

CURRICULUM VITAE



PERSONAL INFORMATION

Name **DANILO MANSTRETTA**
E-mail **danilo.manstretta@unipv.it**
[Google Scholar](#)
Nationality Italian

CURRENT POSITION Since Oct 2019

- Company name and address
 • Industry/sector
 • Job function
Università degli Studi di Pavia - Corso Strada Nuova, 65 - 27100 Pavia
University
Associate professor
- Main activity and responsibilities
Research activity in analog and RF integrated circuit design; teaching “VLSI Analog-Digital Interface ICs”, “Industrial Topics in Microelectronics and Photonics” and “Elettronica II”.
Member of the National Nano and Micro Electronics PhD School Academic Board since 2022.

PROFESSIONAL EXPERIENCE Feb 2005 – Sept 2019

- Company name and address
 • Industry/sector
 • Job function
Università degli Studi di Pavia - Corso Strada Nuova, 65 - 27100 Pavia
University
Assistant professor
- Main activity and responsibilities
Research activity in analog and RF integrated circuit design; teaching “VLSI Analog-Digital Interface ICs” and “Elettronica II”.
Member of the Microelectronics PhD School Academic Board since 2015.

2018

- Company name and address
 • Industry/sector
 • Job function
Italian Ministry of Education and University
University
Consultant
- Main activity and responsibilities
Technical consultant in favor of the Italian Ministry of Education and University in a civil lawsuit

2017 - 2019

- Company name and address
 • Industry/sector
 • Job function
Photeon Technologies
Semiconductors
Consultant
- Main activity and responsibilities
Circuit design and design methodologies of analog and RF integrated circuits.

• Mar 2014 - Sept 2014

- Company name and address
 • Industry/sector
 • Job function
Marvell Italia - V.le Repubblica, 38 - 27100 Pavia
Semiconductors
Consultant
- Main activity and responsibilities
Secondment assignment for the European Marie Curie Project ATWC 251399 (Adaptive Transceivers for Wireless Communications). Responsible for the development of WP2: RX Architecture.

• 2010

- Company name and address
 • Industry/sector
 • Job function
Marvell Italia - V.le Repubblica, 38 - 27100 Pavia
Semiconductors
Consultant

- Main activity and responsibilities
 - **2008-2009**
 - Company name and address
 - Industry/sector
 - Job function
- Main activity and responsibilities

- Nov 2003– Feb 2005**
- Company name and address
 - Industry/sector
 - Job function
- Main activity and responsibilities

- Sep 2001– Oct 2003**
- Company name and address
 - Industry/sector
 - Job function
- Main activity and responsibilities

Analog/RF IC design consultant.

Marvell Italia - V.le Repubblica, 38 - 27100 Pavia
Semiconductors
Consultant

Design of integrated circuits for low-cost TV tuners. The concept of IM2 cancellation in single-ended input differential-output low-noise amplifiers using feedback has been introduced and incorporated in a fully-integrated TV tuner.

Broadcom Corporation (now part of Broadcom Inc.)
5300 California Avenue
Irvine, California 92617
USA

Semiconductors for wireless and wireline communications
Staff Scientist

Member of the tuner group. Responsible for the design of a new multi-standard variable gain low noise amplifier (BCM3431) with autonomous gain control. Other activities: Analog and RF circuit design for TV tuners applications.

Agere Systems (now part of Broadcom Inc.)
Various locations in New Jersey and Pennsylvania

Semiconductors
Member of Technical Staff

Member of the product development team of highly integrated, high performance transceivers for next generation WLAN. Responsible for the transceiver architecture and base-band interface development.

ACADEMIC QUALIFICATIONS

- Feb 2023**
 - Qualification
- Oct 1998– Nov 2001**
 - University name and address
 - Main subject
 - Qualification
- Oct 1992– Feb 1998**
 - University name and address
 - Main subject
 - Qualification

MIUR – Abilitazione Scientifica Nazionale

National academic qualification of *full professor* in the sector 09/E3 Electronics

Università degli Studi di Pavia
RF Microelectronics
PhD in Electrical Engineering and Computer Science

Università degli Studi di Pavia
Electronics, telecommunications, optoelectronics
Laurea degree in Electrical Engineering (110/110 cum Laudae)

