

## LISTES DE PUBLICATIONS – ANNEE 2010

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| <p><b>Z. Bouhamri, Y Le Guennec, J-M. Duchamp, G. Maury, A. Schimpf, V. Dobremez, L. Bidaux, B. Cabon, "Multistandard Transmission Over Plastic Optical Fiber,</b><br/>IEEE Transactions on Microwave Theory and Techniques, Vol. 58, No.11, pp. 3109-3116, Nov. 2010.</p>  |
| <p><b>T. Bertaud, S. Blonkowski, C. Bermond, C. Vallée, P. Gonon, M. Gros-Jean, B. Fléchet</b><br/>"Frequency effect on voltage linearity of ZrO<sub>2</sub> based RF Metal-Insulator-Metal capacitors"<br/>IEEE Electron Device Letters, vol. 31, Issue 2, pp. 114-116, Feb. 2010</p>  |
| <p><b>T. Bertaud, C. Bermond, T. Lacrevez, C. Vallée, Y. Morand, B. Fléchet, A. Farcy, M. Gros-Jean, S Blonkowski</b><br/>"Wideband frequency and in-situ characterization of ultra thin ZrO<sub>2</sub> and HfO<sub>2</sub> films for integrated MIM capacitors"<br/>Microelectronic Engineering, vol.87, issue 3, pp. 301-305, March 2010</p> |
| <p><b>L. Cadix, A. Farcy, C. Bermond, C. Fuchs, F. Lorut, P. Leduc, M. Assous, M. Rousseau, L.L. Chapelon, N. Bicais, B. Flechet, N. Sillon, P. Ancey</b><br/>"RF characterization and modeling of high density Through Silicon Vias for 3D chip stacking"<br/>Microelectronic Engineering, vol.87, issue 3, pp. 491-495, March 2010</p>        |
| <p><b>M. Gallitre, A. Farcy, B. Blampey, C. Bermond, B. Fléchet, P. Ancey</b><br/>"Performance predictions of interconnect networks for advanced technology nodes"<br/>Microelectronic Engineering, vol.87, issue 3, pp. 321-323, March 2010</p>  |
| <p><b>B. Blampey, M. Gallitre, A. Farcy, T. Lacrevez, S. De Rivaz, C. Bermond, B. Fléchet, V. Jousseume, A. Zenasni, P. Ancey</b><br/>"Microwave characterization of porous SiOCH permittivity after integration dedicated to the 32 nm node"<br/>Microelectronic Engineering, vol.87, issue 3, pp. 329-332, March 2010</p>                     |
| <p><b>C. Roda Neve, A. Farcy, M. Gallitre, B. Blampey, P. Meuris, L. Arnaud, J.-P. Raskin</b><br/>"Behaviour of CPW and TFMS lines at high temperature for RF applications in sub-45 nm nodes"<br/>Microelectronic Engineering, vol.87, issue 3, pp. 324-328, March 2010</p>  |
| <p><b>S. Hemour, F. Podevin, P. Xavier</b><br/>"An RF spectrometer for fast wide band measurement"<br/>International Journal of Microwave and Wireless Technologies, Vol. 1, No. 6, pp. 537-542, Jan. 2010.</p>   |
| <p><b>D. Kaddour, J.-D. Arnould, and P. Ferrari</b><br/>"Miniaturized Semi-Lumped UWB Bandpass Filter with Improved out-of-band performances", Microwave Journal, Vol. 53, No. 10, pp. 110, Oct. 2010.</p>  |
| <p><b>A.-L. Franc, D. Kaddour, H. Issa, E. Pistono, N. Corrao, J.-M. Fournier and P. Ferrari</b><br/>"Impact of technology dispersion on slow-wave high performance shielded CPW transmission lines characteristics"<br/>Microwave and Optical Technology Letters, Vol. 52, No. 12, pp. 2786, 2789, Dec. 2010.</p>                              |
| <p><b>A. L. C. Serrano, F. S. Correra, T.-P. Vuong, and P. Ferrari</b><br/>"Analysis of a Reconfigurable Bandpass Circular Patch Filter"<br/>IEEE Trans. on Microwave Theory Tech., Vol. 58, No. 12, pp. 3918 - 3924, Dec. 2010.</p>  |
| <p><b>B. Cabon</b><br/>" Microwave Photonics Mixing"<br/>Papier invité: International Journal of Sciences and Technology, Scientia Iranica, Transactions D, vol. 17, no.2, pp. 149-162, July-Dec. 2010.</p>   |

