

LIST OF PUBLICATIONS – Année 2008

S.B. Constant, Y. Le Guennec, G. Maury, N. Corrao, B. Cabon <i>Low-cost all-optical up-conversion of digital radio signals using a directly modulated 1550 nm emitting VCSEL</i> IEEE Photonics Technology Letters, PTL, Vol. 20, No. 2, p. 120 - 122, 15 janvier 2008
S.B. Constant, Y. Le Guennec, G. Maury, M. Lourdiane, B. Cabon <i>Directly modulated laser diode in the non linear regime for low-cost digital frequency up-conversion</i> Microwave and Optical Technology Letters, Vol. 50, No. 5, p.1214 - 1219, Mai 2008
P. Lombard, Y. Le Guennec, G. Maury, E. Novakov, B. Cabon <i>Optical Distribution and Up-Conversion of MB-OFDM in Ultra Wide Band over Fiber</i> IEEE/OSA Journal of Lightwave Technology, Juin 2008
B. Cabon, G. N'Guyen <i>Ultra-Wide Band over fibre in Millimetre Waves using up-conversion technique</i> Journal of the European Microwave Association, Special Issue on Microwave Photonics, Proceedings, Vol. 4, p. 206 - 211, Juin 2008
M. Jazayerifar, B. Cabon, J.A. Salehi <i>Transmission of MB-OFDM and Impulse Radio Ultra Wide Band Signals Over Single Mode Fiber</i> Joint Special Issue on Microwave Photonics 2008 of the IEEE/OSA Journal of Lightwave Technology & the IEEE Transactions on Microwave Theory and Techniques, Vol. 26, No 14, Juillet 2008
R. Gary, B. Cabon, Y. Le Guennec <i>60 GHz UWB over fiber system using photodiode based frequency up-conversion</i> Microwave and Optical Technology Letters, Vol. 4, p. 302 - 305, Déc. 2008
M. Jazayerifar, J.A. Salehi, B. Cabon <i>Analytical Study of Binary Differential IR-UWB Over Single Mode Fiber Systems Using Two Receiver Structures</i> The Institution of Engineering and Technology , IET Communications
A. Schimpf, D. Bucci, B. Cabon <i>Optimum Biasing of VCSEL Diodes for All-Optical Up-Conversion of OFDM Signals</i> IEEE/OSA Journal of Lightwave Technology
B. Ivira, P. Benech, P. Ferrari <i>Full Modelling and Simulation of FBAR Filters in the GHz Range for temperature ageing prediction,</i> Proceedings of the EuMA, Vol. 4, No. 4, pp. 283-288, Dec. 2008.
E. Pistono, J.-M. Fournier, L. Duvillaret, J.-M. Duchamp, A. Vilcot, P. Ferrari <i>A MMIC 4.3-GHz-tunable low-pass filter,</i> Microwave and Optical Technology Letters, Vol. 50, No. 10, p. 2566 - 2568, Oct. 2008.
C. Hoarau, N. Corrao, J.-D. Arnould, P. Ferrari, P. Xavier <i>Complete Design and Measurement Methodology for a RF Tunable Impedance Matching Network,</i> IEEE Trans. on Microwave Theory Tech., Vol. 56, No. 11, Part 2, p. 2620 - 2627, Nov. 2008.
S. Capraro, C. Bermond, T.T. Vo, A. Farcy, J. Piquet, M. Thomas, S. Cremer, B. Fléchet, J. Torres, <i>Variation of MIM damascene capacitors HF performance as they evolve from 2D to 3D architectures,</i> IEE Electronics Letters, Volume 44, No 6, p. 411 - 412, mars 2008
B. Ivira, R. Y. Fillit, F. Ndagijimana, Ph. Benech, G. Parat, P. Ancey <i>Self-Heating Study of Bulk Acoustic Wave Resonators Under High RF Power</i> IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency control, Vol. 55, No 1, p. 139 - 147, janvier 2008.

B. Ivira, Ph. Benech, R. Fillit, F. Ndagijimana, P. Ancey, G. Parat <i>Modeling for Temperature Compensation and Temperature Characterizations of BAW Resonators at GHz Frequencies</i> IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency control, Vol. 55, No 2, p. 421 - 430, 2008
M. Gallitre, B. Blampey, B. Fléchet, A. Farcy, V. Arnal, C. Bermond, T. Lacrevaz, J. Torres <i>Characterization of porous ULK SiOCH and impact on signal propagation for on-chip interconnects of the 45 nm node</i> Proc. of the European Microwave Association, Vol. 4, p. 131-138, juin 2008
C. Pastore, F. Gianesello, D. Gloria, E. Serret, Ph. Benech <i>Impact Of Dummy Metal Filling Strategy Dedicated To Inductors Integrated In Advanced Thick Copper RF Beol</i> Microelectronics Engineering, Vol. 85, No 10, p. 1962 – 1966, Octobre 2008.
J. Piquet, C. Bermond, M. Thomas, A. Farcy, T. Lacrevaz, B. Blampey, J. Torres, G. Angénieux, B. Fléchet, <i>High Frequency Characterization of Advanced MIM Capacitors Using SiN Dielectric Layers,</i> IEEE Trans. on Components and Packaging Technologies, Vol. 31, No 3, p. 546 - 551, Sept. 2008
T.T. Vo, T. Lacrevaz, C. Bermond, T. Bertaud, B. Fléchet, A. Farcy, Y. Morand, S. Blonkowski, J. Torres, B. Guiges, E. Defaÿ, <i>In-situ Microwave Characterization of Medium-k HfO₂ and High-k STO Dielectrics for MIM Capacitors Integrated in Back-End of Line of IC</i> IET Microwave, Antennas & Propagation, Vol. 2, No 8, p. 781 - 788, Décembre 2008
D. Kaddour, H. Issa, M. Abdelaziz, F. Podevin, E. Pistono, J.-M. Duchamp, P. Ferrari, <i>Design Guidelines for Low-Loss Slow-Wave Coplanar Transmission Lines In RF-CMOS Technology,</i> Microwave and Optical Technology Letters, Vol. 50, No. 12, p. 3029 3036, Déc. 2008.
M. Kadi, F. Ndagijimana, J. Dansou-Eloy, <i>Printed Dipoles Antennas for MCM-L Wireless RF Interconnects</i> IEEE Trans. On Antennas and Propagation, Vol. 56, No. 1, p. 223 – 230, Jan. 2008
B. Cabon, M. Jazayerifar, G. N'Guyen RoF techniques for broadband access IEEE Radio and Wireless Symposium RWS2008 Workshop WM2: Radio over Fiber Technologies, Orlando, USA, 21-24 Janvier 2008
G. N'Guyen, B. Cabon, B.Z.Yu, P.Y. Fonjallaz Simultaneous Up-Conversion to 60 GHz and Side-Band Suppression Using a Fibre Bragg Grating 6th ISIS Workshop: FTTH, Wireless Communications, and their interaction, Stockholm, Suède, 2-3 Juin 2008
A. Pizzinat, I. Louriki, B. Charbonnier, S. Meyer, C. Sillans, H. Jaquinot, S. Bories, M. Terré, C. Algani , A.-L. Billabert , Y. Le Guennec, P. Lombard, G. Froc Ultra Wide Band Home Networks by Means of a Low Cost Radio-over-MultiMode-Fibre Transparent System Network and Optical Communications 2008, Krems, Australie, 1-3 Juillet 2008
A. Schimpf, D. Bucci, B. Cabon, Low cost optical up-conversion of IR-UWB signals beyond the relaxation frequency of a vertical cavity surface emitting laser IEEE 2008 International Conference on Ultra-Wideband, IEEE ICUWB'2008, Hannover, Allemagne, 10-12 Sept. 2008
A. Pizzinat, I. Louriki, B. Charbonnier, S. Meyer, C. Sillans, H. Jaquinot, S. Bories, M. Terré, C. Algani , A.-L. Billabert , Y. Le Guennec, P. Lombard, G. Froc Low Cost Transparent Radio-over-Fibre System for UWB Based Home Network European Conference on Optical Communications 2008 , Bruxelles, Belgique, 21-25 Sept. 2008.

B. Cabon Convergence between future wireless and photonic communication systems Conference on Design of Circuits and Integrated Systems, DCIS 2008, Grenoble, France, 12-14 nov. 2008
C. Pastore, F. Ganesello, D. Gloria, E. Serret, B. Rauber, Ph. Benech High-Performance Thick Copper Inductors Integrated in Advanced High Resistivity SOI RF CMOS technology EuroSOI workshop, Cork, 23–25 Janvier 2008
C. Pastore, F. Ganesello, D. Gloria, E. Serret, Ph. Benech Impact Of Dummy Metal Filling Strategy Dedicated To Inductors Integrated In Advanced Thick Copper RF Beol European Workshop on Materials for Advanced Metallization 2008, Dresde, Allemagne, 2-5 mars 2008.
C. Pastore, F. Ganesello, D. Gloria, E. Serret, Ph. Benech Test Structure Definition for Dummy Metal Filling Strategy Dedicated to Advanced Integrated RF Inductors IEEE International Conference on Microelectronic Test Structures, Edinburgh, UK, 24-27 mars 2008
T. Hoang, P. Rey, M.-H. Vaudaine, Ph. Robert, Ph. Benech Effect of Mo layer on performance of AlN/Si SAW filter IEEE International Frequency Control Symposium, 2008, Honolulu, Hawaii, USA, 19-21 mai 2008
T. Hoang, P. Rey, M.-H. Vaudaine, Ph. Benech Effect of thin polyimide film on performance of AlN/SiO ₂ /Si SAW device PRIME 2008, Istanbul, Turquie, 22-25 Juin 2008
C. Pastore, F. Ganesello, D. Gloria, E. Serret, Ph. Benech Innovative and Complete Dummy Filling Strategy for RF Inductors Integrated in an Advanced Copper BEOL 38th European Microwave Integrated Circuits Conference 2008, Amsterdam, Holland, 27-29 octobre 2008.
A. Triantalyllou, N. Coroa, Ph. Benech, F. Ndagiijimana, A. Farcy, J. Torres Integrated Antennas for Wireless Interconnections on Silicon up to 110 GHz 38th European Microwave Integrated Circuits Conference 2008, Amsterdam, Holland, 27-29 octobre 2008.
C. Pastore, F. Ganesello, D. Gloria, E. Serret, P. Bouillon, B. Rauber, Ph. Benech Double Thick Copper BEOL in Advanced HR SOI RF CMOS Technology: Integration of High Performance Inductors for RF Front End Module IEEE SOI Conference 2008, New York, USA, 6-9 octobre 2008.
H. Issa, J.-M. Duchamp, and P. Ferrari Miniaturized DBR Filter: Formulation and Performances Improvement, Proc. IEEE International Microwave Theory and Techniques Symposium, MTT-S 2008, Atlanta, USA, 10-15 juin 2008.
H. Issa, J.-M. Duchamp, and P. Ferrari Miniature DBR Filters Compatible with Low Cost Substrates: Formulation, Proc. 14th IEEE Mediterranean Electrotechnical Conference, Ajaccio, France, 5-7 mai 2008.
S. Dossou, N. Abele, E. Cesar, P. Ancey, J.-F. Carpentier, P. Vincent, J.-M. Fournier, SMR BAW oscillator designed in 65nm CMOS technology ISCAS 2008. IEEE International Symposium on Circuits and Systems, p.1456-1459, 18-21 mai 2008
Siegfried Dossou; S. Joblot; D. Petit, P. Ancey A 2.5 GHz low phase noise oscillator design in 65nm CMOS technology with reduced current consumption, Proceedings of IEEE EDSSC 2008, Hong Kong, 8-10 décembre 2008.

H. Issa, D. Kaddour, M. Abdelaziz, F. Podevin, E. Pistono, J.-M. Duchamp, P. Ferrari Low-loss slow-wave shielded coplanar waveguides for RFIC applications 23rd Conference on Design of Circuits and Integrated Systems (DCIS), Grenoble, France, 12-14 novembre 2008.
D. Kaddour, H. Issa, M. Abdelaziz, F. Podevin, E. Pistono, J.-M. Duchamp, P. Ferrari Behaviour study of low-loss slow-wave coplanar transmission lines for RFIC applications « Chip in the Pampa », 23th symposium on Microelectronics Technology and Devices (SBMICRO 2008), Gramado, Brésil, 1-4 septembre 2008.
Alexis Farcy, Michel Gallitre, Vincent Arnal, Joaquin Torres, Bernard Fléchet, Pascal Ancey, Evolution and challenges of interconnect technologies and performance 12th IEEE Signal Propagation on Interconnects, Avignon, France, 12-15 mai 2008
M. Gallitre, B. Blampey, B. Fléchet, A. Farcy, V. Arnal, C. Bermond, T. Lacrevez, V. Sbugnera, K. Hamioud, M. Aimadeddine, H. Chaabouni, J. Torres First evidence of dielectric loss effects with ultra low-k materials and impact on interconnect propagation performance Materials for Advanced Metallization Conf., Dresde, Allemagne, 2-5 mars 2008
D.Rauly, A. Montfardini , A.E. Sanchez Colin, P. Febvre Design of two-band 150-220 GHz superconducting bolometric detection structure PIERS 2008 (Progress in Electromagnetics Research Symposium), Cambridge, USA, 2-6 Juillet 2008
Emil Novakov, Jean-Michel Fournier, Low power, 20 Mbit/s, Ultra-Wide Band Transceiver Integrated Circuit Suitable for Communicating Objects Radio Interface”, XXIX URSI General Assembly, Chicago, Illinois USA, 7-16 août 2008.
G. Bacles-Min, F. Ndagijimana, Package-antenna for wireless sensor network nodes Antennas and Propagation Conference LAPC 2008, Loughborough , p. 381 - 384, 17-18 mars 2008
M. Gallitre, B. Blampey, H. Chaabouni, A. Farcy, P. Grosgeorges, T. Lacrevez, C. Bermond, B. Fléchet, P. Ancey, Impact of ULK restoration techniques on propagation performance for interconnects of the 45 nm technology node and below 12th IEEE Signal Propagation on Interconnects, Avignon, France, 12-15 mai 2008
S. de Rivaz, T. Lacrevez, M. Gallitre, A. Farcy, B. Blampey, C. Bermond, B. Flechet Dielectric loss effects on the modeling of interconnect responses for the 45 nm node 12th IEEE Signal Propagation on Interconnects, Avignon, France, 12-15 mai 2008
B. Blampey, M. Gallitre, A. Farcy, J. Poncharra, C. Bermond, B. Flechet Experimental characterization of dummies impact on interconnects propagation performance. Optimization of dummy sizes for the CMOS 22 nm technology node 12th IEEE Signal Propagation on Interconnects, Avignon, France, 12-15 mai 2008
M. Gallitre, S. Gall, A. Farcy, B. Blampey, B. Icard, V. Jousseaume, M. Guillermet, P. Brun, A. Zenasni, P. Grosgeorges, V. Sbrugnera, J. Bustos, C. Bermond, T. Lacrevez, B. Fléchet, M. Rivoire, P. Ancey Impact of direct CMP on porous ULK properties and interconnect propagation performance on a wide frequency bandwidth 25th Advanced Metallization Conference, AMC 2008, San Diego, Californie, USA, 23-25 septembre 2008
L. Cadix, A. Farcy, P. Leduc, M. Assous, C. Bermond, L.L. Chapelon, M. Rousseau, C. Fuchs, B. Fléchet, N. Sillon, P. Ancey, Integration and RF characterization of high density Through Silicon Vias for 3D chip stacking 25th Advanced Metallization Conference, AMC 2008, San Diego, Californie, USA, 23-25 septembre 2008

