

PROF. Smail TEDJINI

University Full Professor, Grenoble Institute of Technology,

IEEE Senior Member, URSI Fellow

Phone: +33-4-7575-9420

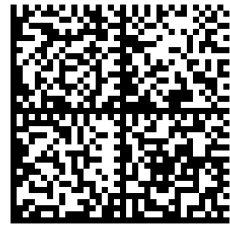
Fax: +33-4-7575-9450

Cell +33 6 3049 8701

Email: smail.tedjini@grenoble-inp.fr

Web: <http://lcis.grenoble-inp.fr/orsys>

https://scholar.google.fr/citations?hl=fr&user=8mlmPXoAAAAJ&view_op=list_works&sortby=pubdate



Smail TEDJINI, Doctor in Physics from Grenoble University in 1985. He was Assistant Professor at the Electronics Dpt. of Grenoble Institute of Technology (Grenoble-inp) from 1981 to 1986, and Senior Researcher for the CNRS (Research French National Center) from 1986 to 1993. He became University Full Professor in 1993 and since 1996 he is Professor at the esisar, Embedded Systems Dpt. of Grenoble-inp. His main teaching topics concern Applied Electromagnetism, RadioFrequency, Wireless Systems and Optoelectronics. Now he has more than 35 year-experience in academic education, Research and management of university affairs.

He served as coordinator and staff member in numerous academic programs both for education and research. He was coordinator for Ph.D. program, Master and Bachelor Programs for the Universities at Grenoble, some of these programs are under collaboration with international universities from Europe, Canada, Brazil, India, Vietnam, Egypt, Tunisia, Algeria) He served as the Director of esisar, Dpt. of Grenoble-inp. He is involved in academic research supervision since 1982. His main topics in research are applied electromagnetism, modeling of devices and circuits at both RF and optoelectronic domains. Current research concerns wireless systems with specific attention to RFID technology and its applications.

He is the founder in 1996 and past Director of the LCIS Lab. Now, he is project manager within ORSYS group that he led until 2014 and founded 18 years ago. He supervised more than 40 PhD and he has more than 300 publications. He between 2015 and 2018 he was invited professor at the Universidad Federal Campina Grande (Brazil). He serves as Examiner/reviewer for tens of Ph.D. degrees for universities in many countries (France, Germany, Finland, Spain, Ireland, Italy, Sweden, Vietnam, Australia, Singapore, India, Brazil, Egypt, Maghreb...).

He supervised tens of research contracts with public administrations and industries. He is Member of several TPC/TPRC and serves as expert/reviewer for national and international scientific committees and conferences including journals in particular IEEE (MTT, TAP, Sensors, MGWL, AWPL, RFID, Access...), Piers, URSI.... He served as project expert for French and international research programs ISO, ANR, OSEO, Europe, FNQRT, CNPQ.

He organized several conferences/workshops/Summer schools and was TPC chair/co-chair in numerous conferences. He was the General Chair of IEEE RFID-TA 2012. Senior Member IEEE, Past President and founder of the IEEE-CPMT French Chapter, Vice-President of IEEE Section France (2008-2014). He was elected as the Vice-Chair of URSI Commission D "Electronics & Photonics" in 2008. He served as the Chair of URSI Commission "D" for the triennium 2011-2014. In 2015 he was elected President of URSI-France. Since 2018 he is the Vice-chair of the MTT-TC24 on RFID.

Educational Qualification

- **1985 - Grenoble Institute of Technology (Grenoble-INP)**
Docteur d'Etat Es-Sciences physique . Physics
Department of Electrical Engineering & Department of Physics
Thesis : Full Wave Electromagnetic Modeling an Simulation of Discontinuities for Planar Mmwave Circuits as Finline Technology.
- **1982 - Grenoble Institute of Technology (Grenoble-INP)**
Doctorat 3ème cycle In Microwave. Thesis "Semiconductor based isolator and circulator for millimeterwave applications". Modeling and measurements.
- **1980 - Joseph Fourier University @ Grenoble**
Master in Microwave. Department of Physics
Master thesis : Semiconductor Non Reciprocal Devices at Mmwaves.

Professional Experience

Since 1996 – Present - Professor (ESISAR Dpt.) Grenoble Institute of Technology (Grenoble-INP)

- **Education:** Electromagnetism, RF, Antenna, Wireless Systems,
- **Research :** RF and optical Communication Systems, Wireless Circuits and Systems, RFID, Chipless RFID, Communicating clothes, UWB Antennas and Communications
- **Management :** Foundation of the LCIS Lab. Foundation of ORSYS Group
Director of the LCIS Lab.
Director of the Engineering School ESISAR
Leader of the research Group ORSYS for more than 8 years
Scientific supervisor and manager of tens of contracts with industries and public institutions
- **Expertise and Supervision :** Expert for ISO and many other national and international Scientific committees. Supervisor of more than 45 PhD.
- **Jury member/opponent** for tens of Ph.Ds in France and other countries : Singapore, Australia, Vietnam, India, Finland, Sweden, Spain, Italy, Ireland, Egypt, Tunisia, Brazil
General Chair and TPC chair/co-chair of several conferences
Vice-Chair of IEEE France Section
Chair of URSI-Commission D
Chair of URSI-France

Oct. 1993 – Oct. 1996 Professor at University Joseph Fourier, France

Lectures in : Electronics, RF, Physics of semiconductors,
Research : Optical microwaves, High speed optoelectronics, transmission processing of optical signals.
Foundation of Bachelor curriculum and associated Lab. facilities
Supervision : Several master students and 3 PhD.
Management : Scientific Coordination of research contracts in France and Europe
Organisation of workshops and conference sessions

Oct 1986 – Sept 1993 : Senior Res. at National Centre for Scientific Research (CNRS lab), France

Research in Optoelectronics and Microwave modulation of laser sources.
Management : Foundation of research group on Optical Microwaves.
Supervision : Several masters students and 7 PhD.
Management : Scientific Coordination of research contracts
Organisation of workshops and summer schools

Oct. 1982 – Sept. 1986 Assistant Professor, ENSERG at Grenoble-INP

Lectures: Electronics and Microwave
Research : Nonreciprocal Semiconductor Devices for Millimeterwave Applications. Applications to Isolators and circulators for Finline Technology.
Supervision : master students
Management : Scientific supervision of research contracts with public institutions

