

Publications scientifiques

Type d'Article	Nombre
Revue scientifique avec comité de lecture	15
Conférences avec actes et comité de lecture	32
Colloques internationaux avec comité de lecture	12

Revue scientifique internationale avec comité de lecture

G. Aguirre, F. Forero, V. Champac, M. Renovell, F. Azaïs, M. Comte, J.-M. Galliere
"Cost-Effective Analytical Models of Resistive Opens Defects in FinFET Technology"
IEEE Transactions on Very Large Scale Integration (VLSI) Systems
November 2024
DOI : 10.1109/TVLSI.2024.3479068

A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
"Analytical Models for the Evaluation of Resistive Short Defect Detectability in Presence of Process Variations: Application to 28nm Bulk and FDSOI Technologies"
Journal of Electronic Testing Theory and Applications (JETTA)
February 2019
DOI : 10.1007/s10836-019-05776-1

F. Forero, J.-M. Galliere, M. Renovell, and V. Champac
"Detectability Challenges of Bridge Defects in FinFET Based Logic Cells"
Journal of Electronic Testing Theory and Applications (JETTA)
February 2018
DOI : 10.1007/s10836-018-5714-0

A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
"Resistive Bridging Defect Detection in Bulk, FDSOI and FinFET Technologies"
Journal of Electronic Testing Theory and Applications (JETTA)
Volume 33, Issue 4, pp. 515-527, August 2017
ISSN : 0923-8174

A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
"Influence of Body-Biasing, Supply Voltage and Temperature on the detection of resistive short defects in FDSOI technology"
IEEE Transactions on Nanotechnology,
Volume 16, Issue 3, pp. 417-430, February 2017
DOI : 10.1109/TNANO.2017.2664895

J.-M. Galliere, F. Azaïs, M. Comte and M. Renovell
"Testing for Gate Oxide Short Defects using the Detectability Interval Paradigm"
De Gruyter - it - Information Technology
Volume 56, Number 4, pp. 173-181, August 2014
ISSN : 1611-2776

F. Wrobel, J.-R. Vaillé, D. Pantel, L. Dilillo, J.-M. Galliere et al.,
"A Silicon Diode-Based Detector for Investigations of Atmospheric Radiation"
IEEE Transactions on Nuclear Science
Volume 60, Issue 5, pp. 3603-3608, October 2013
ISSN : 0018-9499

- F. Wrobel, J.-R. Vaillé, D. Pantel, L. Dilillo, J.-M. Galliere et al.,
 "Proton Flux Anisotropy in the Atmosphere: Experiment and Modeling"
 IEEE Transactions on Nuclear Science
 Volume 60, Issue 4, pp. 2386-2391, August 2013
 ISSN : 0018-9499
- P. Rech, J.-M. Galliere, P. Girard, A. Griffoni, J. Boch, F. Wrobel, F. Saigne, and L. Dilillo
 "Neutron-Induced Multiple Bit Upsets on Two Commercial SRAMs Under Dynamic-Stress"
 IEEE Transactions on Nuclear Science
 Volume 59, Issue 4, pp. 893-899, August 2012
 ISSN : 0018-9499
- D. Pantel, J.-R. Vaillé, F. Wrobel, L. Dilillo, J.-M. Galliere, J.-L. Aufran et al.
 "Embedded Silicon Detector to Investigate the Natural Radiative Environment"
 Journal of Instrumentation
 Volume 7, pp. 1-11, May 2012
 DOI : 10.1088/1748-0221/7/05/P05007
- P. Rech, J.-M. Galliere, P. Girard, F. Wrobel, F. Saigne and L. Dilillo
 "Impact of Resistive-Open Defects on SRAM Error Rate Induced by Alpha Particles and Neutrons"
 IEEE Transactions on Nuclear Science
 Volume 58, Issue 3, pp. 855-861, June 2011
 ISSN : 0018-9499
- F. Wrobel, J.-R. Vaillé, D. Pantel, L. Dilillo, P. Rech, J.-M. Galliere et al.
 "Experimental Characterization of an Atmospheric Environment with a Stratospheric Balloon"
 IEEE Transaction on Nuclear Science
 Volume 58, Issue 3, pp. 945-951, June 2011
 DOI : 10.1109/TNS.2011.2136359
- J.-M. Galliere, M. Renovell, F. Azaïs and Y. Bertrand
 "Delay Testing Viability of Gate Oxide Short Defects"
 Journal of Computer Science and Technology
 Volume 20, Number 2, pp195-200, March 2005
 ISSN : 1000-9000
- R. Bouchakour, J.-M. Portal, J.-M. Galliere, F. Azaïs, Y. Bertrand and M. Renovell
 "A Compact DC Model of Gate Oxide Short Defect"
 Microelectronic Engineering
 Volume 72, Number 1-4, pp. 140-148, April 2004
 ISSN : 0167-9317
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Modeling the Random Parameters Effects in a Non-Split Model of Gate Oxide Short"
 Journal of Electronic Testing Theory and Applications (JETTA)
 Volume 19, Number 4, pp. 377-386, August 2003
 ISSN : 0923-8174