<p><b>Pouzin, T.P. Vuong, S. Tedjini, M. Pouyet, J. Perdereau,</b>  “Bench test for measurement of differential RCS of UHF RFID tags”,  Electronics Letters, Vol. 46, No. 8, pp. 590-591, Apr. 2010.</p>
<p><b>T. Quémerais, L. Moquillon, J.M. Fournier, P. Benech</b>  “65 nm, 45 nm and 32 nm Aluminium and Copper Transmission Line Model at Millimeter Wave Frequencies”. IEEE Transaction on Microwave Theory and Techniques, vol. 58, no. 9, pp. 2426-2433, Sept. 2010.</p>
<p><b>T. Quémerais, L. Moquillon, V. Huard, J.M. Fournier, P. Benech, N. Corrao, X. Mescot</b>  “Hot Carrier Stress Effect on a CMOS 65 nm 60 GHz One Stage Power Amplifier”  IEEE Electron Device Letters vol. 31, no. 9, pp. 927-929, Sept. 2010.</p>
<p><b>F. Belmas, J.M. Fournier, F. Hameau</b>  “A New Method for Performance Control of a Differential Active Inductor for Low Power 2.4GHz applications”  IEEE International Conference on IC Design and Technology, 2 juin 2010, Grenoble</p>
<p><b>Z. Bouhamri, P. Lombard, Y. Le Guennec, J.M. Duchamp, G. Maury et B. Cabon</b>  “Quasi Static Approach to Optimise RF Modulation of Vertical-Cavity Surface-Emitting Lasers”  IEEE International Topical Meeting on Microwave Photonics, 5-9 oct. 2010, Montreal, Canada.</p>
<p><b>W. Sahyoun, J.-M. Duchamp, P. Benech</b>  “Coupled Resonator Filters: wide-band modeling, frequency versus pseudo-time characterizations”  Fourth International Conference on Micro- Nanoelectronics, Nanotechnologies and MEMs, 12-15 Dec. 2010, Athens, Greece.</p>
<p><b>W. Sahyoun, P. Benech, J.-M. Duchamp, “An improved wide-band model of CRF Filters using two different approaches”</b>  Asia-Pacific Microwave Conference 2010, 7-10 Dec. 2010, Yokohama, Japan.</p>
<p><b>W. Sahyoun, P. Benech, J.-M. Duchamp, “Pseudo-time domain filter characterization using EVM parameter,</b>  European Microwave Conference 2010, 28-30 Sept. 2010, Paris, France.</p>
<p><b>Z. Bouhamri, Y. Le Guennec, J-Marc Duchamp, G. Maury, B. Cabon,</b>  “Quasi-static approach to optimize RF modulation of vertical-cavity surface-emitting lasers”, IEEE Microwave Photonics 2010, 5-8 Oct. 2010, Montreal, Canada.</p>
<p><b>W. Sahyoun, P. Benech, J.-M. Duchamp,</b>  “Wide-band modelling of Coupled Resonator Filters with measurement restrictions”  11th International Symposium on RF MEMS and RF Microsystems, 28-30 June. 2010, Otranto, Italy.</p>
<p><b>E. Eid, T. Lacrevez, C. Bermond, S. de Rivaz, S. Capraro, J. Roullard, L. Cadix, B. Fléchet, A. Farcy, P. Ancey, F. Calmon, O. Valorge, P. Leduc,</b>  “Characterization and Modelling of Substrate Coupling Effects in 3D Integrated Circuit Stacking”,  Materials for Advanced Metallization, March 7-10, 2010, Mechelen, Belgium</p>
<p><b>J. Roullard, S. Capraro, E. Eid, L. Cadix, C. Bermond, T. Lacrevez, A. Farcy, B. Flechet</b>  “Quality Factor and Frequency Bandwidth of 2D Self Inductors in 3D Integration Stack”  Materials for Advanced Metallization, March 7-10, 2010, Mechelen, Belgium</p>
<p><b>T. Bertaud, E. Defay, C. Bermond, T. Lacrevez, J. Abergel, B. Salem, C. Vallée, B. Flechet</b>  “Wideband frequency and in-situ characterization of Aluminum Nitride (AlN) in a Metal/Insulator/Metal (MIM) configuration”  Materials for Advanced Metallization, March 7-10, 2010, Mechelen, Belgium</p>
<p><b>E. Eid, T. Lacrevez, C. Bermond, S. De Rivaz, S. Capraro, J. Roullard, L. Cadix, B. Fléchet, A. Farcy, P. Ancey, F. Calmon, O. Valorge, P. Leduc,</b>  “Characterization and Modeling of RF Substrate Coupling Effects due to Vertical Interconnects in 3D Integrated Circuit Stacking “  IEEE Signal Propagation on Interconnects, May 9-12, 2010, Hildesheim, Germany</p>

