MATTEO PERENZONI - CURRICULUM VITAE

PERSONAL INFORMATION

Name	**MATTEO PERENZONI**	
Address	Office	FBK, VIA SOMMARIVE 18, 38123 TRENTO, TN, ITALY
Telephone	Office	+39 0461 314533
	Office fax	+39 0461 314591
e-mail	perenzoni@fbk.eu	

WORK EXPERIENCE

Dates	January 2004 – present
Name and address of Employer	Fondazione Bruno Kessler Centre for Materials & Microsystems (CMM) Integrated Radiation & Imaging Sensors (IRIS) Via Sommarive 18 38123, Povo, Trento, Italy
Type of business or sector	Integrated Circuit Design, Optical Sensors
Position held	Senior Research Scientist
Main activities and responsibilities	Reference person for the multispectral sensors research line Development of integrated circuits Reference person for the IC design tools and website maintenance Fund raising activities for research unit financing Scientific management of ongoing projects International networking for the promotion of the unit PhD and master students supervision
Website	http://iris.fbk.eu

Dates	April 2014 – July 2014
Name and address of Employer	Technical University of Delft Terahertz Sensing Group - EWI Mekelweg 4 2628 CD Delft The Netherlands
Type of business or sector	Antennas for THz Applications
Position held	Visiting Research Scientist
Main activities and responsibilities	Study of coupling of antennas and FET THz detectors Investigation of further cooperations

Dates	November 2002 – December 2003
Name and address of Employer	Coclea S.r.l. Via D. Pasqui 28 38068, Rovereto, Trento, Italy
Type of business or sector	Information Technology, Education and Training
Position held	Teacher and software engineer
Main activities and responsibilities	Teaching of post-diploma/post-graduation courses on IT Software engineering and programming

Dates	May 2002 – November 2002
Name and address of Employer	Universitá degli Studi di Padova Dipartimento di Ingegneria dell'Informazione Via Gradenigo 6/B 35131, Padova, Italy
Type of business or sector	Integrated Circuit Design Consultant
Position held	Mixed-signal integrated circuit designer
Main activities and Responsibilities	Mixed-signal integrated circuit design and layout for a national funded project for decoders of UMTS mobile phones receivers.

EDUCATION

Dates	April 2002
Organization	Universitá degli Studi di Padova (Italy)
Principal subjects	Microelectronics and Applied Electronics. Dissertation on “Progettazione di un decodificatore turbo analogico CMOS per codici di Hamming concatenati in parallelo”, Prof. Andrea Neviani. Main skills: Integrated circuits design and modeling, measurement and testing.
Title of qualification awarded	Master Degree (Laurea) in Electronics Engineering

Dates	June 1996
Organization	Istituto Tecnico Industriale “G. Marconi”, Rovereto, Trento (Italy)
Principal subjects	Industrial Electronics and Telecommunications
Title of qualification awarded	High school diploma of “Perito industriale in elettronica”

TRAINING COURSES

2013-2014: People Management
Pierluigi Palmigiani e Gianfranco Goeta (School of Coaching SCOA)
5 full-days group lessons, 5 individual coaching sessions
Subject: Coaching and development of collaborators, vision, leadership

2011: Laser Safety
Dante Milani (Ordine Ingegneri Piacenza)
Subject: Training on the laser safety rules in the lab

2011: Cadence Advanced Mixed Signal IC Design
Maxime Barbe (Cadence Design Systems), 2-day course
Subject: Advanced Mixed-Signal Design and Simulation

2010: Project Management
Mario Damiani (Fondazione ISTUD), 2-day course
Subject: Introduction to Project Management

2006: Mentor Graphics Calibre DRC & LVS
Stefano Pettazzi (Mentor Graphics), 2-day course
Subject: Professional usage of Calibre tools

MOTHER TONGUE

Italian

OTHER LANGUAGES

	ENGLISH	FRENCH
Reading skills	Cambridge B2 (Attended: CPE C2)	Good
Writing skills	Cambridge B2 (Attended: CPE C2)	Basic
Verbal skills	Cambridge B2 (Attended: CPE C2)	Basic

SCIENTIFIC ACTIVITY

TEACHING ACTIVITIES

2012-2015: Member of the Committee on Graduate Studies of the ICT Doctoral School of the University of Trento, DISI Department