TEACHING ACTIVITIES

- 2007– 2011
 - 2011– 2012
 - 2013– present
 - 2017-present
 - 2019-2020
 - 2021- present
- Laurea (undergraduate) course: *Technologie e Materiali per l'Elettronica*
Laurea Magistrale course: *Filtri e Convertitori*
Laurea Magistrale course: *VLSI Analog-Digital Interface Integrated Circuits (in English)*
Laurea (undergraduate) course: *Elettronica II*
Laurea Magistrale course: *Industrial Topics in Microelectronics (in English)*
Laurea Magistrale course: *Industrial Topics in Microelectronics and Photonics (in English)*

OTHER ACADEMIC ACTIVITIES

2015- present
2017

Member of the Microelectronics PhD Board (University of Pavia).
Member of the Admission Committee for the PhD in Microelectronics (University of Pavia).

RESEARCH ACTIVITIES

The main focus of the research activity is RF and millimeter-wave ICs for wireless communications, including RX and TX front end and frequency synthesizer. These research activities are carried on within the frame of nationally and internationally funded research programs. Cooperation with private industries has always been very tight. Over the years, research has been conducted cooperatively with or sponsored by STMicroelectronics, Lucent Technologies and Agere Systems (now part of Broadcom Inc.), CSEM, National Semiconductor, Ericsson, Lund University, University of Toronto, Broadcom Corporation, Marvell Technology Group, Mediatek, Photeon, Huawei, CamGraphIC and Saphyrion.

For more information, visit my Lab website: microlab.unipv.it

A list of recent research programs is listed below.

2022-present

Program

Wireless RFIC Design

Partners

Saphyrion .

Objective

The research program is intended to the development of a radio receiver for L-band radiometers for space applications..

2022-present

Program

Optical RFIC Design

Partners

CamGraphIC .

Objective

The research program is intended to the development of OPTO-RFIC for 400Gbaud applications and beyond and its main focus is the design and development of interface electronics for Graphene-based optical modulators and detectors.

2018-present

Program

Optical RFIC Design

Partners

Huawei Technologies Italia s.r.l.

Objective

The research program is intended to the development of CMOS OPTO-RFIC for 400Gbaud applications and beyond and its main focus is the design and development of linear transimpedance amplifiers and drivers for coherent optical applications in standard CMOS.

2018-2019

Program

5G Receiver

Partners

Huawei Technologies Oy (Finland)

Objective

The final goal of the program is to demonstrate the feasibility of a complete receiver (from LNA to Filter/VGA buffer) in the band from 6 to 8 GHz. Such a frequency can be considered as the intermediate frequency of a heterodyne receiver whose input is around 30 GHz (5G higher band). In alternative, it can be considered as deriving directly from the lower 5G band.

2017-2019

Program

PRIN: Advanced Nanometer IC Technologies for Next Generation Transceivers (ANiThiNG)

Partners

University of Pavia, University of Milan, University of Naples-II

Objective

ANiThiNG deals with the development in the aggressive 14nm FinFet technology of an innovative circuit and system solution to validate an LTE transceiver implementing for the first time the Same-Channel Full-Duplex (SCFD) concept in a single chip including RF, analog and digital self-interference cancellation.

2011-2014

Program

Adaptive Transceivers for Wireless Communications (ATWC)

EU Industry-Academia Partnerships and Pathways (Marie Curie)

Partners	Università degli Studi di Pavia, Marvell Italia, Marvell USA, University of Lund, Ericsson AB
Program Coordinator	R. Castello
Objective	The project aims at using adaptive optimization to reduce energy consumption in a multimode wireless communication terminal.
Activities and responsibilities	Responsible for the development of Workpackage 2: RX architecture

2008-2012

Program	Advanced topics in the field of wireless communications
Partners	Broadcom Corporation
Activities and responsibilities	Responsible for the research liaison. Industrially sponsored research and student internship programs.

2009-2010

Program	Application of scaled CMOS technologies for the implementation of receive and transmit algorithms for wireless, wireline and industrial control applications. Sponsored by the Italian Ministry of Education
Partners	Università degli Studi di Pavia, Marvell Italia
Program Coordinator	R. Castello
Objective	The project aims at using adaptive optimization to reduce energy consumption in a multimode wireless communication terminal.
Activities and responsibilities	Responsible for the development of research on millimeter-wave CMOS ICs.