Conférences internationales avec actes, comité de lecture

- G. Chancel, J.-M. Galliere, P. Maurine
 "Body Biasing Injection: To thin or not to thin the substrate?"
 13th Workshop on Constructive Side-Channel Analysis and Secure Design, COSADE
 April 11-12, Leuven, Belgium, 2022
 DOI : 10.1007/978-3-030-99766-3_6
- G. Chaillou, P. Maurine, J.-M. Galliere, N. Azemard
 "Iterative Method for Performance Prediction Improvement of Integrated Circuits"
 Conference on Design of Circuits and Integrated Systems, DCIS
 November 24-26, Vila do Conde, Portugal, 2021
 DOI : 10.1109/DCIS53048.2021.9666182

- J. Toulemont, G. Chancel, J.-M. Galliere, F. Mailly, P. Nouet, P. Maurine
 "On the scaling of EMFI probes"
 18th Workshop on Fault Detection and Tolerance in Cryptography, FDTC
 September 17, Milan, Italy, 2021
DOI : 10.1109/FDTC53659.2021.00019
- J. Toulemont, N. Ouldei-Tebina, J.-M. Galliere, P. Nouet, E. Bourbao, P. Maurine
 "A Simple Protocol to Compare EMFI Platforms"
 2020, IACR Cryptol. ePrint Arch. pp.1277
- F. Forero, J.-M. Galliere, M. Renovell, and V. Champac
 "A Semi-analytical Model for Interconnect Open Defects in FinFET Logic Cells"
 20th IEEE Latin American Test Symposium, LATS
 March 11-13, Santiago, Chile, 2019
DOI : 10.1109/LATW.2019.8704612
- M. Cozzi, J.-M. Galliere and P. Maurine
 "Exploiting Phase Information in Thermal Scans for Stealthy Trojan Detection"
 Euromicro Conference on Digital System Design
 August 29-31, Prague, Czech Republic, 2018
ISBN : to be published
- M. Cozzi, J.-M. Galliere and P. Maurine
 "Thermal Scans for Detecting Hardware Trojans"
 9th International Workshop on Constructive Side-Channel Analysis and Secure Design
 April 23-24, Singapore, 2018
ISBN : 978-3-319-89640-3
- A. Karel, F. Azais, M. Comte, J.-M. Galliere and M. Renovell
 "Impact of Process Variations on the Detectability of Resistive Short Defects: Comparative Analysis
 between 28nm Bulk and FDSOI"
 19th IEEE Latin American Test Symposium
 March 12-14, São Paulo, Brazil, 2018
DOI : 10.1109/LATW.2018.8349696
- A. Karel, M. Comte, J.-M. Galliere, F. Azais, M. Renovell and K. Singh
 "Comprehensive Study for Detection of Weak Resistive Open and Short Defects in FDSOI Technology"
 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)
 July 3-5, Bochum, Germany, 2017
ISBN : 978-1-5090-6762-6
- A. Karel, M. Comte, J.-M. Galliere, F. Azais, M. Renovell and K. Singh
 "Detection of resistive open and short defects in FDSOI under delay-based test: Optimal VDD and body
 biasing conditions"
 22nd IEEE European Test Symposium
 May 22-26, Limassol, Cyprus, 2017
ISBN : 978-1-5090-5457-2
- F. Forero, M. Renovell, J.-M. Galliere and V. Champac
 "Analysis of Short Defects in FinFET Based Logic Cells"
 18th IEEE Latin American Test Symposium
 March 13-15, Bogota, Colombia, 2017
ISBN : 978-1-5386-0415-1
- A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
 "Impact of VT and Body-biasing on resistive short detection in 28nm UTBB FDSOI-LVT and RVT
 configurations"
 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)
 July 11-13, Pittsburgh, USA, 2016
ISBN : 978-1-4673-9038-5