Academic Year 2012 - 2013: Contract Professor in CMOS Readout Electronics for Image Sensors, ICT Doctoral School, University of Trento

Academic Years 2006 - 2009: Contract Professor in Electronic Systems, NanoMicro 2nd level Professional Master, University of Trento/FBK

PARTICIPATION IN SCIENTIFIC CONFERENCE AND WORKSHOP PROGRAM COMMITTEES

Technical Program Committee Member of the International Solid-State Circuits Converence (ISSCC) in the Imagers, MEMS, Medical and Display (IMMD) subcommittee since March 2017.

Technical Program Committee Member of the European Solid-State Circuits Conference (ESSCIRC) in the Imagers, MEMS, Medical and Display (IMMD) subcommittee since September 2014.

Director of the 6th Winter School of Photonics and Optoelectronics for PhD students, "Physics and Applications of T-Rays", 20-26 February 2011, Fai Della Paganella, Trento, Italy.

Program Committee Member, session and tutorial chair of the 7th Conference on PhD Research in Microelectronics, 3-7 July 2011, Madonna di Campiglio, Trento, Italy.

Reviewer for the following peer-reviewed international journals:
IEEE – Journal of Solid-State Circuits, Journal of Selected Topics on Quantum Electronics, Transactions on Circuits and Systems, Transactions on Instrumentation and Measurements, Sensors Journal
SPIE – Optical Engineering
Elsevier – Optical Materials
Springer – Journal of Infrared, Millimeter and Terahertz Waves, Analog Integrated Circuits and Signal Processing
MDPI – Remote Sensing, Sensors

INTERNATIONAL NETWORKING

Member of the Photonics21 Workgroup 5 (Security, Metrology and Sensors) since 2008, with active participation to the definition of the European strategy and competitive calls in the photonics area.

Member of the IEEE since 2008, member of the Microwave Theory and Techniques Society since 2011, and member of the Solid-State Circuits Society since 2012.

INVITED CONTRIBUTIONS

Matteo Perenzoni, "Is there anything beyond? Terahertz imaging: potential and perspectives", Invited at SEMICON Imaging Europe 2016, Grenoble (FR), October 2016.

David Stoppa, Matteo Perenzoni, Lucio Pancheri, "Sensors Architectures for 3D Time-of-Flight Imaging", Half-day workshop, Image Sensors 2012, Hotel Russell, London, 20-22 March 2012.

Matteo Perenzoni, "Multispectral Imaging: When CMOS Does The Trick!", Scientific Imaging Forum at the International Solid-State Circuits Conference ISSCC 2013, San Francisco (CA), February 2013.

Matteo Perenzoni, David Stoppa, "Electronics-based pixels for 3D range imaging", Range Imaging Sensors and Applications RISA 2011, Trento, 27-28 January 2011.

A. Yeremyan, M. Cazzanelli, P. Bettotti, E. Froner, M. Scarpa, L. Pavesi, M. Perenzoni, B. Margesin, "Terahertz Spectroscopy of Protein Solutions", Fotonica 2010, Pisa, 25-27 May 2010.

PUBLICATIONS

Books and book chapters

1. M. Perenzoni, D. J. Paul, “Physics and Applications of Terahertz Radiation”, contributed book, Springer (2014).

2. M. Perenzoni, P. Kostov, M. Davidovic, G. Zach, H. Zimmermann, “Electronics-based sensors”, chapter in Time-of-Flight Range Imaging, edited by Fabio Remondino & David Stoppa, Springer (2012).

Journals

1. M. Perenzoni, L. Gasparini, D. Stoppa, “Design and Characterization of a 43.2-ps and PVT-resilient TDC for Single-Photon Imaging Arrays”, IEEE Transactions on Circuits and Systems II: Express Briefs , accepted for publication, 2017.

2. L. Gasparini, B. Bessire, M. Unternährer, A. Stefanov, D. Boiko, M. Perenzoni, and D. Stoppa, “SUPERTWIN: towards 100kpixel CMOS quantum image sensors for quantum optics applications”, SPIE OPTO, International Society for Optics and Photonics, Jan 2017.

