

## LISTES DES PUBLICATIONS 2012

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| [1R1] | N. Boudou, A. Monfardini, C. Hoffmann, F. Podevin, P. Xavier and M. Calvo<br>"Development of Kinetic Inductance Stationary-Wave Integrated Fourier-Transform Spectrometry (SWIFTS)", <i>Journal Low Temp Phys</i> , Vol. 167, No. 3-4, pp. 386–391, Jan. 2012.  |
| [1R2] | X. Tang, E. Pistono, P. Ferrari, and J.-M. Fournier<br>"Enhanced Performance of 60-GHz Power Amplifier by using Slow-wave Transmission Lines in 40 nm CMOS Technology ", <i>International Journal of Microwave &amp; Wireless Technology</i> , Vol. 4, pp. 93-100, Feb. 2012.                                       |
| [1R3] | G. Rehder, T. Vo, and P. Ferrari<br>"Development of a slow-wave MEMS phase shifters on CMOS technology for millimeter wave frequencies", <i>Microelectronic Engineering</i> , Vol. 90, pp. 19-22, Feb. 2012.  |
| [1R4] | A.-L. Franc, E. Pistono, and P. Ferrari<br>"Characterization of Thin Dielectric Films up to Mm-wave Frequencies Using Shielded CoPlanar Waveguide Transmission Lines", <i>IEEE Microw. &amp; Wireless Compon. Lett.</i> , Vol. 22, No. 2, pp. 100-102, Feb. 2012.   |
| [1R5] | W. Sahyoun, J.M. Duchamp, Ph. Benech<br>"Coupled Resonator Filters: wide-band modeling, frequency versus pseudo-time characterizations", <i>Microelectronic Engineering</i> , Vol. 90, pp. 15-18, Feb. 2012.  |
| [1R6] | M. Abdel Aziz, H. Issa, D. Kaddour, F. Podevin, A.M.E. Safwat, E. Pistono, J.-M. Duchamp, A. Viltot, J.-M. Fournier, and P. Ferrari<br>"Slow-wave high-Q coplanar striplines in CMOS technology and their RLCG model", <i>Microwave and Optical Technology Letters</i> , Vol. 54, Issue 3, pp. 650-654, March 2012. |
| [1R7] | A. L. C. Serrano, F. S. Correra, T.-P. Vuong, and P. Ferrari<br>"Synthesis Methodology Applied to a Tunable Patch Filter With Independent Frequency and Bandwidth Control", <i>IEEE Trans. on Microwave Theory Tech.</i> , Vol. 60, No. 3, pp. 484-493, March 2012.   |
| [1R8] | T. Quemerais, L. Moquillon, J.M. Fournier, P. Benech, and V. Huard<br>"Design-in-Reliable Millimeter-Wave Power Amplifiers in a 65-nm CMOSProcess ", <i>IEEE Trans. on Microwave Theory Tech.</i> , Vol. 60 , No. 4, pp. 1079–1085, Apr. 2012.  |

