberystwyth University - Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth (Wales, United Kingdom). Tasks: Analysis of Hyperspectral Imaging Data collected from UAVs for the Detection and Discrimination of Drought Stress in Bioenergy Crops ( <i>Arundo donax</i> and <i>Populus Nigra</i> ). Supervisor: Mr. Alan Gay.
Experience in academic teaching	Academic year 2019/2020, organization and support for the bioimpedance laboratory module for the course "Sensor and biosensor for food processing" for M.Sc. students of "Food Sciences for Innovation and Authenticity" (LM70) at the Free University of Bozen-Bolzano.
	Academic year 2021/2022, hybrid teaching, exercise and laboratories for the course of "Sensors and Biosensors for Food Processing" for M.Sc. students of "Food Sciences for Innovation and Authenticity" (LM70) at the Free University of Bozen-Bolzano.
	Academic year 2021/2022, hybrid teaching, exercise and laboratories for the course of "Information and DSS in fruit production" for M.Sc. students of the "International Master in Horticultural Science (IMaHS)" (LM69) at the Free University of Bozen-Bolzano.
	Academic year 2021/2022 and 2022/2023, Lecturer and course responsible," Biotechnologies Principles and applications" (3 CFU, 30 hours, in English); Ph.D. in Food Engineering and Biotechnology, Free University of Bozen-Bolzano
	Academic year 2022/2023, Lecturer and course responsible," Sensors and Biosensors for Food Processing" (3 CFU, 30 hours, in English); M.Sc. in Food Sciences for Innovation and Authenticity (LM-70), Free University of Bozen-Bolzano
	Academic year 2023/2024 and 2024/2025, Lecturer and course responsible, "Information systems for the food and wine sector" (6 CFU, 60 hours, in Italian); B.Sc. in Enogastronomy in Mountain Areas (L-GASTR), Free University of Bozen-Bolzano
Summer Schools and courses	Hybrid teaching and laboratory in the mini workshop "Practical Bioimpedance measurements on the basis of AD5933EBZ", held at the Universidad Autónoma de San Luis Potosí on November 10th, 2021, at the IV Latin American Conference on Bioimpedance CLABIO.
	Hybrid teaching "Bioimpedance in fruit quality characterization: from on- plant to postharvest applications", held at the Politecnico di Torino on

	September 26th, 2022, at 3rd IEEE CAS SEASONAL SCHOOL ON ELECTRONICS FOR AGRIFOOD SMART TECHNOLOGIES FOR A SUSTAINABLE AGRICULTURE
Experience in	Principal Investigator:
project writing	<ul> <li>Biodegradable and Low-cOst Soil Sensor platfOrM (BLOSSOM); Mobility grants for short international research stays Abt. 34: Innovation, Forschung und Universität; Budget: 11.625,00 €</li> </ul>
	<u>Team Member:</u>
	New directions in statistical methods for BIO-impedance analysis of FRUIT ripeness (BIOFRUIT); UNIBZ (Start-up Funds)
	Electrical impedance spectroscopy measurements of potato samples (KARTEIS); Pizzoli S.p.A.
	Electronic enhancement of bio-photosynthetic systems (ELPLANT); UNIBZ (ID Call 2020)
	Research and Innovation Network on food and nutrition Sustainability, Safety and Security (ON-FOODS), Italian ministry of university and research
	• Contributed to the writing of the accepted Unibz Interdisciplinary Project "BIOFRUIT: New Directions in Statistical Methods for Bio- impedance Analysis of Fruit Ripeness", funded by Unibz Interdisciplinary Project (ID Call 2020).
	• Contributed to the writing of the accepted 37 <sup>th</sup> cycle PhD project scholarship "Fruit waste reduction and recycle through post- harvest early disease detection using 3D imaging methods and fruit waste-based bioprinting technologies", funded by FSE REACT-EU - PON "Ricerca e Innovazione" programme.
Other academic responibilities	Post-doctoral Researcher Supervision at Free University of Bolzano- Bozen
	• Giulia Elli, Research assistant (AR), Free University of Bolzano, from February 2024
	Ph.D. student co-supervision at Free University of Bolzano-Bozen
	• Maria Rivola, "Food Quality Monitoring Using Electrical Impedance Spectroscopy (EIS)", Ph.D. in Food Engineering and Biotechnology, 35th cycle.
	• Mukhtar Ahmad, "Biodegradable Wireless Sensors for Precision Agriculture", Ph.D. in Advanced Systems Engineering, 35th cycle.