3. S. Domingues, D. Perenzoni, M. Perenzoni, and D. Stoppa, “CMOS Integrated Lock-in Readout Circuit for FET Terahertz Detectors”, Journal of Infrared, Millimeter, and Terahertz Waves, 38(6), pp. 679-688, Feb 2017.

4. M. Perenzoni, D. Perenzoni, and D. Stoppa, “A 64x64-Pixels Digital Silicon Photomultiplier Direct TOF Sensor With 100-MPhotons/s/pixel Background Rejection and Imaging/Altimeter Mode With 0.14% Precision Up To 6 km for Spacecraft Navigation and Landing”, IEEE Journal of Solid-State Circuits, vol. 51, n. 1, pp. 151-160, Jan 2017.

5. M. Perenzoni, and D. Stoppa, “Responsivity and NEP optimization of FET-based terahertz detectors”, International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz), Sept 2016.

6. M. Khatib, M. Perenzoni, and D. Stoppa, “A CMOS 0.15-μm in-pixel noise reduction technique for readout of antenna-coupled FET-based THz detectors”, International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz), Sept. 2016.

7. M. Ali, M. Perenzoni, and D. Stoppa, “A high-gain, low-noise switched capacitor readout for FET-based THz detectors”, ESSCIRC 2016: 42nd European Solid-State Circuits Conference, Lausanne, 2016, pp. 401-404.

8. M. Perenzoni, L. Pancheri, and D. Stoppa, “Compact SPAD-Based Pixel Architectures for Time-Resolved Image Sensors”, Sensors 2016, 16(5), 745, May 2016.

9. M. Ali, M. Perenzoni and D. Stoppa, “A Methodology to Measure Input Power and Effective Area for Characterization of Direct THz Detectors,” in IEEE Transactions on Instrumentation and Measurement, vol. 65, no. 5, pp. 1225-1231, May 2016.

10. M. Perenzoni, N. Massari, D. Perenzoni, L. Gasparini and D. Stoppa, “A 160x120 Pixel Analog-Counting Single-Photon Imager With Time-Gating and Self-Referenced Column-Parallel A/D Conversion for Fluorescence Lifetime Imaging,” in IEEE Journal of Solid-State Circuits, vol. 51, no. 1, pp. 155-167, Jan. 2016.

11. M. Perenzoni, H. Xu and D. Stoppa, “Small area 0.3 pJ/conv, 45 ps time-to-digital converter for arrays of silicon photomultiplier interfaces in 150 nm CMOS,” in Electronics Letters, vol. 51, no. 23, pp. 1933-1935, 2015.

12. F. Bianco, D. Perenzoni, D. Convertino, S.L. De Bonis, D. Spirito, M. Perenzoni, C. Coletti, M.S. Vitiello, and A. Tredicucci, “Terahertz detection

by epitaxial-graphene field-effect-transistors on silicon carbide", Applied Physics Letters, 107, 131104 (2015).

13. C. Bruschini , E. Charbon, C. Veerappan, L. Huf Campos Braga, N. Massari, M. Perenzoni, L. Gasparini, D. Stoppa, R. Walker, A. Erdogan, R. K. Henderson, S. East, L. Grant, B. Játékos, F. Ujhelyi, G. Erdei, E. Lörincz, L. André, L. Maingault, V. Reboud, L. Verger, E. Gros d'Aillon, P. Major, Z. Papp, and G. Németh, "SPADnet: Embedded Coincidence in a Smart Sensor Network for PET Applications", Nuclear Instruments & Methods in Physics Research, Section A, Accelerators, Spectrometers, Detectors and Associated Equipment, vol. 734, n. B, pp. 122 – 126, 2014.

14. L. Huf Campos Braga, L. Gasparini, L. Grant, R. K. Henderson, N. Massari, M. Perenzoni, D. Stoppa, and R. Walker, "A fully digital 8×16 SiPM array for PET applications with per-pixel TDCs and real-time energy output", IEEE Journal of Solid-State Circuits, vol. 49, n. 1, pp. 301 – 314, 2014.

15. M. Perenzoni, L. Parmesan, D. Stoppa, "A robust, power- and area-efficient gm-control for low-noise operational amplifiers", Analog Integrated Circuits and Signal Processing, vol. 82, n. 1, pp. 209 – 216, 2014.

