Name: Luca Roselli Nationality: Italian Date of birth: May 4, 1962 Home address: Via Faustina 14, 06121 Perugia, Italy Position held: Associate Professor, Senior IEEE (2001) Work address: University of Perugia, Department of Engineering (DI), High Frequency Electronic (HFE Lab), Via G. Duranti 93, 06125, Perugia, Italy Work phone: +39 0755853633; E-mail: luca.roselli@unipg.it

## **Education:**

• 13 December 1988, Electronic Engineering, University of Florence "Laurea" thesis: "Surface acoustic resonators", Supervisor: Prof. Carlo Atzeni.

## **Employments:**

- Current position: Associate Professor in "Applied Electronics", University of Perugia, From 2005 heis responsible of High Frequency Electronics Laboratory since November 1, 2001.
- "Researcher" (formal Italian academic permanent position) in Applied Electronics, University of Perugia November 1,1991-November 1, 2001
- Consultant under contract, six months, MICREL s.r.l., to develop modeling of SAW chirp filters (1990 to 1991)
- Second Lieutenant in the Italian Army as teacher of Electronics equipments since 1989 to 1990

## Visiting:

- Visiting Researcher at Ferdinand Braun Institut fuer Hoechstfrequenztechnik (FBH), Berlin, Germany 1993
- Visiting Researcher at Ferdinand Braun Institut fuer Hoechstfrequenztechnik (FBH), Berlin, Germany 1994
- Visiting Researcher at University of Michigan, Ann Arbor, US (Fulbright fellowship for researchers) 1997

## **Teaching Activities**

Since I was in the Italian Army in 1989 I started a continuous teaching activity in the area of applied electronics. Always at the University of Perugia since 1991.

More specifically I taught:

- "Electronic Equipments" (Italian Army), 1989.
- "Electronic components", as assistant professor, 1991-1993
- "Applied Electronics", as assistant professor, 1991-1999
- "Electronic Devices", 1994-1998
- "Microwave electronics", 1995-2011
- "Basics of Electronic Circuits", 2000
- "Telecommunication Electronics", 2001
- "High Frequency Electronic Components", 2003-2009
- "Applied Electronics", 2009-

## Supervision of PhD and visiting students, evaluation of M. thesis and PhD thesis

- Supervisor of the following PhD students:
  - Valeria Palazzari 2001-2003
  - Francesco Pio Placentino 2005-2008
  - Andrea Scarponi 2005-2008
  - o Gabriele Tasselli 2008-2010
  - o Giulia Orecchini 2009-2011
  - o Luca Aluigi 2009-2011
  - o Francesca Lolli 2009-2012
  - o Andrea Battistini 2010-2012
  - o Chiara Mariotti 2012-
- PhD Assessment committee/external referee for the University of Florence, Italy (4 times); for the University of Pavia, Italy; for the University of Gent, Belgium and for the University of Aveiro, Portugal.
- Advisor of the following visiting scientists within the Short Terms Scientific Mission program of the COST ACTION IC0803 (2012):

- Goran Kitic from the University of Novi Sad
- Supervisor of more than 150 Master Thesis, since 1992

# International Journals responsibilities:

- Guest editor of Wiley-International Journal of Numerical Modeling, 2009
- Guest editor of IEEE-Microwave Theory and Techniques Transactions, 2013
- Guest editor of Proceedings of IEEE, 2013
- Reviewer for Elsevier Publishing, Artech House, Cambridge University Press
- Editorial Board Member of IEEE-Transactions on Microwave Theory and Techniques (since 1998)
- Editorial Board Member of IEEE-Microwave Components and Waveguides Letters (since 1995)
- Reviewer for Cambridge University Press-Wireless Power Transfer Journal, IEEE Sensor Journal, IEEE Proceedings