<p><b>J. Roullard, S. Capraro, T. Lacrevez, L. Cadix, E. Eid, A. Farcy, B. Flechet</b>  “HF Performance Characterization and Prediction of 2D Redistribution Layer Interconnects in a 3D-Integrated Circuit Stack”  IEEE Signal Propagation on Interconnects, May 9-12, 2010, Hidelshheim, Germany</p>
<p><b>S. de Rivaz, A. Farcy, D. Deschacht, T. Lacrevez, B. Flechet</b>  “Benefit on Interconnect Performance of a Relaxed Wire Density in a 45 nm Node of the Back End of Line”  IEEE Signal Propagation on Interconnects, May 9-12, 2010, Hidelshheim, Germany</p>
<p><b>L. Cadix, M. Rousseau, C. Fuchs, P. Leduc, A. Thuai, R. El Farhane, H. Chaabouni, R. Anciant, J.-L. Huguenin, P. Coudrain, A. Farcy, C. Bermond, N. Sillon, B. Fléchet, P. Ancey</b>  « Integration and frequency dependent electrical modeling of Through Silicon Vias (TSV) for high density 3DICs”  IEEE International Interconnect Technology Conference, June 7-9, 2010, San Francisco, USA</p>
<p><b>L. Cadix, C. Fuchs, M. Rousseau, P. Leduc, H. Chaabouni, A. Thuai, M. Brocard, A. Valentian, A. Farcy, C. Bermond, N. Sillon, P. Ancey, B. Fléchet,</b>  « Integration and frequency dependent parametric modeling of Through Silicon Via involved in high density 3D chip stacking”,  IEEE Electrochemical Society Meeting, Oct. 10-15, 2010, Las Vegas, USA  Invited paper</p>
<p><b>L.Fourneaud, T.Lacrevez, J. Charbonnier, A. Farcy, B. Fléchet</b>  “Innovative HF Extraction Procedure of the Characteristic Impedance for Embedded Planar Transmission Line on High Conductive Si Substrate“  IEEE Asia Pacific Microwave Conference, Dec. 7-10, 2010, Yokohama, Japan</p>
<p><b>D. Deschacht, S. de Rivaz, A. Farcy, T. Lacrevez, B. Flechet,</b>  “Keep on shrinking interconnect size: is it still the best solution ?”  IEEE Int. Electronics Manufacturing Technology Conf., Nov-Dec 30-2, 2010, Melaka, Malaysia</p>
<p><b>E. Eid, T. Lacrevez, C. Bermond, S. Capraro, J. Roullard, B. Fléchet</b>  L. Cadix, A. Farcy, P. Ancey, F. Calmon, O. Valorge, P. Leduc,  “Frequency and Time Domain Characterization of Substrate Coupling Effects in 3D Integration Stack”,  IEEE Int. Electronics Manufacturing Technology Conf., Nov-Dec 30-2, 2010, Melaka, Malaysia  Best Student Paper Prize</p>
<p><b>S. de Rivaz, A. Farcy, D. Deschacht, T. Lacrevez, B. Flechet</b>  Effective Interconnect Networks Design in CMOS 45 nm Circuits to Joint Reductions of XT and Delay for Transmission of Very High Speed Signals  IEEE Electrical Design of Advanced Packaging &amp; Systems Symposium, Dec. 7-9, 2010, Singapore</p>
<p><b>H. Chaabouni, M. Rousseau, P. Leduc, A. Farcy, R. El Farhane, A. Thuai, G. Haury, A. Valentian, G. Billiot, M. Assous, F. De Crecy, J. Cluzel, A. Toffoli, D. Bouchu, L. Cadix, T. Lacrevez, P. Ancey, N. Sillon, B. Flechet,</b>  « Investigation on TSV impact on 65nm CMOS devices and circuits »  IEEE International Electron Devices Meeting, Dec. 6-8, 2010, San Francisco, USA</p>
<p><b>P. Xavier, F.-A. Rocas, J.-P. Laurent, B. Mercier</b>  “An innovative dielectric method for profiling soil water content”  First European Conference on Moisture Measurement “Aquametry 2010”, 5-7 Oct. 2010, Weimar, Germany.</p>
<p><b>E. Novakov</b>  “Orthogonal Frequencies Pulsed-Signal Ultra-Wideband Communication System”  2010 Asia Pacific-Radio Science Conference (AP-RASC’10), September 15-21, 2010, Toyama, Japan</p>
<p><b>E. Novakov, J.-M. Fournier</b>  « Low Power, Medium Data Rate, Ultra-Wide Band Transceiver”  Wireless Congress 2010: Systems &amp; Applications, November 10-11, 2010 Munich, Germany</p>

