short-form curriculum
updated to May 2026

Vittorio Ferrari, Ph.D.

Professor of Electronics
at the University of Brescia, Italy

☐ **Affiliation and contact address:**

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☐ **ORCID ID:** 0000-0002-3949-9975

☐ **Scopus ID:** 57194493639

☐ **Google scholar profile:**
https://scholar.google.com/citations?hl=it&user=zSVthx4AAAAJ&view_op=list_works

☐ **General:**

- *Date and place of birth*: October 3, 1962; Milan, Italy.

- *Citizenship*: Italian

☐ **Education:**

- 1988: Laurea degree *cum laude* in Physics at the University of Milan, Italy.

- 1993: Research Doctorate (PhD) degree in Electronic Instrumentation at the University of Brescia, Italy.

☐ **Employment and positions:**

- 1988-1989: Postgraduate research scholar with Istituto Nazionale di Fisica Nucleare at the University of Pavia, Italy.

- 1993-2001: Assistant Professor with the Department of Electronics for Automation (DEA) at the University of Brescia.

- 1994: Visiting fellow at the HP Laboratories, Palo Alto, CA, USA.

- 2001-2006: Associate Professor of Electrical and Electronic Measurements with the DEA at the University of Brescia.

- 2006-present: Full Professor of Electronics with the DEA (DII since 2010) at the University of Brescia.

- 2017 (July; December): Visiting Professor at the Institut Polytechnique de Grenoble, France.

☐ Research activity:

▣ The research activity of Vittorio Ferrari deals with the design and characterization of sensors, microsystems, and the related signal-conditioning interface electronics.

▣ Present topics of interest include thick-film piezoelectric acoustic-wave devices and sensors, energy harvesting techniques and devices for autonomous and wearable sensors, MEMS and microsystems, passive resonant sensors with contactless interrogation, low-noise electronic circuits for sensors, circuit interfaces and instrumentation for quartz-crystal microbalances and microresonator sensors, sensing systems for fluidics, microfluidics and biomedical applications.

▣ Since 1990, participation in national and international research projects on sensors and electronic instrumentation with both academic and industrial presence, often with coordination roles.

▣ From 1994 to 1996, involvement in the working group that at HP Laboratories started the activity on what lately became the IEEE 1451.2 *Standard for a Smart Transducer Interface for Sensors and Actuators.*

▣ Author of more than 300 publications in international peer-reviewed journals and conference proceedings, invited presentations, book chapters, edited books and journal issues, 8 patent applications (6 of which are under industrial exploitation).

▣ Recent and ongoing research collaborations with:

Beijing Institute of Aerospace Control Devices (BIACD) / CERN – Geneva. / Danube University Krems. / Institute of Microelectronics A*STAR - Singapore. / Johannes Kepler University - Linz. / University KU Leuven / Otto-von-Guericke Universität - Magdeburg. / Université de Monastir / Politecnico di Milano. / SPAWAR San Diego. / Universidad Politécnica de Catalunya (UPC). / Universidad Politécnica de Valencia (UPV). / Università di Catania. / VU University Amsterdam. / Vienna University of Technology (TUV). / Institut Polytechnique de Grenoble (INP). // City University of Hong Kong.

▣ Selected funded projects based on competitive evaluations:

- Linz Center of Mechatronics (LCM), Austria, project K2-COMET center (2018-2021 & 2022-2026) on sensors for mechatronics;
- INP Grant for visiting professorship, Institut Polytechnique de Grenoble, France (2017): Microsystems based on Acoustic Waves in Fluids for in vitro Experiments on Biological Samples;
- EU project PETRA II (2004-2007) on piezoelectric transducers and applications;
- MUR-PNRR Italian project (2023-2026) on Made in Italy circolare e sostenibile (MICS);
- MIUR-PRIN Italian projects (2009-2010) on nonlinear energy harvesting techniques for sensor applications (2011-2013) on energy harvesting from broadband vibrations;
- MISE Italian project (2011-2013) on ICT for territorial security;
- Regione Lombardia project (2020-2022) on infrastructures and ICT for sustainable mobility;
- Regione Lombardia project (2018-2020) on sensor systems for indoor air quality monitoring;
- Regione Lombardia project (2006-2008) on smart kitchenware based on sensors.