# International Conference responsibilities:

- Technical Program Reviewing Committee Member of IEEE International Microwave Symposium (IMS) since 1999; in this committee he had the responsibility of chairing the Sub Committee 03 (time domain modeling) in 2009 and 2010 and the SC 32 (RFID Technologies) in 2011 and 2012.
- Technical Committe Member of IEEE CEM-TD (2003 and 2008)
- Chairman of the IEEE-TD-CEM (Time Domain Computational Electromagnetic Modeling) 2007, 15-17 October 2007, Perugia, Italy.
- Organizer of the Working day: "Formula 1 and consumer car: a continuous dialogue", Perugia "Aula Magna" of the Faculty of Engineering, March 2008
- Steering Committe Member of IEEE-IMS 2008, 15-20 2008 Atlanta GE, as Student Competition Chair.
- Co-organizer of the Workshop "Flexible, autonomous RFID-enabled sensors: novel applications, energy harvesting and integration challenges" in the IMS 2011.
- Co-organizer of the Workshop "Nanotechnology-enabled RF and cognitive devices components and systems" in the IMS 2011.
- Co-organizer of the Convened Session "RFID technologies" (COST IC0803/IC0603) in the EUCAP 2011 conference.
- Co-organizer of the Workshop "RFIDs and RFID-enabled sensors: novel applications, energy harvesting and integration challenges." in the EuMW 2011
- Chairman of the 6th RFCSET Workshop meeting (COST ACTION IC0803) Perugia, May 2011.
- Steering Committee Member of IEEE RFID-TA 2011 Conference as Publicity Chair
- Co-organizer of the Workshop "Looking further than the internet of things Wide Area Electronics" in the IEEE-IMS 2013
- Chairman of the first IEEE-Wireless Power Transfer Conference (WPTC), 15-16 May 2013, Perugia, Italy.
- Co-organizer of the Workshop "Wireless Transfer of Power and Information for the Smart Evolution of Cities " in the EuMW 2014
- Program Committee member of IEEE-ECTC (Electronic Component and Technology Conference)
- Advisory committee member of IEEE-WPTC (Wireless Power Transfer Conference)
- Reviewing board member of the European Microwave Conference (EuMC)
- Technical Program Reviewing Committee member of the IEEE-WiSNet Conference
- Technical Program Committee member of the EuCAP Conference
- Reviewing Committee Member of Asia Pacific Microwave Conference APMC RC-27 Wireless Power Transfer and Energy Harvesting.

# Scientific Society servicing and activity:

- MIUR (Italian Ministry of Research and Instruction) list of expert member, since 2005
- IEEE-MTT-Technical Coordination Committee, Member (2009-2012)
- Technical Committee IEEE-MTT-24 (RFID Technologies), Vice chair 2009-2010, Chair 2011-2012
- Technical Committee IEEE-MTT-25 (RF Nanotechnolgies), Member since 2010
- Technical Committee IEEE-MTT-26 (Wireless Power Transfer), Member since 2011
- European Research Council (ERC), Panel PE7 "System and Communication Engineering", member since 2011

## **Research interest and expertise:**

Applied Electronics – High Frequency Electronics - RFIDs – printable circuits – green electronics – Wireless Power Transfer (microwave transfer).

## **Project involvement and funding ID:**

Here a synoptic table summarizing funded project involvement, relevant responsibilities and commitments. The funding are rounded to .5 K€ and refer to the budget of the managed task not to the overall project.

