

Année	Auteurs	Titre	Revue	Réf
2011	A. Cresti, A. Lopez-Bezanilla, P. Ordejon, S. Roche	Oxygen Surface Functionalization of Graphene Nanoribbons for Transport Gap Engineering	ACS Nano	Vol. 5, no. 11, pp. 9271-9277 (Nov. 2011)
2011	F. Martins, B. Hackens, H. Sellier, P. Liu, M.G. Pala, S. Baltazar, L. Desplanque, X. Wallart, V. Bayot, S. Huant	Scanning-Gate Microscopy of Semiconductor Nanostructures: An Overview	Acta Physica Polonica A	Vol. 119, no. 5, pp. 569-575 (May 2011)
2011	J. Jomaah, M. Fadlallah, G. Ghibaudo	DC Characterization of different advanced MOSFET architectures	Advanced Materials Research	Vol. 324 (2011) pp 407-410 (August 2011)
2011	J. Jomaah, M. Fadlallah, G. Ghibaudo	Low Frequency Noise Analysis in Advanced CMOS Devices	Advanced Materials Research	Vol. 324 (2011) pp 441-444 (August 2011)
2011	Doyoung Jang, Jae Woo Lee, Chi-Woo Lee, Jean-Pierre Colinge, Laurent Montès, Jung Il Lee, Gyu Tae Kim and Gérard Ghibaudo	Low-frequency noise in junctionless multi-gate transistors	Applied Physics Letters	To be published in 2011.
2011	M. A. Negara, D. Veksler, J. Huang, G. Ghibaudo, P.K. Hurley, G. Bersuker, N. Goel, and P. Kirsch	Analysis of Effective Mobility and Hall Effect Mobility in High-k based In _{0.75} Ga _{0.25} As metal-oxide-semiconductor high-electron-mobility transistors.	Applied Physics Letters	Vol 99, 232101-232103 (2011).
2011	Y. Xu, F. Balestra, G. Ghibaudo	Theoretical analysis of carrier mobility in organic field-effect transistors	Applied Physics Letters	Vol. 98, no. 23, art. no. 233302 (Jun 2011)
2011	S. Altazin, R. Clerc, R. Gwoziecki, G. Pananakakis, G. Ghibaudo, C. Serbutoviez	Analytical modeling of organic solar cells and photodiodes	Applied Physics Letters	Vol. 99, issue 14, no. 143301 (Oct. 2011)
2011	F. Ortman, A. Cresti, G. Montambaux, S. Roche	Magnetoresistance in disordered graphene: The role of pseudospin and dimensionality effects unraveled	Europhysics Letters	Vol. 94, Iss. 4, Art. no. 47006 (May 2011)
2011	M. Laghrouche, L. Montes, J. Boussey, S. Ameer	Low-cost embedded spirometer based on micro machined polycrystalline	Flow Measurement and Instrumentation	To be published, 2011
2011	C. G. Theodorou, A. Tsormpatzoglou, C. A. Dimitriadis, S. A. Khan, M. K. Hatalis, J. Jomaah, G. Ghibaudo	Origin of Low-Frequency Noise in the Low Drain Current Range of Bottom-Gate Amorphous IGZO Thin-Film Transistors	IEEE Electron Device Letters	Vol. 32, no. 7, pp. 898-900 (July 2011)
2011	J. L. Huguenin, S. Monfray, J. M. Hartmann, V. Destefanis, V. Delaye, M. P. Samson, P. Boulitreau, Y. Morand, P. Brianceau, C. Arvet, P. Gautier, T. Skotnicki, G. Ghibaudo, F. Bœuf	Performance of Localized-SOI MOS Devices on (110) Substrates: Impact of Channel Direction	IEEE Electron Device Letters	Vol. 32, no. 8, pp. 996-998 (Aug 2011)
2011	J. R. Ngankio-Njila, D-G. Crété, J-C. Mage, B. Marcilhac, P. Febvre	Concept of Superconducting Comparator for Pipeline A/D Converter	IEEE Trans. Appl. Supercond.	Vol. 21, no. 3, pp. 697-700 (Jun 2011)
2011	F. L. Traversa, E. Buccafurri, A. Alarcón, G. Albareda, R. Clerc, F. Calmon, A. Poncet, X. Oriols	Time dependent many-particle simulation for Resonant Tunneling Diodes: interpretation of an analytical small signal equivalent circuit	IEEE Trans. Electron Devices	Vol. 58, n° 7, p. 2104-2112 (2011)

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2011	C. M. Mezzomo, A. Bajolet, A. Cathignol, R. Di Frenza, G. Ghibaudo	Characterization and Modeling of Transistor Variability in Advanced CMOS Technologies	IEEE Trans. Electron Devices	Vol. 58, no. 8, pp. 2235-2248 (Aug. 2011)