▣ Selected funded collaborative research with companies:

Accent, Angelo Po Grandi Cucine, Beretta, Bialetti Industrie, Camozzi, CESI, COBO, CSMT, Entech, Finmek, Geca, Gefran, Hewlett Packard, HUAWEI, Intellimech, Intesa Sanpaolo, InvisibleFarm, Logimec, Markos Mefar-Air Liquide, Meggit-Ferroperm, OMAL, Raccorderie Metalliche, ST-Microelectronics, Technobiochip, Tecnint HTE, Tenaris-Dalmine, Zinco Global.

☐ Teaching activity:

▣ Vittorio Ferrari has been teaching several university courses in the field of sensors, microsystems, electronics and measuring instrumentation, including class lectures, laboratory activities and project-based training.

▣ He is in charge of the following courses at the University of Brescia:
- Fundamentals of Electronics and Instrumentation;
- Instrumentation Electronics, Sensors and Microsystems;

plus additional courses upon invitation from another Italian university.

▣ Supervisor and thesis director of more than 30 Master and PhD students in Italy and abroad (Uruguay, Brasil, Colombia) within international co-tutorship programmes.

▣ From 2010 to 2013, coordinator of the academic board of the PhD program in *Electronic Engineering, Sensors and Instrumentation* at the University of Brescia.

▣ From 2013 to 2016, coordinator of the academic board of the PhD program in *Information Engineering* at the University of Brescia (http://drii.unibs.it/).

▣ From 2013, member of the academic board of the PhD program in *Information Engineering* at the University of Brescia.

▣ From 2023, member of the academic board of the National PhD program in *Micro- and Nano-Electronics* at the University of Pavia.

▣ Repeatedly involved in teaching courses on sensors and measuring instrumentation to professionals and engineers in industry.

☐ **Selected academic offices and responsibilities:**

▣ From 2012 to 2016, member of the Quality Assurance Committee of the University of Brescia.

▣ From 2016 to 2022, Rector's delegate for Research Quality Management and Postgraduate Studies at the University of Brescia.

▣ Since 2022, external invited member of the governing council of the Doctoral School of Politecnico di Torino.

▣ From 2023 to 2025, coordinator of a national working group on Doctoral Programmes within the Italian Conference of University Rectors (CRUI).

☐ **Services and recognitions:**

▣ Invited/selected member in the Technical Program Committee of prominent international conferences, including:

Eurosensors / IEEE Sensors / IEEE International Ultrasonics Symposium (IUS)-Group 5: Transducers & Transducer Materials / Ph.D. Research in Microelectronics & Electronics – PRIME / Sensordevices / IEEE Int. Conf. on Sensors, Circuits and Instrumentation Systems – SSD SCI / Mechatronics / IEEE ISQED / IEEE-ISSNIP: Intelligent Sensors / EDERC / ECMS / International Conference on Materials Science, Engineering and Technology.

▣ Invited member of editorial boards:

Journal of Sensors (ISSN 1687-7268); *Sensors* (ISSN 1424-8220); *Micro* (ISSN 2673-8023); *Micro- and Nanoelectromechanical Systems* in *Frontiers in Mechanical Engineering* (ISSN 2297-3079); scientific committee of the *Revista EIA* (ISSN: 1794-1237); co-editor for *Sensors & Transducers Journal* (SSN 1726-5479).

▣ Since 2024, section editor-in-chief of *Electronic Sensors* in *Sensors* (ISSN 1424-8220).

▣ Reviewer on a regular basis for most salient international journals and conferences on sensors and electronic instrumentation.

▣ Project evaluator for the Italian Ministry for University and Research (MUR) and other international Organizations, including:

Agence Nationale de la Recherche (ANR), France / Agencia Nacional de Promoción Científica y Tecnológica - FONCyT, Argentina / Research Foundation - Flanders (FWO), Belgium / Dutch Technology Foundation (STW), The Netherlands. / Netherlands Organisation for Scientific Research (NWO), The Netherlands. / Christian Doppler Research Association (CDG), Austria / Alexander von Humboldt Foundation, Germany.

▣ Affiliations and membership:

Institute of Electrical and Electronic Engineers - IEEE *Senior Member* / IEEE Instrumentation and Measurement Society / IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society / IEEE Sensors Council / Associazione Società Italiana di Elettronica - SIE / Associazione Gruppo Misure Elettriche ed Elettroniche - GMEE / Istituto Nazionale di Ottica (INO) in Consiglio Nazionale delle Ricerche - CNR / Istituto Nazionale di Fisica Nucleare - INFN.

