

Alexandre Boyer

Liste des publications

Mise à jour : 12 septembre 2013

Contributions à ouvrages

- [1] « Maîtrise de la CEM – Technologie Réglementation – Normes », Les Référentiels Dunod, pp. 4.1.11.5.1-4.1.11.5.7, février 2006, 7 pages, ISBN 2-10-020415-7, 28^e complément
- [2] S. Bendhia, M. Ramdani, E. Sicard, « Electromagnetic Compatibility – Techniques for Low Emission and Susceptibility », Springer, 2006, pp.442 – 451, ISBN 0-387-26600-3
- [3] E. Sicard, **A. Boyer** “IC-EMC v2.5 User’s Manual”, INSA editor, ISBN 978-2-87649-061-1, October 2011, online at www.ic-emc.org

Articles dans des revues scientifiques à comité de lecture international

- [4] **A. Boyer**, E. Sicard, S. Bendhia, « Characterization of the Electromagnetic Susceptibility of Integrated Circuits using a Near Field Scan », *Electronic Letters*, 4th January 2007, vol. 43, No 1
- [5] **A. Boyer**, L. Roy, E. Sicard, B. Tamer, “New Cube Probe Structures for an Integrated Near Field Scanner Module” *Electronic Letters* Vol. 44, Collection Issue 11 (Mai 2008)
- [6] L. Bouhouch, S. Ben Dhia, **A. Boyer**, E. Sicard, M. Fadel, “Effect of Ferromagnetic Material on the Reduction of Parasitic Emission in Near Field” *Ferroelectrics* Vol. 371, Taylor & Francis Group, LLC ISBN 0015-0193 (Octobre 2008)”
- [7] A. Alaeldine, N. Lacrampe, **A. Boyer**, R. Perdriau, F. Cagnet, M. Ramdani, E. Sicard, M. Drissi, “Comparison among Emission and Susceptibility Reduction Techniques for Electromagnetic Interference in Digital Integrated Circuits”, *Microelectronics Journal*, Elsevier, Volume 39, Issue 12, December 2008, pp. 1728-1735
- [8] M. Ramdani, E. Sicard, **A. Boyer**, S. Ben Dhia, J. J. Whalen, T. Hubing, M. Coenen, O. Wada, “The Electromagnetic Compatibility of Integrated Circuits – Past, Present and Future”, *IEEE Transactions on Electromagnetic Compatibility*, vol. 51, no. 1, pp. 78-99, February 2009.
- [9] **A. Boyer**, A. C. Ndoeye, S. Ben Dhia, L. Guillot, B. Vrignon, “Characterization of the Evolution of IC Emissions after Accelerated Aging”, *IEEE Transactions on EMC*, Vol. 51, N°4, November 2009, pp 892 – 900.
- [10] S. Ben Dhia, **A. Boyer**, B. Li, A. C. Noye, “Characterization of the Electromagnetic Modelling drifts of a nanoscale IC after Accelerated Life Tests”, *Electronic Letters*, 18th February 2010, Vol. 46, no. 4, pp. 278-279.
- [11] B. Li, **A. Boyer**, S. Ben Dhia, C. Lemoine, “Ageing effect on electromagnetic susceptibility of a phase locked loop”, *Microelectronics Reliability*, Vol. 50, Issues 9-11, September – November 2010, pp. 1304-1308.