- A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
 "Comparative study of Bulk, FDSOI and FinFET technologies in presence of a resistive short defect"
 17th IEEE Latin American Test Symposium
 April 6-8, Foz do Iguaçu, Brazil, 2016
 ISBN : 978-1-5090-1331-9
- R. Kheirallah, J.-M. Galliere, A. Todri-Sanial, N. Azemard and G. Ducharme
 "Statistical Energy Study for 28nm FDSOI Devices"
 IEEE EuroSime,
 April 19-23, Budapest, Hungary, 2015
 ISBN : 978-1-4799-9949-1
- D. Pantel, J.-R. Vaile, F. Wrobel, L. Dilillo, J.-M. Galliere, J.-L. Aufran et al.
 "A Silicon Diode Based Detector for Radiation Measurement in High Altitude Natural Environment"
 IEEE (Nuclear Plasma Society) Real Time Conference, Berkeley, USA, 2012
 ISBN : 978-1-4673-1082-6
- P. Rech, J.-M. Galliere, P. Girard, A. Griffoni, F. Wrobel, F. Saigné, and L. Dilillo
 "Neutron-Induced Multiple Bit Upsets on Dynamically-Stressed Commercial SRAM Arrays"
 12th IEEE European Conference on Radiation and its Effects on Components and Systems
 September 19-23, Sevilla, Spain, 2011
 ISBN : 978-1-4577-0585-4
- P. Rech, J.-M. Galliere, P. Girard, F. Wrobel, F. Saigné, and L. Dilillo
 "Dynamic-Stress Neutrons Test of Commercial SRAMs"
 IEEE Nuclear and Space Radiation Effects Conference,
 July 25-29, Las Vegas, USA, 2011
- L. Dilillo, P. Rech, J.-M. Galliere, P. Girard, F. Wrobel and F. Saigne
 "Neutron Detection in Atmospheric Environment through Static and Dynamic SRAM-Based Test Bench"
 12th IEEE Latin American Test Workshop
 March 27-30, Porto de Galinhas, Brazil, 2011
 ISBN : 978-1-4577-1490-0
- J.-M. Galliere, P. Rech, P. Girard and L. Dilillo
 "A Roaming Memory Test Bench for Detecting Particle- induced SEUs"
 International Test Conference,
 October 31 - November 5, Austin, USA, 2010
 ISBN : 978-1-4244-7205-5
- J.-M. Galliere, P. Papet and L. Latorre
 "A 2-D KLM Model for Disk-Shape Piezoelectric Transducers"
 The Second International Conference on Advances in Circuits, Electronics and Micro-electronics
 October 11-16, Sliema, Malta, 2009
 ISBN: 978-0-7695-3832-7
- L. Dilillo, F. Wrobel, J.-M. Galliere and Frederic Saigne
 "Neutron Detection through an SRAM-Based Test Bench", pp. 64-69
 23rd IEEE International Workshop on Advances in Sensors and Interfaces,
 June 25-26, Trani (Bari), Italy, 2009
 ISBN: 978-1-4244-4708-4
- J.-M. Galliere, F. Azais, M. Renovell and L. Dilillo
 "Influence of Gate Oxide Short Defects on the Stability of Minimal Sized SRAM Core-cell by Applying Non-Split Models"
 IEEE Int. Conference Design & Technology of Integrated Systems
 April 6-7, Cairo, Egypt, 2009
 ISBN : 978-1-4244-4321-5
- J.-M. Galliere, P. Papet and L. Latorre
 "A 2-D VHDL-AMS Model for Disk-Shape Piezoelectric Transducers"
 IEEE Behavioral Modeling and Simulation Conference
 September 25-26, San Jose, USA, 2008
 ISBN : 978-1-4244-2896-0