▣ From 2008 to 2013, member of the scientific advisory board for the Institute for Integrated Sensor Systems at the Austrian Academy of Sciences.

▣ From 2012 to 2014, chairman of the scientific advisory committee of the EU FP7-FET project ZEROPOWER.

▣ From 2014 to 2017, elected Italian national coordinator of the research line on *Sensors, Microsystems and Instrumentation* and member of the governing board in the Associazione Gruppo Italiano di Elettronica (GE), now Società Italiana di Elettronica (SIE).

▣ From 2014 to 2020, elected member of the governing board of the Società Italiana di Elettronica (SIE).

▣ Since 2012, member of the steering committee of the Associazione Italiana Sensori e Microsistemi (AISEM).

▣ Since 2016, member of the directing board and, since 2026, vice-president in the Associazione Microelettronica Elettronica Semiconduttori (AMES-AEIT).

▣ Since 2020, member of the cultural committee of Collegio Universitario di Merito Luigi Lucchini, Brescia.

▣ From 2023 to 2026, chairman of the technical evaluation committee for the cascade project calls within one national innovation ecosystem funded by Italian MUR under the National Recovery and Resilience Plan (PNRR).

▣ Co-chair of the *17th AISEM Annual Conference 2013*.

▣ Co-chair of the Electric, Electronic and Electromechanical Engineering track and program committee member in *European Conference on Modelling & Simulation 2014*.

▣ Program chair of the *28th EUROSENSORS Conference 2014*.

▣ Coordinator of the *48th Annual Meeting of Associazione Gruppo Italiano di Elettronica (GE) 2016*.

▣ Chair together with H. Espinosa, A. Frangi and M. Pantano of the symposium "Micro and Nano Mechanics Systems" at the *ESMC Conference 2018*.

▣ Track chair for the topic "Energy Harvesting" at *32nd EUROSENSORS Conference 2018*.

▣ Hosting organizer of the *2019 EUA Council for Doctoral Education Annual Meeting* in Brescia.

▣ Chair together with H. Espinosa, A. Frangi and M. Pantano of the symposium "Micro and Nano Systems and Applications" at the *ESMC Conference 2022*.

▣ Organizer and chair together with M. De Vittorio of the special session "Sustainable sensors" at *35th EUROSENSORS Conference 2023*.

▣ Organizer and chair together with L. Rufer of the special session "Acoustic MEMS" at *Forum Acusticum 2023*.

▣ Main Theme organizer together with P. Honzik, H. Lissek and L. Rufer of "Electroacoustics", and chair together with A. Carlosena of the structured session "Acoustic-based Sensors, Actuators and Microsystems for Diverse Applications" at *Forum Acusticum 2025*.

▣ Invited lecturer in national and international schools on the topic of sensors, energy harvesting, sensor electronics and instrumentation.

▣ Invited examiner and member of the evaluation panels of doctoral theses in Italy and abroad (Australia, Austria, France, Germany, Portugal, Spain, Suisse, Uruguay).

▣ Most recent invited and keynote presentations:

- *Energy Harvesting and Passive Resonators with Contactless Interrogation for Stand-Alone Sensors Based on Piezoelectric Films,*
  Invited lecture, *IEEE International Ultrasonics Symposium*, Xi'an, China, September 15, 2021.
- *Lumped-Element Modelling and Equivalent Circuits in Microsystems,*
  Invited lecture, *MEMS Before and After 2025: From Application Requirements and Theoretical Aspects to Practical Design Approach*, Villa Grumello, Como, Italy, May 29-June 1, 2023.
- *Exploring New Detection Opportunities with ElectroMechanical Microsystems,*
  Invited lecture, *CNR-INO Galileo's Briefings 2024*, Brescia, October 10, 2024.
- *Lumped-Element Modelling and Equivalent Circuits in Microsystems,*
  Invited lecture, *MEMS After 2025: Application Requirements. Theoretical Aspects, Design Approaches*, Villa Grumello, Como, Italy, June 3-6, 2025.
- *Making Sense of Sensors - from Physical Quantities to Signals, Data and Information,*
  Invited lecture, *AISEM Summer School AISS 2025*, Giardini di Naxos, Messina, September 20-23, 2025.