	• Saleh Hamed, "In planta sensing technologies for Agriculture 4.0", Ph.D. in Advanced Systems Engineering, 36th cycle.
	• Fahimeh Masoumi, "Fruit waste reduction and recycle through post- harvest early disease detection using 3D imaging methods and fruit

	waste-based bioprinting technologies", Ph.D. in Food Engineering and Biotechnology, 37th cycle.
	<ul> <li>Eduardo Suraci Picchiotti, "Development of a low-cost, energy-efficient sensor platform for fieldmonitoring of crop stress conditions for precision agriculture", Ph.D. in Advanced Systems Engineering, 37th cycle.</li> </ul>
	<ul> <li>Sundus Riaz, "Low-cost and novel sensors for fruit maturity assessment along the whole quality chain", Ph.D. in Food Engineering and Biotechnology, 38th cycle.</li> </ul>
	<ul> <li>Camilo Eduardo Tellez Villamizar, "Skin conformal dry electrodes for impedance plethysmography measurements", Ph.D. in Advanced Systems Engineering, 38th cycle.</li> </ul>
	<ul> <li>Shamim Torkian, "Innovative Green Electronics for Assessing Plant Vitality and Fruit Ripeness in Precision Agriculture", Ph.D. in Advanced Systems Engineering, 40th cycle</li> </ul>
	M.Sc. student supervision at Free University of Bolzano-Bozen
	<ul> <li>Arvind Andrew Das, "Characterization of Post-harvest Fruit Damage Using Non-Destructive Bioimpedance Measurements", Master In Food Sciences For Innovation And Authenticity, UNIBZ, a.y. 2022/2023.</li> </ul>
	Events and scientific meeting organization
	Organizing Committee as Publicity and Media Co-Chair in the 2023 Conference on AgriFood Electronics (CAFÉ) held at Politecnico di Torino (PoliTO), Italy.
	Organization and setup of the Free University of Bozen-Bolzano/Istituto Italiano di Tecnologia (IIT) stand and participation to AquaFarm/NovelFarm 2020 exhibition, Fiera di Pordenone, Pordenone, Italy, 19 <sup>th</sup> – 20 <sup>th</sup> February 2020.
	Organization of the activities and laboratory guided tours of the Sensing Technologies Lab during the "Lunga Notte della Ricerca – LUNA 2019" Free University of Bozen-Bolzano, 27 <sup>th</sup> of September 2019.
	Organization and setup of the University of Tuscia - Department for innovation in biological, agro-food and forest systems stand and participation to Maker Faire 2016 exhibition, Fiera di Roma, Roma, Italy, $14^{th} - 16^{th}$ October 2016.
Memberships	Membership of scientific societies
	<ul> <li>Member of the Institute of Electrical and Electronics Engineering (IEEE) since 2018 (member nr. 95111723)</li> <li>Member of the IEEE Young Professionals (YP) since 2018</li> <li>Member of the IEEE Circuits and Systems Society since 2021</li> <li>Member of the IEEE Electron Device Society (EDS) since 2022</li> </ul>

	Member of the Italian Electronic Society (SIE) since 2022
	Memberhip of Ph.D. committees
	From 2024, Member Ph.D. committee in Advanced System Engineering (ASE), Faculty of Engineering, UNIBZ.
	Membership of Ph.D. Evaluation Committees
	<ul> <li>Alice Costantini, Sahira Carolina Vasquez Baez, PhD in Food Engineering and Biotechnology at Free University of Bolzano-Bozen, 20<sup>th</sup> July 2023.</li> </ul>
	• Arvind Gurusekaran and Hugo Oliveira, PhD in Advanced System Engineering at Free University of Bolzano-Bozen, 10 <sup>th</sup> December 2024.
	Membership of selection committees
	Member of several selection committee for the conferral of fixed term research assistant and technologist contracts.
Grants	Winner of Erasmus+ for Traineeship Program 2016/2017 Grant. Winner of Erasmus+ for Study Program 2015/2016 Grant.