- J.-M. Galliere, P. Papet and L. Latorre
 "A Unified Electrical SPICE Model for Piezoelectric Transducers"
 IEEE Behavioral Modeling and Simulation Conference
 September 20-21, San Jose, USA, 2007
 ISBN : 978-1-4244-1567-0
- I. Polian, S. Kundu, J.-M. Galliere, P. Engelke, M. Renovell and B. Becker
 "Resistive Bridge Fault Model Evolution From Conventional to Ultra Deep Submicron Technologies"
 23rd IEEE VLSI Test Symposium
 May 1-5, Palm Spring, USA, 2005
 ISBN : 0-7695-2314-5
- S. Bernardini, P. Masson and J.-M. Portal - L2MP
 J.-M. Galliere and M. Renovell - LIRMM
 "Impact of Gate Oxide Reduction Failure on Analog Application : Example of the Current Mirror"
 5th IEEE Latin American Test Workshop, pp.12-17
 March 8-10, Cartagena, Colombia, 2004
 ISBN : 9-5833-5899-1
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Delay Testing of MOS Transistor with Gate Oxide Short"
 12th Asian Test Symposium,
 November 17-19, Xi'an, China, 2003
 ISBN : 0-7695-1951-2
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "A Non-Split Model for Realistic Gate Oxide Short in CMOS Technology"
 Conference on Design of Circuits and Integrated Systems, pp. 197-204
 November 19-22, Santander, Spain, 2002
 ISBN : 8-4810-2311-6
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Modeling Gate Oxide Short Defects in CMOS Minimum Transistors"
 7th IEEE European Test Workshop, pp. 15-20
 May 26-29, Corfu, Greece, 2002
 ISBN : 0-7695-1715-3
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Low Voltage Testing of Gate Oxide Short in CMOS Technology"
 5th International Workshop on IEEE Design and Diagnostics of Electronic Circuits and Systems
 April 17-19, Brno, Czech Republic, 2002
 ISBN : 8-0214-2094-4
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Boolean and Current Detection of MOS Transistor with Gate Oxide Short"
 International Test Conference, pp. 1039-1048
 October 30 – November 1, Baltimore, USA, 2001
 ISBN : 0-7803-7169-0
- M. Renovell, J.-M. Galliere, F. Azaïs and Y. Bertrand
 "Analysing the Characteristics of MOS Transistors in the Presence of Gate Oxide Short"
 4th International Workshop on IEEE Design and Diagnostics of Electronic Circuits and Systems,
 April 18-20, Gyor, Hungary, 2001
 ISBN : 9-6371-7516-4

Colloques internationaux avec comité de lecture

- R. Kheirallah, J.-M. Galliere, G. Ducharme and N. Azemard
 "Combined analysis of supply voltage and body-bias voltage for energy management"
 28th IEEE International Symposium on Power and Timing Modeling, Optimization and Simulation
 July 2-4, Platja d'Aro, Spain, 2018