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| [1R9]  | <p>X. Tang, A.-L. Franc, E. Pistono, A. Siligaris, P. Vincent, P. Ferrari, and J.-M. Fournier</p> <p>"Performance Improvement versus CPW and Loss Distribution Analysis of Slow-wave CPW in 65 nm HR-SOI CMOS Technology", <i>IEEE Trans. on Electron Device</i>, Vol. 59, No. 5, pp. 1279-1285, May 2012.</p>                                       |
| [1R10] | <p>A.-L. Franc, E. Pistono, D. Gloria, and P. Ferrari</p> <p>"High-performance Shielded Coplanar Waveguides for the Design of CMOS 60-GHz Band-pass Filters", <i>IEEE Trans. on Electron Device</i>, Vol. 59, No.5, pp. 1219 - 1226, May 2012.</p>   |
| [1R11] | <p>F. Belmas, F. Hameau, J.M. Fournier</p> <p>"A Low Power Inductorless LNA with Double <math>G_m</math> enhancement in 130nm CMOS", <i>IEEE Journal of Solid State Circuit</i>, Vol. 47, No. 5, pp. 1094-1103, May 2012.</p>  |
| [1R12] | <p>T. Bertaud, C. Bermond, S. Blonkowski, C. Vallée, T. Lacrevez, A. Farcy, B. Fléchet</p> <p>"DC to Radio-Frequency Characterization of <math>ZrO_2</math> Dielectric for "Metal-Insulator-Metal" Integrated Capacitors"</p> <p><i>IEEE Trans. on Components, Packaging and Manufacturing Technology</i>, Vol. 2, No. 3, pp 502-509, March 2012</p> |
| [1R13] |  |
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| Conférences Internationales (avec Comité de Lecture) – Thème2 – RFM – 2012 |  |
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| [2CI1]   | <p>F. Burdin, F. Podevin, B. Blampey, N. Corrao, E. Pistono and P. Ferrari</p> <p>"Millimeter-Wave Rat-Race Balun in a CMOS 65 nm Technology with Slow-Wave Transmission lines and innovative topology ", <i>PIERS 2012, Moscow, Russia, Aug. 19-23, 2012.</i></p>   |
| [2CI2]   | <p>A.-L. Franc, F. Podevin, E. Pistono, G. Rehder, A. Serrano, F. Burdin, T. Xiaolan, J.-M. Fournier, and P. Ferrari</p> <p>"Slow-wave transmission lines for millimeter-wave integrated circuits: State-of-the-art and Prospects", <i>NANOFUNCTION ESSDERC/ESSCIRC Workshop on Novel Material, Devices and technologies for High Performance On-Chip Applications, Bordeaux, France, Sept. 21, 2012. Invited paper.</i></p> |
| [2CI3]   | <p>A.-L. Franc, A. Serrano, G. Rehder, F. Podevin, L. Cagnon, and P. Ferrari</p> <p>"Metallic Nanowire Filled Membrane for Slow Wave Microstrip Transmission Lines", <i>International Semiconductor Conference Dresden-Grenoble, ISCDG 2012, Grenoble, France, Sept. 24-26, 2012.</i></p>  |
| [2CI4]   | <p>A.-L. Franc, G. Rehder, and P. Ferrari</p> <p>"A Millimeter-Wave Integrated Sensor for the Dielectric Constant Characterization of Pico-Liter Volumes of Liquids", <i>International Semiconductor Conference Dresden-Grenoble, ISCDG 2012, Grenoble, France, Sept. 24-26, 2012.</i></p>   |
| [2CI5]   | <p>A. Serrano, F. Podevin, G. Rehder, L. Cagnon, and P. Ferrari</p> <p>"Nanowires based membrane as an interposer for mm waves applications ", <i>Micro&amp;Nano Conference, Heraklion, Greece, Oct. 7-10, 2012.</i></p>   |
| [2CI6]   | <p>F. Podevin, A. Serrano, G. Rehder, A.-L. Franc, L. Cagnon, and P. Ferrari</p> <p>"Slow-wave Microstrip Lines on a Nanowire based Alumina Membrane", <i>Micro&amp;Nano Conference, Heraklion, Greece, Oct. 7-10, 2012.</i></p>   |
| [2CI7]   | <p>M. Akra, H. Issa, E. Pistono, A. Jrad, and P. Ferrari</p> <p>"Parallel-Coupled Stub-Loaded Resonator Filters with Wide Spurious Suppression", <i>42th European Microwave Conference, EuMC'12, Amsterdam, Nederland, Oct. 30-Nov. 1, 2012.</i></p>   |
| [2CI8]   | <p>H. Issa, J.-M. Duchamp, S. Abouchahine, and P. Ferrari</p> <p>"Capacitive Loading for Miniaturization and Performance Improvement of Transmission Lines", <i>Second International Conference on Advances in Computational Tools for Engineering Applications, Notre Dame University, Lebanon, Dec. 12-15, 2012.</i></p>   |