2011	A. Cresti, M. G. Pala, S. Poli, M. Mouis and G. Ghibaudo	A comparative study of surface-roughness induced variability in Si nanowire and double-gate FETs	IEEE Trans. Electron Devices	Vol. 58, no. 8, pp. 2274-2281 (Aug. 2011)
2011	N. Rodriguez, S. Cristoloveanu, F. Gamiz	Novel Capacitorless 1T-DRAM Cell for 22-nm Node Compatible With Bulk and SOI Substrates	IEEE Trans. Electron Devices	Vol. 58, no. 8, pp. 2371-2377 (Aug. 2011)
2011	T. Boutchacha, G. Ghibaudo	Improved Modeling of Low-Frequency Noise in MOSFETs-Focus on Surface Roughness Effect and Saturation Region	IEEE Trans. Electron Devices	Vol. 58, no.9, pp. 3156-3161 (Sept. 2011)
2011	T. Pro, J. Buckley, R. Barattin, A. Calborean, V. Aiello, G. Nicotra, K. Huang, M. Gely, G. Delapierre, E. Jalaguier, F. Duclairoir, N. Chevalier, S. Lombardo, P. Maldivi, G. Ghibaudo, B. De Salvo, S. Deleonibus	From Atomistic to Device Level Investigation of Hybrid Redox Molecular/Silicon Field-Effect Memory Devices	IEEE Trans. Nanotechnology	Vol. 10, no.2, pp. 275-283 (March 2011)
2011	L. Latu-Romain, M. Ollivier, A. Mantoux, G. Auvert, O. Chaix-Pluchery, E. Sarigiannidou, E. Bano, B. Pelissier, C. Roukoss, H. Roussel, F. Dhalluin, B. Salem, N. Jegenyes, G. Ferro, D. Chaussende, T. Baron	From Si nanowire to SiC nanotube	J. Nanoparticle Research	Vol. 13, no. 10, pp. 5425-5433 (Oct. 2011)
2011	M. Ollivier, L. Latu-Romain, A. Mantoux, E. Bano, T. Baron	Carburization of Si Microwires by Chemical Vapour Deposition	J. Nanoscience and Nanotechnology	Vol.11, no. 9, pp. 8412-8415 (Sept. 2011)
2011	R. Clerc, P. Palestri, L. Selmi, G. Ghibaudo	Impact of carrier heating on backscattering in inversion layers	Journ. Appl. Phys.	Vol. 110, 104502 (2011)
2011	Yong Xu, Mohamed Benwadih, Romain Gwoziecki, Romain Coppard, Takeo Minari, Chuan Liu, Kazuhito Tsukagoshi, Jan Chroboczek, Francis Balestra, and Gerard Ghibaudo	Carrier mobility in organic field-effect transistors	Journ. Appl. Phys.	Vol. 110, 104513 (2011)
2011	Y. Xu, T. Minari, K. Tsukagoshi, R. Gwoziecki, R. Coppard, M. Benwadih, J. Chroboczek, F. Balestra, G. Ghibaudo	Modeling of static electrical properties in organic field-effect transistors	Journ. Appl. Phys.	Vol. 110, no.1, 10.1063/1.3602997 (July 2011)
2011	A. Potie, T. Baron, L. Latu-Romain, G. Rosaz, B. Salem, L. Montes, P. Gentile, J. Kreisel, H. Roussel	Controlled growth of SiGe nanowires by addition of HCl in the gas phase	Journ. Appl. Phys.	Vol. 110, no.2, 10.1063/1.3610409 (July 2011)
2011	S. Cristoloveanu	Trends in SOI Technology: Hot and Green	Journal of the Korean Physical Society	Vol. 58, no.5, part 2, pp. 1461-1467 (May 2011)
2011	B. Bercu, L. Montès, P. Morfouli	SOI built-in heat spreader with temperature and pressure integrated sensors for cooling optimization and in situ monitoring	Material Science & Engineering B	Vol. 176, pp. 305-310 (2011)

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2011	M. A. Negara, N. Goel, D. Bauza, G. Ghibaudo, P. K. Hurley	Interface state densities, low frequency noise and electron mobility in surface channel In _{0.53} Ga _{0.47} As n-MOSFETs with a ZrO ₂ gate dielectric	Microelectronic Engineering	Vol. 88, no.7, pp. 1095-1097 (July 2011)
2011	S. J.Chang, M. Bawedin, W. Xiong, S. C. Jeon, J. H. Lee, S. Cristoloveanu	A FinFET memory with remote carrier trapping in ONO buried insulator	Microelectronic Engineering	Vol. 88, no.7, pp. 1203-1206 (July 2011)