SELECTED INVITED CONFERENCES & WORKSHOPS

- «Radio Frequency Identification » @ 8th International Seminar on Electrical Metrology João Pessoa, Brazil June 17 - 19, 2009 <http://www.inmetro.gov.br/english/news/events/VIIIsemetro/program.asp>
- « Recent Advances in Antennas » @ Conférence ESC 2009, EMP, Mai 2009 Alger www.emp.edu.dz/Manif_Scientifique/ESC09/ESC09.htm
- «RFID, an old technology with brilliant future » @ Conférence ESC 2009, EMP, Mai 2009 Alger www.emp.edu.dz/Manif_Scientifique/ESC09/ESC09.htm
- «Advances in RFID tag design and applications ». @ IWNA 2009 Vung Tau, Viet Nam, Nov . 12 - 14, 2009 www.hcmint.edu.vn/index.php?Module...id... - Traduire cette page
- « Chipless tags, the RFID next Frontier », 20th Tyrrhenian Workshop on Digital Communications, Invited paper, Sardina (Italy), Sep. 2009. www.smart-systems-integration.org/.../20th-tyrrhe... - Traduire page
- "Chipless Tags for RF and THz Identification", 4th, EuCAP , Barcelona, Spain, 12-16 April 2010. <http://www.congrexevents.nl/docs/EUCAP2010/full-programme.pdf>
- « Towards THz Chipless Tags » @ IMRE A-Star, Singapore le 15 Jun 2010 <http://www.imre.a-star.edu.sg/events.php?id=E532R533>
- «Introduction to RFID, History, Principles, Applications and Regulations » @ LNT, Vietnam National University HoChiMinh 21 juin 2010 <http://www.hcmint.edu.vn/index.php?Module=Content&Action=view&id=201&Itemid=451>
- «La RFID état de l'art et perspectives » @ ENIT, Tunis , les 11 mars 2010 www.enit.rnu.tn/fr/manifestations/rfid2010/PROGRAMME.pdf
- «RFID tags : From Identification to Sensing» @ 11th Mediterranean Microwave Symposium :8-10 Sept. 2011 http://www.mms2011.com/index.php?option=com_content&view=article&id=48&Itemid=53
- « RFID Chipless Solutions » @ BIT's 1st Annual International Congress of u-World, Dalian, china Oct. 23-25, 2011 http://www.bitconferences.com/u-world2011/forum_2-t.asp
- «Advances in Chipless RFID », @ IPHC, Fusionopolis, A-Star, Singapore, 28 Oct 2011 http://eatar.eventshub.sg/ems_wb_Details.aspx?CallID=28&EventID=458935
- «From Radiator to Signal Processing Antenna » @ Asia Pacific Microwave Conference - December 2011, Melbourne www.apmc2011.com/
- «Wireless, Batteryless and Chipless Solutions, Towards a Green Technology» @ The 13th Antennas and propagation Symposium (APSYM 2012) December 2012, Cochin <http://www.doe.cusat.edu/apsym/>
- « Advances in Coding Techniques for Chipless RFID Tags », Workshop W 21 @ EuMic Week 2013, Oct, Nuremberg http://www.eumweek.com/archive/eumweek2013/2013/docs/workshops_monday.pdf
- « Non linear Nonlinear behavior and characteristics of RFID chips » @ Workshop WFC, IEEE-IMS, May 2015 Phoenix, Arizona, <http://www.ims2015.org/workshops>
- « Advances in RFID, Towards Augmented Tags » @ Campus Universitário Lagoa Nova. Natal, Rio Grande do Norte Brazil. August 2015, <https://meetings.vtools.ieee.org/m/35471>
- « Advances in UHF RFID Tags » @ IEEE AP/ED/MTT Oct. 2015 Aalto Univ. Helsinki, Finland
- « Towards Augmented Tags » CTTC, Castelldefels, Cataluna, Spain Oct. 2015 <https://meetings.vtools.ieee.org/m/33249>
- « RFID, State of the art and future directions», COST IC1301 Wipe School, Valence Oct. 2015 <http://www.cost-ic1301.org/files/WipeSchoolValenceV00.pdf>
- « Exploitation of Nonlinear Characteristics of RFID Chips for Energy Harvesting» @ Workshop « Eu. Initiatives to Develop Wireless Power Supply for Sensor Node Evolution » IEEE RWW, Austin Jan 2016. <http://radiowirelessweek.org/>
- « Chipless RFID, State of the art and Current Developments », COST IC1301 Wipe School, Bologna, Apr 2016 <http://www.cost-ic1301.org/files/Preliminary%20Program.pdf>
- « RFID for Last Few Meters of Internet Of Things » 5th International Conference on Multimedia Computing and Systems (ICMCS'16) – IEEE Conf. Oct. 2016, Marrakech, Maroc. <http://www.med-space.org/icmcs16/smail-tedjini/>

CONFERENCE COMMITTEES

- **TPC Member of** : URSI-GASS 2008, URSI-GASS 2011, URSI-GASS 2014, Eucap'09, Eucap10, Eucap11, Eucap12, Eucap13, Eucap14, Semetro 2009, IEEE-RFID 2009, IEEE-RFID 2010, IEEE-RFID 2011, IEEE-RFID 2012, IEEE-RFID2013, IEEE-RFID 2014, IEEE-RFID 2015, PIERS2011, MMS2011, IMOC2011. APMC11, IEEE-RFIDTA 2010, IEEE-RFIDTA 2011, IEEE-RFID-TA 2013, RFID-TA 2014, IEEE-MTTS 2015, IEEE-MTTS 2016, IEEE-MTTS 2017, IEEE-MTTS2018, GASS-URSI 2014, GASS-URSI 2017, GASS-ATRASC 2018
- **Session Chair** URSI-GASS 2008, Semetro 2009, WSIM10, URSI-GASS 2011, IEEE-RFID 2009, IEEE-RFID 2010, IEEE-RFID 2011, IEEE-RFIDTA 2010, bit's 1st world congress u-world , APMC 2011, IEEE-RFID-TA 2012, URSI-GASS 2014, GASS-URSI 2017, GASS-ATRASC 2018, IMS 2015, IMS2016, IMS2017, IMS 2018

- **TPC Chair : WSIM10, IEEE-RFID 2011, URSI-GASS 2014 (commission D)**
- **General Chair of IEEE RFID-TA 2012**

SCIENTIFIC PRODUCTION 2011-2016

I have more than 350 publications, 3/4 are international conferences and journal papers. Most of the publication are within IEEE, URSI and SPIE. 75% of my publications are in RF and microwave domains in particular RFID. 25% are in Optics and Optoelectronics domains.

Below I provide list of major publication in the last four years 2011-2016. At the end I add the list of publication for the period 2016 - 2018