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| [2CI9]  | M. Ould Elhassen, M. Mabrouk, Ph. Benech and A. Ghazel<br>"New Tunable Phase Shifter Using Loaded Stepped Impedance Structure", IPWiS 2012, 16-18 March 2012, Sousse Tunisia.  |
| [2CI10] | M. Ould Elhassen, M. Mabrouk, P. Benech and A. Ghazel<br>"Tunable Coupled Line Phase Shifter based on Modified Schiffman Approach", IPWiS 2012, 16-18 March 2012, Sousse Tunisia.  |
| [2CI11] | S. Ighilahriz, F. Cacho, L. Moquillon, S. Razafimandimby, F. Blanchet, J. Morelle, N. Corrao, V. Huard, P. Garcia, C. Arnaud, J.M. Fournier, P. Benech<br>"Reliability study under DC stress on mmW LNA, Mixer and VCO", IRPS 2012, 15-19 April 2012, Anaheim, California, USA.  |
| [2CI12] | T. Lim, J. Jimenez, P. Benech, J.-M. Fournier, B. Heitz, P. Galy<br>"Model and measurements of a Transmission Line with Integrated Symmetrical 1-kV HBM Broadband ESD Protection in Advanced CMOS Technologies", <i>International Semiconductor Conference Dresden-Grenoble</i> , ISCDG 2012, Grenoble, France, Sept. 24-26, 2012. |
| [2CI13] | C.-L. Hsu, G. Ardila, P. Benech<br>"High Frequency Characterization and Modeling of Single Metallic Nanowire", <i>International Semiconductor Conference Dresden-Grenoble</i> , ISCDG 2012, Grenoble, France, Sept. 24-26, 2012.   |
| [2CI14] | C. Hsu, P. Benech, G. Ardila<br>"A de-embedding technique for metallic nanowires in microwave characterization", <i>Micro&amp;Nano2012</i> , 7-10 October 2012, Heraklion, Greece.   |
| [2CI15] | S. Ighilahriz, F. Cacho, V. Huard, L. Moquillon, J.M. Fournier, P. Benech<br>"HBT reliability modelling discussion for RF and mmW applications", IIRW 2012, Fallen Leaf Lake, CA, October 14-18, 2012.   |
| [2CI16] | T. Lim, J. Jimenez, P. Benech, J.-M. Fournier, B. Heitz, P. Galy<br>"Geometrical Impact on RF performances of Broadband ESD Self Protected Transmission Line in Advanced CMOS Technologies", IIRW 2012, Fallen Leaf Lake, CA, USA, October 14-18, 2012.  |
| [2CI17] | C. Hsu, P. Benech, G. Ardila<br>"Parameters Extraction of Submicron Thin Film Microstrip Lines at Broadband mm-wave Frequencies", EuMIC, October 28th - November 2nd 2012, Amsterdam.  |
| [2CI18] | T. Lim, J. Jimenez, P. Benech, J.-M. Fournier, P. Galy<br>"Transmission Line with Integrated Symmetrical 1-kV HBM DC - 100 GHz ESD Protection in Advanced CMOS Technologies", EuMIC 2012, October 28th - November 2nd 2012, Amsterdam.   |

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| [2CI19] | <p>W. Sahyoun, P. Benech, J. Duchamp</p> <p>"Nonlinear behavior of Coupled Resonator Filter at high RF power levels in time and frequency domains", <i>42th European Microwave Conference, EuMC'12</i>, Amsterdam, Nederland, Oct. 30-Nov. 1, 2012.</p>   |
| [2CI20] | <p>T. Lim, J. Jimenez, B. Heitz P. Benech, J.-M. Fournier, P. Galy</p> <p>"Transmission Line with 2kV HBM Broadband ESD Protection using BIMOS and SCR in Advanced CMOS Technologies", <i>APMC 2012</i>, Kaohsiung, Taiwan. (<b><u>Best student paper</u></b>)</p>  |
| [2CI21] | <p>Ph. Benech</p> <p>"Design, realization and characterization of metallic nanolines and nanoantennas with RF pads", <i>NANOFUNCTION ESSDERC/ESSCIRC Workshop on Novel Material, Devices and technologies for High Performance On-Chip Applications</i>, Bordeaux, France, Sept. 21, 2012. <b>Invited paper.</b></p>  |
| [2CI22] | <p>P. Bousseaud, E. Novakov and J.-M. Fournier « A Low-Power Passive Mixer Receiver for Software Defined Radio (SDR) » Applications, <i>IARIA journals on ICDT 2012</i>, Chamonix, France, 29 Aril-4 May, 2012.</p>   |
| [2CI23] | <p>P. Bousseaud, E. Novakov and J.-M. Fournier, « A 130nm Low power Software-Defined radio receiver », <i>Asia-Pacific Microwave Conference</i>, Kaohsiung, Taiwan, 4-7 July, 2012.</p>   |
| [2CI24] | <p>L. Fourneaud, T. Lacrevez, C. Bermond, J. Charbonnier, C. Fuchs, A. Farcy, Y. Gaeremynck, B. Fléchet</p> <p>"Refined but Handy Electrical Models of TSV Useable from Low to High Density and for RF or Fast Digital Signals in 3D-IC",<br/>IEEE 62<sup>nd</sup> Electronic Components and Technology Conf., San Diego, USA, May 29 – June 1, 2012</p>                                  |
| [2CI25] | <p>E. Eid, T. Lacrevez, G. Houzet, C. Bermond, B. Fléchet, A. Farcy, F. Calmon, P. Leduc,</p> <p>"Effects of silicon substrate coupling phenomena on signal integrity for RF or high speed communications in 3D-IC.",<br/>IEEE 62<sup>nd</sup> Electronic Components and Technology Conf., San Diego, USA, May 29 – June 1, 2012</p>  |
| [2CI26] | <p>J. Roullard, A. Farcy, S. Capraro, T. Lacrevez, C. Bermond, G. Houzet, J. Charbonnier, C. Fuchs, C. Ferrandon, P. Leduc, B. Flechet</p> <p>'Evaluation of 3D Interconnect Routing and Stacking Strategy to Optimize High Speed Signal Transmission for Memory on Logic",<br/>EEE 62<sup>nd</sup> Electronic Components and Technology Conf., San Diego, USA, May 29 – June 1, 2012</p> |