Project leaded

Project / Company	Year	Subject/ short description	Fund	Responsibility
MADESS 2/MIUR	1998	Design Methodology for "wireless" applications with radio	12 K€	Proj. Manager
		frequency in CMOS sub-micrometrical technologies		
DOLP s.p.a.	1998	Study, development and realization of oscillators prototypes	2 K€	Proj. Manager
		controlled in tensions for telecommunications in S/C band		
ITELCO s.p.a.	1999	Study, development and realization of amplifier prototype in	2,5 K€	Proj. Manager
		I band based on LDMOS devices		
DOLP s.p.a.	1999	Study and development of filters in square wave-guide "dual	7 K€	Proj. Manager
		mode" type with response compatible with DVB standard		
TEKMAR s.r.l.	1999	Development of subsystems passive controllers filters for	5 K€	Proj. Manager
		microwaves and radio-frequency in planar technology with		
		prototypes relevant to IMT 200 band		
Magneti Marelli s.p.a.	2000	Development of front-ends for F1 telemetry	35 K€	Proj. Manager
COFIN 2000/MIUR	2000	Poly-phase filters in CMOS for DECT applications	41 K€	Proj. Manager
TEKMAR s.r.l.	2000	Development of predistorsion system for laser diodes for	26 K€	Proj. Manager
		"Radio over Fiber" type systems		
MARCONI s.p.a.	2001	Development of linearization system for amplifiers of	32 K€	Proj. Manager
		medium power with large band		
Delta Meccanica s.r.l.	2002	Design of filters of power for DVB-T applications	7,5 K€	Proj. Manager
WiS s.r.l.	2002	Development of control electronics for transceivers with	20 K€	Proj. Manager
		large band		
Consorzio Cresci	2005	Design and realization of electronic systems assigned to	20 K€	Proj. Manager
		remote control (wireless and wired) of matrix sensors for the		
		survey of air condition or specific gas emissions		
Georgia Institute of	2005	Development of radar sensor subsystems in LTCC and LCP	8 K€	Proj. Manager
Technology		Technologies		
SISAS s.r.l.	2006	Pre-certification of blinking lights for road signalling	2 K€	Proj. Manager
WiS s.r.l.	2007	Development of radar sensors for automotive applications	200 K€	Proj. Manager
WiS s.r.l.	2007	Development of telemetry systems for applications to human	180 K€	Proj. Manager
		being and animals		
Georgia Institute of	2008	Development of radar sensor subsystems in LTCC and LCP	8 K€	Proj. Manager
Technology		Technologies		
ADAHELI /ASI	2009	Feasibility study for the realization of a W band radiometer	60 K€	Co Principal
		for the solar observation of solar flares		investigator
ART s.r.l.	2009	Feasibility study for radar front end for car speed detection	7 K€	Proj. Manager
		along highway		
ENLIGHT/ENIAC	2011	European project within JTI ENIAC about intelligent lighting	735 K€	Proj. manager
JU				
IDEAS /ENIAC JU	2012	European project within JTI ENIAC about reconfigurable	300 K€	Proj. manager
		electronics for efficient electric cars		
GRETA/MIUR	2012	Localization, identification and sensing by UWB techniques	185 K€	Proj. manager
		based on green technologies		
TOTAL			1895 K€	

#### Project participated with non leading responsibilities

ESA-ESTEC	1993	Optimisation routines for the efficient CAD of microwave	18 K€	Team leader
		wave guide components		
MURST ex 40%	1997	Microelectronic and nanoelectronic techniques	8,5 K€	Team leader
TMR	1997	Development of models and circuits for the develop of	170 K€	Team leader
		"almost optics" frequency multipliers		
ALENIA s.p.a.	1998	Study and design of wide band microstrip to waveguide	6 K€	Designer
		transitions		
ITELCO s.p.a.	1998	Design of two prototypes of "dual-mode" filters with DAB-T	6 K€	Designer

		involucres for memories with semiconductor		
"TOP-MELON"	2010	Development of miniaturized low cost sensors for the	60 K€	General
		monitoring of sensitive data for melon farming		supervisor
				(advisor of the
				project manager
				Valeria Palazzari)
SAIPEM s.p.a.	2010	Investigation of new RF technologies for buckle detection	45 K€	Task leader
SAIPEM s.p.a.	2011	Further investigation on new RF technologies for buckle	100 K€	Task leader
		detection and design of WIFI antenna for intra-pipe wireless		
		communications		
ARTEMOS/ENIAC	2011	European project within JTI ENIAC about reconfigurable	1500 K€	Broker and
JU		transceivers		Project
				manager
SAIPEM s.p.a.	2012	Further investigation on new RF technologies for buckle	70 K€	Task leader
-		detection and design of WIFI antenna for intra-pipe wireless		
		communications		
TOTAL			1991 K€	