16. E. Gros d'Aillon, L. Maingault, L. André, V. Reboud, L. Verger, E. Charbon, C. Bruschini, C. Veerappan, L. Huf Campos Braga, N. Massari, M. Perenzoni, L. Gasparini, D. Stoppa, R. Walker, A. Erdogan, R. K. Henderson, S. East, L. Grant, B. Játékos, F. Ujhelyi, G. Erdei, E. Lörincz, P. Major, Z. Papp, and G. Németh, "First characterization of the SPADnet sensor: a digital silicon photomultiplier for PET applications", Journal of Instrumentation, vol. 8, n. 12, 2013

17. M. Perenzoni, D. Stoppa, "Figures of Merit for Indirect Time-of-Flight 3D Cameras: Definition and Experimental Evaluation", Remote Sensing Journal, 2011, 3, 2461-2472.

18. Matteo Perenzoni, Nicola Massari, David Stoppa, Lucio Pancheri, Mattia Malfatti, and Lorenzo Gonzo, "A 160x120-Pixels Range Camera With In-Pixel Correlated Double Sampling and Fixed-Pattern Noise Correction", IEEE Journal of Solid-State Circuits, vol. 46, no. 7, pp. 1672-1681, Jul 2011.

19. David Stoppa, Nicola Massari, Lucio Pancheri, Mattia Malfatti, Matteo Perenzoni, and Lorenzo Gonzo, "An 80x60 Range Image Sensor based on 10um 50MHz Lock-In Pixels in 0.18um CMOS", IEEE Journal of Solid-State Circuits, vol. 46, no. 1, pp. 248-258, Jan 2011.

20. Oreste Sgrott, Daniel Mosconi, Matteo Perenzoni, Gianmaria Pedretti, Lorenzo Gonzo, and David Stoppa, "A 134-pixel CMOS Sensor for Combined Time-of-Flight and Optical Triangulation 3-D Imaging", IEEE Journal of Solid-State Circuits, vol. 45, no. 7, pp. 1354-1364, July 2010.

21. Matteo Perenzoni, and Lorenzo Gonzo, "Solar-powered CMOS Image Sensor", IET Electronics Letters, vol. 46, no. 1, 7 January 2010.

22. Matteo Perenzoni, David Stoppa, Mattia Malfatti and Andrea Simoni, "A Multispectral Analog Photon-Counting Readout Circuit for X-ray Hybrid Pixel Detectors", IEEE Transactions on Instrumentation and Measurement, vol. 57, no. 7, pp. 1438-1444, 2008.

PUBLICATIONS – CONFERENCE AND WORKSHOP PROCEEDINGS

23. M. Khatib, M. Perenzoni, “Pixel-level continuous-time incremental sigma-delta A/D converter for THz sensors”, Proc. SPIE 9899, Optical Sensing and Detection IV, 98990E, 29 April 2016.

24. M. Perenzoni, D. Perenzoni and D. Stoppa, “A 64x64-pixel digital silicon photomultiplier direct ToF sensor with 100Mphotons/s/pixel background rejection and imaging/altimeter mode with 0.14% precision up to 6km for spacecraft navigation and landing,” 2016 IEEE International Solid-State Circuits Conference (ISSCC), San Francisco, CA, 1-4 Feb 2016, pp. 118-119.

25. Hesong Xu, Matteo Perenzoni, Nicola Massari, Alberto Gola, Alessandro Ferri and David Stoppa, “A 30-ns recovery time, 11.5-nC input charge range, 16-channel read-out ASIC for PET application”, 41st European Solid-State Circuits Conference (ESSCIRC), Graz, 14-18 September 2015, pp. 360-363.

26. Leonardo Gasparini, Nicola Massari, Matteo Perenzoni, Lucio Pancheri, David Stoppa, “Compact time-gated analog counting SPAD-based pixels for high resolution, single-photon, time-resolved imagers”, International Image Sensors Workshop 2015, Vaals (NL), 8-11 June 2015.

27. Hesong Xu, Matteo Perenzoni, Nicola Massari and David Stoppa, “A CMOS analog SiPM front-end for positron emission tomography application”, 2015 IEEE International Symposium on Circuits and Systems (ISCAS), Lisbon, 24-27 May 2015, pp. 1630-1633.