Publications	Journal articles in refereed academic journals
	<ol> <li><u>P. Ibba</u>, A. Falco, B.D. Abera, G. Cantarella, L. Petti, and P. Lugli, "Bio-impedance and circuit parameters: An analysis for tracking fruit ripening", in Postharvest Biology and Technology 159, pp. 110978, 2020, doi: 10.1016/j.postharvbio.2019.110978.</li> </ol>
	<ol> <li>A. Douaki, B. D. Abera, G. Cantarella, B. Shkodra, A. Mushtaq, <u>P.</u> <u>Ibba</u>, AKM Inam, L. Petti, P. Lugli, "Flexible Screen Printed Aptasensor for Rapid Detection of Furaneol: A Comparison of CNTs and AgNPs Effect on Aptasensor Performance", Nanomaterials 10 (6), p. 1167, 2020, doi: 10.3390/nano10061167.</li> </ol>
	<ol> <li>P. Ibba, M. Crepaldi, G. Cantarella, G. Zini, A. Barcellona, M. Rivola, M. Petrelli, L. Petti and P. Lugli, "Design and Validation of a Portable AD5933–Based Impedance Analyzer for Smart Agriculture", IEEE Access 9, 2021, doi: 10.1109/ACCESS.2021.3074269.</li> </ol>
	<ol> <li>P. Ibba, C. Tronstad, R. Moscetti, T. Mimmo, G. Cantarella, L. Petti, Ø. G. Martinsen, S. Cesco, and Paolo Lugli, "Supervised binary classification methods for strawberry ripeness discrimination from bioimpedance data", Scientific Reports 11 (1), 2021, doi: 10.1038/s41598-021-90471-5.</li> </ol>
	<ol> <li>G. Elli, S. Hamed, M. Petrelli, <u>P. Ibba</u>, M. Ciocca, P. Lugli, and L. Petti, "Field-Effect Transistor-Based Biosensors for Environmental and Agricultural Monitoring" Sensors, 22(11), 4178, 2022, doi: 10.3390/s22114178.</li> </ol>
	6. M. Ahmad, MA. Costa Angeli, <b>P. Ibba</b> , S. Vasquez, B. Shkodra, P.

	Lugli, L Petti, "Paper-based Printed Antenna: Investigation of Process-induced and Climatic-induced Performance Variability", Advanced Engineering Materials 25 (16), 2023, doi: 10.1002/adem.202201703.
7.	G. Cantarella, M. Madagalam, I. Merino, C. Ebner, M. Ciocca, A. Polo, <u>P. Ibba</u> , P. Bettotti, A. Mukhtar, B. Shkodra, AKM. S. Inam, AJ. Johnson, A. Pouryazdan, M. Paganini, R. Tiziani, T. Mimmo, S. Cesco, N. Münzenrieder, L. Petti, N. Cohen, P. Lugli, "Laser-Induced, Green and Biocompatible Paper-Based Devices for Circular Electronics", Advanced Functional Materials 33 (17), 2023, doi: 10.1002/adfm.202210422.
8.	A. Altana, B. Shkodra, <u>P. Ibba</u> , M. A. Costa Angeli, M. Ploner, M. Petrelli, E. M. Korek, P. Lugli, L. Petti, "Textile-Integrated Organic Electrochemical Transistor for Selective Ion Detection via Electrical Impedance Spectroscopy", IEEE Sensors Letters 8(7), 2024, doi: 10.1109/LSENS.2024.3414851.
9.	A. Altana, S. Hamed, P. Lugli, L. Petti, <b>P. Ibba</b> , "Monitoring Iron Stress in Tomato Plants Through Bioimpedance and Machine-Learning- Enhanced Classification Based on Circuit Component Analysis", IEEE Transactions on AgriFood Electronics, 2024, doi: 10.1109/TAFE.2024.3411269.
10.	F. Masoumi, A. Gottardo, <u><b>P. Ibba</b></u> , M. Caffini, A. Altana, S. Riaz, L. Petti, P. Lugli, "Capacitive Impedance Analysis for Noncontact Assessment of Fruit Quality and Ripening", IEEE Transactions on AgriFood Electronics, 2024, doi: 10.1109/TAFE.2024.3406848.
11.	S. Hamed, A. Altana, P. Lugli, L. Petti, <u>P. Ibba</u> , "Supervised classification and circuit parameter analysis of electrical bioimpedance spectroscopy data of water stress in tomato plants", Computers and Electronics in Agriculture 226, 2024, doi: 10.1016/j.compag.2024.109347.
12.	<b>P. Ibba</b> , Z. Muhammad, M. A. Costa Angeli, G. Cantarella, B. Shkodra, A. Altana, A. Athanassiou, P. Lugli, and L. Petti, "Integration of a Textile Electrode into a Smart Glove for On-Field Analysis of Fruit Quality" IEEE Journal on Flexible Electronics, 2024, doi: 10.1109/JFLEX.2024.3466108.