1. JOURNAL PAPERS

- [1] D Allane, Y Duroc, GA Vera, R Touhami, S Tedjini « On energy harvesting for augmented tags » *Comptes Rendus de l'Académie des Sciences, Physique*, 18, N°2, pp 710-718, Fev 2017
- [2] M Benbaghdad, B Fergani, S Tedjini « Toward a New PHY Layer Scheme for Decoding Tags Collision Signal in UHF RFID System » *IEEE Communications Letters* 20 (11), 2233-2236, 2016
- [3] D Allane, GA Vera, Y Duroc, R Touhami, S Tedjini « Harmonic power harvesting system for passive RFID sensor tags » *IEEE Transactions on Microwave Theory and Techniques* 64 (7), 2347-2356, 2016
- [4] A Ramos, E Perret, O Rance, S Tedjini, A Lázaro, D Girbau « Temporal separation detection for chipless depolarizing frequency-coded RFID » *IEEE Trans. on Micro. Theory and Techniques* 64 (7), 2326-2337, 2016
- [5] D Hotte, R Siragusa, Y Duroc, S Tedjini « A Concept of Pressure Sensor Based on Slotted Waveguide Antenna Array for Passive MMID Sensor Networks » *IEEE Sensors Journal* 16 (14), 5583-5587, 2016
- [6] G Andia-Vera, S Nawale, Y Duroc, S Tedjini « Exploitation of the nonlinearities in electromagnetic energy harvesting and passive UHF RFID » *Wireless Power Transfer* 3 (01), 43-52, 2016
- [7] M Benbaghdad, B Fergani, S Tedjini « Backscatter signal model of passive UHF RFID tag. Application to collision detection » *Electronics Letters* 52 (11), 974-976, 2016
- [8] Hotte, D.; Duroc, Y.; Siragusa, R.; Tedjini, S., "A Method to Characterize the Frequency-Dependent Structural Coefficient of Antennas: Application to Millimeter Wave Identification," in *Antennas and Wireless Propagation Letters*, IEEE , vol.15, no., pp.170-173, 2016
- [9] M Zurita, RCS Freire, S Tedjini, SA Moshkalev « A Review of Implementing ADC in RFID Sensor » *Journal of Sensors Volume 2016 (2016)*, Article ID 8952947
- [10] D Hotte, Y Duroc, R Siragusa, S Tedjini « A method to characterize the frequency-dependent structural coefficient of antennas: Application to millimeter wave identification » *IEEE Antennas and Wireless Propagation Letters* 15, 170-173, 2016
- [11] D Hotte, R Siragusa, Y Duroc, S Tedjini « Radar cross-section measurement in millimetre-wave for passive millimetre-wave identification tags » *IET Micro, Ant. & Propag* 9 (15), 1733-1739 2, 2015
- [12] S Tedjini, NC Karmakar « Special issue on chipless technologies » *Wireless Power Transfer* 2 (02), 61-61
- [13] Andia Vera, G.; Nawale, S.D.; Duroc, Y.; Tedjini, S., "Read Range Enhancement by Harmonic Energy Harvesting in Passive UHF RFID," in *Micro. & Wire. Comp. Letters*, IEEE , vol.25, no.9, pp.627-629, Sept. 2015
- [14] Unnikrishnan, D.; Kaddour, D.; Tedjini, S.; Bihar, E.; Saadaoui, M., "CPW-Fed Inkjet Printed UWB Antenna on ABS-PC for Integration in Molded Interconnect Devices Technology," in *Antennas and Wireless Propagation Letters*, IEEE , vol.14, no., pp.1125-1128, 2015
- [15] Andia Vera, G.; Duroc, Y.; Tedjini, S., "Third Harmonic Exploitation in Passive UHF RFID," in *Microwave Theory and Techniques*, IEEE Transactions on , vol.63, no.9, pp.2991-3004, Sept. 2015
- [16] Andia Vera, G.; Allane, D.; Georgiadis, A.; Collado, A.; Duroc, Y.; Tedjini, S., "Cooperative Integration of Harvesting RF Sections for Passive RFID Communication," in *Microwave Theory and Techniques*, IEEE Transactions on , vol.63, no.12, pp.4556-4566, Dec. 2015
- [17] Hotte, D.; Siragusa, R.; Duroc, Y.; Tedjini, S., "Directive and high-efficiency slotted waveguide antenna array for V-band made by wire electrical discharge machining," in *Elect. Letters* , vol.51, no.5, pp.380-382, 3 5 2015
- [18] T Andriamiharivolamena, P Lemaître-Auger, S Tedjini, F Tirard « Compact planar monopole antenna for wearable wireless applications » *Comptes Rendus Physique* 16 (9), 851-861, 2015
- [19] DS Nguyen, NN Le, TP Lam, E Fribourg-Blanc, MC Dang, S Tedjini « Development of novel wireless sensor for food quality detection » *Adv. in Natural Sciences: Nanos. & Nanotechnology* 6 (4), 045004 2015
- [20] O Boularess, H Rmili, T Aguil, S Tedjini « Analysis of electromagnetic signature of Arabic alphabet as RF elementary coding particles » *Wireless Power Transfer* 2 (02), 97-106, 2015
- [21] GA Vera, Y Duroc, S Tedjini « Analysis and exploitation of harmonics in wireless power transfer (H-WPT): passive UHF RFID case » *Wireless Power Transfer* 1 (02), 65-74, 2014
- [22] MC Dang, DS Nguyen, TMD Dang, S Tedjini, E Fribourg-Blanc « Design and testing of RFID sensor tag fabricated using inkjet-printing and electrodeposition » *Advances in Natural Sciences: Nanoscience and Nanotechnology* 5 (2), 025012 4, 2014
- [23] S. Tedjini, P.Lemaitre-Auger, T. Andriamiharivolamena, F. Tirard, C. Mercier « Developing Wearable Antennas For Military Applications » <http://electronicsmilitarydefense.epubxp.com/i/350588> Magazine Article | July 24, 2014
- [24] Andia Vera, G.; Duroc, Y.; Tedjini, S., "RFID Test Platform: Nonlinear Characterization," in *Instrumentation and Measurement*, IEEE Transactions on , vol.63, no.9, pp.2299-2305, Sept. 2014
- [25] DT Nguyen, R Siragusa, S Tedjini « Beam steering patch antenna using reactive loading and Yagi-antenna concept » *Microwave and Optical Technology Letters* 57 (2), 417-421, 2015