28. Nicola Massari and Matteo Perenzoni, “A time-based technique for a resistive detector”, 2015 IEEE International Symposium on Circuits and Systems (ISCAS), Lisbon, 24-27 May 2015, pp. 361-364.

29. Matteo Perenzoni and Daniele Cavallo, “Design of an efficient 900 GHz antenna in standard CMOS technology for imaging arrays”, 2015 9th European Conference on Antennas and Propagation (EuCAP), Lisbon, 13-17 April 2015.

30. Muhammad Ali, Matteo Perenzoni, David Stoppa, “A Measurement Setup for THz Detectors Characterization Validated on FET-Based CMOS Test Structures”, I2MTC 2015, Pisa (ITALY), May 2015.

31. Matteo Perenzoni, Nicola Massari, Daniele Perenzoni, Leonardo Gasparini, David Stoppa, “A 160x120-pixel analog-counting single-photon imager with Sub-ns time-gating and self-referenced column-parallel A/D conversion for fluorescence lifetime imaging”, International Solid-State Circuits Conference ISSCC 2015, S. Francisco (CA), 22-26 February 2015.

32. Matteo Perenzoni, “Measurement of Spatial Response of CMOS Antenna-Coupled FET Detector at 325GHz”, International Infrared, Millimeter, and Terahertz waves Conference (IRMMW-THz), Sept. 2014.

33. Edoardo Charbon, Claudio Bruschini, Chockalingam Veerappan, Leo H.C. Braga, Nicola Massari, Matteo Perenzoni, Leonardo Gasparini, David Stoppa, Richard Walker, “Updates from the SPADnet project (fully digital, scalable and networked photonic component for Time-of-Flight PET applications)”, EJNMMI Physics, 1(Suppl 1), A11, 2014.

34. Muhammad Ali, Matteo Perenzoni, “Comparison of gate driven and source driven FET structures as THz detectors”, Optical Sensing and Detection III, vol.9141, SPIE Photonics Europe, Bruxelles, May 2014.

35. S. Domingues, D. Perenzoni, M. Perenzoni, D. Stoppa, “Design and characterization of a readout circuit for FET-based THz imaging”, Optical Sensing and Detection III, vol.9141, SPIE Photonics Europe, Bruxelles, May 2014.

36. C. Bruschini, E. Charbon, C. Veerappan, L. H. C. Braga, N. Massari, M. Perenzoni, L. Gasparini, D. Stoppa, R. Walker, A. Erdogan, R. K. Henderson, S. East, L. Grant, B. Jatekos, F. Uihelyi, G. Erdei, E. Lorincz, L. Andrè, L. Maingault, D. Jacolin, L. Verger, E. Gros d'Aillon, P. Major, Z. Papp, G. Nemeth, "SPADnet: a fully digital, scalable, and networked photonic component for time-of-flight PET applications", Proc. SPIE 9129, Biophotonics: Photonic Solutions for Better Health Care IV, vol.9129, Brussels, April 2014.

37. L. Braga, L. Gasparini, L. Grant, R. Henderson, N. Massari, M. Perenzoni, D. Stoppa, R. Walker, "An 8x16-pixel 92k SPAD time-resolved sensor with on-pixel 64ps 12b TDC and 100MS/s real-time energy histogramming in 0.13um CIS technology for PET/MRI applications", International Solid-State Circuits Conference ISSCC 2013, pp. 486-487, San Francisco, USA.

38. Suzana Domingues, Daniele Perenzoni, Valeria Giliberti, Alessandra Di Gaspare, Michele Ortolani, Matteo Perenzoni, and David Stoppa, "Analysis of CMOS 0.13µm Test Structures for 0.6 to 1.5 THz Imaging", International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz) 2013, Mainz, Germany.

39. E. Charbon, C. Bruschini, C. Veerappan, L. Huf Campos Braga, N. Massari, M. Perenzoni, L. Gasparini, D. Stoppa, R. Walker, A. Erdogan, R. K. Henderson, S. East, L. Grant, B. Játékos, F. Ujhelyi, G. Erdei, E. Lörincz, L. André, L. Maingault, V. Reboud, L. Verger, E. Gros d'Aillon, P. Major, Z. Papp, and G. Németh, "SPADnet: A Fully Digital, Networked Approach to MRI Compatible PET Systems Based on Deep-Submicron CMOS Technology", Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC), Seoul, South Korea, 2013.