<p><b>A. Serrano, T.-P. Vuong, F. S. Correra, and P. Ferrari,</b>  "A Tunable Bandpass Patch Filter with Varactors"  Proc. IEEE International Microwave Theory and Techniques Symposium, MTT-S 2010, Anaheim, USA, May 23-28, 2010.</p>
<p><b>H. Issa, J-M. Duchamp, S. Abou-Chahine, and P. Ferrari</b>  "Miniature DBR with Series Capacitive Loading"  Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p><b>F. Burdin, E. Pistono, and P. Ferrari</b>  "Tunable compact filters based on stub-loaded parallel-coupled resonators", Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p><b>A.-L. Franc, A. Larabat, E. Pistono, and P. Ferrari</b>  "Slow-Wave Coplanar Waveguides in a Printed Circuit Technology"  Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p><b>A.-L. Franc, E. Pistono, and P. Ferrari</b>  "Design Guidelines for High Performance Slow-Wave Transmission Lines with Optimized Floating Shield Dimensions"  40th European Microwave Conference, EuMC'10, Paris, France, Sept. 28-30, 2010.</p>
<p><b>M. Garcia, E. Pistono, H. Maouche, and P. Ferrari</b>  "Compact filters based on stub-loaded parallel-coupled resonators"  40th European Microwave Conference, EuMC'10, Paris, France, Sept. 28-30, 2010.</p>
<p><b>H. Issa, J-M. Duchamp, S. Abou-Chahine, and P. Ferrari</b>  "Quality factor improvement of miniature capacity loaded transmission lines"  40th European Microwave Conference, EuMC'10, Paris, France, Sept. 28-30, 2010.</p>
<p>A. Romanescu, P. Fonteneau, C.-A. Legrand, P. Ferrari, J.-D. Arnould, J.-R. Manouvrier, H. Beckrich-Ros  "A Novel Physical Model for the SCR ESD protection device"  Proc. of the 32th EOS/ESD 2010 Symposium, Reno, USA, Oct. 3-8, 2010.</p>
<p>A.-L. Franc, E. Pistono, N. Corrao, and P. Ferrari  "Compact High Rejection Notch and DBR Designed with Slow-Wave Transmission Lines"  Asia-Pacific Microwave Conference, APMC 2010, Yokohama, Japan, Dec. 7-10, 2010.</p>
<p><b>F. Burdin, E. Pistono, and P. Ferrari</b>  " Parallel-coupled Stub-loaded Resonators Compact Size Tunable Filter "  Asia-Pacific Microwave Conference, APMC 2010, Yokohama, Japan, Dec. 7-10, 2010.</p>
<p><b>G. Rehder, T. Vo, P. Ferrari</b>  "Development of a slow-wave MEMS phase shifters on CMOS technology for millimeter wave frequencies"  Micro&amp;Nano Conference, Athens, Greece, Dec. 12-15, 2010.</p>
<p><b>H. Issa, D. Kaddour, P. Ferrari, E. Hourdakis, and A. G. Nassiopoulou</b>  "High Performance Transmission Lines on Porous Silicon in the Millimeter-Wave Range" Micro&amp;Nano Conference, Athens, Greece, Dec. 12-15, 2010.</p>
<p><b>G. Bulla, A. Salles, and T.P. Vuong</b>  "PIFA Bandwidth Optimization Using Genetic Algorithm and Capacitive Feeding"  IEEE International Conference on Wireless Information Technology and Systems Digest, Honolulu, Hawaii, 2010.</p>
<p><b>T.D. Nguyen, T.P Vuong, Y. Duroc, V. Y. Vu, "Optimization Of PIFA Antenna Using An Auto-embedded Genetic Algorithm"</b>  ICCE 2010, Nha Trang, Vietnam, August 2010.</p>
<p><b>A. Ghiotto, T. P. Vuong, K. Wu</b>  "Chip and Antenna Impedance Measurement for the Design of Passive UHF RFID Tag", 40th European Microwave Conference, EuMC'10, Paris, France, Sept. 28-30, 2010.</p>