2011	D. S. Kim, T. H. Kim, C. H. Won, H. S. Kang, K. W. Kim, K. S. Im, Y. S. Lee, S. H. Hahm, J. H. Lee, J. H. Lee, J. B. Ha, Y. Bae, S. Cristoloveanu	Performance enhancement of GaN SB-MOSFET on Si substrate using two-step growth method	Microelectronic Engineering	Vol. 88, no.7, pp. 1221-1224 (July 2011)
2011	K. W. Kim, S. D. Jung, D. S. Kim, K. S. Im, H. S. Kang, J. H. Lee, Y. Bae, D. H. Kwon, S. Cristoloveanu	Charge trapping and interface characteristics in normally-off Al ₂ O ₃ /GaN-MOSFETs	Microelectronic Engineering	Vol. 88, no.7, pp. 1225-1227 (July 2011)
2011	N. Rodriguez, S. Cristoloveanu, M. Maqueda, F. Gamiz, F. Allibert	Three-interface pseudo-MOSFET models for the characterization of SOI wafers with ultrathin film and BOX	Microelectronic Engineering	Vol. 88, no.7, pp. 1236-1239 (July 2011)
2011	A. Ohata, Y. Bae, T. Signamarcheix, J. Widiez, B. Ghyselen, O. Faynot, L. Clavelier, S. Cristoloveanu	Performance of (110) p-channel SOI-MOSFETs fabricated by deep-amorphization and solid-phase epitaxial regrowth processes	Microelectronic Engineering	Vol. 88, no.7, pp. 1265-1268 (July 2011)
2011	T. Benoist, C. Fenouillet-Beranger, P. Perreau, C. Buj, P. Galy, D. Marin-Cudraz, O. Faynot, S. Cristoloveanu, P. Gentil	Experimental investigation of ESD design window for fully depleted SOI N-MOSFETs	Microelectronic Engineering	Vol. 88, no.7, pp. 1276-1279 (July 2011)
2011	T. Boutchacha, G. Ghibaudo	Improved low frequency noise model for MOSFET operated in non-linear region	Microelectronic Engineering	Vol. 88, no.7, pp. 1280-1282 (July 2011)
2011	A. E. H. Diab, I. Ionica, S. Cristoloveanu, F. Allibert, Y. H. Bae, J. A. Chroboczek, G. Ghibaudo	Low-frequency noise in SOI pseudo-MOSFET with pressure probes	Microelectronic Engineering	Vol. 88, no.7, pp. 1283-1285 (July 2011)
2011	J. Wan, C. Le Royer, A. Zaslavsky, S. Cristoloveanu	Gate-induced drain leakage in FD-SOI devices: What the TFET teaches us about the MOSFET	Microelectronic Engineering	Vol. 88, no.7, pp. 1301-1304 (July 2011)
2011	S. Baudot, C. Leroux, F. Chave, R. Boujamaa, E. Martinez, P. Caubet, M. Silly, F. Sirotti, G. Reibold, G. Ghibaudo	Understanding reversal effects of metallic aluminum introduced in HfSiON/TiN PMOSFETs	Microelectronic Engineering	Vol. 88, no.7, pp. 1305-1308 (July 2011)
2011	L. Masoero, P. Blaise, G. Molas, J. P. Colonna, M. Gely, J. P. Barnes, G. Ghibaudo, B. de Salvo	Defects-induced gap states in hydrogenated gamma-alumina used as blocking layer for non-volatile memories	Microelectronic Engineering	Vol. 88, no.7, pp. 1448-1451 (July 2011)
2011	N.A. Hastas, N. Arpatzani, C.A. Dimtriadis, J. Brochet, F. Templier, G. Kamarinos	Hysteresis effect in bottom-gate polymorphous silicon thin-film transistors	Microelectronics Reliability	Vol. 51, no. 3, pp. 556-559 (Mars 2011)
2011	K. Tachi, S. Barraud, K. Kakushima, H. Iwai, S. Cristoloveanu, T. Ernst	Comparison of low-temperature electrical characteristics of gate-all-around nanowire FETs, Fin FETs and fully-depleted SOI FETs	Microelectronics Reliability	Vol. 51, no. 5, pp. 885-888 (May 2011)

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2011	A. Potie, T. Baron, F. Dhalluin, G. Rosaz, B. Salem, L. Latu-Romain, M. Kogelschatz, P. Gentile, F. Oehler, L. Montes, J. Kreisel, H. Roussel	Growth and characterization of gold catalyzed SiGe nanowires and alternative metal-catalyzed Si nanowires	Nanoscale Research Letters	Vol. 6, 10.1186/1556-276X-6-187 (March 2011)