## **Technology Transfer:**

- Director of the works for the realization of a 35 m<sup>2</sup> clean room (10,000 to100 class under laminar flow) at the University of Perugia.
- Funder (in 2000) and general manager of the first spin-off company WiS s.r.l. of the University of Perugia. This company, at the top of his life, before being acquired by a bigger research center (ART s.r.l. now ART s.p.a.) had a revenue of 900 K€, hiring 12 engineers. Core business being the realization of HF electronic systems for formula 1 cars (Telemetry systems). These products equipped, among others, Ferrari and Renault that won the F1 world championship in those years.
- Member (2003-2006) of the Technology Transfer Committee of the University of Perugia and writer of the first version of the Technology Transfer Regulation of that University.
- Member since 2014 of the research committee of the Deapartment of Engineering of the University of Perugia.

#### **Granted Patents:**

- id=TR2006A000017, "Sistema automatico di rilevamento dei piattelli rotti nel tiro a volo", 7 December 2006.
- id=TR2008A000005, "Sicurezza contro gli infortuni derivati dall'utilizzo di utensili da taglio", 6 November 2008.
- id=RM2012A000190, "Sistema di codifica, decodifica e ricetrasmissione senza fili di dati sensoriali", 2 May 2012.
- The latter has been extended as European Patent.

#### **Publications:**

**59** articles in international peer-reviewed journals, 21 of which in the last five years 2009-2013 and 3 already published in 2014), 1 chapter of a book published by Wiley, coauthor of 1 book published by Wiley, author of 1 book under contract with Cambridge university press – expected publication October 2014); more than **170** articles in international peer-reviewed conferences.

#### Citations (09/06/2014):

1384 citations (h-index 20) in Google Scholar,

My academic life has been always characterized by a great independency. Even in my young career, (1992 to 2000), at the time I was "Researcher" (Aggregate Professor) I had not any supervisors, only an intense cooperation with the Electromagnetic Group of the University of Perugia where I introduced together with a PhD student (at that time): Paolo Mezzanotte; the FDTD method (field a.). After I became associate Professor in 2001, I decided to take a new challenge, working on more industrial related fields (fields b. and c.). More recently, partially stimulated by the economic crisis, I decided to steer my activity toward longer term researches (field d.) that likely will meet the industrial needs when the circumstances will be hopefully positive.

The main distinctive contributions have been in the field:

- a. Finite Difference Time Domain (FDTD) and Multi Resolution Time Domain (MRTD) modeling of high Frequency electronic circuits accounting for linear as well as nonlinear components and sub-circuits [1-5].
- b. Linearization of electrooptic devices for Radio over Fiber systems [6-7].
- c. RF electronic systems and subsystems with specific attention to RFID systems (High performance for F1 applications and ultra low cost for Internet of Things evolution)[8-11]