13.	S. Riaz, <b>P. Ibba</b> , N. Sadar, A. Rasheed, S. Stürz, A. Zanella, L. Petti, and P. Lugli. "Electrical Impedance Spectroscopy-Based Detection of Internal Browning Disorder in Apples." IEEE Transactions on AgriFood Electronics, 2024, doi: 10.1109/TAFE.2024.3454529.
14.	C. Allará, R. Moscetti, G. Bedini, M. Ciocca, A. Benelli, P. Lugli, L. Petti, and <u>P. Ibba</u> . "Bioimpedance-based prediction of dry matter content and potato varieties through supervised machine learning methods." Postharvest Biology and Technology 222 (2025): 113358. Doi: https://doi.org/10.1016/j.postharvbio.2024.113358.
15.	L. M. Peppi, M. Gullino, <u>P. Ibba</u> , P. Lugli, W. Guerra, L. Petti, L. Manfrini. "Sensori di crescita dei frutti in continua evoluzione". Rivista di frutticoltura e di ortofloricoltura, 1, 46-49 (2025).

## **Conference papers**

- B. D. Abera, B. Shkodra, A. Douaki, <u>P. Ibba</u>, Giuseppe Cantarella, L. Petti, and P. Lugli, "Single-Walled Carbon Nanotube-Coated Flexible and Soft Screen-Printed Electrochemical Biosensor for Ochratoxin a Detection," in 2020 IEEE International Symposium on Circuits and Systems (ISCAS), 2020, pp. 1-5, doi: 10.1109/ISCAS45731.2020.9181295.
- B. Shkodra, A. Douaki, B. D Abera, <u>P. Ibba</u>, E. Avancini, G. Cantarella, L. Petti, and P. Lugli, "A PEDOT: PSS/SWCNT-Coated Screen Printed Immunosensor for Histamine Detection in Food Samples," in in 2020 IEEE International Symposium on Circuits and Systems (ISCAS), 2020, pp. 1-4, doi: 10.1109/ISCAS45731.2020.9181296.
- 3. P. Ibba, M. Crepaldi, G. Cantarella, G. Zini, A. Barcellona, M. Petrelli, B.D. Abera, B. Shkodra, L. Petti, and P. Lugli, "FruitMeter: An AD5933-Based Portable Impedance Analyzer for Fruit Quality Characterization," in 2020 IEEE International Symposium on Circuits Systems (ISCAS), doi: and 2020, pp. 1-5. 10.1109/ISCAS45731.2020.9181287.
- M. Rivola, <u>P. Ibba</u>, P. Lugli, and L. Petti, "Bioimpedance data statistical modelling for food quality classification and prediction", in 2021 IEEE International Symposium on Circuits and Systems (ISCAS), 1-5, doi: 10.1109/ISCAS51556.2021.9401712.
- M. Ahmad, G. Cantarella, M. A. Angeli, M. Madagalam, C. Ebner, M. Ciocca, R. Riaz, <u>P. Ibba</u>, M. Petrelli, I. Merino, N. Cohen. P. Lugli, and L. Petti, "2.4 GHz Microstrip Patch Antenna Fabricated by Means of Laser Induced Graphitization of a Cellulose-based Paper Substrate", in 2021 IEEE International Flexible Electronics Technology Conference (IFETC), pp. 0044-0046, 2021, doi: 10.1109/IFETC49530.2021.9580510.
- S. Hamed, <u>P. Ibba</u>, M. Petrelli, M. Ciocca, P. Lugli, and L. Petti, "Transistor-based plant sensors for agriculture 4.0 measurements", In 2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor), pp. 69-74, 2021, doi: 10.1109/MetroAgriFor52389.2021.9628560.
- MA. Costa Angeli, M. Madagalam, M. Petrelli, S. Pogliaghi, A. Scarton, <u>P. Ibba</u>, E. Avancini, F. Gori, R. Biasi, L. Petti, and P. Lugli, "Assessing the role of textiles in the performance of wearable screen-printed strain sensors for breathing rate monitoring", in 2021 IEEE Sensors, pp. 1-4, 2021, doi: 10.1109/SENSORS47087.2021.9639701.