2011	Xin Xu, Alexis Potié, Rudeesun Songmuang, Jae Woo Lee, Bogdan Bercu, Thierry Baron, Bassem Salem and Laurent Montès	An improved AFM cross-sectional method for piezoelectric nanostructures properties investigation: application to GaN nanowires	Nanotechnology	Vol. 22, 105704, 8pp (2011)
2011	Y. Xu, T. Minari, K. Tsukagoshi, R. Gwoziecki, R. Coppard, F. Balestra and G. Ghibaudo	Power transfer-length method for full biasing contact resistance evaluation of organic field-effect transistors	Organic Electronics	Vol. 12, no. 12, pp. 2019-2024 (Dec. 2011)
2011	S. Altazin, R. Clerc, R. Gwoziecki, D. Boudinet, G. Ghibaudo, G. Pananakakis, I. Chartier, R. Coppard	Analytical modeling of the contact resistance in top gate/bottom contacts organic thin film transistors	Organic Electronics	Vol. 12, no. 6, pp. 897-902 (June 2011)
2011	S. Roche, B. Biel, A. Cresti and F. Triozon	Chemically enriched graphene-based switching devices: A novel principle driven by impurity-induced quasibond states and quantum coherence	Physica E	In press - http://dx.doi.org/10.1016/j.physe.2011.06.008
2011	R. Ribeiro, J. M. Poumirol, A. Cresti, W. Escoffier, M. Goiran, J. M. Broto, S. Roche, B. Raquet	Unveiling the Magnetic Structure of Graphene Nanoribbons	Physical Review Letters	Vol. 107, no. 8, 10.1103/PhysRevLett.107.086601 (Aug. 2011)
2011	M. Clavel, T. Poiroux, M. Mouis, L. Becerra, J.L Thomassin, A. Zenasni, G. Lapertot, D. Rouchon, D. Lafond and O. Faynot	Study of annealing temperature influence on the performance of top gated Graphene / SiC transistors	Solid State Electronics	to be published (2012)
2011	B. Cousin, M. Reyboz, O. Rozeau, M.-A. Jaud, T. Ernst and J. Jomaah	A Unified Short-Channel Compact Model for Cylindrical Surrounding-Gate MOSFET	Solid State Electronics	Vol. 56, n°1, pp. 40-46 (Feb. 2011)
2011	A. Tsormpatzoglou, D.H. Tassis, C.A. Dimitriadis, G. Ghibaudo, N. Collaert, G. Pananakakis	Analytical threshold voltage model for lightly doped short-channel tri-gate MOSFETs	Solid State Electronics	Vol. 57, n°1, pp. 31-34 (Mar. 2011)
2011	G. Hamaide, F. Allibert, F. Andrieu, K. Romanjek, S. Cristoloveanu	Mobility in ultrathin SOI MOSFET and pseudo-MOSFET: Impact of the potential at both interfaces	Solid State Electronics	Vol. 57, n°1, pp. 83-86 (Mar. 2011)
2011	W. Van Den Daele, C. Le Royer, E. Augendre, J. Mitard, G. Ghibaudo, S. Cristoloveanu	Detailed investigation of effective field, hole mobility and scattering mechanisms in GeOI and Ge pMOSFETs	Solid State Electronics	Vol. 59, no. 1, Special issue, pp. 25-33 (May 2011)
2011	K.H. Park, S. Cristoloveanu, M. Bawedin, Y. Bae, K.I. Na, J.H. Lee	Double-gate 1T-DRAM cell using nonvolatile memory function for improved performance	Solid State Electronics	Vol. 59, no. 1, Special issue, pp. 39-43 (May 2011)
2011	Y. Xu, T. Minari, K. Tsukagoshi, J. Chroboczek, F. Balestra, G. Ghibaudo	Origin of low-frequency noise in pentacene field-effect transistors	Solid State Electronics	Vol. 61, no. 1, pp. 106-110 (Jul 2011)

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2011	P. Martin, A. S. Royet, F. Guellec, G. Ghibaudo	MOSFET modeling for design of ultra-high performance infrared CMOS imagers working at cryogenic temperatures: Case of an analog/digital 0.18 μm CMOS process	Solid State Electronics	Vol. 62, no.1, pp.115-122 (Aug. 2011)
