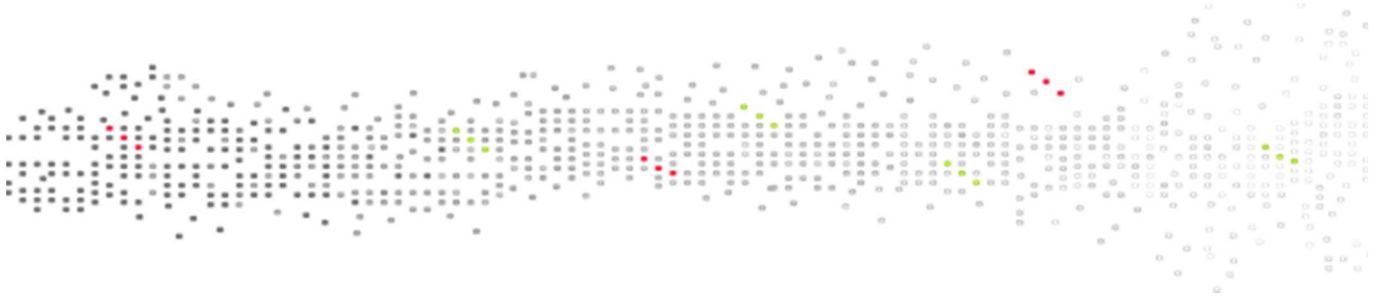




LETI ACTIVITIES @ IEDM



Short Course

“Design/Technology Enablers for Computing Applications”

- “Breaking the Memory Bottleneck in Computing Applications with Emerging Memory Technologies: A Design Perspective (Circuit Level)”, Michael Harrand, Leti
- “Breaking the Memory Bottleneck in Computing Applications with Emerging Memory Technologies: A Technology Perspective (Device level)”, Gabriel Molas, Leti

Sunday, December 4 from 8:30 to 5:15 pm
Location: Continental 6, 7 and 9

Leti Workshop

“Disrupting the Computing Paradigm with Leti”

Sunday, December 4 from 5 to 9pm
Location: Nikko Hotel

Plenary Session

Keynote by Marie Semeria: “Symbiotic Low-Power, Smart and Secure Technologies in the Age of Hyperconnectivity”

Monday, December 5 at 9 am:
Location: Grand Ballroom B

Focus Session on Quantum Computing

“SOI Technology for Quantum Information Processing (Invited)”

S. De Franceschi, L. Hutin, R. Maurand, L. Bourdet, H. Bohuslavskyi, A. Corna, D. Kotekar-Patil, S. Barraud, X. Jehl, Y.-M. Niquet, M. Sanquer and M. Vinet, CEA, INAC and CEA, Leti and University of Grenoble Alpes

Tuesday, December 6 at 10:20 am - Session 13.4
Location: Ballroom 6

Evening Panel Sessions

Marc Duranton will moderate the session entitled “Challenges and Opportunities for Neuromorphic and Machine Learning” Panelists include Carlo Reita, Leti

Tuesday, December 6 from 8-10 pm
Location: TBD

Technical Papers

Monday, December 5

FDSOI Technology for Emerging Mobile, Internet-of-Things, and RF Applications,

R. Carter, J. Mazurier, L. Pirro*, J.-U. Sachse, P. Baars, J. Faul, C. Grass, G. Grasshoff, P. Javorka, T. Kammler, A. Preusse, S. Nielsen, T. Heller, J. Schmid, H. Niebojewski*, P.-Y. Chou, E. Smith, E. Erben, C. Metze, C. Bao, Y. Andee*, I. Aydin*, S. Morvan*, J. Bernard*, E. Bourjot*, T. Feudel, D. Haramé, R. Nelluri, H.-J. Thees, L. M. Meskamp, J. Kluth, R. Mulfinger, M. Rashed, R. Taylor, C. Weintraub, J. Hoentschel, M. Vinet*, J. Schaeffer and B. Rice, Globalfoundries, *Leti*

Monday, December 5 at 2 pm – Session 2.2
Location: Grand Ballroom B

Understanding RRAM Endurance, Retention and Window Margin Trade-off using Experimental Results and Simulations,

C. Nail, G. Molas, P. Blaise, G. Piccolboni, B. Sklenard, C. Cagli, M. Bernard, A. Roule, M. Azzaz, E. Vianello, C. Carabasse, R. Berthier, D. Cooper, T. Magis, C. Pellissier, G. Ghibaudo, C. Vallée***, B. De Salvo, L. Perniola, D. Bedeau** and O. Mosendz**, CEA-Leti, *IMEP/LAHC/CNRS, **WD San Jose Research Center, ***LTM/CNRS*

Monday, December 5 at 3:15 pm: Session 4.5
Location: Continental Ballroom 4

NSP: Physical Compact Model for Stacked-planar and Vertical Gate-All-Around MOSFETs

O. Rozeau, S. Martinie, T. Poiroux, F. Triozon, S. Barraud, J. Lacord, Y.-M. Niquet, C. Tabone, R. Coquand, E. Augendre, M. Vinet, O. Faynot and J.-Ch. Barbé, CEA-Leti, *CEA-INAC*

Monday, December 5 at 3:15 pm: Session 7.5
Location: Continental Ballroom 7-9

Fundamental Variability Limits of Filament-based RRAM

Grossi, E. Nowak, C. Zambelli, C. Pellissier, S. Bernasconi, G. Cibrario, K. El Hajjam, R. Crochemore, J.-F. Nodin, P. Olivo* and L. Perniola, Leti, *Università degli Studi di Ferrara*

Monday, December 5 at 4:05 pm: Session 4.7
Location: Continental Ballroom 4

Vertically Stacked-NanoWires MOSFETs in a Replacement Metal Gate Process with Inner Spacer and SiGe Source/Drain

S. Barraud, V. Lapras, M.-P. Samson, L. Gaben, L. Grenouillet, V. Maffini-Alvaro, Y. Morand*, J. Daranlot, N. Rambal, B. Previtali, S. Reboh, C. Tabone, R. Coquand, E. Augendre, O. Rozeau, J.-M. Hartmann, C. Vizios, C. Arvet*, P. Pimenta-Barros, N. Posseme, V. Loup, C. Comboutoure*, C. Euvrard, V. Balan, I. Tinti, G. Audoit, N. Bernier, D. Cooper, Z. Saghi, F. Allain, A. Toffoli, O. Faynot and M. Vinet, CEA, Leti, Minatec and University of Grenoble Alpes, *STMicroelectronics*

Monday, December 5 at 4:25 pm: Session 17.6
Location: Grand Ballroom A

Tuesday, December 6

Experimental Demonstration of Short and Long Term Synaptic Plasticity Using OxRAM Multi k-bit Arrays for Reliable Detection in Highly Noisy Input Data

T. Werner, E. Vianello, O. Bichler, A. Grossi, E. Nowak, J.-F. Nodin, B. Yvert**, B. De Salvo, L. Perniola, CEA Leti, *CEA LIST, **INSERM*

Tuesday, December 6 at 11:10 am: Session 16.6
Location: Imperial Ballroom

First Demonstration of a Back-Side Integrated Heterogeneous Hybrid III-V/Si DBR Lasers for Si-Photonics Applications

J. Durel, B. B. Bakir, C. Jany*, S. Cremer, B. Szelag*, T. Bria*, V. Larrey*, L. Sanchez*, P. Brianceau*, J.-A. Dallery**, R. Guiavarch*, T. Card*, R. Thibon*, J.-E. Broquin*** and F. Boeuf**, STMicroelectronics, *Leti, **Vistec Electron Beam GmbH, ***University of Grenoble Alpes*

Tuesday, December 6 at 2:45 pm: Session 22.2
Location: Imperial Ballroom B

A Novel Dual Isolation Scheme for Stress and Back bias Maximum Efficiency in FDSOI Technology

R. Berthelon, F. Andrieu, P. Perreau, D. Cooper, F. Roze, O. Gourhant, P. Rivallin, N. Bernier, A. Cros*, C. Ndiaye*, E. Baylac*, E. Souchier*, D. Dutartre*, A. Claverie**, O. Weber, E. Josse*, M. Vinet and M. Haond*, Leti, *STMicroelectronics, **CEMES-CNRS,*

Tuesday, December 6 at 4:50 pm: Session 17.7
Location: Grand Ballroom A

Wednesday, December 7

Data Retention Extraction Methodology for Perpendicular STT-MRAM

L. Tillie, E. Nowak, R. Sousa, M.-C. Cyrille, B. Delaet, T. Magis, A. Persico, J. Langer**, B. Ocker**, I.-L. Prejbeanu* and L. Perniola, CEA-LETI, *SPINTEC, **Singulus Technologies AG*

Wednesday, December 7 at 9:55 am: Session 27.3
Location: Continental Ballroom 4

Extending the Functionality of FDSOI N- and P-FETs to Light Sensing

L. Kadura, L. Grenouillet, T. Bedecarrats, O. Rozeau, N. Rambal, P. Scheiblin, C. Tabone, D. Blachier, O. Faynot, A. Chelnokov and M. Vinet, Leti

Wednesday, December 7 at 11:10 am: Session 32.6
Location: Imperial Ballroom B

New Perspectives for Multicore Architectures using Advanced Technologies (Invited)

F. Clermidy, P. Vivet, D. Dutoit, Y. Thonnart, J.-L. Gonzales, J.-P. Noël, B. Giraud, A. Lévisse, O. Billoint and S. Thuriès, University Grenoble Alpes

Wednesday, December 7 at 1:35 pm: Session 35.1
Location: Continental Ballroom 6

Looking forward to meeting you at IEDM!