T. BERTAUD, T.T. VO, C. BERMOND, T. LACREVAZ, C. VALLÉE, Y. MORAND, B. FLÉCHET, A. FARCY, M. GROS-JEAN, S. BLONKWSKI,

Wideband frequency in-situ characterization of ultra thin ZrO₂ films for integrated MIM capacitors

25th Advanced Metallization Conference, AMC 2008, San Diego, Californie, USA,
23-25 septembre 2008

Y. Le Guennec, B. Cabon, G. Maury, D. Bucci

Activités optomicroondes à l'IMEP-LAHC

Journée du club "optique-microondes" de la SFO, Paris, 8 juillet 2008.

M. Mabrouk, F. Ndagijimana, Ph. Benech

Banc de caractérisation sous pointes de résonateurs FBAR en régime grand signal

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

N. Berrag, J.-D. Arnould, Ph. Benech, N. Corrao, M. Thomas, A. Farcy, J. Torres

Caractérisation électrique et électromagnétique de capacités MIM entre 40 MHz et 110 GHz en technologie standard CMOS 120 nm

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

T. Korn, M. Kerekes, U. Ebels, C. Hoarau, J.-D. Arnould, P. Ferrari, P. Xavier

Filtre coupe bande reconfigurable et atténuateur variable utilisant la résonance ferromagnétique 10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

P. Xavier, P. Ferrari, D. Rauly, J.-P. Laurent, and B. Mercier

Réflectomètre six-ports pour la caractérisation in-situ des sols par spectrométrie diélectrique, 10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

T. Hostache, S. Hemour, F. Podevin, P. Xavier

SWIFTS : un spectromètre large bande temps réel,

Journée Effets biologiques et sanitaires des RNI, La Tronche, 7 octobre 2008.

S. Hemour, F. Podevin, P. Xavier, P. Benech, E. le Coarer,

Spectromètre à Ondes Stationnaires et à Transformée de Fourier (SWIFTS) large bande

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

N. Berrag, J.-D. Arnould, Ph. Benech, N. Corrao, M. Thomas, A. Farcy, J. Torres.

[Caractérisation électrique et électromagnétisme de capacités MIM entre 40 MHz et 110 GHz en technologie standard CMOS 120nm](#)

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

T.T. Vo, C. Bermond, T. Lacrevaz, T. BERTAUD, S. Capraro, B. Fléchet, A. Farcy, J. Torres, E. Defay

Capacités MIM accordables pour circuits intégrés et caractérisation HF du SrTiO₃

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

S. Capraro, C. Bermond, J. Piquet, T.T. Vo, B. Fléchet, M. Thomas, S. Cremer, A. Farcy, J. Torres

Optimisation des performances de capacités MIM 3D en SiN pour des applications RF en circuits intégrés

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.

M. Gallitre, B. Blampey, T. Lacrevaz, A. Farcy, C. Bermond, B. Fléchet, V. Sbrugnera, T.T. Vo, V. Arnal, J. Torres

Impact des pertes diélectriques de matériaux à très faible permittivité sur les performances des interconnexions de circuits intégrés

10èmes Journées de Caractérisation Microondes et Matériaux, Limoges, 2-4 avril 2008.