- [12] B. Li, N. Berbel, **A. Boyer**, S. Ben Dhia, R. Fernandez Garcia, « Study of the impact of hot carrier injection to immunity of MOSFET to electromagnetic interferences », *Microelectronics Reliability*, Vol. 51, Issues 9-11, pp. 1557-1560, September 2011, Proceedings of the 22th European Symposium on the Reliability of Electron Devices, Failure Physics and Analysis
- [13] N. Berbel, R. Fernandez Garcia, I. Gil, B. Li, **A. Boyer**, S. Ben Dhia, « Experimental verification of the usefulness of Nth power law MOSFET model under hot carrier injection wear out », *Microelectronics Reliability*, Vol. 51, Issues 9-11, pp. 1564-1567, September 2011, Proceedings of the 22th European Symposium on the Reliability of Electron Devices, Failure Physics and Analysis
- [14] R. Fernandez Garcia, I. Gil, **A. Boyer**, S. Ben Dhia, B. Vrignon, « A New Approach to Modeling the Impact of EMI on MOSFET DC Behavior », *IEICE TRANSACTIONS on Electronics* Vol.E94-C No.12 pp.1906-1908, December 2011
- [15] S. Ben Dhia, **A. Boyer**, B. Vrignon, M. Deobarro, T. V. Dinh, “On-Chip Noise Sensor for Integrated Circuit Susceptibility Investigations”, *IEEE Transactions on Instrumentation and Measurement*, vol. 61, no. 3, pp. 696-707, March 2012.
- [16] S. Ben Dhia, **A. Boyer**, B. Vrignon, M. Deobarro, « IC Immunity Modeling Process Validation using On-Chip Measurements », *Journal of Electronic Testing*, DOI 10.1007/s10836-012-5294-3, April 2012
- [17] J.F. Wu, E. Sicard, **A. Boyer**, S. Ben Dhia, J.C. Li, R.J. Shen, “Enhancing accuracy of low-dropout regulator susceptibility extraction with on-chip sensors”, *Electronics Letters*, 24th May 2012, Vol. 48, No 11, pp. 649-650, DOI 10.1049/el.2012.0407
- [18] **A. Boyer**, S. Ben Dhia, B. Li, C. Lemoine, B. Vrignon, “Prediction of Long-term Immunity of a Phase-Locked Loop”, *Journal of Electronic Testing*, December 2012, Volume 28, Issue 6, pp 791-802, DOI 10.1007/s10836-012-5335-y.
- [19] J. Wu, **A. Boyer**, J. Li, S. Ben Dhia, R. Shen, “Characterization of Changes in LDO Susceptibility After Electrical Stress”, *IEEE Transactions on Electromagnetic Compatibility*, vol. PP, no 99, February 2013, 10.1109/TEMPC.2013.2242471.
- [20] **A. Boyer**, S. Ben Dhia, B. Li, N. Berbel, R. Fernandez-Garcia, Experimental Investigations on electrical Stress Impact on Integrated Circuit Electromagnetic Emission”, *IEEE Transaction on Electromagnetic Compatibility*, vol. PP, no 99, February 2013, 10.1109/ 10.1109/TEMPC.2013.2272195.
- [21] S. Bendhia, **A. Boyer**, “Long-term Electro-Magnetic Robustness of Integrated Circuits: EMRIC research project”, accepted in *Microelectronics Reliability*.

Articles dans des revues nationales

- [22] **A. Boyer**, « Prédire la Susceptibilité des Circuits aux Agressions Electromagnétiques », *Electronique – Le mensuel des ingénieurs de conception*, mars 2008, No 189
- [23] **A. Boyer**, « Tribune – En CAO, il faut prédire l’immunité des circuits aux IEM », *Electronique – Le mensuel des ingénieurs de conception*, février 2008, No 188

Articles dans des conférences internationales à comité de lecture

- [24] **A. Boyer**, C. Labussière, O. Pigaglio, J. W. Tao, E. Sicard, C. Lochot, « Methodology of Calibration of Miniature Near-Field Probes for Quantitative Characterization of IC radiation », *ICONIC 2005 – Barcelone Espagne – 05-07 June 2005*, pp. 311 – 316
- [25] E. Sicard, **A. Boyer**, A. Tankielun, « On the Prediction of Near Field Microcontroller Emission », *IEEE Symposium on EMC – Chicago – August 2005*, pp. 695 – 699
- [26] E. Lamoureux , **A. Boyer**, S. Ben Dhia, E. Sicard, « Investigations on a Conducted Aggression inside a Digital Integrated Circuits », *EMC Compo 05, Munich, Germany*,