**OTHER PROFESSIONAL
ACTIVITIES**

IEEE Member since 2002.
Reviewer for IEEE Journal of Solid State Circuits, IEEE Transaction on Circuits and Systems-Part I, IEEE Transaction on Circuits and Systems-Part II, and IEEE Transaction on Microwave Theory and Techniques.
Member of the IEEE Radio Frequency Integrated Circuits Symposium Technical Program committee since 2007.
Member of the IEEE Radio Frequency Integrated Circuits Symposium Steering Committee since 2017.

TPC chair of the 2023 IEEE Radio Frequency Integrated Circuits Symposium

TPC member of ESSCIRC since 2022.

TPC co-chair of the 2022 IEEE Radio Frequency Integrated Circuits Symposium

Guest Editor of the IEEE Journal of Solid-State Circuits May 2017 Special Section on the 2016 RFIC Symposium.
Guest Editor of the IEEE Transactions on Microwave Theory and Techniques June 2018 Mini Special Issue on the 2017 RFIC Symposium.

LANGUAGE SKILLS

**FIRST LANGUAGE
OTHER LANGUAGES**

	ITALIAN
	ENGLISH
• Reading	EXCELLENT
• Writing	GOOD
• Oral	GOOD
	FRENCH
• Reading	GOOD
• Writing	SUFFICIENT
• Oral	SUFFICIENT

PUBLICATIONS AND AWARDS

The publications on international peer-reviewed conferences and journals have received a total of 794 citations with an h-index=12 according to Scopus (as of 29/08/2018).

He was co-recipient of the **IEEE Journal of Solid-State Circuits 2003 Best Paper Award** for the paper entitled "Second-order intermodulation mechanisms in CMOS down-converters", published on the JSSC on March 2003

He was co-recipient of the Gold Leaf Award (PRIME 2017 BEST PAPER AWARD) for a paper presented at PRIME Conference 2017 - 12 - 15 June 2017, Giardini Naxos - Taormina, Italy

Patents

<i>Pub. No.: US</i> 2005/0255815	J. Hammerschmidt, D. Manstretta, "Multiple Branch Wireless Receiver"
<i>Pub. No.: US</i> 2006/0125453	D. Manstretta, "High precision power detector"
<i>Pub. No.: US</i> 2006/0125557	D. Manstretta, "Impedance matched variable gain low noise amplifier using shunt feed-back"
<i>Pub. No.: US</i> 2006/0205370 A1	T. Hayashi, D. Manstretta, "High-order harmonic rejection mixer using multiple LO phases"
<i>Pub. No.: US</i> 2011/7994865 B1	D. Manstretta, F. De Bernardinis, "Even Order Cancellation in single-ended input differential output amplifiers using feedback"

List of Publications

1. J. Jin, S. Lecchi, R. Castello and D. Manstretta, "An FDD Auxiliary Receiver with a Highly Linear Low Noise Amplifier," ESSCIRC 2022- IEEE 48th European Solid State Circuits Conference (ESSCIRC), Milan, Italy, 2022, pp. 309-312. doi: 10.1109/ESSCIRC55480.2022.9911524
2. N. Cordioli, D. Manstretta and R. Castello, "A 58 GHz Bandwidth, and less than 1.8% THD, Mach-Zehnder Driver, in 28 nm CMOS Technology," ESSCIRC 2022- IEEE 48th European Solid State Circuits Conference (ESSCIRC), Milan, Italy, 2022, pp. 429-432. doi: 10.1109/ESSCIRC55480.2022.9911473
3. I. Apostolina and D. Manstretta, "A 14.5-17.9 GHz Harmonically-Coupled Quad-Core P-N Class-B DCO with -117.3 dBc/Hz Phase Noise at 1 MHz Offset in 28-nm CMOS," 2022 IEEE Radio Frequency Integrated Circuits Symposium (RFIC), Denver, CO, USA, 2022, pp. 211-214. doi: 10.1109/RFIC54546.2022.9863180
4. N. N. Miral, K. Sohal, D. Manstretta and R. Castello, "Filtering Trans-Impedance Amplifiers: from mW of Power to GHz of Bandwidth," 2022 IEEE Custom Integrated Circuits Conference (CICC), Newport Beach, CA, USA, 2022, pp. 1-8. doi: 10.1109/CICC53496.2022.9772822
5. J. Jin, J. Wu, R. Castello and D. Manstretta, "A 400- μ W IoT Low-IF Voltage-Mode Receiver Front-End With Charge-Sharing Complex Filter," in IEEE Journal of Solid-State Circuits, vol. 57, no. 7, pp. 1957-1967, July 2022. doi: 10.1109/JSSC.2022.3161340
6. N. N. Miral, D. Manstretta and R. Castello, "A 17-mW 0.5–1.5-GHz Bandwidth TIA Based on an Inductor-Stabilized OTA With 35–42-dBm In-Band IIP3," in IEEE Solid-State Circuits Letters, vol. 5, pp. 13-16, 2022. doi: 10.1109/LSSC.2022.3149300