- [26] Nair, R.S.; Perret, E.; Tedjini, S.; Baron, T., "A Group-Delay-Based Chipless RFID Humidity Tag Sensor Using Silicon Nanowires," in *Antennas and Wireless Propagation Letters, IEEE*, vol.12, no., pp.729-732, 2013
- [27] Andia Vera, G.; Duroc, Y.; Tedjini, S., "Analysis of Harmonics in UHF RFID Signals," in *Microwave Theory and Techniques, IEEE Transactions on*, vol.61, no.6, pp.2481-2490, June 2013
- [28] Vena, A.; Perret, E.; Tedjini, S.; Tourtollet, G.E.P.; Delattre, A.; Garet, F.; Boutant, Y., "Design of Chipless RFID Tags Printed on Paper by Flexography," *Trans. Ant. Prop, IEEE*, vol.61, no.12, pp.5868-5877, Dec. 2013
- [29] S Tedjini, N Karmakar « Chipless RFID, an emerging technology » *annals of telecommunications-Annales des télécommunications* 68 (7-8), 359-359, 2013
- [30] S Tedjini, N Karmakar, E Perret, A Vena, R Koswatta « Hold the Chips: Chipless Technology, an Alternative Technique for RFID » *Microwave Magazine, IEEE* 14 (5), 56-65, 2013
- [31] RS Nair, E Perret, S Tedjini « Group delay modulation for pulse position coding based on periodically coupled C-sections » *annals of telecommunications-Annales des telecom.* 68 (7-8), 447-457, 2013
- [32] A Vena, E Perret, S Tedjini « Design rules for chipless RFID tags based on multiple scatterers » *annals of telecommunications-Annales des télécommunications* 68 (7-8), 361-374, 2013
- [33] D Nguyen, TT Pham, EF Blanc, NN Le, CM Dang, S Tedjini « RFID beefs up » *Electronics Letters* 49 (25), 2013
- [34] D Nguyen, TT Pham, EF Blanc, NN Le, CM Dang, S Tedjini « Approach for quality detection of food by RFID-based wireless sensor tag » *Electronics Letters* 49 (25), 1588-1589, 2013
- [35] D Abed, S Redadaa, S Tedjini « CLOSED-FORM PDF FOR MULTIUSER TR-UWB SYSTEMS UNDER GAUSSIAN NOISE AND IMPULSIVE INTERFERENCE. » *PIERS. Res C*. 2013, Vol. 40, p175-186. 12p.
- [36] RS Nair, E Perret, S Tedjini « A TEMPORAL MULTI-FREQUENCY ENCODING TECHNIQUE FOR CHIPLESS RFID BASED ON C-SECTIONS. » *PIER B*. 2013, Vol. 49, p107-127. 21p.
- [37] H Halheit, A Vander Vorst, S Tedjini, R Touhami « Flexible Dual-Frequency Applicator for Local Hyperthermia » *International Journal of Antennas and Propagation* Volume 2012, Article ID 389214, 7 pages
- [38] A. Vena, E. Perret, S. Tedjini, "High Capacity Chipless RFID Tag Insensitive to the Polarization", *Antennas and Propagation, IEEE Transactions on* 60 (10), 4509-4515, 2012
- [39] A. Vena, E. Perret, S. Tedjini, "A Fully Printable Chipless RFID Tag With Detuning Correction Technique" *IEEE Microwave and Wireless Components Letters*, Vol. 22, Issue 4, pp. 209 – 211, mar. 2012.
- [40] E. Perret, S. Tedjini, and R. Nair, "Design of Antennas for UHF RFID Tags," *Proceedings of the IEEE*, vol. 100, pp. 2330 - 2340, 2012.
- [41] A. Vena, E. Perret, and S. Tedjini, "Design of Compact and Auto Compensated Single Layer Chipless RFID Tag," *IEEE Transactions on Microwave Theory and Techniques*, vol. 60, pp. 2913 – 2924, Sept. 2012.
- [42] A Vena, E.Perret, S Tedjini « Chipless RFID tag using hybrid coding technique » *IEEE Transactions on Microwave Theory and Techniques*, vol. 59, no. 12 PART 2, pp. 3356–3364, 2011
- [43] H. Chaabane, E.Perret, S Tedjini « A methodology for the design of frequency and environment robust UHF RFID tags » *IEEE Transactions on Antennas and Propagation*, vol. 59, no. 9, pp. 3436–3441, 2011
- [44] A Pouzin, TP Vuong, S Tedjini, J Perdereau « Automated bench test for UHF RFID tags measurement in operational environment » *International Journal of Micr. & Wire. Techn.* 3 (04) August 2011, pp 415-422
- [45] R. Siragusa, P Lemaitre-Auger, S Tedjini « Tunable Near-Field Focused Circular Phase-Array Antenna for 5.8-GHz RFID Applications » *IEEE Antennas and Wireless Propagation Letters*, vol. 10, pp. 33–36, 2011
- [46] M Bernier, F Garet, E Perret, L Duvillaret, S Tedjini « Terahertz encoding approach for secured chipless radio frequency identification » *Applied Optics* 50 (23), 4648-4655
- [47] R. Siragusa, E. Perret, H. V. Nguyen, P. Lemaitre-Auger, S. Tedjini and C. Caloz, "Control of the Sensitivity of CRLH Interdigital Microstrip Balanced Structures using a Co-Design Genetic ...". *Applied Physics A*, Sp. Issue: "Advanced Metamaterial & Photonic", Vol. 102, Jan. 2011
- [48] I. Kharrat, Y. Duroc, G. Andia Vera, M. Awad, S. Tedjini, and T. Aguilu, "Customized RSSI Method for Passive UHF RFID Localization System," *Journal of Telecommunications*, vol. 10, pp. 5-9, 2011.
- [49] E Perret, M Hamdi, A Vena, F Garet, M Bernier, L Duvillaret, S Tedjini « RF and THz identification using a new generation of chipless RFID tags » *Radioengineering*20, 380-386, june 2011

2. BOOK CHAPTER

- [1] S. Tedjini, E. Perret, V. Deepu, M. Bernier, "Chipless tags, the RFID next Frontier", Chapitre d'ouvrage "Internet of Things", publié par Springer en 2010, ISBN 978-1-4419-1673-0
- [2] P-H Thevenon, O. Savry, S.Tedjini, R. Malherbi-Martins " Attacks on the HF physical layer of contactless and RFID systems" : *Current Trends and Challenges in RFID*, ISBN 978-953-307-356-9 Publisher: InTech, July 2011
- [3] A.I. Najam, Y. Duroc, S. Tedjini, "MIMO antennas for ultra wideband communications," book chapter of "Ultra Wideband: Current Status and Future Trends", edited by M. Matin, InTech, 2012, ISBN: 979-953-307-809-9.
- [4] S.Tedjini, E.Perret, A. Vena, D. Kaddour " Mastering the electromagnetic signature of chipless RFID system", in «Chipless and Conventional RFID : Systems for Ubiquitous Tagging » ISBN13: 9781466616165
<http://www.igi-global.com/book/chipless-conventional-radio-frequency-identification/61620>
- [5] Arnaud Vena, Etienne Perret and Smail Tedjini " Chipless RFID based on RF Encoding Particle Realization, Coding, Reading System" ISBN: 9781785481079 Publication Date: August 2016 Hardback 258 pp.

3. PATENTS

- [1] E. Perret, S.Tedjini, V.Deepu, F.Garet, L.Duvillaret « Etiquette RFID Passive sans puce » Brevet d'invention Date de dépôt : 11 fev 2010, Pays : France, numéro : 10/50971, N. REF : B100087
- [2] E.Perret, H.Chaabane, S.Tedjini, « RFID Tool » Dépôt du logiciel auprès de l'agence pour la protection des programmes (APP), Inter Deposit Digital Number : IDDN.FR.001.390041.000S.C.2010.000.20600
- [3] Etienne Perret, Arnaud Vena, Smail Tedjini «SYSTEME D'IDENTIFICATION PAR FREQUENCES RADIO» Date de dépôt : 27 juin 2012, Pays : France, numéro : 12/56109, N. REF : B11824 FR
- [4] E Perret, S Tedjini, D Vasudevan Nair, F Garet, L Duvillaret, AM Vena « CHIPLESS PASSIVE RFID TAG » US Patent 20,130,015,248

[6] S Tedjini, Y.Duroc, G Andia-Vera, C.Loussert, « RFID communication system » BNT216062US00, Dépôt PCT 2013

[7] S Tedjini, P. Lemaitre-Auger, F.Tirard, T. Andriamiharivolamea «Groupe d'antennes pour le contrôle de la distribution spatiale du champ électromagnétique» le 06/12/2013 : Dépôt n° 13 – 62218.

