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# ANTONIO ABRAMO

# CURRICULUM VITAE E PUBBLICAZIONI

Il sottoscritto Antonio Abramo autorizza il trattamento di tutti dati personali qui di seguito riportati ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 “Codice in materia di protezione dei dati personali”.

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## CONTATTI

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## CRONOLOGIA ESSENZIALE

| | |
|---|---|
| 2020 - | Membro del Comitato Tecnico Spin-off dell'Università di Udine |
| 2017 - 2019 | Delegato del Rettore al Tavolo Tecnico per la creazione del Competence Center Triveneto di I4.0 |
| 2017 - 2018 | Delegato del Rettore per il Trasferimento della Conoscenza |
| 2017 - 2019 | Membro designato del Comitato di Gestione della Fondazione Rino Snaidero |
| 2017 - | Membro del Comitato Tecnico di Valutazione Regione Friuli-Venezia Giulia |
| 2016 - 2017 | Delegato del Rettore per i Brevetti |
| 2013 - 2016 | Membro della Commissione Tecnica Brevetti dell'Università degli Studi di Udine |
| 2008 - 2018 | Direttore di Ricerca - ETH Lab, Eurotech Group (http://www.eurotech.com) |
| 2008 - 2013 | Direttore Scientifico - PTLab, Agemont, (http://www.pervasivelab.agemont.it) |
| 2000 - | Professore Associato di Elettronica, Università degli Studi di Udine |
| 1997 - 2000 | Ricercatore di Elettronica, Università degli Studi di Udine |
| 1995 - 1997 | PostDoc - Dipartimento di Fisica - Università degli Studi di Modena |
| 1995 | Ph.D. in Ingegneria Elettronica - Università degli Studi di Bologna |
| 1990 | Inizio attività scientifica - DEIS, Università degli Studi di Bologna |
| 1987 | Laurea in Ingegneria Elettronica (magna cum laude) - Università degli Studi di Bologna |
| 1962 | Nato a Bologna il 16 agosto 1962 |

## ESPERIENZE INTERNAZIONALI

| | |
|---|---|
| 2000 | Visiting Professor, Center for Integrated Systems, Stanford University, Palo Alto (CA), USA |
| 1993 - 1994 | Visiting Scholar, Technology Research Department, AT&T Bell Labs, Murray Hill (NJ),USA |
| 1992 | Summer Job, Technology CAD Group, Intel Corporation, Santa Clara (CA), USA |
| 1991 | Visiting Scholar, Technology Research Department, AT&T Bell Labs, Murray Hill (NJ),USA |

## ATTIVITÀ DIDATTICA

Sistemi Immersi, Architetture a Microprocessore, Architetture Parallele, Elettronica, Reti Neurali.

## NOTE

Antonio Abramo è Senior Member dell'IEEE.

ICST 2011 - International Conference on Sensing Technology, Palmerston North, NZ, Nov. 2011:
Membro del Comitato Scientifico Internazionale.

IEDM 2003 - International Electron Device Meeting, Washington, D.C., USA, Dic. 2003:
Chairman del Comitato Tecnico "Modeling and Simulation".

IEDM 2002 - International Electron Device Meeting, S. Francisco (CA), USA - Dic. 2002:
Membro del Comitato Tecnico "Modeling and Simulation".

IEDM 2001 - International Electron Device Meeting, Washington, D.C., USA, Dic. 2001:
Membro del Comitato Tecnico "Modeling and Simulation".

## FUND RISING

- Cluster Italiano su "Assisted Living" - Azione di Ricerca su "Smart Cities / Smart Environments"
  Progetto D4All; Finanziamento di Progetto: 11 MEuro; Finanziamento di Unità: 580 kEuro; Durata: tre anni)
- Piattaforma Tecnologica Europea ARTEMIS
  Progetto nSHIELD; Finanziamento di Progetto: 13 MEuro; Finanziamento di Unità: 360 kEuros; Durata: tre anni)
- Piattaforma Tecnologica Europea ENIAC
  Progetto E2SG; Finanziamento di Progetto: 36 MEuro; Finanziamento di Unità: 1.2 MEuro; Finanziamento di Gruppo: 40 kEuro; Durata: tre anni)
- Piattaforma Tecnologica Europea ENIAC
  Progetto END; Finanziamento di Progetto: 12 MEuro; Finanziamento di Unità: 50 kEuro; Durata: tre anni)
- Progetto POR-FESR "Easyhome"
  Finanziamento di Progetto: 1,5 MEuro; Finanziamento di Unità: 190 kEuro; Durata: tre anni)
- Fondi Regionali su Legge Innovazione per la creazione di un Laboratorio di Tecnologie Pervasive
  (Finanziamento totale: 650 kEuro; Durata: tre anni)
- Progetto Nazionale PRIN su Autonomic Computing
  Finanziamento di Progetto: 132 kEuro; Finanziamento di Unità: 51 kEuro; Durata: due anni)

## LISTA DELLE PUBBLICAZIONI

### RIVISTE INTERNAZIONALI

**[IJ01]** A. Abramo, F. Venturi, E. Sangiorgi, C. Fiegna, B. Riccò, R. Brunetti, W. Quade, C. Jacoboni, "A multi-band model for hole transport in silicon at high energies", Semiconductor Science and Technology, 7, B597 (1992).

**[IJ02]** A. