

LIST OF PUBLICATIONS 2010

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|---|
| <p>Z. Bouhamri, Y Le Guennec, J-M. Duchamp, G. Maury, A. Schimpf, V. Dobremez, L. Bidaux, B. Cabon, "Multistandard Transmission Over Plastic Optical Fiber,
IEEE Transactions on Microwave Theory and Techniques, Vol. 58, No.11, pp. 3109-3116, Nov. 2010.</p> |
| <p>T. Bertaud, S. Blonkowski, C. Bermond, C. Vallée, P. Gonon, M. Gros-Jean, B. Fléchet
"Frequency effect on voltage linearity of ZrO₂ based RF Metal-Insulator-Metal capacitors"
IEEE Electron Device Letters, vol. 31, Issue 2, pp. 114-116, Feb. 2010</p> |
| <p>T. Bertaud, C. Bermond, T. Lacrevez, C. Vallée, Y. Morand, B. Fléchet, A. Farcy, M. Gros-Jean, S Blonkowski
"Wideband frequency and in-situ characterization of ultra thin ZrO₂ and HfO₂ films for integrated MIM capacitors"
Microelectronic Engineering, vol.87, issue 3, pp. 301-305, March 2010</p> |
| <p>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
"RF characterization and modeling of high density Through Silicon Vias for 3D chip stacking"
Microelectronic Engineering, vol.87, issue 3, pp. 491-495, March 2010</p> |
| <p>M. Gallitre, A. Farcy, B. Blampey, C. Bermond, B. Fléchet, P. Ancey
"Performance predictions of interconnect networks for advanced technology nodes"
Microelectronic Engineering, vol.87, issue 3, pp. 321-323, March 2010</p> |
| <p>B. Blampey, M. Gallitre, A. Farcy, T. Lacrevez, S. De Rivaz, C. Bermond, B. Fléchet, V. Jousseume, A. Zenasni, P. Ancey
"Microwave characterization of porous SiOCH permittivity after integration dedicated to the 32 nm node"
Microelectronic Engineering, vol.87, issue 3, pp. 329-332, March 2010</p> |
| <p>C. Roda Neve, A. Farcy, M. Gallitre, B. Blampey, P. Meuris, L. Arnaud, J.-P. Raskin
"Behaviour of CPW and TFMS lines at high temperature for RF applications in sub-45 nm nodes"
Microelectronic Engineering, vol.87, issue 3, pp. 324-328, March 2010</p> |
| <p>S. Hemour, F. Podevin, P. Xavier
"An RF spectrometer for fast wide band measurement"
International Journal of Microwave and Wireless Technologies, Vol. 1, No. 6, pp. 537-542, Jan. 2010.</p> |
| <p>D. Kaddour, J.-D. Arnould, and P. Ferrari
"Miniaturized Semi-Lumped UWB Bandpass Filter with Improved out-of-band performances", Microwave Journal, Vol. 53, No. 10, pp. 110, Oct. 2010.</p> |
| <p>A.-L. Franc, D. Kaddour, H. Issa, E. Pistono, N. Corrao, J.-M. Fournier and P. Ferrari
"Impact of technology dispersion on slow-wave high performance shielded CPW transmission lines characteristics"
Microwave and Optical Technology Letters, Vol. 52, No. 12, pp. 2786, 2789, Dec. 2010.</p> |
| <p>A. L. C. Serrano, F. S. Correra, T.-P. Vuong, and P. Ferrari
"Analysis of a Reconfigurable Bandpass Circular Patch Filter"
IEEE Trans. on Microwave Theory Tech., Vol. 58, No. 12, pp. 3918 - 3924, Dec. 2010.</p> |
| <p>B. Cabon
" Microwave Photonics Mixing"
Papier invité: International Journal of Sciences and Technology, Scientia Iranica, Transactions D, vol. 17, no.2, pp. 149-162, July-Dec. 2010.</p> |