A. Karel, M. Comte, J.-M. Galliere, F. Azais and M. Renovell
 "Comparative study of FinFET and FDSOI nanometric technologies based on manufacturing defect testability"
 GDR: Groupement De Recherche Soc-SiP
 Nantes, France, 2016

F. Wrobel, J.-R. Vaillé, D. Pantel, L. Dilillo, J.-M. Galliere et al.
 "Proton Flux Anisotropy in the Atmosphere: Experiment and Modeling"
 13th IEEE European Conference on Radiation and its Effects on Components and Systems
 September 24-28, Biarritz, France, 2012

P. Rech, J.-M. Galliere, F. Wrobel, F. Saigné and L. Dilillo
 "Impact of Resistive-Open Defects on SRAM Error Rate Induced by Alpha Particles and Neutrons"
 11th European Conference on Radiation and its Effects on Components and Systems
 September 20-24, Langenfeld, Austria, 2010

F. Wrobel, J.-R. Vaillé, D. Pantel, L. Dilillo, P. Rech, J.-M. Galliere et al.
 "Experimental Characterization of Atmospheric Radiation Environment with Stratospheric Balloon"
 11th European Conference on Radiation and its Effects on Components and Systems
 September 20-24, Langenfeld, Austria, 2010

J.-M. Galliere and P. Papet
 "A 2-D Electrical Model for Disk-Shape Piezoelectric Transducers"
 XXII Conference on Design of Circuits and Integrated Systems
 November 21-23, Sevilla, Spain, 2007

R. Bouchakour and J.-M. Portal - L2MP
 J.-M. Galliere, F. Azais, Y. Bertrand and M. Renovell - LIRMM
 "A Compact DC Model of Gate Oxide Short Defect",
 Insulating Films on Semiconductors,
 June 18-20, Barcelona, Spain, 2003

M. Renovell, J.-M. Galliere, F. Azais and Y. Bertrand - LIRMM
 J.M. Portal et R. Bouchakour - L2MP
 "An Embedded Gate Oxide Short Model for Efficient Electrical Simulation"
 9th Workshop IBERCHIP
 March 26-28, La Habana, Cuba, 2003

M. Renovell, J.-M. Galliere, F. Azais and Y. Bertrand - LIRMM
 J.M. Portal et R. Bouchakour - L2MP
 "GOSMOS : A Gate Oxide Short Defect Embedded in a MOS Compact Model"
 4th IEEE Latin American Test Workshop, pp. 6-11
 February 16-19, Natal, Brazil, 2003

M. Renovell, J.-M. Galliere, F. Azais and Y. Bertrand
 "Non-Linear and Non-Split Transistor MOS Model for Gate Oxide Short"
 IEEE International Workshop on Defect Based Testing, pp. 11-16
 April 28, Monterey, USA, 2002

M. Renovell, J.-M. Galliere, F. Azais and Y. Bertrand
 "A Complete Analysis of the Voltage Behaviour of MOS Transistor with Gate Oxide Short"
 IEEE International Workshop on Defect Based Testing, pp. 5-10
 April 29, Los Angeles, USA, 2001

M. Renovell, J.-M. Galliere, F. Azais and Y. Bertrand
 "Electrical Analysis of Gate Oxide Short in MOS Technologies"
 2nd IEEE Latin American Test Workshop, pp.266-272
 February 11-14, Cancun, Mexico, 2001

Publications pédagogiques

Type d'Article	Nombre
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Conférences avec actes et comité de lecture	9
Colloques internationaux avec comité de lecture	2
Colloques nationaux avec comité de lecture	3

Revue scientifique internationale avec comité de lecture et ISSN

J.-M. Galliere

"Programmable Analog Arrays, an answer for Control-Systems Practical Works"