2011	J. W. Lee, D. Jang, M. Mouis, G. T. Kim, T. Chiarella, T. Hoffmann and G. Ghibaudo	Mobility Analysis of Surface Roughness Scattering in FinFET devices	Solid State Electronics	Vol. 62, no.1, pp.195-201 (Aug. 2011)
2011	A. Zaka, J. Singer, E. Dornel, D. Garetto, Q. Raffhay, D. Rideau, R. Clerc, G. Ghibaudo, J.-P.Manceau, N. Degors, C. Boccaccio, A. Cathignol, S. Bruyere, N. Cherault, C. Tavernier, H. Jaouen	Characterization and 3D TCAD Simulation of Flash Non-Volatile Memories	Solid State Electronics	Vol. 63 n°1 p.158-162 (2011)
2011	N. Fasarakis, A. Tsormpatzoglou, D. H. Tassis, C. A. Dimitriadis, K. Papathanasiou, M. Bucher, J. Jomaah, G. Ghibaudo	Analytical unified threshold voltage model of short-channel FinFETs and implementation	Solid State Electronics	Vol. 64, n°1, pp. 34-41 (2011)
2011	K. Tachi, N. Vulliet, S. Barraud, K. Kakushima, H. Iwai, S. Cristoloveanu, T. Ernst	Influence of source/drain formation process on resistance and effective mobility for scaled multi-channel MOSFET	Solid State Electronics	Vol. 65-66, pp. 16-21 (Nov.-Dec. 2011)
2011	C.M. Mezzomo, A. Bajolet, A. Cathignol, G. Ghibaudo	Drain-current variability in 45 nm bulk N-MOSFET with and without pocket-implants	Solid State Electronics	Vol. 65-66, pp. 163-169 (Nov.-Dec. 2011)
2011	J. Wan, C. Le Royer, A. Zaslavsky, S. Cristoloveanu	Tunneling FETs on SOI: Suppression of ambipolar leakage, low-frequency noise behavior, and modeling	Solid State Electronics	Vol. 65-66, pp. 226-233 (Nov.-Dec. 2011)
2011	A. Hubert, M. Bawedin, G. Guegan, T. Ernst, O. Faynot, S. Cristoloveanu	SOI 1T-DRAM cells with variable channel length and thickness: Experimental comparison of programming mechanisms	Solid State Electronics	Vol. 65-66, pp. 256-262 (Nov.-Dec. 2011)
2011	R. Ritzenthaler, F. Lime, O. Faynot, S. Cristoloveanu, B. Iniguez	3D analytical modelling of subthreshold characteristics in vertical Multiple-gate FinFET transistors	Solid State Electronics	Vol. 65-66, pp. 94-102 (Nov.-Dec. 2011)
2011	J. A. Silva , M. Gauthier, C. Boulord, C. Oliver, A. Kaminski, B. Semmache, M. Lemiti	Improving front contacts of n-type solar cells	Energy Procedia	Vol. 8, pp. 625-634 (2011)
2011	Y. Sayad, D. Blanc, A. Kaminski, G. Bremond, and M. Lemiti	Diffusion length determination in solar grade silicon by room temperature photoluminescence measurements	Phys. Status Solidi C	Vol. 8, no. 3, pp. 808-811 (2011)
2011	G. Poulain, C. Boulord, D. Blanc, A. Kaminski, M. Gauthier, C. Dubois, B. Semmache, M. Lemiti	Direct laser printing for high efficiency silicon solar cells fabrication	Applied Surface Science	Vol. 257, pp. 5241–5244 (2011)
2011	S. Tutashkonko, A. Kaminski-Cachopo, C. Boulord, R. Arès, V. Aimez and M. Lemiti	Light induced silver and copper plating on silver screen-printed contacts of silicon solar cells	Opto-Electronics Review	Vol 19, no. 3, pp. 301-306 (2011)

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2011	J.A. Silva, M. Gauthier, C. Boulord, C. Oliver, A. Kaminski, B. Semmache, M. Lemiti	Progress in the metallisation of n-type multicrystalline silicon solar cells	Solar Energy Materials and Solar Cells	Vol 95, Issue 12, pp. 3333-3340 (2011)
2011	X. Meng, G. Gomard , O. El Daif, E. Drouard, R. Orobtcchouk, A. Kaminski, Al. Fave, M. Lemiti, A. Abramov, P. Roca i Cabarrocas, C. Seassal	Absorbing photonic crystals for silicon thin-film solar cells: Design, fabrication and experimental investigation	Solar Energy Materials and Solar Cells	Vol 95, S32-S38 (2011)