☐ Achievements and awards:

▣ Co-author of the book "*Applied Structural and Mechanical Vibrations: Theory, Methods and Measuring Instrumentation*", P.L. Gatti, V. Ferrari, 1999, CRC Press.

▣ Co-author of 3 papers in the Highly Cited Papers in ISI-WoS ranking in the top 1% in Engineering.

▣ Co-author of 3 papers that in different times ranked in the Most Cited Papers of the journal *Sensors and Actuators A* (ISSN: 0924-4247).

▣ Co-author of 1 paper that in 2012 ranked in the Most Cited Papers of the journal *Smart Materials and Structures* (ISSN: 0964-1726).

▣ 1st most cited author in 2010, and 9th most cited author in lifetime in the journal *Sensors and Actuators A* (ISSN: 0924-4247) as per https://exaly.com/author/4286957/vittorio-ferrari/rankings

▣ Listed in *Top 2% Scientists Worldwide 2025 Ranking* by Stanford University and Elsevier for his achievements in 2024 and lifetime career in Electrical & Electronic Engineering as per https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8

▣ Outstanding Poster Presentation Award for "Autonomous Sensor Module Powered by Impact-Enhanced Energy Harvester from Broadband Low-Frequency Vibrations" at *TRANSDUCERS 2013-Eurosensors XXVII*.

▣ Best Paper Award for "A Microfluidic Device with Embedded Capacitive Sensor for Fluid Discrimination and Characterization" at *SENSORDEVICES 2010*.

▣ Best Poster Award for "Piezoelectric Energy Harvesting From Von Karman Vortices" at *AISEM 2013*.

▣ Best Poster Award for "Piezoelectric Actuators for Microfluidic Acoustic-Wave Manipulation of In-Liquid Particles" at *SIE 2017*.

▣ Best Poster Award for "Electrical Tuning of the Resonant Frequency of a Piezoelectric Micromachined Acoustic Transducer" at *AISEM 2019*.

▣ Best Oral Award for "MEMS Inclinometer with Double-Actuator Servo-Assisted Position-Feedback and Tunable Sensitivity" at *SIE 2019*.

▣ Silver Leaf Award for "Servo-Assisted Position-Feedback MEMS Inclinometer with Tunable Sensitivity" at *PRIME 2019*.

▣ Best Paper Award for "Flexible Passive Sensor Patch with Contactless Readout for Measurement of Human Body Temperature" at *qBATS 2022*.

☐ **Bibliometric data:**

- 300+ journal and conference papers, 10+ books/chapters, 8 patents.
- Total number of publications in peer-review journals: 109
- Citations (Scopus / WoS / GoogleScholar): 4908 / 3921 / 6737
- H-index (Scopus / WoS / GoogleScholar): 34 / 30 / 39

☐ **Extended publication list:** OpenBS archive

☐ **Selection of most significant publications from 2021 to present:**

▣ ***International Journals***

RI-93 F. G. Alabarse, M. Polisi, M. Fabbiani, S. Quartieri, R. Arletti, B. Joseph, F. Capitani, S. Contreras, L. Konczewicz, J. Rouquette, B. Alonso, F. Di Renzo, G. Zambotti, M. Baù, M. Ferrari, V. Ferrari, A. Ponzoni, M. Santoro, J. Haines,
High-Pressure Synthesis and Gas-Sensing Tests of 1-D Polymer/Aluminophosphate Nanocomposites,
ACS Appl. Mater. Interfaces, **13**, 23, (2021) 27237–27244. ISBN/ISSN: 1944-8244. web ISBN/ISSN: 1944-8252.

RI-94 A. Nastro, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Piezoelectric MEMS Acoustic Transducer with Electrically-Tunable Resonant Frequency,
Micromachines, **13**, 1 (2022) 96. ISBN/ISSN: 2072-666X. **Open Access**

RI-95 A. Nastro, N. Pienazza, M. Baù, P. Aceti, M. Rouvala, R. Ardito, M. Ferrari, A. Corigliano, V. Ferrari,
Wearable Ball-Impact Piezoelectric Multi-Converters for Low-Frequency Energy Harvesting from Human Motion,
Sensors, **22**, 3 (2022) 772. ISBN/ISSN: 1424-8220. **Open Access**

RI-96 M. Rosso, A. Nastro, M. Baù, M. Ferrari, V. Ferrari, A. Corigliano, R. Ardito,
Piezoelectric Energy Harvesting from Low-Frequency Vibrations based on Magnetic Plucking and Indirect Impacts,
Sensors, **22**, 15 (2022) 5911. ISBN/ISSN: 1424-8220. **Open Access**