WSEAS Transactions on Advances in Engineering Education

Volume 3, Issue 8, pp. 783-787, August 2006

ISSN : 1790-1979

Conférences internationales avec actes, comité de lecture et ISBN

J.-M. Galliere and J. Boch

"A Toolkit to Demystify CMOS Active Pixel Sensors"

IEEE International Conference on Microelectronic Systems Education,

June 2-3, Austin, USA, 2013

ISBN: 978-1-4799-0139-5

J.-M. Galliere and L. Dillo

"Versatile March Test Generator for Hands-on Memory Testing Laboratory"

IEEE International Conference on Microelectronic Systems Education,

June 5-6, San Diego, USA, 2011

ISBN: 978-1-4577-0550-2

J.-M. Galliere and J. Boch

"A Mixed TCAD/Electrical Simulation Laboratory to Open up the Microelectronics Teaching" pp. 37-40

IEEE International Conference on Microelectronic Systems Education,

July 25-27, San Francisco, USA, 2009

ISBN: 978-1-4244-4406-9

J.-M. Galliere and J. Boch

"Mixed TCAD/Electrical Simulation Learning"

8th European Workshop on Microelectronics Education (EWME)

May 28-30, Budapest, Hungary, 2008

ISBN : 978-2-35500-007-2

J.-M. Galliere

"Programmable Analog Array in Control-Systems Laboratory"

IEEE Mediterranean Conference on Control and Automation

June 27-29, Athens, Greece, 2007

ISBN : 978-960-254-664-2

J.-M. Galliere and G. Cathebras

"Stream Manager, Easy CAD Tools Switching in Academic Context"

IEEE Conference on Microelectronic Systems Education

June 2-4, San Diego, USA, 2007

ISBN : 0-7695-2849-X

J.-M. Galliere
"A Control-Systems FPAA Based Tutorial"
2nd WSEAS International Conference on Educational Technologies, pp39-42
October 16-18, Bucharest, Roumania, 2006
ISBN : 960-8457-54-8

J.-M. Galliere and G. Cathebras
"Stream Manager, an Answer to Academic Project Policy"
IEEE Conference on Automation, Quality and Testing, Robotics, pp 127-129
May 25-28, Cluj-Napoca, Roumania, 2006
ISBN : 1-4244-0361-8

J.-M. Galliere
"Extensive CMOS and Electrical Simulation Learning",
6th European Workshop on Microelectronics Education (EWME),
June 8-9, Stockholm, Sweden, 2006
ISBN : 91-7178-402-0

Colloques internationaux avec comité de lecture

J.-M. Galliere and L. Dilillo
"Séquence pédagogique dédiée à l'apprentissage des techniques de test des mémoires"
9^e Colloque sur l'Enseignement des Technologies et des Sciences de l'Information et des Systèmes
October 23-26, Trois Rivières, Canada, 2011

J.-M. Galliere and G. Cathebras
"Stream Manager Facility in Microelectronics Projects",
CDNLive! EMEA 2007
May 14-16, Munich, Germany, 2007

Colloques nationaux avec comité de lecture et ISBN

J.-M. Galliere and L. Dilillo
"Banc de Test Programmable Dédié à l'Apprentissage des Techniques de Test des Mémoires"
11^{èmes} Journées Pédagogiques du CNFM
Novembre 22-24, Saint-Malo, 2010
ISBN : 2-9522395-3-3

J.-M. Galliere and J. Boch
"Mise en Œuvre de la Simulation Mixte pour Décloisonner l'Enseignement de la Microélectronique"
10^{èmes} Journées Pédagogiques du CNFM
Novembre 26-28, Saint-Malo, 2008
ISBN : 2-9522395-2-5

J.-M. Galliere and G. Cathebras
"Stream Manager : une Assistance à la Gestion des Projets Microélectroniques"
9^{èmes} Journées Pédagogiques du CNFM
Novembre 22-24, Saint-Malo, 2006
ISBN : 2-9522395-1-7