40. L. Gasparini, L. Huf Campos Braga, M. Perenzoni, and D. Stoppa, "Characterizing Single- and Multiple-timestamp Time of Arrival Estimators with Digital SiPM PET Detectors", Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC), Seoul, South Korea, 2013.

41. L. Huf Campos Braga, L. Gasparini, L. Grant, R. K. Henderson, N. Massari, M. Perenzoni, D. Stoppa, and R. Walker, "Complete characterization of SPADnet-I – a digital 8×16 SiPM array for PET applications", Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC), Seoul, South Korea , 2013.

42. L. Huf Campos Braga, M. Perenzoni, and D. Stoppa, "Effects of DCR, PDP and Saturation on the Energy Resolution of Digital SiPMs for PET", Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC), Seoul, South Korea, 2013.

43. R. Walker, L. Huf Campos Braga, A. Erdogan, L. Gasparini, L. Grant, R. K. Henderson, N. Massari, M. Perenzoni, D. Stoppa, "A 92k SPAD Time-Resolved Sensor in 0.13um CIS Technology for PET/MRI Applications", Proceedings of the 2013 International Image Sensor Workshop, pp. 177-180, International Image Sensor Workshop, Snowbird, Utah, USA, 12-16 June 2013.

44. Matteo Perenzoni, Suzana Domingues, "A diode-based bolometer implemented on micromachined CMOS technology for terahertz radiation detection", Proceedings of SPIE Silicon Photonics, SPIE Photonics Europe 2012.

45. Suzana Domingues, Matteo Perenzoni, David Stoppa,Antonio D. Capobianco, Francesco Sacchetto, "A CMOS THz Staring Imager with In-pixel Electronics", Proceedings of the PRIME 2011, Madonna di Campiglio, Italy.

46. Matteo Perenzoni, Daniele Perenzoni, David Stoppa, Viviana Mulloni, Francesco Solazzi, Giuseppe Resta, Benno Margesin, “Terahertz microsensor for biomedical applications”, 2011 International Workshop on BioPhotonics, 8-10 June 2011, Parma, Italy.

47. Matteo Perenzoni, Nicola Massari, David Stoppa, Lucio Pancheri, Mattia Malfatti, and Lorenzo Gonzo, “A 160x120-Pixels Range Camera with On-Pixel Correlated Double Sampling and Nonuniformity Correction in 29.1um pitch”, Proceedings of the European Solid-State Circuits Conference (ESSCIRC`10), pp. 294-297, 13-17 September 2010, Sevilla.

48. Matteo Perenzoni, Daniel Mosconi, and David Stoppa, “A 160□120-pixel Uncooled IR-FPA Readout Integrated Circuit with On-chip Non-uniformity Compensation”, Proceedings of the European Solid-State Circuits Conference (ESSCIRC`10), pp. 122-125, 13-17 September 2010, Sevilla.

49. Matteo Perenzoni, Nicola Massari, Stéphane Pocas, Jérôme Meilhan, François Simoens, “A Monolithic Visible, Infrared and Terahertz 2D Detector”, 35th Infrared, Millimeter and Terahertz waves Conference, IRMMW2010, 5-10 September 2010, Rome.

50. Matteo Perenzoni, Fausto Borghetti, and Lorenzo Gonzo, “A Column Readout Channel for Infrared and Terahertz Bolometers with Direct Analog to Digital Conversion”, International Symposium on Circuits and Systems ISCAS 2010, pp. 1288-1291, Paris, 30 May - 2 June, 2010.

51. Daniele Perenzoni, Matteo Perenzoni, Lorenzo Gonzo, Antonio D. Capobianco, Francesco Sacchetto, “Analysis and design of a CMOS-based terahertz sensor and readout”, Proceedings of SPIE Optical Sensing and Detection, Volume 7726, SPIE Europe 2010.