[8] S Tedjini, P. Lemaitre-Auger, F.Tirard, T. Andriamiharivolamea «DISPOSITIF DE RACCORDEMENT D'UNE ANTENNE IMPRIMEE SUR UN SUPPORT SOUPLE A UN CABLE COAXIAL» 15/05/2014 : Dépôt n° 14 – 54336

4. INTERNATIONAL CONFERENCES

[1] D Allane, GA Vera, Y Duroc, R Touhami, S Tedjini « Comparative strategies 3f exploiting the 3rd harmonic signal energy in passive RFID tags » Wireless Power Transfer Conference (WPTC), 2016 IEEE, 1-3

[2] T Andriamiharivolamena, M Cosker, P Lemaitre-Auger, S Tedjini, F Tirard « CPW uniplanar and monobloc balanced 3-way power divider for wearable antennas » Antenna Meas. & App. (CAMA), 2016 IEEE Conf

[3] S Genovesi, F Costa, M Borgese, AF Dicandia, G Manara, S Tedjini, ... « Enhanced chipless RFID tags for sensors design » Antennas & Propagation (APSURSI), 2016 IEEE Int. Symposium on Antennas and Propagation

[4] G Andia-Vera, A Abdelnour, M Sarkis, A Georgiadis, D Kaddour, S Tedjini « Passive RFID-enabled proximity sensor » Microwave Symposium (IMS), 2016 IEEE MTT-S International, May 2016

[5] S.Tedjini, GA Vera, Z Marcos, RCS Freire, Y Duroc "Augmented RFID tags" IEEE Radio and Wireless Week, (WiSNet) Austin, 23-27 January 2016

[6] G Andia-Vera, A Dahmane, Y Duroc, S Tedjini "Augmented RFID tags: capabilities of RFID chips for energy harvesting at different frequencies" SENSO Conference, Marseille September 2015

[7] G Andia-Vera, Y Duroc, S Tedjini « Nonlinear behavior and characteristics of RFID chips » IEEE International Microwave Symposium, Microwave Week Workshop, 2015

[8] Andia Vera, G.; Georgiadis, A.; Duroc, Y.; Tedjini, S., "Cooperative integration of harvesting sections for passive RFID communication," in Microwave Symposium (IMS), 2015 IEEE MTT-S Int. pp.1-3, 17-22 May 2015

[9] Araujo Rodrigues, R.A.; Candeia Gurjao, E.; de Assis, F.M.; Tedjini, S.; Perret, E., "Group delay analysis of folded multi-layer C-sections used in encoding of chipless RFID tag," in Microwave and Optoelectronics Conference (IMOC), 2015 SBMO/IEEE MTT-S International, vol., no., pp.1-5, 3-6 Nov. 2015

[10] Andia-Vera, G.; Duroc, Y.; Tedjini, S., "Toward augmented UHF RFID passive tags," in Radio Science Conference (URSI AT-RASC), 2015 1st URSI Atlantic, vol., no., pp.1-1, 16-24 May 2015

[11] Rodrigues, R.A.A.; Candeia Gurjao, E.; de Assis, F.M.; Palazzi, V.; Alimenti, F.; Roselli, L.; Mezzanotte, P.; Tedjini, S., "Design of planar resonators on flexible substrate for chipless tags intended for crack sensing," in Microwave Symposium (MMS), 2015 IEEE 15th Mediterranean, vol., no., pp.1-4, Nov. 30 2015-Dec. 2 2015

[12] Son Dat Nguyen; Ngan Nguyen Le; Phat Tan Lam; Fribourg-Blanc, E.; Chien Mau Dang; Tedjini, S., "A wireless sensor for food quality detection by UHF RFID passive tags," in Advanced Technologies for Communications (ATC), 2015 International Conference on, vol., no., pp.258-263, 14-16 Oct. 2015

[13] Dat Nguyen, Son; Le, Ngan Nguyen; Lam, Phat Tan; Fribourg-Blanc, Eric; Dang, Chien Mau; Tedjini, Smail, "Modeling of antenna geometry and thickness optimization for wideband UHF RFID tag," in Advanced Technologies for Communications (ATC), 2015 International Conf on, vol., no., pp.528-533, 14-16 Oct. 2015

[14] GA Vera, Y Duroc, S Tedjini "Toward augmented UHF RFID passive tags" Radio Science Conference (URSI AT-RASC), 2015 1st URSI Atlantic, 1-1

[15] Vena, A.; Perret, E.; Sorli, B.; Tedjini, S., "Theoretical study on detection distance for chipless RFID systems according to transmit power regulation standards," in Antennas and Propagation (EuCAP), 2015 9th European Conference on, vol., no., pp.1-4, 13-17 April 2015

[16] Daiki, M.; Perret, E.; Tedjini, S., "Design of near field UHF RFID reader antenna integrated into clothing," in RFID Technology and Applications Conference (RFID-TA), 2014 IEEE, vol., no., pp.261-265, 8-9 Sept. 2014

[17] Hotte, D.; Siragusa, R.; Tedjini, S.; Duroc, Y., "A new concept of UHF RFID tag for metallic object tracking with embedded cavity," in RFID Tech. & Applications Conf (RFID-TA), 2014 IEEE, pp.237-240, 8-9 Sept. 2014

[18] Andia Vera, G.; Nawale, S.D.; Duroc, Y.; Tedjini, S., "Optimum integration of passive UHF RFID tag-rectenna in a single feed dual band antenna," in General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, vol., no., pp.1-4, 16-23 Aug. 2014

[19] Vena, A.; Perret, E.; Sorli, B.; Tedjini, S., "Toward reliable readers for chipless RFID systems," in General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, pp.1-4, 16-23 Aug. 2014

[20] Halheit, H.; Touhami, R.; Vorst, A.V.; Tedjini, S.; Tan Phu Vuong, "Effect of microstrip rectangular radiator width on SAR for local hyperthermia," in Antenna Measurements & Applications (CAMA), 2014 IEEE Conference on, vol., no., pp.1-3, 16-19 Nov. 2014

[21] Vera, G.A.; Nawale, S.D.; Tedjini, S.; Duroc, Y., "Passive UHF RFID backscattering for indoor lighting control," in India Conference (INDICON), 2014 Annual IEEE, vol., no., pp.1-4, 11-13 Dec. 2014

[22] Benbaghdad, M.; Fergani, B.; Tedjini, S.; Perret, E., "Simulation and measurement of collision signal in passive UHF RFID system and edge transition anti-collision algorithm," in RFID Technology and Applications Conference (RFID-TA), 2014 IEEE, vol., no., pp.277-282, 8-9 Sept. 2014

[23] Andriamiharivolamena, T.; Vena, A.; Perret, E.; Lemaitre-Auger, P.; Tedjini, S., "Chipless identification applied to human body," in RFID Tech. & Applications Conf. (RFID-TA), 2014 IEEE pp.241-245, 8-9 Sept. 2014

[24] Perret, E.; Nair, R.S.; Bel Kamel, E.; Vena, A.; Tedjini, S., "Chipless RFID tags for passive wireless sensor grids," General Assembly and Scientific Symposium (URSI GASS), 2014 XXXIth URSI, pp.1-4, 16-23 Aug. 2014

[25] Andia Vera, G.; Duroc, Y.; Tedjini, S., "Tag-to-reader harmonic link in passive UHF RFID," in Microwave Symposium (IMS), 2014 IEEE MTT-S International, vol., no., pp.1-4, 1-6 June 2014

[26] Vena, A.; Tedjini, M.; Bjorninen, T.; Sydanheimo, L.; Ukkonen, L.; Tentzeris, M.M., "A novel inkjet-printed wireless chipless strain and crack sensor on flexible laminates," in Antennas and Propagation Society International Symposium (APSURSI), 2014 IEEE, vol., no., pp.1294-1295, 6-11 July 2014

[27] Ennasar, M.A.; Berbia, H.; Essaaidi, M.; El Mrabet, O.; Aznabet, I.; Aznabet, M.; Tedjini, S., "A new modified S-shaped compact antenna for RFID-UHF tag applications," in 14th Microwave Symposium (MMS), 2014