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| [2CI27] | M. Brocard, E. Eid, T. Lacrevez, C. Bermond, G. Houzet, A. Farcy, P. Leduc, B. Fléchet<br>"Focus on Links between High Frequency Substrate Noise and High Speed Signal Transmission in Interconnection Channels of 3D-IC",<br>Micro-Nano-Electronics Packaging & Assembly, Design and Manufacturing, Grenoble, France, 25-26 April 2012 |
| [2CI28] |   |
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| Conférences Nationale Thème2 RFM – 2012 |  |
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| [2CN1]                                  | T.T.Vo, G. Rehder, F. Podevin, A-L Franc, and P. Ferrari<br>"Faisabilité de réalisation de lignes à onde lente accordables pour l'application de déphaseur dans la gamme de fréquence millimétrique", <i>12<sup>èmes</sup> Journées de Caractérisation Microondes et Matériaux</i> , JCMM'12, Chambéry, France, 28-30 Mars 2012. |

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| [2CN2]  | I. Kharrat, M.Nguyen, P. Xavier, G. Eymin Petot Tourtollet, J-M.Duchamp, Ph. Benech, T.-P. Vuong<br>« Caractérisation de papiers pour une application radio en électronique imprimée », ", 12 <sup>èmes</sup> Journées de Caractérisation Microondes et Matériaux, JCMM'12, Chambéry, France, 28-30 Mars 2012.   |
| [2CN3]  | W. Sahyoun, Ph. Benech, J-M. Duchamp<br>"Caractérisation en puissance des filtres CRF et extraction d'un modèle non linéaire des paramètres de l'AlN", 12 <sup>èmes</sup> Journées de Caractérisation Microondes et Matériaux, JCMM'12, Chambéry, France, 28-30 Mars 2012.   |
| [2CN4]  | G. Houzet, T. Lacrevez, C. Bermond, A. Le Febvrier, S. Députier, M. Guilloux-Viry, K. Blary, B. Fléchet<br>« Extraction entre 40 MHz et 67 GHz de la permittivité complexe du $\text{KTa}_{0.65}\text{Nb}_{0.35}\text{O}_3$ déposé en couche mince », 12 <sup>e</sup> Journées Caractérisation Microondes et Matériaux, Chambéry, 28-30 mars 2012  |
| [2CN5]  | C. Bermond, J. Abergel, G. Le Rhun, E. Defay, G. Houzet, T. Lacrevez, B. Flechet<br>« Etude jusqu'à 60 GHz d'une capacité ferroélectrique de $\text{PbZrO}_{0.52}\text{TiO}_{0.48}\text{O}_3$ », 12 <sup>e</sup> Journées Caractérisation Microondes et Matériaux, Chambéry, 28-30 mars 2012   |
| [2CN6]  | T. Eudes, B. Ravelo, T. Lacrevez, et B. Fléchet,<br>« Influence de la température sur l'intégrité des signaux haut débit véhiculés dans les interconnexions de PCB », 12 <sup>e</sup> Journées Caractérisation Microondes et Matériaux, Chambéry, 28-30 mars 2012  |
| [2CN7]  | P. Queffelec, V. Laur, F. Rasoanoavy, J-M. Le Floch, D. Passerieux, D. Cros, V. Madrangas, A. Le Febvrier, S. Députier, M. Guilloux-Viry, G. Houzet, T. Lacrevez, C. Bermond, B. Fléchet<br>« Inter comparaison de caractérisations électromagnétiques de couches minces ferroélectriques », 12 <sup>e</sup> Journées Caractérisation Microondes et Matériaux, Chambéry, 28-30 mars 2012 |
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