- 29 – 31 November 2005, proc. Pp. 87 – 91
- [27] C. Labussière, C. Lochot, **A. Boyer**, « Characterization of the Radiation from a 16 bit Microcontroller by using miniature Near-Field Probes », EMC Compo 05, Munich, Germany, 29 – 31 November 2005, pp. 33 – 38
- [28] **A. Boyer**, E. Sicard, J.L. Levant, « On the Prediction of Near-Field Microcontroller Emission », EMC Compo 05, Munich, Germany, 29 – 31 November 2005, pp. 216 – 220
- [29] N. Lacrampe, **A. Boyer**, « Original Methodology for Integrated Circuit ESD Immunity combining VF-TLP and Near Field Scan Testing », 3rd EOS/ESD/EMI Workshop – Toulouse – 18-19 May 2006, pp. 51 – 54
- [30] **A. Boyer**, E. Sicard, S. Bendhia, « Near Field Scan Immunity Measurement with RF Continuous Wave », EMC Europe 06 – Workshop Immunity – Barcelona – 4 – 8 September 2006
- [31] A. Alaeldine, **A. Boyer**, R. Perdriau, M. Ramdani, E. sicard ,M. Drissi, « A near field injection model including power losses for susceptibility prediction in IC », EMC Workshop 07, Paris, 14-15 June 2007
- [32] A. Alaeldine, **A. Boyer**, R. Perdriau, M. Ramdani, E. Sicard, M. Drissi, « A Near Field Injection Model for Susceptibility Prediction in Integrated Circuits », ICONIC 2007, Saint Louis, USA, 27 – 29 June 2007
- [33] S. Ben Dhia, E. Sicard, Y. Mequignon, **A Boyer**, JM Dienot, « Thermal Influence on 16-bits Microcontroller Emission », IEEE Symposium on EMC, Hawaii, 6 – 13 July 2007
- [34] **A. Boyer**, S. Bendhia, E. Sicard, « Modelling of a Mixed-Signal Processor Susceptibility to Near-Field Aggression », IEEE Symposium on EMC, Hawaii, 6 – 13 July 2007
- [35] **A. Boyer**, S. Bendhia, E. Sicard, « Modelling of a Direct Power Injection Aggression on a 16 bit Microcontroller Input Buffer », EMC Compo 07, Torino, 28 – 20 November 2007, pp. 35 – 39
- [36] **A. Boyer**, S. A. Boulingui, S. Bendhia, E. Sicard, S. Baffreau, « A Methodology for predicting Disturbances due to Near Field Chip to Chip Coupling », EMC Compo 07, Torino, 28 – 20 November 2007, pp. 301 – 306
- [37] G. F. Bouesse, N. Ninon, G. Sicard, M. Renaudin, **A. Boyer**, E. Sicard, « Asynchronous logic Vs Synchronous logic : Concrete Results on Electromagnetic Emissions and Conducted Susceptibility », EMC Compo 07, Turin, 28 – 20 November 2007, pp. 99 – 103
- [38] S. Ben Dhia, A. C. Ndoye, **A. Boyer**, L. Guillot, B. Vrignon, « IC Emission Spectrum Drifts after Burn-in Cycles », Asia-Pacific EMC Week, Singapore, 19 – 23 May 2008
- [39] **A. Boyer**, E. Sicard, « IC-EMC, a demonstration freeware for predicting Electromagnetic Compatibility of Integrated Circuits », Asia-Pacific EMC Week, Singapore, 19 – 23 May 2008
- [40] **A. Boyer**, M. Fer, L. Courau, E. Sicard, « Modelling of the Susceptibility of 90 nm Input Output Buffer », Asia-Pacific EMC Week, Singapore, 19 – 23 May 2008
- [41] **A. Boyer**, E. Sicard, M. Fer, L. Courau, “Electrical Characterization of a 64 Ball Grid Array Package”, EMC Europe 2008 (EMC Europe 2008) Hambourg, Allemagne, 8-12 September 2008.
- [42] A. C. Ndoye, **A. Boyer**, E. Sicard, S. Serpaud, F. Lafon, “A Concurrent Engineering Platform for Modeling IC emission and immunity”, EMC Kyoto 2009, July 20-24 2009
- [43] B. Li, A. C. Ndoye, **A. Boyer**, S. Ben Dhia, “Characterization of the electromagnetic robustness of a nanoscale CMOS integrated circuit”, EMC Compo 2009, Toulouse, November 17 – 19 2009

