

Publications

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Etienne Perret

Books and Book Chapters

Editor-in-Chief for a series of 5 books published in-between 2016 - 2018 by ISTE Wiley / ISTE Elsevier

Series title : « Remote Identification Beyond RFID" Sous titre: "Chipless RFID and dedicated Smart Wireless Systems"

-Book N°1 : "Chipless RFID based on RF Encoding Particle" - "Realization, Coding and Reading System", Aug. 2016.

Authors: Arnaud Vena, **Etienne Perret**, Smail Tedjini

-Book N°2: title: "RFID and Wireless Sensors using Ultra-Wideband Technology", Feb. 2016.

Authors: Angel Ramos, Antonio Lazaro, David Girbau, Ramon Villarino.

-Book N°3: title: "RCS Synthesis for Chipless RFID - Theory and Design"

Authors: Olivier Rance, **Etienne Perret**, Romain Siragusa, Pierre Lemaître-Auger, Jul. 2017

Book N°4: title: "THID, the ultimate outcome of RFID" - "Terahertz Identification and Authentication"

Authors: Maher Hamdi, Frédéric Garet, Dec. 2017.

Book N°5: title: "Chipless RFID Reader Design for Ultra-Wideband Technology"

Authors: Marco Garbati, **Etienne Perret**, Romain Siragusa, Fev. 2018.

[A.1] O. Rance, E. Perret, R. Siragusa, P. Lemaître-Auger, RCS Synthesis for Chipless RFID - Theory and Design, *ISTE-Elsevier* Jul. 2017.

[A.2] O. Rance, E. Perret, R. Siragusa, P. Lemaître-Auger, Synthèse de RCS pour la technologie RFID sans puce à forte capacité de codage, *ISTE*, Jul. 2017.

[A.3] A. Vena, E. Perret, and S. Tedjini, La RFID sans puce - Théorie, conception, mesures: *ISTE*, 2016.

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[A.5] E. Perret, Radio Frequency Identification and Sensors: From RFID to Chipless RFID, *Wiley-ISTE*, 2014.

[A.6] E. Perret, Identification par radiofréquence de la RFID à la RFID sans puce, *ISTE Editions*, 2014.

[A.7] S. Tedjini, E. Perret, A. Vena, and D. Kaddour, "Mastering the electromagnetic signature of chipless RFID system," in *Chipless and Conventional Radio Frequency Identification: Systems for Ubiquitous Tagging*, N. C. Karmakar, IGI global, 2012.

[A.8] S. Tedjini, E. Perret, V. Deepu, and M. Bernier, "Chipless tags, the next RFID frontier," in *The Internet of Things*, A. I. Daniel Giusto, Giacomo Morabito et Luigi Atzori, 2010, pp. 239-249.

Invited Papers

- [B.1] E. Perret, "Permittivity characterization based on Radar Cross measurements," Int. Symp. Electromagnetic Theory (EMTS 2016), URSI, Finland, Aug. 2016.
- [B.2] E. Perret, F. Garet, "Beyond Chipless RFID, the Terahertz Identification", EMN Meeting on Terahertz, Energy Materials Nanotechnology, San Sebastian, Spain, May 2016.
- [B.3] M. Garbati, R. Siragusa, E. Perret, A. Vena, and C. Halopé, "High Performance Chipless RFID Reader Based on IR-UWB Technology," in the 9th European Conference on Antennas and Propagation (EuCAP'2015), Lisbon, Portugal, 2015.
- [B.4] E. Perret, R. S. Nair, E. B. Kamel, A. Vena, and S. Tedjini, "Chipless RFID Tags for Passive Wireless Sensor Grids," in 2014 XXXIth URSI General Assembly and Scientific Symposium (URSI GASS), Beijing, China, 2014.
- [B.5] S. Tedjini, N. Karmakar, E. Perret, A. Vena, R. Koswatta, and R. E-Azim, "Hold the Chips: Chipless Technology, an Alternative Technique for RFID," IEEE Microwave Magazine, vol. 14, pp. 56-65, July 2013.
- [B.6] E. Perret, S. Tedjini, and R. Nair, "Design of Antennas for UHF RFID Tags," Proceedings of the IEEE, invited, vol. 100, pp. 2330 - 2340, 2012.
- [B.7] E. Perret, M. Hamdi, G. E. P. Tourtollet, R. Nair, F. Garet, A. Delattre, A. Vena, L. Duvillaret, P. Martinez, S. Tedjini, and Y. Boutant, "THID, the next step of chipless RFID," in 7th IEEE RFID Conference, Invited Paper, Florida, USA, 2013.
- [B.8] E. Perret, S. Tedjini, and G. Fongalland, "Trends in the design of RFID tags," presented at the 2011 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference, invited speaker, Natal, Brazil, 2011.
- [B.9] E. Perret and S. Tedjini, "RFID tags: From Identification to Sensing," in the 11th Mediterranean Microwave Symposium MMS'2011, keynote talk, Hammamet, Tunisia, 2011.
- [B.10] E. Perret, "Méthodologie de conception des tags RFID", « Premières Journées d'études RFID (technologie et applications) », ENIT, 11 - 12 Mars 2010, Tunis, Tunisie.
- [B.11] S. Tedjini and E. Perret, "Advances in RFID tag design and applications," in Second International workshop on Nanotechnology and application - IWNA 2009, Invited paper, Vung Tau (Vietnam), 2009.
- [B.12] S. Tedjini and E. Perret, "Radio-Frequency Identification Systems and Advances in Tag Design," URSI Radio Science Bulletin, Invited Paper, vol. 331, pp. 9-20, Dec. 2009.
- [B.13] T. P. Vuong, A. Ghiotto, E. Perret, R. Siragusa, A. Pouzin, and S. Tedjini, "Conception et Miniaturisation des antennes pour les tags RFID UHF passifs, Conférence invitée," in 19èmes Colloque International Optique Hertzienne et Diélectriques, OHD2007, Valence (France), 2007.
- [B.14] H. Aubert, N. Raveu, E. Perret, and H. Legay, "Multiscale Approach for the Electromagnetic Modelling of MEMS-Controlled Reflectarrays," in 1st European Conference on Antennas and Propagation (EuCAP 2006), Invited paper, Nice (France), 2006.