- P. Lugli, M. Petrelli, B. Shkodra, S. Vasquez, A. Nijkoops, G. Elli, A. Tagliaferri, M. Ciocca, A. Douaki, <u>P. Ibba</u>, MA. Costa Angeli, and L. Petti, "Solution-processable carbon nanotubes for sensing and biosensing applications", 2023 IEEE Nanotechnology Materials and Devices Conference (NMDC), 2023, doi: 10.1109/NMDC57951.2023.10343652.
- 9. S. Hamed, **P. Ibba**, A. Altana, P. Lugli, and L. Petti, "Towards Tomato

F	Plant Iron Stress Monitoring Through Bioimpedance and Circuit
A	Analysis", 2023 IEEE Conference on AgriFood Electronics (CAFE),
2	2023, doi: 10.1109/CAFE58535.2023.10292001.
10. S L F 7	S. Vasquez, <b>P. Ibba</b> , A. Altana, MA. Costa Angeli, A. Rivadeneyra, P. Jugli, and L. Petti, "Paper-based Impedimetric Sensor for on-Plant Humidity and Transpiration Monitoring", 2023 IEEE Conference on AgriFood Electronics (CAFE), 2023, doi: 0.1109/CAFE58535.2023.10291980.
11. F F F E	F. Masoumi, A. Gottardo, <u>P. Ibba</u> , M. Caffini, A. Altana, P. Lugli, and L. Petti, "Capacitive Impedance Analysis for Non-Contact Assessment of Fruit Quality and Ripening", 2023 IEEE Conference on AgriFood Electronics (CAFE), 2023, doi: 10.1109/CAFE58535.2023.10291929.
12. s	S. Riaz, <u>P. Ibba</u> , S. Nadja, A. Rasheed, P. Lugli, A. Zanella, L. Petti,
"	Exploring the Potential of Electrical Impedance Spectroscopy for
F	Predicting Internal Browning in Apples", 2023 IEEE International
V	Vorkshop on Metrology for Agriculture and Forestry (MetroAgriFor),
2	2023, doi: 10.1109/MetroAgriFor58484.2023.10424025.
13. E C p tu a 1	E. Suraci Picchiotti, S. Krik, <u>P. Ibba</u> , P. Tosato, A. Altana, M. Valt, A. Gaiardo, L. Petti, "Enhancing precision agriculture through cyber- ohysical systems: a functional monitoring platform as decision support ool", 2023 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor), 2023, doi: 0.1109/MetroAgriFor58484.2023.10424409.
14. C	C. E. Téllez Villamizar, A. Lanthaler, MA. Costa Angeli, A. Altana, C.
T	Tronstad, G. Cantarella, N. Münzenrieder, <b>P. Ibba</b> , P. Lugli, L. Petti,
"	Printed Textile-Based Dry Electrodes for Impedance Plethysmography
N	Measurements," 2024 IEEE International Flexible Electronics
T	Technology Conference (IFETC), Bologna, Italy, 2024, pp. 1-3, doi:
1	0.1109/IFETC61155.2024.10771867.
15. S	S. Vasquez, B. Shkodra, A. Rivadeneyra, M. A. C. Angeli, A. Altana, C.
A	Allarà, <u>P. Ibba</u> , P. Lugli, L. Petti. "Fully Printed Low-Cost Ammonia
C	Gas Sensor on Paper Substrate". 2024 IEEE SENSORS, IEEE. Doi:
1	0.1109/SENSORS60989.2024.10785124.
16. C	G. Elli, M. Ciocca, B. Shkodra, <u>P. Ibba</u> , P. Lugli, L. Petti. "Electrolyte-
g	pated field-effect transistor-based sensor for nanoplastic detection: a
s	sensitivity investigation of two nanoplastic models". 2024 IEEE
s	SENSORS, IEEE. Doi: 10.1109/SENSORS60989.2024.10784710.
17. C	C. Allarà, S. Vasquez, M. Ahmad, <u>P. Ibba</u> , M. A. C. Angeli, A. Altana,
A	A. Rivadeneyra, N. Benson, P. Lugli, L. Petti. "Temperature Sensor
F	Fabricated via Direct Laser Writing on Copper Nanoparticles Coated
F	Paper Substrates." 2024 IEEE SENSORS, IEEE. Doi:
1	0.1109/SENSORS60989.2024.10784749
Boo	k Chapters
1. F "	R. Moscetti, A. Benelli, <u>P. Ibba</u> , C. Mannozzi, F. Melini, R. Massantini, Instrumentation Techniques and Analyses of Bioactive Compounds in Different Dried Fruit Products". In Dried Fruit Products (pp. 129-166).