- [44] B. Tamer, L. Roy, **A. Boyer**, “Development of EMC/EMI Characterization Tool in LTCC Format“, EMC Compo 2009, Toulouse, November 17 – 19 2009.
- [45] M. Deobarro, B. Vrignon, S. Ben Dhia, **A. Boyer**, “Use of on-chip sampling sensor to evaluate conducted RF disturbances propagated inside an integrated circuit”, EMC Compo 2009, Toulouse, November 17 – 19 2009
- [46] M. J. Kuo, T. C. Lin, **A. Boyer**, “Integrated Circuit Emission Model Extraction Based on Fuzzy Logic Systems”, EMC Compo 2009, Toulouse, November 17 – 19 2009
- [47] B. Li, **A. Boyer**, S. Ben Dhia, C. Lemoine, “Ageing effect on immunity of a mixed signal IC”, 2010 Asia-Pacific International Symposium on Electromagnetic Compatibility, April 12 – 16, 2010, Beijing, China
- [48] S. Baffreau, S. Akue Boulingui, C. Dupoux, E. Sicard, N. Bouvier, B. Vrignon, **A. Boyer**, “A New Methodology to Measure Electromagnetic Interferences in 3G Mobile Platform”, 2010 Asia-Pacific International Symposium on Electromagnetic Compatibility, April 12 – 16, 2010, Beijing, China
- [49] E. Sicard, **A. Boyer**, “An Educational Approach to Electromagnetic Compatibility of Integrated Circuits”, 8th European Workshop on Microelectronics Education, May 10-12, 2010, Darmstadt, Germany
- [50] B. Li, **A. Boyer**, S. Ben Dhia, C. Lemoine, “Ageing effect on electromagnetic susceptibility of a phase-locked-loop”, ESREF 2010, October 2010, Italy
- [51] **A. Boyer**, B. Li, S. Ben Dhia, C. Lemoine, “Impact of Aging on the Immunity of a Mixed Signal Circuit”, EMC Europe 2010, 13 – 17th September 2010, Poland
- [52] S. Ben Dhia, **A. Boyer**, B. Vrignon, M. Deobarro, « IC immunity modelling process validation using on-chip measurements”, 12th IEEE Latin-American Test Workshop (LATW2011), Porto de Galinhas, Brazil, March 27th-30th, 2011
- [53] **A. Boyer**, S. Ben Dhia, B. Li, C. Lemoine, B. Vrignon, « Prediction of Long-Term Immunity of a Phase-Locked Loop”, 12th IEEE Latin-American Test Workshop (LATW2011), Porto de Galinhas, Brazil, March 27th-30th, 2011
- [54] **A. Boyer**, B. Li, S. Ben Dhia, C. Lemoine, B. Vrignon, “Development of an Immunity Model of a Phase-Locked Loop”, 2011 Asia-Pacific International Symposium on Electromagnetic Compatibility, May 16 – 19, 2011, Jeju Island, Korea
- [55] B. Vrignon, M. Deobarro, **A. Boyer**, S. Ben Dhia, “Bulk Current Injection Modelling and validation on passive loads and an active circuit”, 2011 Asia-Pacific International Symposium on Electromagnetic Compatibility, May 16 – 19, 2011, Jeju Island, Korea
- [56] B. Li, N. Berbel, **A. Boyer**, S. Ben Dhia, R. Fernández-García, “Study of the impact of hot carrier injection to immunity of MOSFET to electromagnetic interferences”, ESREF 2011, October 2011, Bordeaux, France
- [57] **A. Boyer**, S. Ben Dhia, C. Lemoine, B. Vrignon, “An On-Chip Sensor for Time Domain Characterization of Electromagnetic Interferences”, 8th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011), November 6 – 9, 2011, Dubrovnik, Croatia
- [58] **A. Boyer**, S. Ben Dhia, C. Lemoine, B. Vrignon, “Construction and Evaluation of the Susceptibility Model of an Integrated Phase-Locked Loop”, 8th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011), November 6 – 9, 2011, Dubrovnik, Croatia
- [59] N. Berbel, R. Fernández-García, I. Gil, B. Li, S. Ben Dhia, **A. Boyer**, “An alternative approach to model the Internal Activity of integrated circuits”, 8th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2011), November 6 – 9, 2011, Dubrovnik, Croatia
- [60] E. Sicard, **A. Boyer**, “Enhancing Engineers Skills in EMC of Integrated Circuits”, 8th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC

- Compo 2011), November 6 – 9, 2011, Dubrovnik, Croatia
- [61] E. Sicard, **A. Boyer**, “A hands-on approach to make electromagnetic compatibility of integrated circuits relevant to engineers and students », 9th European Workshop on Microelectronics Education (EWME), May 9-11, 2012, Grenoble, France
- [62] **A. Boyer**, S. Ben Dhia, C. Lemoine, B. Vrignon, « Characterizing Circuit Susceptibility with On-chip Sensors », 2012 Asia-Pacific International Symposium on Electromagnetic Compatibility, May 21 – 25, 2012, Singapour
- [63] J. F. Wu, J. C. Li, **A. Boyer**, E. Sicard, S. Ben Dhia, R. J. Shen, « EMC Susceptibility of Low-Dropout Voltage Regulator using a Test Chip », 2012 Asia-Pacific International Symposium on Electromagnetic Compatibility, May 21 – 25, 2012, Singapour
- [64] **A. Boyer**, S. Ben Dhia, « Effect of Aging on Power Integrity of Digital Integrated Circuits », 14th IEEE Latin-American Test Workshop (LATW2013), Cordoba, Argentina, April 2nd-5th, 2013
- [65] **A. Boyer**, S. Ben Dhia, “Effect of Electrical Stresses on Digital Integrated Circuits Power Integrity”, IEEE Workshop on Signal and Power Integrity (SPI), Paris, France, May 2013.
- [66] J. Wu, **A. Boyer**, J. Li, R. Shen, S. Ben Dhia, “Effect of Electrical Stresses on the Susceptibility of a Voltage regulator”, EMC Europe 2013, Brugge, Belgium, September 2013
- [67] J. Wu, **A. Boyer**, J. Li, S. Bendhia, B. Vrignon, “LDO regulator DC characteristic and susceptibility prediction after electrical stress ageing”, 24th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis ESREF 2013, 30th September – 4th October 2013.
- [68] S. Ben Dhia, **A. Boyer**, “Long-term Electro-Magnetic Robustness of Integrated Circuits: EMRIC research project”, 24th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis ESREF 2013, 30th September – 4th October 2013.
- [69] **A. Boyer**, S. Ben Dhia, “Characterization and Modeling of Electrical Stresses on Digital Integrated Circuits Power Integrity and Conducted Emission”, 9th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2013), December 15 – 18, 2013, Nara, Japan.
- [70] S. Ben Dhia, **A. Boyer**, “Long-term Electro-Magnetic Robustness of Integrated Circuits: EMRIC research project”, 9th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2013), December 15 – 18, 2013, Nara, Japan.
- [71] C. Oliveira, J. Benfica, L. M. Bolzani Poehls, F. Vargas, J. Lipovetzky, A. Lutenberg, E. Gatti, F. Hernandez, **A. Boyer**, “Reliability Analysis of an On-Chip Watchdog for Embedded Systems Exposed to Radiation and EMI”, 9th International Workshop on electromagnetic Compatibility of Integrated Circuits (EMC Compo 2013), December 15 – 18, 2013, Nara, Japan.

Articles dans des conférences nationales ou francophones

- [72] **A. Boyer**, S. Bendhia, J.L. Levant, M. Ramdani, B. Vrignon, « Modélisation d'un Boîtier TQFP144 par mesures et simulation », 4^{èmes} JFMMA & TELECOM 2005, Rabat, Maroc, 23-25 mars 2005
- [73] E. Sicard, **A. Boyer**, G. Peres, « Un Logiciel Dédié à la Prédiction du Comportement des Circuits Intégrés en Compatibilité Electromagnétique de 1 MHz à 5 GHz »,

- CEM06, Saint-Malo, avril 2006
- [74] **A. Boyer**, E. Sicard, S. Bendhia, E. Lamoureux, « Immunité d’Inverseurs CMOS en Champ Proche », CEM06, Saint-Malo, avril 2006, pp. 323 – 324
- [75] **A. Boyer**, S. Bendhia, « Design d’un Agresseur Champ Proche dédié à l’Etude CEM des System-in-Package », JNRDM06 – Rennes – France – 10 -12 mai 2006
- [76] **A. Boyer**, « Caractérisation et Modélisation de la Susceptibilité d’un Circuit Intégré par une Méthode de Scan Champ Proche », Journée l’école doctorale GEET, Toulouse, 8 mars 2007
- [77] L. Bouhouch, **A. Boyer**, « Amélioration des Performances CEM d’un Microcontrôleur à l’aide d’un Film de Matériau Ferromagnétique », 5èmes JFMMA & TELECOM 07, Fès, Maroc, 14 – 16 mars 2007
- [78] **A. Boyer**, S. Akue Boulingui, E. Sicard, S. Baffreau, « Méthodologie de Prédiction des Risques d’Interférences dans un Couplage Puce à Puce », 5èmes JFMMA & TELECOM 07, Fès, Maroc, 14 – 16 mars 2007
- [79] E. Sicard, S. Baffreau, S. A. Boulingui, **A. Boyer**, « System-In-Package Integration of Third-Generation Mobile Phones: Some EMC Challenges», 2EMC 2007, Rouen, France, 18 – 19 octobre 2007
- [80] S. Ben Dhia, A. C. Ndoye, **A. Boyer**, L. Guillot, B. Vrignon, « Dérives du Spectre d’Emission d’un composant Mixte après Vieillesse Accéléré », CEM08, 20 – 23 mai 2008, Paris, France
- [81] A. C. Ndoye, **A. Boyer**, E. Sicard, S. Serpaud, F. Lafon, “Une plateforme collaborative de service en modélisation CEM des Composants”, Telecom 2009, Agadir, 11-13 Mars 2009
- [82] E. Sicard, **A. Boyer**, “IC-EMC: A Dedicated environment for predicting electromagnetic compatibility of integrated circuits”, 2EMC 2010, Rouen, 18 – 19 Novembre 2010
- [83] E. Sicard, **A. Boyer**, “Une approche éducative de la compatibilité électromagnétique des circuits intégrés », JPCNFM 2010, 22 – 24 Novembre 2010, Saint Malo
- [84] E. Sicard, **A. Boyer**, “ Retour d’expérience d’une formation Eurodots en compatibilité électromagnétique des circuits intégrés », JPCNFM 2012, 28-30 novembre 2012, Saint Malo