7. J. Jin, J. Wu, R. Castello and D. Manstretta, "A 400- μ W Low-IF IoT Receiver Front-End with Tunable Charge-Sharing Complex Filter," *ESSCIRC 2021 - IEEE 47th European Solid State Circuits Conference (ESSCIRC)*, 2021, pp. 419-422, doi: 10.1109/ESSCIRC53450.2021.9567758.
8. N. N. Miral, D. Manstretta and R. Castello, "A 17 mW 33 dBm IB-OIP3 0.5-1.5 GHz Bandwidth TIA Based on an Inductor-Stabilized OTA," *ESSCIRC 2021 - IEEE 47th European Solid State Circuits Conference (ESSCIRC)*, 2021, pp. 203-206, doi: 10.1109/ESSCIRC53450.2021.9567850.
9. E. Kargaran, D. Manstretta and R. Castello, "Design Considerations for a Sub-mW Receiver Front-End for Internet-of-Things," in *IEEE Open Journal of the Solid-State Circuits Society*, vol. 1, pp. 37-52, 2021, doi: 10.1109/OJSSCS.2021.3110461.
10. M. Javadi, H. Miari-Naimi, S. Tijani, D. Manstretta and R. Castello, "A Highly Linear SAW-Less Noise-Canceling Receiver With Shared TIAs Architecture," in *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, vol. 29, no. 7, pp. 1360-1369, July 2021.
11. K. Sohal, D. Manstretta and R. Castello, "A 2nd Order Current-Mode Filter with 14dB Variable Gain and 650MHz to 1GHz Tuning-Range in 28nm CMOS," *2021 IEEE International Symposium on Circuits and Systems (ISCAS)*, Daegu, Korea, 2021, pp. 1-5.
12. J. Jin, J. Wu, R. Castello and D. Manstretta, "A 4.8-dB NF, 440- μ W Bluetooth Receiver Front-End With a Cascode Noise Canceling LNTA," in *IEEE Microwave and Wireless Components Letters*, vol. 31, no. 5, pp. 489-492, May 2021, doi:10.1109/LMWC.2021.3062901.
13. A. Mohammadpour, D. Manstretta and R. Castello, "A 140 μ W Front-end with 5.7 dB NF and +10 dBm OOB-IIP3 using Voltage-Mode Boosting Mixer," in *IEEE Microwave and Wireless Components Letters*, 2021, (*in print*), doi: 10.1109/LMWC.2021.3066420.
14. L. Aschei, N. Cordioli, P. Rossi, D. Montanari, R. Castello and D. Manstretta, "A 42 GHz TIA in 28nm CMOS With Less Than 1.8% THD for Optical Coherent Receivers," in *IEEE Solid-State Circuits Letters*, vol. 3, pp. 238-241, 2020, doi: 10.1109/LSSC.2020.3012691.
15. B. Guo, D. Prevedelli, R. Castello, D. Manstretta, "A 0.08mm² 1-6.2 GHz Receiver Front-End with Inverter-Based Shunt-Feedback Balun-LNA", *IEEE RFIC Symposium.*, Aug 4-Sept 30 2020.
16. G. Pini, D. Manstretta and R. Castello, "Analysis and Design of a 260-MHz RF Bandwidth +22-dBm OOB-IIP3 Mixer-First Receiver With Third-Order Current-Mode Filtering TIA," in *IEEE Journal of Solid-State Circuits*, doi: 10.1109/JSSC.2020.2987715.
17. E. Kargaran, C. Bryant, D. Manstretta, J. Strange, R. Castello, "A Sub-0.6V, 330 μ W, 0.15 mm² Receiver Front-End for Bluetooth Low Energy (BLE) in 22 nm FD-SOI with Zero External Components", *IEEE A-SSCC*, Macau (China), 4-6 Nov 2019
18. G. Pini, D. Manstretta and R. Castello, "A 260-MHz RF Bandwidth Mixer-First Receiver With Third-Order Current-Mode Filtering TIA," in *IEEE Solid-State Circuits Letters*, vol. 2, no. 9, pp. 183-186, Sept. 2019.
19. A. Coccia, L. Fanori, D. Manstretta, R. Castello, "A Wideband SAW-Less Transmitter Operating in Closed-Loop with Embedded N-Path Filtering", to be presented at the 2019 IEEE Custom Integrated Circuits Conference, Austin, Texas (USA), Apr 14-17 2019
20. E. Kargaran, D. Manstretta and R. Castello, "A 1.5–2.8 GHz current-mode LNTA achieving >25 dBm IIP3 and +8 dBm P-1dB gain compression", in *Microelectronics Journal*, vol. 86, no. 4, pp. 57-64, Apr 2019
21. D. Prevedelli, G. Pini, D. Manstretta, R. Castello, "A Mixer-1st auxiliary receiver for full-duplex self-interference cancellation", *2018 New Generation of CAS, NGCAS 2018*, Valletta (Malta), pp. 162-165, 20-28 Nov 2018
22. A. Coccia, S. Tijani, D. Manstretta, R. Castello, "A TVWS Receiver with Balanced Output Self-Calibrated IIP2 LNTA Employing a Low-Noise Current Multiplier", *Integration, the VLSI Journal* Volume 63, pp. 283-290, Sept 2018
23. E. Kargaran, D. Manstretta and R. Castello, "A Sub-IV, 72 μ W Stacked LNA-VCO for Wireless Sensor Network Applications," *2018 14th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*, Prague, pp. 185-188, July 2018.
24. D. Manstretta, "Guest Editorial for the 2017 RFIC Symposium Mini-Special Issue," in *IEEE Transactions on Microwave Theory and Techniques*, vol. 66, no. 6, pp. 1579, Jun 2018.
25. D. Montanari, G. Castellano, E. Kargaran, G. Pini, S. Tijani, D. De Caro, A. G. M. Strollo, D. Manstretta, and R. Castello, "An FDD Wireless Diversity Receiver With Transmitter Leakage

- Cancellation in Transmit and Receive Bands," in *IEEE Journal of Solid-State Circuits*, vol. 53, no. 7, pp. 1945-1959, July 2018.
26. G. Pini, D. Manstretta and R. Castello, "Analysis and Design of a 20-MHz Bandwidth, 50.5-dBm OOB-IIP3, and 5.4-mW TIA for SAW-Less Receivers," in *IEEE Journal of Solid-State Circuits*, vol. 53, no. 5, pp. 1468-1480, May 2018.
 27. E. Kargaran, D. Manstretta and R. Castello, "Design and Analysis of 2.4 GHz 30 μ W CMOS LNAs for Wearable WSN Applications," in *IEEE Transactions on Circuits and Systems I: Regular Papers*, vol. 65, no. 3, pp. 891-903, March 2018.
 28. E. Kargaran, D. Manstretta, R. Castello, "Design Considerations for a Sub-mW Wireless Medical Body-Area Network Receiver Front End", in *Micromachines*, Jan 2018.
 29. G. Castellano, D. Montanari, D. De Caro, D. Manstretta, and A. G. M. Strollo, "An Efficient Digital Background Control for Hybrid Transformer-based Receivers ", *IEEE Transactions on Circuits and Systems - I*, vol. 64, Issue 12, 2017
 30. I. Fabiano, M. Ramella, D. Manstretta, R. Castello, "A +25 dBm IIP3 1.7-2.1 GHz FDD Receiver Front-End with Integrated Hybrid-Transformer in 28nm CMOS", in *IEEE Transactions on Microwave Theory and Techniques*, vol. 65, Issue 11, 2017
 31. S. Tijani, D. Manstretta, "A Low-Power Active Self-Interference Cancellation Technique for SAW-Less FDD and Full-Duplex Receivers", in *Journal of Low Power Electronics and Applications*, Nov 2017
 32. Matteo Ramella, Ivan Fabiano, Danilo Manstretta, Rinaldo Castello, "A SAW-Less 2.4GHz Receiver Front-End with 2.4mA Battery Current for SoC Coexistence", in *IEEE Journal of Solid-State Circuits*, Vol. 52, Issue 9, Sept 2017, pp. 2292-2305
 33. Ehsan Kargaran, Danilo Manstretta, and Rinaldo Castello, "A 30 μ W, 3.3dB NF CMOS LNA for Wearable WSN Applications ", *International Symposium on Circuits and Systems (ISCAS) 2017*, Baltimore, MD (USA), 28/05/2017.
 34. Arianna Coccia, Danilo Manstretta, and Rinaldo Castello, "A TVWS LNTA with Balanced Output Employing a Low-Noise Current Multiplier", *PRIME 2017*, Giardini Naxos - Taormina, Italy, 12/06/2017.
 35. D. Montanari, G. Castellano, D. Manstretta and R. Castello, "A 0.7-2 GHz Auxiliary Receiver with Enhanced Compression for SAW-less FDD", *ESSCIRC 2017*, LEUVEN, Belgium, 11/09/2017.
 36. E. Kargaran, S. Tijani, G. Pini, D. Manstretta and R. Castello, "Low Power Wideband Receiver with RF Self-Interference Cancellation for Full-Duplex and FDD Wireless Diversity", *IEEE Radio Frequency Integrated Circuits (RFIC) Symposium 2017*, Honolulu, Hawaii, 04/06/2017.
 37. D. Manstretta, "Introduction to the Special Section on the 2016 Radio Frequency Integrated Circuits (RFIC) Symposium", *IEEE Journal of Solid-State Circuits*, vol. 52, issue 5, pp. 2, 2017.
 38. G. Castellano, D. De Caro, A.G.M. Strollo, D. Manstretta, "A Low Power Control System for Real-Time Tuning of a Hybrid Transformer-based Receiver", *Proceedings of the 2016 IEEE International Conference on Electronics, Circuits and Systems*
 39. G. Pini, D. Manstretta, R. Castello, "Highly Linear TIA for SAW-Less FDD Receivers", *Proceedings of the 2016 IEEE Asian Solid-State Circuits Conference*
 40. D. Montanari, L. Silvestri, M. Bozzi and D. Manstretta, "Antenna Coupling and Self-Interference Cancellation in SAW-less Diversity Receivers", *Proceedings of the 2016 IEEE European Microwave Conference*
 41. S. Tijani, D. Manstretta "A SAW-Less Receiver Front-End with Low-Power Active Self-Interference Canceler", *Proceedings of the 2015 IEEE International Conference on Electronics, Circuits and Systems*
 42. M. Ramella, I. Fabiano, D. Manstretta, and R. Castello, "A 1.7-2.1GHz +23dBm TX Power Compatible Blocker Tolerant FDD Receiver with Integrated Duplexer in 28nm CMOS", *Proceedings of the 2015 Asian Solid-State Circuits Conference*
 43. M. Ramella, I. Fabiano, D. Manstretta and R. Castello, "2.4GHz Low-Power SAW-Less Receiver for SoC Coexistence", *Proceedings of the 2015 Asian Solid-State Circuits Conference*
 44. D. Manstretta and R. Castello, "An Intuitive Analysis of Phase Noise Fundamental Limits in LC Oscillators", *Proceedings of the 23rd International Conference on Noise and Fluctuations*, Xi'an (China), June 2nd-5th 2015

45. M. Garampazzi, P. Mendes, N. Codega, D. Manstretta, R. Castello, "Analysis and Design of a 195.6 dBc/Hz Peak FoM P-N Class-B Oscillator With Transformer-Based Tail Filtering", *IEEE Journal of Solid-State Circuits*, vol. 50, n. 7, Jul 2015, pp. 1657-1668
46. D. Manstretta, "Fundamental Limitations in LC Oscillators Noise-Power Efficiency", Workshop at RFIC 2015
47. Moroni, R. Genesi, and D. Manstretta, "Analysis and design of a 54 GHz distributed 'hybrid' wave oscillator array with quadrature outputs", *IEEE Journal of Solid-State Circuits*, vol. 49, n. 5, May 2014, pp. 1158-1172
48. M. Garampazzi, P. Mendes, N. Codega, D. Manstretta, R. Castello, "A 195.6dBc/Hz peak FoM P-N class-B oscillator with transformer-based tail filtering", *Proceedings of the 2014 European Solid-State Circuits Conference*, pp. 331-334
49. M. Garampazzi, S. Dal Toso, A. Liscidini, D. Manstretta, P. Mendez, L. Romano, R. Castello, "An intuitive analysis of phase noise fundamental limits suitable for benchmarking LC oscillators", *IEEE Journal of Solid-State Circuits*, vol. 49, n. 3, Mar 2014, pp. 635-645
50. A. Moroni and D. Manstretta, "Design and modeling of passive mixer-first receivers for millimeter-wave applications", *Proceedings of the 2013 International Conference on IC Design and Technology*
51. A. Moroni, R. Genesi, and D. Manstretta, "A Distributed "Hybrid" Wave Oscillator Array for Millimeter-Wave Phased-Arrays", *Proceedings of the IEEE CICC 2012*
52. D. Manstretta, "Second-Order Intermodulation in CMOS Down-Converters", Tutorial Presentation at "Recent development in active and passive CMOS mixer" Workshop, RFIC 2012
53. A. Moroni and D. Manstretta, "A Broadband Millimeter-Wave Passive CMOS Down-Converter", to be presented at IEEE Radio Frequency Integrated Circuits Conference, June 2012
54. D. Manstretta, "A Broadband Low-Power Low-Noise Active Balun With Second-Order Distortion Cancellation", *IEEE Journal of Solid-State Circuits*, Vol. 47, No. 2, Feb 2012,
55. D. Manstretta, "Design Considerations on ultra-low-power wireless transmitters for wearable medical devices", 2010 Annual Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp 3437- 3438
56. L. Baldini, D. Manstretta, T. Erseghe, N. Laurenti, A. Liscidini, R. Castello, "Reconfigurable Multi-Band OFDM UWB Receivers: Circuits and System Considerations", chapter in book "Circuits and Systems for Future Generations of Wireless Communications", Springer, 2009, pp 27-52
57. D. Manstretta, "A Reconfigurable Ultra-Wideband Receiver", CMOS Emerging Technologies Workshop, Banff, Alberta, Canada, Feb 2009
58. D. Mastantuono, and D. Manstretta, "A low noise active balun with IM2 cancellation for multi-band portable DVB-H receivers", ISSCC 2009, San Francisco (CA), USA, 8-12 Feb 2009
59. D. Manstretta, "High Linearity Down-Conversion CMOS Mixers", IEEE European Microwave Integrated Circuits Conference 2008, Amsterdam (NL), 27-31 Oct. 2008, pp. 175-178
60. F. Avanzo, F. M. De Paola, and D. Manstretta, "A Common-Base Linear RF Power Amplifier for 3G Cellular Applications", *IEEE Custom Integrated Circuits Conference 2008*, San Jose (CA), 21-24 Sept 2008
61. R. Genesi, F. M. De Paola, and D. Manstretta, "A 53 GHz DCO for mm-Wave WPAN", *IEEE Custom Integrated Circuits Conference 2008*, San Jose (CA), 21-24 Sept 2008
62. F. M. De Paola, R. Genesi, and D. Manstretta, "A 71-73 GHz Voltage-Controlled Standing-Wave Oscillator in 90 nm CMOS Technology", 34th European Solid-State Circuit Conference, Edinburgh, 15-19 Sept 2008
63. D. Manstretta, "A Broadband Low-Noise Single-Ended Input Differential Output Amplifier with IM2 Cancelling", *IEEE Radio Frequency Integrated Circuit Symposium*, Atlanta, GA, USA, 15-17 June 2008, pp. 79-82
64. D. Manstretta, N. Laurenti, and R. Castello, "A Reconfigurable Narrowband MB-OFDM UWB Receiver Architecture", *IEEE Transaction on CAS II*, Vol. 55, Issue 4, April 2008, pp.324-328
65. M. Brandolini, P. Rossi, D. Manstretta, and F. Svelto, "Insights into CMOS Wireless Receivers toward a Universal Mobile Radio", chapter in the book "Wireless Technologies: Circuits, Systems, and Devices", ISBN: 978-0-84937-9-963, Edited by K. Iniewsky, CMOS Emerging Technologies Inc., Vancouver, Canada

66. D. Manstretta, and L. Dauphinee, "A Highly Linear Broadband Variable Gain LNA for TV Applications", presented at *IEEE Custom Integrated Circuits Conference 2007*, San Jose (CA), Sept 2007
67. R. Castello and D. Manstretta, "Multimode Reconfigurable Wireless Terminals: a First Step Toward Software Defined Radio" **invited talk** at *IEEJ Int. Analog VLSI Workshop*, Nov. 7-9, 2007, Bunratty, Ireland
68. R. Castello and D. Manstretta, "Multimode Reconfigurable Wireless Terminals: a First Step Toward Software Defined Radio" invited talk at *ESSCIRC 2006*, 32nd European-Solid-State Circuits Conference, 18-22 September 2006, Montreux, Switzerland
69. F. Agnelli, G. Albasini, I. Bietti, A. Gnudi, A. Lacaita, D. Manstretta, R. Rovatti, E. Sacchi, P. Savazzi, F. Svelto, E. Temporiti, S. Vitali, and R. Castello, "Wireless Multi-Standard Terminals: System Analysis and Design of a Reconfigurable RF Front-end", *IEEE Circuits and Systems Magazine*, First Quarter 2006, pp 38-59
70. M. Brandolini, P. Rossi, D. Manstretta, and F. Svelto, "Towards Multi-Standard Mobile Terminals: Fully Integrated Receivers Requirements and Architectures"; *IEEE Trans. on Microwave Theory and Techniques*, Mar 2005
71. F. Gatta, D. Manstretta, P. Rossi, and F. Svelto, "A fully integrated 0.18 μ m CMOS direct conversion receiver front-end with on-chip LO for UMTS", *IEEE Journal of Solid-State Circuits*, Jan 2004
72. D. Manstretta, M. Brandolini and F. Svelto, "Second-order intermodulation mechanisms in CMOS down-converters", *IEEE Journal of Solid-State Circuits*, March 2003 - **JSSC Best Paper Award 2003**
73. M. Banu, V. Prodanov, P. Kiss, and D. Manstretta, "The challenges of fully integrated OFDM transceivers for 802.11 wireless-LAN systems", presented at *Gigahertz Radio Frequency Workshop, IEEE Int. Solid State Circuits Conference 2003*
74. D. Manstretta, F. Gatta, P. Rossi, and F. Svelto "A direct conversion CMOS receiver front-end with on-chip LO for UMTS", presented at *ESSCIRC 2002*, Florence (IT), September 2002
75. D. Manstretta and F. Svelto, "Analysis and optimization of IIP2 in CMOS direct down-converters", presented at *CICC 2002*, Orlando (FL), May 2002
76. D. Manstretta, R. Castello, F. Gatta, P. Rossi and F. Svelto "A 0.18 μ m CMOS Direct Conversion Receiver Front-End for UMTS", *IEEE Int. Solid State Circuits Conference 2002*
77. D. Manstretta, R. Castello and F. Svelto, "Low 1/f Noise CMOS active Mixers for Direct Conversion", *IEEE Transaction on CAS II: Analog and Digital Signal Processing*, vol.48, No. 9, September 2001, pp.846-850
78. D. Gerna, A. Giry, D. Manstretta, D. Belot and D. Pache, "A 1W 900MHz Direct Conversion CMOS Transmitter for Paging Applications", presented at *Radio Frequency Integrated Circuit Symposium*, Phoenix (AR), USA, May 2001
79. F. Svelto, D. Manstretta, I. Bietti and R. Castello, "Present Status in CMOS RF design", *invited paper* presented at *Norchip 2000*, Turku, Finland, December 2000
80. D. Manstretta, I. Bietti, F. Gatta, E. Sacchi, F. Svelto and R. Castello, "CMOS RF Front-end for Direct Conversion: a 2dB fully Differential LNA and a Low 1/f Noise Mixer", presented at the *Workshop "New Trends in CMOS RF Design"*, Pavia, Italy, Jun. 2000
81. D. Manstretta, F. Svelto and R. Castello, "Active Mixers for Direct Conversion Architectures" presented at *"International workshop on low power RF integrated circuits"*, Lausanne, Oct. 1999
82. D. Manstretta, F. Gatta, E. Sacchi and F. Svelto, "Low Noise Amplifier Design in CMOS", Chapter in book "Low-power design techniques and CAD tools for analog and RF integrated circuits", Kluwer Academics Press