RI-97 P. Aceti, M. Rosso, R. Ardito, N. Pienazza, A. Nastro, M. Baù, M. Ferrari, M. Rouvala, V. Ferrari, Alberto Corigliano,
Optimization of an Impact-Based Frequency Up-Converted Piezoelectric Vibration Energy Harvester for Wearable Devices,
Sensors, **23**, 3 (2023) 1391. ISBN/ISSN: 1424-8220. **Open Access**

RI-98 M. Zini, M. Baù, A. Nastro, M. Ferrari, V. Ferrari,
Flexible Passive Sensor Patch with Contactless Readout for Measurement of Human Body Temperature,
Biosensors, **13**, 6 (2023) 572. ISBN/ISSN: 2079-6374. **Open Access**
RI-99 G. De Palma, E. Sala, S. Rubino, S. Dalola, M. Ferrari, D. Marioli, P. Apostoli, C. Tomasi, F. Righetti, F. Mattioli, V. Ferrari,
Objective Evaluation of Active Interactions between the Operator and Display Screen Equipment Using an Innovative Acquisition System,
Bioengineering, **10**, 6 (2023) 686. ISBN/ISSN: 2306-5354. **Open Access**
RI-100 A. Nastro, M. Baù, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Cell Alignment in Aqueous Solution employing a Flexural Plate Wave Piezoelectric MEMS Transducer,
IEEE Access, 11, (2023) 130755-130762. Electronic ISSN: 2169-3536.
RI-101 A. Nastro, M. Baù, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Piezoelectric MEMS Flexural-Plate-Wave Transducer for Alignment of Microparticles in a Drying Droplet,
IEEE Sensors Journal, 24, 6, (2024) 7564-7572. Electronic ISSN: 1558-1748.
RI-102 F. Mazzoli, D. Alghisi, V. Ferrari,
Self-Diagnostic and Self-Compensation Methods for Resistive Displacement Sensors Tailored for In-Field Implementation,
Sensors, 24, 8 (2024) 2594. ISBN/ISSN: 1424-8220. **Open Access**
RI-103 D. Gelmini, M.A. Haberman, V. Ferrari, E.M. Spinelli, F. Reverter,
An Isolation Amplifier-based Front-End Circuit for Grounded Capacitive Sensors,
IEEE Trans. on Instrum. Meas., 73, (2024) 2004210. ISBN/ISSN: 0018-9456, Electronic ISSN: 1557-9662.
RI-104 A. Nastro, M. Baù, M. Ferrari, F. Cerini, D. Paci, S. Adorno, F. Foncellino, V Ferrari,
Inductive Sensor based on Micromachined Coil for Conductive Target Detection,
IEEE Sensors Letters, 8, 8, (2024) 2502604. Electronic ISSN: 2475-1472.
RI-105 E. Marelli, D. Ruongo, S. Dalola, E. Sala, C. Tomasi, V. Ferrari, M. Ferrari, G. De Palma,
Objective Assessment of Active Display Screen Fixation Among Office Workers Using an Innovative Nonwearable Acquisition System: A Pilot Study,
Appl. Sci., 14, 23, 11307, (2024) 1-11. ISBN/ISSN: 2076-3417. **Open Access**
RI-106 L. Rufer, S. Shubham, H. Wang, T. Miller, P. Honzík, V. Ferrari,
Editorial for the Special Issue on Micromachined Acoustic Transducers for Audio-Frequency Range,
Micromachines, 16, 1 (2025) 67. ISBN/ISSN: 2072-666X. **Open Access**
RI-107 F. Mazzoli, D. Alghisi, V. Ferrari,
A Multivariable Motion Sensor Embedding an Improved Velocity Estimation Algorithm,
IEEE Sensors Journal, 25, 8, (2025) 13840-13849. Electronic ISSN: 1558-1748.
RI-108 F M. Zini, A. Nastro, M. Baù, M. Ferrari, V. Ferrari,
Proximity Distance-Independent Contactless Interrogation of a Passive Sensor Unit based on a Resistive Sensing Element,
IEEE Sensors Journal, **25**, 13, (2025) 24548-24557. Electronic ISSN: 1558-1748.
RI-109 D. Nasr, M. Baù, A. Nastro, S. Bertelli, M. Ferrari, M.H. Said, D. Flandre, M. Mansour, F. Tounsi, V. Ferrari,
A MEMS Variable Reluctance Sensor for Contactless Detection of a Ferrous Rotating Target,
Sensors, **26**, 4, (2026) 1280. ISBN/ISSN: 1424-8220. **Open Access**