Logiciel

- [85] IC-EMC, a freeware dedicated to electromagnetic compatibility of integrated circuits. Version 2.5 on line at www.ic-emc.org. Contact : etienne.sicard@insa-toulouse.fr or alexandre.boyer@insa-toulouse.fr

Divers : Rapports internes, Workshops, Présentations invités, Tutorial

- [86] **A. Boyer**, S. Ben Dhia, « Rapport d’Evaluation de l’Evolution des Contraintes de Compatibilité Electromagnétique pour les Technologies Avancées », Centre National d’Etudes Spatiales, Rapport R-S07MT-0004-062 : Evaluation de la fiabilité des composants submicroniques, 40 pages, mars 2008
- [87] Z. Chbili, A. C. Ndoye, **A. Boyer**, S. Ben Dhia, “Spécification d’un plan d’expérience de relevé de l’évolution de la robustesse après vieillissement d’un composant en technologie 65 nm“, Centre National d’Etudes Spatiales, Rapport R-S07MT-0004-062 : Evaluation de la fiabilité des composants submicroniques, 40 pages, avril 2008
- [88] **A. Boyer**, S. Ben Dhia, A. C. Ndoye, “EMC/EMI Issues for DSM: New Challenges”, Workshop on Long Term Reliability in DSM, Noordwijk (Netherland), October 3rd,

2008

- [89] S. Ben Dhia, **A. Boyer**, “Still EMC Compliant ?”, Workshop on Long Term Reliability in DSM, Arcachon, October 9th, 2009
- [90] **A. Boyer**, “Introduction to the modeling and simulation of electromagnetic compatibility of integrated circuits”, Tutorial, 2010 Asia-Pacific International Symposium on Electromagnetic Compatibility, April 12th, 2010, Beijing, China
- [91] **A. Boyer**, « Résultats du projet R&T CNES : CEM et vieillissement des composants », CCT MCE, Tutorial Décharges Electrostatiques (ESD) : du composant au système, Toulouse, 15 décembre 2010.
- [92] **A. Boyer**, S. Ben Dhia, “Initiation to the modeling and simulation of susceptibility of integrated circuits to electromagnetic interferences”, Tutorial, 2011 Asia-Pacific International Symposium on Electromagnetic Compatibility, May 16th, 2011, Jeju Island, Korea
- [93] S. Ben Dhia, **A. Boyer**, “La CEM des Circuits Intégrés”, Présentation invitée à l’école d’été du GT6 (CEM) du GDR Ondes, ENS Cachan, 30 août au 2 septembre 2011
- [94] **A. Boyer**, E. Sicard, « IC Immunity Modeling », Tutorial, 2011, EMC Compo 2011, November 6th 2011, Dubrovnik, Croatia.
- [95] **A. Boyer**, « Scan champ proche pour l’injection localisée de perturbations – Robustesse électromagnétique », Workshop E-SAFE, LAAS-CNRS, 8 décembre 2011, Toulouse, France.
- [96] **A. Boyer**, « Scan champ proche pour l’injection localisée de perturbations pour l’analyse de l’immunité des circuits intégrés », Séminaire CEM – Aide à la conception d’équipements électroniques – NEXIO, LAAS-CNRS, Toulouse, 4 avril 2012.
- [97] **A. Boyer**, « Investigation de l’immunité des circuits intégrés par la méthode DPI », Séminaire CEM – Ingénierie d’essais – NEXIO, LAAS-CNRS, Toulouse, 13 novembre 2012.
-