	CRC Press, 2025
	Neuropener nukligetiener
Publications <u>about</u> the applicant	Newspaper publications: Article on the online newspaper dedicated to the fruit and vegetable sector "Fresh Plaza" on the portable impedance analyzer "FruitMeter", developed and presented together with the IIT (Istituto Italiano di Tecnologia, Genova (Italy)) at NOVELFARM 2020. NOVELFARM 2020 is an international conference & trade show for new growing systems, soilless and vertical farming held in Pordenone (Italy) in February 2020.
	Link: <u>https://www.freshplaza.com/article/9196919/an-experimental-fruit-meter-to-measure-quality/</u>
	Article on the online newspaper "Academia" on the portable impedance analyzer "FruitMeter", developed together with the IIT and on the future research directions related to the instrument.
	Link: <u>https://www.academia.bz.it/articles/lebensmittelqualitaet-mit-strom-messen-reifetest-fuer-neue-analysemethode</u>
	TV Services:
	L. Petti, P. Lugli, <b>P. Ibba</b> , M. A. Costa Angeli, "Das neue Senslab an der Freien Universität Bozen", in ORF Südtirol heute, 28th April 2021.
Further data	Speaker at the following conferences:
	2019 - "Selection of Cole model Bio-impedance Parameters for the Estimation of the Ageing Evolution of Apples", XVII International Conference on Electrical Bioimpedance, ICEBI 2019, Joinville (Brasil), 9-13 June 2019.
	2020 - "FruitMeter: an AD5933-based portable impedance analyzer for fruit quality characterization", International Symposium on Circuits and Systems, ISCAS 2020, Sevilla (Spain), 10-21 October 2020.
	2022 – "Cole bioimpedance parameters influence on strawberry ripening binary classification using decision trees", XVIII International Conference on Electrical Bioimpedance, ICEBI 2022, Seoul (Korea) – Online presentation, 29 June – 1 July 2022.
	2023 – "Towards tomato plant iron stress monitoring through bioimpedance and circuit analysis", IEEE Conference on Agrifood Electronics (CAFE 2023), 24-26 September 2023, Torino (Italy).
	2024 – "Integration of a Textile Electrode into a Smart Glove for On-Field Analysis of Fruit Quality", International Flexible Electronics Conference (IFETC 2024), Bologna (Italy), 16-18 September 2024.
	2024 – "Textile-Integrated Organic Electrochemical Transistor for Selective Ion Detection via Electrical Impedance Spectroscopy", IEEE Sensors 2024, Kobe (Japan), 20-23 October 2024.
	Poster presentation at the following international conferences:
	2018 - "Low-cost bio-impedance analysis system for the evaluation of fruit ripeness" IEEE Sensors 2018, New Delhi (India), 28-31 October 2018.

	<ul> <li>2018 - "Development of Printed Electrical Impedance Spectroscopy Based Biosensors for Fruit Characterization", 23rd Workshop on the Developments in the Italian PhD Research on Food Science, Technology &amp; Biotechnology, Oristano (Italy), 19-21 September 2018.</li> <li>2017 - "UAVs based Hyperspectral imaging for the detection of drought stress in Arundo donax L. bioenergy crops", 3rd UK Bioinformatics Student Symposium, Aberystwyth (Wales), 11 August 2017.</li> </ul>
	<ul> <li>Journal of food engineering (Elsevier)</li> <li>Biosystem engineering (Elsevier)</li> <li>Computers and Electronics in Agriculture (Elsevier)</li> <li>Advanced sustainable systems (Wiley)</li> <li>Scientific reports (Springer Nature)</li> <li>IEEE Access</li> <li>IEEE Transactions on Agrifood Electronics</li> <li>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</li> <li>IEEE Sensors conference 2021</li> <li>IEEE Electron Device Technology Manufacturing (EDTM) Conference, 2021.</li> <li>IEEE Conference on Agrifood Electronics (CAFÉ), 2023 and 2024</li> <li>IEEE International Flexible Electronics Technology Conference (IFETC), 2024</li> </ul>
Language competence	Italian: Native English: Advanced – Diploma IELTS C1 Spanish: Upper Intermediate – Diploma DELE B2 German: Pre-intermediate – A2.2
Driving license	В
	Date: Bolzano, 14/04/2025