

Giuseppe Bertuccio

Curriculum vitae

Giuseppe Bertuccio was born in 1962, received the Master degree in Nuclear Engineering at Politecnico di Milano (PoliMi) and since 1987 he joined the research group of professor Emilio Gatti at PoliMI, contributing to the pioneering development of electronic devices on the high resistivity silicon suitable for the integration with radiation detectors.

Since 1990 he has been researcher and since 1998 professor at the Department of Electronics, Information and Bioengineering at PoliMi.

In 1991 he was visiting researcher at Brookhaven National Laboratory (BNL, New York - USA) working on X-ray detectors and associated electronics. He contributed to the development of the Silicon Drift Detectors and associated front-end electronics within a research collaboration between PoliMi, BNL and Max Planck Institute (Munich, D).

In 1993 he was visiting researcher at Canberra Industries (Meriden, CT - USA) to collaborate in the R&D of a front-end for high purity germanium detectors.

In 1993-94, he collaborated with the University of Freiburg and the Fraunhofer Institute for Solid State Physics (Freiburg, Germany) on the design of the first charge amplifier in GaAs technology using High Electron Mobility Transistors.

He has also collaborated with the University of Modena, Institute for Solid State Physics (Julich, D), Alenia-Marconi Systems (Rome, I) and ESA-ESTEC (Noordwijk, Netherland) for study and development of X-ray detectors based on Gallium Arsenide.

His present research fields are in low-noise and low-power mixed-signals Application Specific Integrated Circuits (ASICs) for signal processing of radiation detectors and in Silicon and compound semiconductor detectors (SiC, GaAs, CdTe, CdZnTe) for ionizing radiation spectroscopy and imaging.

He has been scientific responsible for Politecnico di Milano of several research projects on radiation detectors and associated electronics funded by the National Research Council (CNR), the Italian Institute for Nuclear Physics (INFN), the Italian Space Agency (ASI), the Italian Institute of Astrophysics (INAF), Lombardy region and by the Ministry of University and Scientific and Technological Research.

He has collaborated or is collaborating with Alenia Marconi Systems (I), Altalab (I), Check Cap (Israel), LPE S.p.A. (I), Ketek GmbH (D), Selex Integrated Systems (I), Thales Alenia Space (I), Xnext (I), for the development and application of high resolution X-ray spectroscopic devices and systems.

Since 1987 he is member of the Italian National Institute of Nuclear Physics.

He has served as professor to several international courses on radiation detectors and associated electronics organized by the Institute of Electrical and Electronics Engineers (IEEE) in USA and Europe.

He is author/co-author of 180 scientific articles on semiconductor detectors, electron devices, integrated circuits, instrumentation and measurements published on international scientific journals and 20 invited talks at international conferences.

He won the RTSD Scientist Award 2019, an international lifetime achievement award given by the Scientific Advisory Board of the International Symposium on Room Temperature Semiconductor Detectors.

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