- 1. P. Mezzanotte, M. Mongiardo, L. Roselli, R. Sorrentino, and W. Heinrich, "Analysis of packaged microwave integrated circuits by FDTD," IEEE Trans. Microwave Theory Tech., vol. 42, pp. 1796-1801, Sep. 1994.
- 2. P. Ciampolini, P. Mezzanotte, L. Roselli, and R. Sorrentino, "Accurate and efficient circuit simulation with lumped-element FDTD technique," *IEEE Trans. Microwave Theory Tech.*, vol. 44, no. 12, pp. 2207-2215, Dec. 1996.
- 3. J. A. Pereda, F. Alimenti, P. Mezzanotte, L. Roselli, and R. Sorrentino, "A new algorithm for the incorporation of arbitrary lumped networks into FDTD simulators," IEEE Trans. Microwave Theory Tech., vol. 47, pp. 943-949, Jun. 1999.
- 4. P. Ciampolini, L. Roselli, G. Stopponi, and R. Sorrentino, "Global modeling strategies for the analysis of high-frequency integrated circuits," IEEE Trans. Microwave Theory Tech., vol. 47, pp. 950-955, Jun. 1999.
- G. Emili, F. Alimenti, P. Mezzanotte, L. Roselli, and R. Sorrentino, "Rigorous modelling of packaged Schottky diodes by the non linear lumped network (NL2N)-FDTD approach," IEEE Trans. Microwave Theory Tech., vol. 48, pp. 2277-2282, Dec. 2000.
- F. Zepparelli, L. Roselli, F. Ambrosi, R. Sorrentino, P. Faccin, A. Casini, "Modelling and Design of a Broadband Predistortion Circuit for Radio-over-Fibre Systems," IEICE Transactions on Fundamentals Communications, vol. E85-C, n. 3, pp. 519-526, Mar. 2002.
- 7. L. Roselli, V. Borgioni, F. Zepparelli, F. Ambrosi, M.Comez, P. Faccin, A. Casini, "Analog Laser Predistortion for Multiservice Radio-over-Fiber Systems," in IEEE Journal of Lightwave Technology JLT, vol. 21, n. 5, pp 1211-1223, May 2003.
- S. Helbing, M. Cryan, F. Alimenti, P. Mezzanotte, L. Roselli, and R. Sorrentino, "Design and verification of a novel crossed dipole structure for quasi-optical frequency doublers," IEEE Microwave and Guided Wave Lett., vol. 10, pp 105-107, Mar. 2000.
- 9. F. Alimenti, P. Mezzanotte, L. Roselli, and R. Sorrentino, "Modeling and characterization of the bonding wire interconnection," IEEE Trans. Microwave Theory Tech., vol. 49, pp. 142-150, Jan. 2001.
- L. Roselli, F. Alimenti, M. Comez, V. Palazzari, F. Piacentino, N. Porzi, A. Scarponi "A Cost driver 24GHz Doppler Radar Sensor Development for Automotive Applications," in Proc. 35th European Microwave Conference, Paris, F, Oct. 3-7, 2005, pp. 2059-2062.
- V. Palazzari, S. Pinel, M. M. Tentzeris, L. Roselli and J. Laskar, "Design of an Asymmetrical Dual-Band WLAN Filter in Liquid Crystal Polymer (LCP) System-On-Package Technology," IEEE Microwave and Wireless Components Letters, vol. 15, n. 3, pp. 165-167, Mar. 2005.
- G. Orecchini, F. Alimenti, V. Palazzari, M. Virili, A. Rida, M. Tentzeris, L. Roselli, "Design and fabrication of ultra-low cost radio frequency identification antennas and tags exploiting paper substrates and inkjet printing technology", IET Microwave Antennas and Propagation, vol. 5, n. 8, June, 2011, pp. 993-1001, ISSN : 1751-8725.
- R. Vyas, V. Lakafosis, L. Hoseon, G. Shaker, Y. Li, G. Orecchini, A. Traille, M.M. Tentzeris, L. Roselli, "Inkjet Printed, Self Powered, Wireless Sensors for Environmental, Gas, and Authentication-Based Sensing", IEEE Sensors Journal, vol. 11, n. 12, Dec. 2011, pp. 3139 -3152.
- F. Alimenti, M. Virili, G. Orecchini, P. Mezzanotte, V. Palazzari, M. M. Tentzeris, L. Roselli, "A New Contactless Assembly Method for Paper Substrate Antennas and UHF RFID Chips", IEEE Transactions on Microwave Theory and Techniques, vol. 59, n. 3, March 2011, pp. 627 – 637.
- 15. F. Alimenti, P. Mezzanotte, M. Dionigi, M. Virili, and L. Roselli, "Microwave Circuits in Paper Substrates Exploiting Conductive Adhesive Tapes," IEEE Microw. Wirel. COMPONENTS Lett., vol. 22, no. 12, pp. 660–662, 2012.
- 16. S. Kim, F. Alimenti, and P. Mezzanotte, "No battery required," IEEE Microw. Mag., no. August, pp. 66-77, 2013.
- [1] L. Valentini, M. Cardinali, M. Mladjenovic, P. Uskokovic, F. Alimenti, L. Roselli, and J. Kenny, "Flexible Transistors Exploiting P3HT on paper Substrates and Graphene Oxide Films as Gate Dielectrics : Proof of Concept," Sci. Adv. Mater., vol. 5, no. 5, pp. 1–4, 2013.
- [1] M. Virili, H. Rogier, F. Alimenti, P. Mezzanotte, and L. Roselli, "Wearable Textile Antenna Magnetically Coupled to Flexible Active Electronic Circuits," IEEE Antennas Wirel. Propag. Lett., vol. 13, pp. 209–212, 2014.
- [1] F. Alimenti, M. Virili, P. Mezzanotte, L. Roselli, V. Rericha, M. Pokorny, F. Iorio, R. Gaddi, and C. Schepens, "A RF-MEMS Based Tunable Matching Network for 2.45 GHz Discrete-resizing Cmos Power Amplifiers," RADIOENGINEERING, vol. 23, no. 1, pp. 328–337, 2014.
- 20. [1] F. A. L.Roselli, S. Kawasaki, "Guest Editorial," IEEE Trans. Microw. Theory Tech., vol. 62, no. 4, pp. 2012–2014, 2014.