<p>Pouzin, T.P. Vuong, S. Tedjini, M. Pouyet, J. Perdereau, “Bench test for measurement of differential RCS of UHF RFID tags”, Electronics Letters, Vol. 46, No. 8, pp. 590-591, Apr. 2010.</p>
<p>T. Quémerais, L. Moquillon, J.M. Fournier, P. Benech “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>T. Quémerais, L. Moquillon, V. Huard, J.M. Fournier, P. Benech, N. Corrao, X. Mescot “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>F. Belmas, J.M. Fournier, F. Hameau “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>Z. Bouhamri, P. Lombard, Y. Le Guennec, J.M. Duchamp, G. Maury et B. Cabon “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>W. Sahyoun, J.-M. Duchamp, P. Benech “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>W. Sahyoun, P. Benech, J.-M. Duchamp, “An improved wide-band model of CRF Filters using two different approaches” Asia-Pacific Microwave Conference 2010, 7-10 Dec. 2010, Yokohama, Japan.</p>
<p>W. Sahyoun, P. Benech, J.-M. Duchamp, “Pseudo-time domain filter characterization using EVM parameter, European Microwave Conference 2010, 28-30 Sept. 2010, Paris, France.</p>
<p>Z. Bouhamri, Y. Le Guennec, J-Marc Duchamp, G. Maury, B. Cabon, “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>W. Sahyoun, P. Benech, J.-M. Duchamp, “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>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, “Characterization and Modelling of Substrate Coupling Effects in 3D Integrated Circuit Stacking”, Materials for Advanced Metallization, March 7-10, 2010, Mechelen, Belgium</p>
<p>J. Roullard, S. Capraro, E. Eid, L. Cadix, C. Bermond, T. Lacrevez, A. Farcy, B. Flechet “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>T. Bertaud, E. Defay, C. Bermond, T. Lacrevez, J. Abergel, B. Salem, C. Vallée, B. Flechet “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>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, “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, Hidelshheim, Germany</p>

<p>J. Roullard, S. Capraro, T. Lacrevez, L. Cadix, E. Eid, A. Farcy, B. Flechet “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>S. de Rivaz, A. Farcy, D. Deschacht, T. Lacrevez, B. Flechet “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>L. Cadix, M. Rousseau, C. Fuchs, P. Leduc, A. Thuaire, R. El Farhane, H. Chaabouni, R. Anciant, J.-L. Huguenin, P. Coudrain, A. Farcy, C. Bermond, N. Sillon, B. Fléchet, P. Ancey « 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>L. Cadix, C. Fuchs, M. Rousseau, P. Leduc, H. Chaabouni, A. Thuaire, M. Brocard, A. Valentian, A. Farcy, C. Bermond, N. Sillon, P. Ancey, B. Fléchet, « 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>L.Fourneaud, T.Lacrevez, J. Charbonnier, A. Farcy, B. Fléchet “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>D. Deschacht, S. de Rivaz, A. Farcy, T. Lacrevez, B. Flechet, “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>E. Eid, T. Lacrevez, C. Bermond, S. Capraro, J. Roullard, B. Fléchet 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>S. de Rivaz, A. Farcy, D. Deschacht, T. Lacrevez, B. Flechet 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 & Systems Symposium, Dec. 7-9, 2010, Singapore</p>
<p>H. Chaabouni, M. Rousseau, P. Leduc, A. Farcy, R. El Farhane, A. Thuaire, 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, « Investigation on TSV impact on 65nm CMOS devices and circuits » IEEE International Electron Devices Meeting, Dec. 6-8, 2010, San Francisco, USA</p>
<p>P. Xavier, F.-A. Rocés, J.-P. Laurent, B. Mercier “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>E. Novakov “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>E. Novakov, J.-M. Fournier « Low Power, Medium Data Rate, Ultra-Wide Band Transceiver” Wireless Congress 2010: Systems & Applications, November 10-11, 2010 Munich, Germany</p>

<p>A. Serrano, T.-P. Vuong, F. S. Correra, and P. Ferrari, "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>H. Issa, J-M. Duchamp, S. Abou-Chahine, and P. Ferrari "Miniature DBR with Series Capacitive Loading" Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p>F. Burdin, E. Pistono, and P. Ferrari "Tunable compact filters based on stub-loaded parallel-coupled resonators", Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p>A.-L. Franc, A. Larabat, E. Pistono, and P. Ferrari "Slow-Wave Coplanar Waveguides in a Printed Circuit Technology" Mediterranean Microwave Conference, MMS'2010, Guzelyurt, Cyprus, Aug. 25-27, 2010.</p>
<p>A.-L. Franc, E. Pistono, and P. Ferrari "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>M. Garcia, E. Pistono, H. Maouche, and P. Ferrari "Compact filters based on stub-loaded parallel-coupled resonators" 40th European Microwave Conference, EuMC'10, Paris, France, Sept. 28-30, 2010.</p>
<p>H. Issa, J-M. Duchamp, S. Abou-Chahine, and P. Ferrari "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>F. Burdin, E. Pistono, and P. Ferrari " Parallel-coupled Stub-loaded Resonators Compact Size Tunable Filter " Asia-Pacific Microwave Conference, APMC 2010, Yokohama, Japan, Dec. 7-10, 2010.</p>
<p>G. Rehder, T. Vo, P. Ferrari "Development of a slow-wave MEMS phase shifters on CMOS technology for millimeter wave frequencies" Micro&Nano Conference, Athens, Greece, Dec. 12-15, 2010.</p>
<p>H. Issa, D. Kaddour, P. Ferrari, E. Hourdakis, and A. G. Nassiopoulou "High Performance Transmission Lines on Porous Silicon in the Millimeter-Wave Range" Micro&Nano Conference, Athens, Greece, Dec. 12-15, 2010.</p>
<p>G. Bulla, A. Salles, and T.P. Vuong "PIFA Bandwidth Optimization Using Genetic Algorithm and Capacitive Feeding" IEEE International Conference on Wireless Information Technology and Systems Digest, Honolulu, Hawaii, 2010.</p>
<p>T.D. Nguyen, T.P Vuong, Y. Duroc, V. Y. Vu, "Optimization Of PIFA Antenna Using An Auto-embedded Genetic Algorithm" ICCE 2010, Nha Trang, Vietnam, August 2010.</p>
<p>A. Ghiotto, T. P. Vuong, K. Wu "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>A. Ghiotto, T. P. Vuong, K. Wu "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>T. Quémerais, L. Moquillon, J.-M. Fournier, P. Benech, N. Corrao "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>T. Quémerais, L. Moquillon, J.-M. Fournier, P. Benech, N. Corrao "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>T. Quémerais, L. Moquillon, V. Huard, J.-M. Fournier, P. Benech, N. Corrao "DC Hot Carrier Stress Effect on CMOS 65nm 60 GHz Power Amplifiers", IEEE RFIC Symp., Anaheim, USA, May 2010.</p>
<p>T. Quémerais, L. Moquillon, J.M. Fournier, Ph. Benech "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>M. Ould-Elhassen, M. Mabrouk, A. Ghazel, Ph. Benech Analytical study and simulation of distributed phase shifter 4th Microwave and Radar Week MRW-2010, 14-18 June 2010, Vilnius.</p>
<p>M. Ould-Elhassen, M. Mabrouk, A. Ghazel, Ph. Benech "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>J.M. Fournier, P. Benech, T. Quémerais « Intégration en technologies silicium d'amplificateurs de puissance pour les applications en bande millimétrique » GDR Ondes 26-27/10/2010, INSA Rennes</p>
<p>C. Hoarau, J-D. Arnould, P. Xavier, J-M. Duchamp "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>P. Xavier, A.-M. Belli-Riz, J.-Y. Frau, « 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>J. Roullard, S. Capraro, E. Eid, L. Cadix, T. Lacrevez, C. Bermond, A. Farcy, B. Fléchet « 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>E. Eid, T. Lacrevez, C. Bermond, S. de Rivaz, S. Capraro, J. Roullard, B. Fléchet, F. Calmon, C. Gontrand, A. Farcy, P. Ancy « 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>T. Bertaud, E. Defay, C. Bermond, T. Lacrevez, J. Abergel, B. Salem, B. Fléchet, « 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