- [28] Andriamiharivolamena, T.; Lemaitre-Auger, P.; Tedjini, S.; Tirard, F., "Coplanar waveguide monopole antenna on artificial magnetic conductor for body-worn wireless communication systems," in Antennas and Propagation Society International Symposium (APSURSI), 2014 IEEE, vol., no., pp.438-439, 6-11 July 2014
- [29] Perret, E.; Hamdi, M.; Tourtollet, G.E.P.; Nair, R.; Garet, F.; Delattre, A.; Vena, A.; DuVillaret, L.; Martinez, P.; Tedjini, S.; Boutant, Y., "THID, the next step of chipless RFID," in RFID (RFID), 2013 IEEE International Conference on, vol., no., pp.261-268, April 30 2013-May 2 2013
- [30] Andia Vera, G.; Duroc, Y.; Tedjini, S., "Redundant backscattering modulation of passive UHF RFID tags," in Microwave Symposium Digest (IMS), 2013 IEEE MTT-S International, vol., no., pp.1-3, 2-7 June 2013
- [31] Hotte, D.; Siragusa, R.; Duroc, Y.; Tedjini, S., "Performance optimization for the choice of impedances in the design of passive RFID tags," in Antennas and Propagation in Wireless Communications (APWC), 2013 IEEE-APS Topical Conference on, vol., no., pp.1349-1352, 9-13 Sept. 2013
- [32] Nguyen, D.-T.; Hotte, D.; Tedjini, S., "Slotted waveguide antenna for wireless applications," in Electromag. in Advanced Applications (ICEAA), 2013 International Conference on, vol., no., pp.1353-1356, 9-13 Sept. 2013
- [33] D Hotte, R Siragusa, Y Duroc, S Tedjini « Optimization performance for the choice of impedances in the design of passive RFID tags » 2013 International conf. Electromagnetics in Advanced Applications (ICEAA),
- [34] D Unnikrishnan, D Kaddour, S Tedjini « Microstrip transmission lines and antennas on Molded Interconnect Devices materials » 13th Mediterranean Microwave Sym. (MMS), 2013, 1-3
- [35] D Kaddour, S Tedjini, A Djamel « 3D antenna for UHF RFID Tag On Molded interconnect device » Antennas and Propagation Society International Symposium (APSURSI), 7-13 July 2013
- [36] DS Nguyen, XC Le, TT Pham, VH Nguyen, MC Dang, S Tedjini « Novel design of RFID UHF passive tag for wideband applications by direct and contactless chip connection » 2012 IEEE International RFID-TA
- [37] B Mohamed, B Fergani, S Tedjini, E Perret « Simulation and measurements of physical layer parameters for passive UHF RFID tags toward collision detection and canceling » 2012 IEEE International RFID-TA
- [38] R Nair, E Perret, S Tedjini, T Barron « A humidity sensor for passive chipless RFID applications » 2012 IEEE International RFID-Technologies and Applications (RFID-TA),
- [39] G Andia Vera, Y Duroc, S Tedjini « RFID air interface setup for power spectral density analysis » 2012 IEEE International RFID-Technologies and Applications (RFID-TA)
- [40] D Unnikrishnan, D Kaddour, S Tedjini « Molded interconnect devices for RF applications: Transmission lines and low pass filters » International Symposium on Signals, Systems, and Electronics (ISSSE), 2012, 1-5
- [41] A Guillet, A Vena, E Perret, S Tedjini « Design of a chipless RFID sensor for water level detection » 15th Antenna Technology and Applied Electromagnetics (ANTEM), 2012
- [42] T Andriamiharivolamena, P Lemaitre-Auger, D Kaddour, S Tedjini « Bending and crumpling effects on a wearable planar monopole antenna » 15th Antenna Technology and Applied Electromagnetics (ANTEM), 2012
- [43] R Nair, E Perret, S Tedjini « Temporal multi-frequency encoding technique for chipless RFID applications », 2012 IEEE MTT-S International Microwave Symposium Digest, 1-3
- [44] A Vena, E Perret, S Tedjini, D Kaddour, A Potie, T Barron « A compact chipless RFID tag with environment sensing capability » 2012 IEEE MTT-S International Microwave Symposium Digest 1-3
- [45] A Vena, E Perret, S Tedjini, C Vallee, P Gonon, C Mannequin « A fully passive RF switch based on nanometric conductive bridge » 2012 IEEE MTT-S International Microwave Symposium Digest 1-3
- [46] A Vena, E Perret, S Tedjini « A compact chipless RFID tag using polarization diversity for encoding and sensing » 2012 IEEE International Conference on RFID, 191-197
- [47] H Chaabane, E Perret, M Daiki, S Tedjini, JC Bolomey « RFID tag design approach based on chip multi states impedance » Asia-Pacific Microwave Conference Proceedings (APMC), 2011, 1466-1469
- [48] S Tedjini, Y Duroc « From radiator to signal processing antenna » 2011 Asia-Pacific Microwave Conference Proceedings (APMC), , 175-178
- [49] R Nair, E Perret, S Tedjini « Novel encoding in chipless RFID using group delay characteristics » 2011 SBMO/IEEE MTT-S Microwave & Optoelectronics Conference (IMOC), 2011
- [50] E Perret, S Tedjini, G Fongalland « Trends in the design of RFID tags » 2011 SBMO/IEEE MTT-S Microwave & Optoelectronics Conference (IMOC), 2011
- [51] H. Chaabane, E. Perret, S. Tedjini : «RFID Chip Impedance Measurement for UHF RFID Tag Design», " Proc. of Progress In Electromagnetics Research Symposium (PIERS2011), Maroc, March 20-23, 2011.
- [52] A. Vena, E. Perret, S. Tedjini, "RFID Chipless Tag Based on Multiple Phase Shifters, IEEE MTT-S International Microwave Symposium (IMS), June 7, 2011.
- [53] Taranjeet Singh, A. Vena, E. Perret, S. Tedjini, "A Frequency Signature Based Method for the RF Identification of Letters", 5th IEEE RFID Conference, 2011, Florida (USA), 12-14 April 2011.
- [54] M. Daiki, H. Chaabane, E. Perret, S. Tedjini, T. Aguilii, "RFID Chip Impedance Measurement for UHF Tag Design", Progress in Electromagnetics Research Symposium (PIERS'11), Marrakesh, 20-23 March, 2011.
- [55] R. Nair, E. Perret, S. Tedjini, "Novel Encoding in Chipless RFID Using Group Delay Characteristics", , 2011 SBMO/IEEE MTT-S International Microwave Optoelectronics Conf., Natal, Brazil, Oct. 29 – Nov. 01, 2011
- [56] R. Nair, E. Perret, S. Tedjini, "Chipless RFID Based on Group Delay Encoding", IEEE International Conference on RFID-TA-2011, Barcelona, Spain, 15-16 Sept. 2011. **BEST STUDENT PAPER AWARD**
- [57] P-H. Thevenon, O. Savry, S. Tedjini, « Minimization of energy consumption in passive HF contactless and RFID systems » 19th IEEE Int. Conf on Soft. Telecom. & Computer Networks , 2011, 15 & 16 Sept Dubrovnik.
- [58] P-H. Thevenon, O. Savry, S. Tedjini, «On the weakness of contactless systems under relay attacks» 19th IEEE International Conference on Software, Teleco. & Computer Networks , Softcom 2011, 15 & 16 Sept Dubrovnik
- BEST STUDENT PAPER**
- [59] H. Chaabane, E. Perret, M. Daiki, S. Tedjini, J. Bolomey, « RFID Tag Design Approach based on Chip Multi States Impedance », in Proc. Asia-Pacific Microwave Conf. (APMC), Melbourne, Australia, Dec. 2011

Below I provide a list of major publications in the last years 2016-2018.