Detailed list of publication in order of citation can be found here: http://scholar.google.it/citations?hl=it&user=SPwDg2gAAAAJ&view\_op=list\_works

#### **Invited presentations**

• Since 2012 I'm a member of the IEEE-MTT Speakers Bureau office, and I was invited to give the presentation:

- Carlton University (Ottawa, Canada)
- University of Pavia (Pavia, Italy)
- Tsingua University (Beijing, China)
- Beihang University (Beijing, China)
- Jaotong University (Beijing, China)
- North China University (Taiyuan, China)
- Shanxi University (Taiyuan, China)
- Taiyuan University of Technology (Taiyuan, China)
- o KAIST Seoul, Korea
- o APMC 2013 Seoul, Korea

I was invited as a keynote speaker in the following conferences:

- 15<sup>th</sup> COMITE, Brno, 19-21 April 2010 "A System-on-Chip Millimeter-Wave Radiometer for the Space-Based Observation of Solar Flares"
- 2<sup>nd</sup> IMWS-IWPT 2012, 10-11 May 2012, Kyoto, Japan "EM- and piezo-scavengers: two useful solutions in highly humanized scenarios toward a 'greener world' "
- 2<sup>nd</sup> Wireless Power Transfer Confernce (WPTC-2014), Jeju, Korea, "Smart surfaces: an example of Large Area Electronics (LAE) Systems Enabled by Concurrent WPT, Energy Harvesting and RFID Technologies
- Wireless Charging 2014, RAI Center, Amsterdam, 24-25 June 2014, "Wireless Power Transfer, Green Electronics and Radio Frequency Identification: concurrent technologies enabling Internet of Things evolutions"
- I was invited speaker in the following workshops and conferences:
  - 1. L. Roselli, "Netwoked Radio Frequency IDentification (NRFID) and related green technologies", in the panel session "Green Wireless Electronics" of the Radio and Wireless Symposium (RWS), New Orleans (US), 10-14 Jan. 2010.
  - 2. Luca Roselli, "RFID and RFID-enabled Sensors: Packaging, Reliability, and Integration Challenges in Cognitive-Intelligence Applications", ECTC Special session on "RFID", 1 June 2010, Las Vegas (US).
  - L. Roselli, F. Alimenti, G. Orecchini, M. Tentzeris, V. Palazzari, "3D Paper Printed Harmonic RFID-enabled Sensor concept", IMS Workshop WMH on "Flexible, Autonomous RFID-Enabled Sensors: Novel Applications, Energy Harvesting and Integration Challenges", 6 June 2011, Baltimore (US).
  - 4. L. Yang, M. Tentzeris, G. Orecchini, L. Roselli "Wearable Battery-free Active RFID Tag with Piezoelectric Energy Harvester", IMS Workshop WMH on "Flexible, Autonomous RFID-Enabled Sensors: Novel Applications, Energy Harvesting and Integration Challenges", 6 June 2011, Baltimore (US).
  - L. Roselli, F. Alimenti, M. Virili, F. Lolli, B. Popescu, D. Popescu, S. Locci, P. Lugli, L. Pierantoni, "Organic Frequency Doubler" IMS Workshop WFJ on" Nanotechnology-enabled RF and Cognitive Devices, Components and Systems", 10 June 2011, Baltimore (US).