52. David Stoppa, Nicola Massari, Lucio Pancheri, Mattia Malfatti, Matteo Perenzoni, and Lorenzo Gonzo, “An 80x60 Range Image Sensor based on 10um 50MHz Lock-In Pixels in 0.18um CMOS”, International Solid-State Circuits Conference ISSCC 2010, San Francisco, 7-11 February, 2010.

53. Oreste Sgrott, Daniel Mosconi, Massimo Saiani, David Stoppa, Gianmaria Pedretti, Matteo Perenzoni and Lorenzo Gonzo, “A 134-pixel CMOS Sensor for Combined Time-of-Flight and Optical Triangulation 3-D Imaging”, Proceedings of the European Solid-State Circuits Conference (ESSCIRC`09), Athens, Greece, 2009.

54. Mattia Malfatti, Nicola Massari, Lucio Pancheri, Matteo Perenzoni, David Stoppa and Lorenzo Gonzo, “A new 3D position detector for multi-sensor Ambient Assisted Living Applications”, Proceedings of the 1st Forum Italiano AMBIENT ASSISTED LIVING, Lecce, Italy, 2009.

55. Matteo Perenzoni, Massimo Gottardi and Nicola Massari, “A programmable-dynamic pixel for use in a multispectral imager”, Proceedings of the EOS Conference on Frontiers in Electronic Imaging 2009, Munich, Germany, 2009.

56. Matteo Perenzoni, David Stoppa, Mattia Malfatti and Andrea Simoni, “A Multi-Spectral Analog Photon Counting Readout Circuit for X-Ray Hybrid Pixel Detectors”, 2006 IEEE Instrumentation and Measurement Technology Conference Proceedings, pp. 2003-2006, 2006.

57. Mattia Malfatti, Matteo Perenzoni, David Stoppa, Andrea Simoni and Andrea Adami, “A High Dynamic Range CMOS Interface for Resistive Gas Sensor Array with Gradient Temperature Control”, 2006 IEEE Instrumentation and Measurement Technology Conference Proceedings, pp. 2013-2016, 2006.

58. Daniel Mosconi, David Stoppa, Mattia Malfatti, Matteo Perenzoni, Mauro Scandiuzzo and Lorenzo Gonzo, “A CMOS Sensor based on Single Photon Avalanche Diode for Fluorescence Lifetime Measurements”, 2006 IEEE Instrumentation and Measurement Technology Conference Proceedings, pp. 416-419, 2006.

59. Francesco Ficorella, Gian Franco Dalla Betta, Luigi Viarani, Matteo Perenzoni, David Stoppa and Lorenzo Gonzo, “A Linear CMOS Sensor for 3D Vision with Merged I-TOF and OT Techniques”, Proceedings of the PRIME 2006, Otranto, Italy, 2006.

60. Matteo Perenzoni, Mattia Malfatti, Fabrizio De Nisi, David Stoppa and Andrea Baschirotto, “A Systematic Design Procedure for High-Speed Opamp Performance Optimization”, Proceedings of the 2005 European Conference on Circuit Theory and Design, pp. 229-232, 2005.

61. Mattia Malfatti, Matteo Perenzoni, Nicola Viarani, Andrea Simoni, Leandro Lorenzelli and Andrea Baschirotto, “A complete front-end system read-out and temperature control for resistive gas sensor array”, Proceedings of the 2005 European Conference on Circuit Theory and Design, pp. 31-34, 2005.

62. Matteo Perenzoni, Andrea Gerosa, and Andrea Neviani, “Analog CMOS implementation of Gallager's iterative decoding algorithm applied to a block turbo code”, Proceedings of the 2003 International Symposium on Circuits and Systems (ISCAS2003), 2003.

OTHER SKILLS

SOCIAL SKILLS AND COMPETENCES

Self-motivated by passion
Able to work well in team
Able to negotiate and understand conflicts
Honest and trustable

ORGANIZATIONAL SKILLS AND COMPETENCES

People management and negotiation
Understanding of project management gained through training and experience
Able to formulate budget and organize activities gained with experience
Exercises leadership
Knowledgeable to problem solving

TECHNICAL SKILLS AND COMPETENCES

Deeply skilled in sensors, electronics and microelectronics systems gained through more than 10 years’ experience
Deeply skilled in information technology tools and systems by personal and professional experience
Skilled in laboratory equipment and activities
Able to learn and master new knowledge quickly