[Self-Tuning RFID Tag: A New Approach for Temperature Sensing](#)

K Zannas, H El Matbouly, Y Duroc, S Tedjini
IEEE Transactions on Microwave Theory and Techniques 66 (12), 5885-5893

[Optocoupler Effect on In-Vivo Measurements Characterization for Human Body Communication](#)

F Maamir, M Guiatni, S Tedjini, S Gaoua, R Touhami, F Abed
2018 18th Mediterranean Microwave Symposium (MMS), 345-348

[Passive Harmonic RFID System for Buried Assets Localization](#)

A Abdelnour, A Lazaro, R Villarino, D Kaddour, S Tedjini, D Girbau 2 2018
Sensors 18 (11), 3635

[Compact Multi Bit Slotted C-Scatterer for Threshold Sensitive Chipless Wireless Temperature Sensor](#)

H El Matbouly, S Tedjini, K Zannas, Y Duroc
Technologies 6 (3), 59

[A Fully Passive UHF RFID Soil Moisture Time-Domain Transmissometry Based Sensor](#)

N Fonseca, R Freire, G Fontgalland, B Arruda, S Tedjini
2018 3rd International Symposium on Instrumentation Systems, Circuits and ...

[Design of passive UHF RFID sensor on flexible foil for sports balls pressure monitoring](#)

A Rennane, A Abdelnour, D Kaddour, R Touhami, S Tedjini
IET Microwaves, Antennas & Propagation 12 (14), 2154-2160

[On the cooperative exploitation of antenna sensitivity and auto-tuning of UHF RFID chip. Application to temperature sensing](#)

K Zannas, H El Matbouly, Y Duroc, S Tedjini
IEEE International Microwave Symposium

[On the cooperative exploitation of antenna sensitivity and auto-tuning capability of UHF RFID chip. Application to temperature sensing](#)

K Zannas, H El Matbouly, Y Duroc, S Tedjini
2018 IEEE/MTT-S International Microwave Symposium-IMS, 374-377

[Compact multi bits slotted C-scatterer for high sensitivity chipless wireless temperature Sensor](#)

H El Matbouly, K Zannas, Y Duroc, S Tedjini
MDPI Technologies 6 (3)

[Improved Traceability Solution Based on UHF RFID for Cheese Production Sector](#)

A Abdelnour, F Buchin, D Kaddour, S Tedjini
IEEE Journal of Radio Frequency Identification 2 (2), 68-72

[Chipless RFID threshold temperature sensor compliant with UHF and ISM radio frequency band](#)

H El Matbouly, K Zannas, Y Duroc, S Tedjini
URSI AT-RASC

[Achieving Time Domain Transmission Sensing with Fully Passive UHF RFID Tags](#)

N Fonsêca, A Rennane, R Freire, S Tedjini, G Fontgalland
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-3

[Passive UHF RFID Sensor Tag for Pressure and Temperature Conditions Monitoring](#)

A Rennane, N Fonseca, A Abdelnour, F Benmahmoud, D Kaddour, ...
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-3

[Wearable Antennas on flexible substrate](#)

P Lemaitre-Auger, S Tedjini, T Andriamiharivolarnena
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-1

[UHF Near-Field Wireless Power Transfer, Application to RFID System](#)

I Rakotomalala, P Lemaitre-Auger, S Tedjini
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-1

[Design of Narrowband Frequency-Tunable Antenna](#)

R Khelladi, F Ghanem, M Djeddou, S Tedjini
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-3

[Chipless RFID Threshold Temperature Sensor Compliant with UHF and ISM Radio Frequency](#)

H El Matbouly, S Tedjini, K Zannas, Y Duroc
2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), 1-4

[Transformation of Barcode Into RFID Tag, Design, and Validation](#)

A Abdelnour, D Kaddour, S Tedjini
IEEE Microwave and Wireless Components Letters 28 (5), 398-400

[A based microcontroller technique to achieve capacitive multisensing in passive RFID UHF tags](#)

N Fonsêca, R Freire, G Fontgalland, A Abdelnour, A Rennane, S Tedjini
2018 IEEE International Conference on RFID (RFID), 1-7

[Non-linearities in Passive RFID Systems: Third Harmonic Concept and Applications](#)

G Andia, Y Duroc, S Tedjini
John Wiley & Sons

[RFID: A key technology for Humanity](#)

Y Duroc, S Tedjini
Comptes Rendus Physique 19 (1-2), 64-71

[Passive UHF RFID Bending and Absolute Force Strain Gauge Based Sensors](#)

A RENNANE, F BENMAHMOUD, A ABDELNOUR, N Fonseca, ...
2017 Mediterranean Microwave Symposium (MMS), 1-4

[Complementary in-vivo measurements for human body communication](#)

F Maamir, S Tedjini, R Touhami, M Guiatni
2017 5th International Conference on Electrical Engineering-Boumerdes (ICEE ...

[Low-cost UHF near-field power transmission for RFID applications](#)

M Fantuzzi, A Costanzo, S Tedjini, P Lemaitre-Auger
2017 47th European Microwave Conference (EuMC), 212-215

[Design of a planar passive MMID tag](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini
IET Microwaves Antennas and Propagation 11 (12), 1170-1175

[Cleansing RFID data based on RSSI estimation](#)

HH Mihoub-Sidi-Moussa, R Touhami, S Tedjini
2017 IEEE 17th International Conference on Ubiquitous Wireless Broadband ...

[Chipless RFID, from principles to applications](#)

S Tedjini, F Costa, S Genovesi, G Manara
2017 International Conference on Electromagnetics in Advanced Applications ...

[A passive capacitive soil moisture and environment temperature UHF RFID based sensor for low cost agricultural applications](#)

NSSM da Fonseca, RCS Freire, A Batista, G Fontgalland, S Tedjini
2017 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference ...

[On the transformation of symbols and figures to RFID tags](#)

A Abdelnour, A Rennane, D Kaddour, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Development of passive UHF RFID tag on flexible foil for sport balls pressure monitoring](#)

A Rennane, A Abdelnour, D Kaddour, R Touhami, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Compact and small size antenna for an UHF RFID tag placed over a metallic thing](#)

T Andriamiharivolamena, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Design of electrically small 3D wire antennas for UHF RFID applications using genetic algorithm](#)

F Benmahmoud, P Lemaitre-Auger, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Exploitation of harmonic signals generated by the UHF RFID chips: New promises for the radio frequency identification technology](#)

GA Vera, D Allane, Y Duroc, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Antenna design for compact RFID sensors dedicated to metallic environments](#)

K Zannas, H El Matbouly, Y Duroc, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Chipless wireless temperature sensor based on C-like scatterer for standard RFID reader](#)

H El Matbouly, K Zannas, Y Duroc, S Tedjini
2017 XXXIInd General Assembly and Scientific Symposium of the International ...