▣ ***International Conference Proceedings***

CI-168 A. Nastro, M. Ferrari, V. Ferrari,
Electrostatic-Capacitive MEMS Stiffness Sensor with Position-Feedback Mechanism,
Proceedings of IEEE Sensors 2021 Conference, Sydney, Australia, October 31-November 3, 2021, 1-4. ISBN: 978-1-7281-9501-8, INSPEC Accession Number: 21504740.
CI-169 V. Zega, A. Nastro, M. Ferrari, R. Ardito, V. Ferrari, A. Corigliano,
An Innovative Auxetic Electrically-Tunable MEMS Mechanical Filter,
Proceedings of IEEE 35th International Conference on Micro Electro Mechanical Systems Conference (MEMS), Tokyo, Japan, January 9-13, 2022, 539-542.
ISBN: 978-1-6654-0911-7, INSPEC Accession Number: 21721069.
CI-170 A. Nastro, M. Ferrari, C.I. Mura, A. Labombarda, M. Viti, S. Dalle Feste, V. Ferrari,
Noise Reduction by Data Fusion in a Multisensor System of Replicated MEMS Inclinometers,
Proceedings of 2022 IEEE International Symposium on Inertial Sensors and Systems (INERTIAL), Avignon, France, May 8-11, 2022, 1-4.
CI-171 A. Nastro, M. Bau', M. Zini, M. Ferrari, J.E.Y. Lee, V. Ferrari,
Electronic technique and system for non-contact reading of temperature sensors based on piezoelectric MEMS resonators,
Proceedings of 2022 IEEE International Symposium on Circuits and Systems (ISCAS), Austin, TX, USA, May 27-June 1, 2022, 2409-2413.
CI-172 A. Nastro, M. Baù, M. Ferrari, V. Ferrari,
Piezoelectric MEMS for Sensors, Actuators and Energy Harvesting,
Sensors and Microsystems, Proceedings of AISEM 2021 - In memory of Arnaldo D'Amico, Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 918, 2023, 264-270. ISBN/print: 978-3-031-08135-4. ISBN/electronic: 978-3-031-08136-1.
CI-173 F. Mazzoli, D. Alghisi, V. Ferrari,
Real-Time Velocity Estimation Algorithm for a Multivariable Motion Sensor,
Proceedings of IEEE 27th Conference on Emerging Technologies & Factory Automation (ETFA), Stuttgart, Germany, September 6-9, 2022, 1-4. ISBN/ISSN: 978-1-6654-9996-5.
CI-174 M. Zini, M. Baù, F. Scubla, M. Loda, G. Stefini, A. Nastro, M. Ferrari, V. Ferrari,
Radar Sensor System for Unobtrusive Level Monitoring of Granular Solids Stored in Silos,
Sensors and Microsystems, Proceedings of AISEM 2022, Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 999, 2023, 147-152. ISBN/print: 978-3-031-25705-6. ISBN/electronic: 978-3-031-25706-3.
CI-175 F. Mazzoli, D. Alghisi, V. Ferrari,
Algorithm for Velocity Estimation in a Multivariable Motion Sensor,
Sensors and Microsystems, Proceedings of AISEM 2022, Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 999, 2023, 160-166. ISBN/print: 978-3-031-25705-6. ISBN/electronic: 978-3-031-25706-3.
CI-176 A. Nastro, M. Baù, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Flexural Plate Wave Piezoelectric MEMS Transducer for Cell Alignment in Aqueous Solution,
Proceedings of SIE 2022, Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 1005, 2023, 122-127. ISBN/print: 978-3-031-26065-0. ISBN/electronic: 978-3-031-26066-7.
CI-177 A. Nastro, M. Baù, M. Ferrari, F. Foncellino, F. F. Villa, F. Cuneo, F. Capra, V. Ferrari,
Design of a Novel Tridimensional Silicon MEMS ThermoElectric Generator,
Proceedings of IEEE Sensors 2023 Conference, Vienna, Austria, October 29-November 1, 2023, 1-4. ISBN: 979-8-3503-0387-2/23.
CI-178 M. Zini, M. Baù, A. Nastro, M. Ferrari, V. Ferrari,
Inductive Sensor with Contactless Interrogation for Conductive Target Detection,

Proceedings of the XXXV Eurosensors Conference, Lecce, Italy, 10-13 September, 2023, in Procedings, 97 (1), 95, (2024). EISSN: 2504-3900.