<p><b>A. Ghiotto, T. P. Vuong, K. Wu</b>  "Novel Design Strategy for Passive UHF RFID Tags"  14th IEEE International Symposium on Antenna Technology and Applied Electromagnetics [ANTEM],  Ottawa, Canada, July 2010.</p>
<p><b>T. Quémerais, L. Moquillon, J.-M. Fournier, P. Benech, N. Corrao</b>  "TFMS Microstrip line modelling and characterization up to 110 GHz on 45 nm node silicon technology:  application for CAD,"  IEEE 10th Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems, Jan. 2010, New  Orleans, LA, USA.</p>
<p><b>T. Quémerais, L. Moquillon, J.-M. Fournier, P. Benech, N. Corrao</b>  "Methodology of Design of Millimeter Wave Power Amplifiers complying with 125°C Electromigration  Design Rules in advanced CMOS technology,"  IEEE 11th Wireless and Microwave Technology Conference, Apr. 2010, Melbourne Beach, FL, USA.</p>
<p><b>T. Quémerais, L. Moquillon, V. Huard, J.-M. Fournier, P. Benech, N. Corrao</b>  "DC Hot Carrier Stress Effect on CMOS 65nm 60 GHz Power Amplifiers", IEEE RFIC Symp., Anaheim,  USA, May 2010.</p>
<p><b>T. Quémerais, L. Moquillon, J.M. Fournier, Ph. Benech</b>  "A SPDT Switch in a Standard 45 nm CMOS Process for 94 GHz Applications"  Proc. of 40th European Microwave Conference, pp. 425-428, 26 Sept.-1 Oct. 2010, Paris.</p>
<p><b>M. Ould-Elhassen, M. Mabrouk, A. Ghazel, Ph. Benech</b>  Analytical study and simulation of distributed phase shifter  4th Microwave and Radar Week MRW-2010, 14-18 June 2010, Vilnius.</p>
<p><b>M. Ould-Elhassen, M. Mabrouk, A. Ghazel, Ph. Benech</b>  "Linear Phase Shifter Modeling and Simulation: Confirmation of Experimental Characterization"  IEEE International Symposium on Phased Array Systems and Technology (ARRAY), 12-15 Oct. 2010,  Waltham, MA.</p>
<p><b>J.M. Fournier, P. Benech, T. Quémerais</b>  « Intégration en technologies silicium d'amplificateurs de puissance pour les applications en bande  millimétrique »  GDR Ondes 26-27/10/2010, INSA Rennes</p>
<p><b>C. Hoarau, J-D. Arnould, P. Xavier, J-M. Duchamp</b>  "Filtre ULB basé sur des structures périodiques sinusoïdales"  11ème Journées de Caractérisation Microondes et Matériaux JCMM'10, 31 March – 2nd April 2010, Brest,  France.</p>
<p><b>P. Xavier, A.-M. Belli-Riz, J.-Y. Frau,</b>  « Caractérisation de l'atténuation radiofréquence de matériaux isolants naturels du bâtiment »  11èmes Journées de Caractérisation Microondes et Matériaux JCMM'10, 31 March – 2nd April 2010, Brest,  France.</p>
<p><b>J. Roullard, S. Capraro, E. Eid, L. Cadix, T. Lacrevez, C. Bermond, A. Farcy, B. Fléchet</b>  « Influence des substrats de silicium sur les performances des inductances planaires 2D lors d'une  intégration 3D »,  11e Journées Caractérisation Microondes et Matériaux, 31 mars - 2 avril 2010, Brest</p>
<p><b>E. Eid, T. Lacrevez, C. Bermond, S. de Rivaz, S. Capraro, J. Roullard, B. Fléchet, F. Calmon, C.  Gontrand, A. Farcy, P. Ancey</b>  « Effets de couplage RF par les substrats de silicium dans les empilements de circuits intégrés 3D »,  11e Journées Caractérisation Microondes et Matériaux, 31 mars - 2 avril 2010, Brest</p>
<p><b>T. Bertaud, E. Defay, C. Bermond, T. Lacrevez, J. Abergel, B. Salem, B. Fléchet,</b>  « Caractérisation microondes et in-situ du Nitrure d'Aluminium (AlN) en configuration  Métal/Isolant/Métal »  11e Journées Caractérisation Microondes et Matériaux, 31 mars - 2 avril 2010, Brest</p>

**O. Valorge, F. Calmon, M. Le Berre, C. Gontrand, E. Eid, T. Lacrevez, B. Flechet, J. Charbonnier, I. O'Connor,**

« Modélisation RLCG de lignes coplanaires sur un substrat Silicium pour applications CMOS »  
15e Compatibilité Electromagnétique CEM 2010, 7-9 Avril 2010, Limoges

**Minh Thuy Le, Bruno Franciscatto, Trang Tan Trinh, Quoc Cuong Nguyen, Tan Phu Vuong**

« Conception des antennes directives pour les applications télépéages DSRC », GDR Onde, Octobre 2010, RENNE, France