[Item comprising a barcode with an electromagnetic signature](#)

E Perret, A Vena, S Tedjini, Y Boutant, C Halope
US Patent 9,697,446

[Design of a planar passive MMID tag antenna](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini
IET Microwaves, Antennas & Propagation 11 (12), 1770-1775

[Non-destructive dielectric characterization method for food products](#)

A Abdelnour, A Rennane, D Kaddour, S Tedjini
2017 IEEE MTT-S International Microwave Symposium (IMS), 2022-2024

[A novel design of chipless RFID tags based on alphabets](#)

S Tedjini, O Boularess, T Andriamiharivolamena, H Rmili, T Aguilu

2017 IEEE MTT-S International Microwave Symposium (IMS), 1561-1563

[A humidity sensor based on V-band slotted waveguide antenna array](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini

2017 IEEE MTT-S International Microwave Symposium (IMS), 602-604

[Europe and the future for WPT: European contributions to wireless power transfer technology](#)

CAIC Team, IEEE Microwave Magazine 18 (4), 56-87

[Device for connecting a radiofrequency circuit or component printed on a flexible support to a coaxial cable](#)

T Andriamiharivolamena, F Tirard, S Tedjini, P Lemaitre-Auger

US Patent 9,660,366

[Design of wireless sensors by using chipless RFID technology](#)

F Costa, S Genovesi, M Borgese, FA Dicandia, G Manara, S Tedjini, ...

2017 Progress In Electromagnetics Research Symposium-Spring (PIERS), 3309-3313

[Capteur d'humidité basé sur un guide d'ondes à réseau de fentes en bande V](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini

Journées Nationales Microondes

[Conception d'un tag MMID passif planaire](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini

Journées Nationales Microondes

[Analysis and assessments of time delay constrains for passive RFID tag-sensor communication link: Application for rotation speed sensing](#)

H El Matbouly, K Zannas, Y Duroc, S Tedjini

IEEE Sensors Journal 17 (7), 2174-2181

[Energy paradigms of augmented tags for the Internet of Things deployment](#)

S Tedjini, GA Vera, Y Duroc

2017 International Applied Computational Electromagnetics Society Symposium ...

[Progress in green chipless RFID sensors](#)

F Costa, E Perret, S Genovesi, S Tedjini, A Lazaro, D Girbau, R Villarino, ...

2017 11th European Conference on Antennas and Propagation (EUCAP), 3917-3921

[La RFID une Technologie Clé au Service de l'Humanité](#)

Y Duroc, S Tedjini

Journées Scientifiques de l'URSI

[On energy harvesting for augmented tags](#)

D Allane, Y Duroc, GA Vera, R Touhami, S Tedjini -

Comptes Rendus Physique 18 (2), 86-97

[A Broadband Modified T-Shaped Planar Dipole Antenna for UHF RFID Tag Applications](#)

I Aznabet, MA Ennasar, O El Mrabet, G Andia-Vera, M Khalladi, S Tedjini

Progress In Electromagnetics Research 73, 137-144

[La RFID sans puce: théorie, conception, mesures](#)

A Vena, E Perret, S Tedjini, ISTE Editions

[Toward a new PHY layer scheme for decoding tags collision signal in UHF RFID system](#)

M Benbaghdad, B Fergani, S Tedjini

IEEE Communications Letters 20 (11), 2233-2236

[CPW uniplanar and monobloc balanced 3-way power divider for wearable antennas](#)

T Andriamiharivolamena, M Cosker, P Lemaitre-Auger, S Tedjini, F Tirard

2016 IEEE Conference on Antenna Measurements & Applications (CAMA), 1-4

[Meander-line UHF RFID tag antenna loaded with split ring resonator](#)

I Aznabet, M Ennasar, O El Mrabet, S Tedjini, M Khalladi

2016 5th International Conference on Multimedia Computing and Systems (ICMCS ...

[RFID communication system](#)

S Tedjini, Y Duroc, GA Vera, C Loussert, M Recouly

US Patent 9,455,769

[Chipless RFID Based on RF Encoding Particle: Realization, Coding and Reading System](#)

A Vena, E Perret, S Tedjini, Book Elsevier

[Harmonic power harvesting system for passive RFID sensor tags](#)

D Allane, GA Vera, Y Duroc, R Touhami, S Tedjini

IEEE Transactions on microwave theory and techniques 64 (7), 2347-2356

[Temporal separation detection for chipless depolarizing frequency-coded RFID](#)

A Ramos, E Perret, O Rance, S Tedjini, A Lázaro, D Girbau

IEEE Transactions on Microwave Theory and Techniques 64 (7), 2326-2337

[A concept of pressure sensor based on slotted waveguide antenna array for passive MMID sensor networks](#)

D Hotte, R Siragusa, Y Duroc, S Tedjini
IEEE Sensors Journal 16 (14), 5583-5587

[Enhanced chipless RFID tags for sensors design](#)

S Genovesi, F Costa, M Borgese, AF Dicandia, G Manara, S Tedjini, ...
2016 IEEE International Symposium on Antennas and Propagation (APSURSI ...

[Passive RFID-enabled proximity sensor](#)

GA Vera, A Abdelnour, M Sarkis, A Georgiadis, D Kaddour, S Tedjini [3](#) 2016
2016 IEEE MTT-S International Microwave Symposium (IMS), 1-3

[Comparative strategies of exploiting the 3rd harmonic signal energy in passive RFID tags](#)

D Allane, GA Vera, Y Duroc, R Touhami, S Tedjini
2016 IEEE Wireless Power Transfer Conference (WPTC), 1-3

[Backscatter signal model of passive UHF RFID tag. Application to collision detection](#)

M Benbaghdad, B Fergani, S Tedjini
Electronics Letters 52 (11), 974-976

[Tag Augmenté Récupérateur d'Énergie pour Alimentation Autonome d'un Capteur de Température](#)

D Allane, GA Vera, Y Duroc, S Tedjini
Journées Scientifiques de l'URSI-France

[Intégration Optimisée d'un Récupérateur d'Énergie Additionnel dans un tag RFID UHF passif](#)

D Allane, GA Vera, Y Duroc, R Touhami, S Tedjini
Journées Scientifiques de l'URSI-France

[Exploitation of the nonlinearities in electromagnetic energy harvesting and passive UHF RFID](#)

G Andia-Vera, S Nawale, Y Duroc, S Tedjini
Wireless Power Transfer 3 (1), 43-52

[Augmented RFID tags](#)

S Tedjini, G Andia-Vera, M Zurita, RCS Freire, Y Duroc
2016 IEEE Topical Conference on Wireless Sensors and Sensor Networks (WiSNet ...

[A review of implementing ADC in RFID sensor](#)

M Zurita, RCS Freire, S Tedjini, SA Moshkalev
Journal of Sensors 2016

[A method to characterize the frequency-dependent structural coefficient of antennas: Application to millimeter wave identification](#)

D Hotte, Y Duroc, R Siragusa, S Tedjini
IEEE Antennas and Wireless Propagation Letters 15, 170-173