Journal Papers and Letters

- [C.1] M. Purushothama, A. Vena, B. Sorli, and E. Perret, "Nafion Based Fully Passive Solid State Conductive Bridging RF Switch," IEEE Microwave and Wireless Components Letters, vol. To be published, 2017.
- [C.2] M. M. Ahmed, D. Hely, N. Barbot, R. Siragusa, E. Perret, M. Bernier, and F. Garet, "Radiated Electromagnetic Emission for Integrated Circuit Authentication," IEEE Microwave and Wireless Components Letters, 2017.
- [C.3] M. Garbati, E. Perret, R. Siragusa, and C. Halopé, "UWB Chipless RFID Reader " to be published in IEEE Microwave Magazine, 2017.

- [C.4] M. Garbati, E. Perret, R. Siragusa, and C. Halopé, "Towards Chipless RFID Reading Systems Independent of Tag Orientation," *IEEE Microwave and Wireless Components Letters*, 2017.
- [C.5] M. Garbati, R. Siragusa, E. Perret, and C. Halopé, "Ultra-Low-Jitter Fully Tunable Baseband Pulse Generator for UWB Applications," to be published in *IEEE Trans. Microw. Theory Techn.*, 2017.
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- [C.7] E. Perret, "Displacement Sensor Based on Radar Cross-Polarization Measurements," *IEEE Trans. Microw. Theory Techn.*, vol. 65, pp. 955 - 966, 2017.
- [C.8] O. Rance, R. Siragusa, P. Lemaître-Auger, and E. Perret, "Contactless Characterization of Coplanar Stripline Discontinuities by RCS Measurement," *IEEE Transactions on Antennas and Propagation*, vol. 65, pp. 251-257, 2017.
- [C.9] M. Daiki and E. Perret, "Near-Field Modular Antenna Concept with Configurable Reading Area for RFID Applications," *IEEE Trans. Antennas Prop.*, vol. PP, pp. 1-1, 2016.
- [C.10] R. S. Nair and E. Perret, "Folded Multilayer C-Sections With Large Group Delay Swing for Passive Chipless RFID Applications," *IEEE Trans. Microw. Theory Techn.*, vol. 64, pp. 4298-4311, 2016.
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- [C.13] A. Ramos, E. Perret, O. Rance, S. Tedjini, A. Lázaro, and D. Girbau, "Temporal Separation Detection for Chipless Depolarizing Frequency-Coded RFID," *IEEE Trans. Microw. Theory Techn.*, vol. 64, pp. 2326-2337, 2016.
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- [C.15] E. Perret, T. Vidal, A. Vena, and P. Gonon, "Realization of a Conductive Bridging RF Switch Integrated on to Printed Circuit Board," *Progress In Electromagnetics Research*, vol. 151, pp. 9-16, 2015.
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- [D.1] M. M. Ahmed, D. Hely, N. Barbot, R. Siragusa, E. Perret, M. Bernier, and F. Garet, "Towards a robust and efficient EM based authentication of FPGA against counterfeiting and recycling," in 19th CSI International Symposium on Computer Architecture & Digital Systems (CADS 2017), Kish Island - Iran, 2017.
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- [D.6] E. Perret, "Micrometric Displacement Sensor Based on Chipless RFID," in IEEE MTT-S International Microwave Symposium (IMS2017), Honolulu, Hawaii, United States, 2017.
- [D.7] F. Costa, E. Perret, S. Genovesi, M. Borgese, A. Dicandia, G. Manara, S. Tedjini, D. Girbau, A. Lazaro, and R. Villarino, "Progress in Green Chipless RFID Sensors," 11th European Conference on Antennas and Propagation (EuCAP'2017), Paris, France, 2017.
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- [D.18] M. Daiki, E. Perret, and S. Tedjini, "Design of near field UHF RFID reader antenna integrated into clothing," in RFID Technology and Applications Conference (RFID-TA), 2014 IEEE, 2014, pp. 261-265.
- [D.19] M. Benbaghdad, B. Fergani, S. Tedjini, and E. Perret, "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, 2014, pp. 277-282.
- [D.20] A. Vena, E. Perret, B. Sorli, and S. Tedjini, "Study on the detection reliability of chipless RFID systems," in 2014 XXXIth URSI General Assembly and Scientific Symposium (URSI GASS), Beijing, China, 2014.
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