CI-179 F. Mazzoli, D. Alghisi, V. Ferrari,
Self-Diagnostic Method for Resistive Displacement Sensors,
Proceedings of the XXXV Eurosensors Conference, Lecce, Italy, 10-13 September, 2023, in *Procedings*, 97 (1), 164, (2024). EISSN: 2504-3900.

CI-180 A. Nastro, S. Bertelli, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Flexural Plate Wave Piezoelectric MEMS Pressure Sensor,
Proceedings of the XXXV Eurosensors Conference, Lecce, Italy, 10-13 September, 2023, in *Procedings*, 97 (1), 185, (2024). EISSN: 2504-3900.

CI-181 S. Bertelli, A. Nastro, M. Ferrari, M. Baù, V. Ferrari,
Simulation and Experimental Validation of a Flexural Plate Wave Piezoelectric MEMS Transducer,
Proceedings of 2024 IEEE Sensors Applications Symposium (SAS), Napoli, Italy, July 23-25, 2024, 1-7. ISBN/ISSN: 2766-3078.

CI-182 F. Mazzoli, D. Alghisi, V. Ferrari,
Comparative Analysis and New Proposal of Velocity Estimation Methods for Multivariable Motion Sensors,
Proceedings of IEEE 29th Conference on Emerging Technologies & Factory Automation (ETFA), Padova, Italy, September 10-13, 2024, 1-7. ISBN/ISSN: 1946-0759.

CI-183 S. Bertelli, A. Nastro, M. Baù, M. Ferrari, L. Rufer, S. Basrour, V. Ferrari,
Piezoelectric MEMS Temperature Sensor based on Acoustic Flexural Plate Waves,
Proceedings of 11th Convention European Acoustics Association Forum Acusticum / EuroNoise 2025, Málaga, Spain, June 23 - 26, 2025, 1613-1618. ISBN: 978-84-87985-35-5. - ISSN: 3005-7124.

CI-184 A. Nastro, M. Zini, G. Petrucci, F. Cappelli, M. Baldini, N. Lovecchio, M. Baù, M. Ferrari, V. Ferrari,
Experimental Characterization of a Double-Spiral Resistive Temperature Microsensor,
Proceedings of 2025 IEEE Sensors Applications Symposium (SAS), Newcastle, United Kingdom, July 8-10, 2025, 1-5. ISBN/ISSN: 2766-3078.

CI-185 S. Bertelli, A. Nastro, M. Baù, M. Ferrari, V. Ferrari,
Analysis of the Effect of Interdigital Transducer Electrode Number in Lamb Wave Piezoelectric MEMS,
Sensors and Microsystems, Proceedings of AISEM 2025, Trento, Italy, February 11-14, 2025. Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 1497, 2025, 138-143. ISBN/print: 978-3-032-08270-1. ISBN/electronic: 978-3-032-08271-8.

CI-186 D. Nasr, M. Baù, A. Nastro, S. Bertelli, M. Ferrari, M.H. Said, D. Flandre, M. Mansour, F. Tounsi, V. Ferrari,
MEMS Variable Reluctance Sensor Based On a Micromachined Coil,
Sensors and Microsystems, Proceedings of AISEM 2025, Trento, Italy, February 11-14, 2025. Lecture Notes in Electrical Engineering, Springer International Publishing, Vol. 1497, 2025, 164-169. ISBN/print: 978-3-032-08270-1. ISBN/electronic: 978-3-032-08271-8.

▣ ***Book Chapters*** (*from 2012 to present*)

L-10 C. Falconi, G. Mantini, A. D'Amico, V. Ferrari,
Modeling of piezoelectric nanodevices,
in *Piezoelectric nanomaterials for biomedical applications* - Nanomedicine and Nanotoxicology, G. Ciofani and A. Menciassi (Eds.), 2012, Springer-Verlag Berlin Heidelberg, 93-133. ISBN/ISSN: 978-3-642-28043-6; e-ISBN: 978-3-642-28044-3;

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