  - 6. L. Roselli, F. Alimenti, G. Orecchini, M. Tentzeris, F. Lolli, V. Palazzari, "Harmonic RFID concept by means of 3D paper inkjet printed technology", EuMW Workshop W16 on RFIDs and RFID-enabled sensors: novel applications, energy harvesting and integration challenges, 10 oct. 2011, Manchester, UK.
  - 7. M. Tentzeris, R. Vyas, V. Lakafosis, A. Traille, A. Rida, T. Thai, E. Gebara, G. Orrechini, L. Roselli, L. Yang, Y. Kawahara, "INKJET PRINTED RFID-enabled sensors for cognitive, positioning and biomonitoring applications", EuMW Workshop W16 on RFIDs and RFID-enabled sensors: novel applications, energy harvesting and integration challenges, 10 oct. 2011, Manchester, UK.
  - 8. L. Roselli, G. Orecchini, F. Alimenti, M. M. Tentzeris, "Printed RFID technology", RWW Workshop on Wireless Sensor Network Technologies for the "Internet of Things" Implementation, 15, Jan. 2012, Santa Clara, CA.
  - 9. F. Alimenti, C. Mariotti, L. Roselli, "Zero-Power RFID Sensors Based on Harmonic Generation", IMS 2013 Workshop WFI on "RF-On-Demand for the Internet of Things" 7 June 2013, Seattle US.
  - 10. L. Roselli, "RFID, WPT, and Energy harvesting made "green": concurrent technologies for the future networked society", in Proc. Of IEICE 2011, pag 52, Fukuoka JP, 17-20 Sep. 2013.
  - 11. L. Roselli, C. Mariotti, F. Alimenti, P. Mezzanotte, G. Orecchini, M. Virili, "Heterogeneous non-ohmic coupling between antennas and integrated electronics: a pace along the IoT way" RFIC 2014 Workshop WSI on "Wireless Power Transfer and Wireless Charging" 6 June 2014, Tampa US.
  - 12. L. Roselli, C. Mariotti, F. Alimenti, P. Mezzanotte, G. Orecchini, M. Virili, "System in Package on Paper (SiPoP9 Implementation of RF/MF-ID Circuits" IMS 2014 Workshop WFJ on "Inkjet-printing: the next generation of multi-layer fabrication, integration & packaging for RF and mm-wave Systems" 6 June 2014, Tampa US.

#### Awards and recognitions

• Eulhricht fallourshin far rassarshars 1007

"Wearable battery-free active paper printed RFID tag with human-energy scavenge", 5-10 June 2011, Baltimore, US, (advisor)

- 2013 IET Microwaves, Antennas and Propagation Premium Award; best research paper published during the last two years: "Design and fabrication of ultra-low cost radio frequency identification antennas and tags exploiting paper substrates and inkjet printing technology", G. Orecchini, F. Alimenti, V. Palazzari, A. Rida, M.M. Tentzeris, L. Roselli, Volume 5, issue 8, June 2011, p. 993 – 1001
- 2014 WPTC Student Paper Award to Chiara Mariotti for the contribution: C. Mariotti, F. Alimenti, M. Virili, G. Orecchini, P. Mezzanotte, L. Roselli, "Harmonic Chipless Sensor Exploiting Wireless Autonomous Communication and Energy Transfer", Jeju, Korea, 8-9 May 2014 (advisor)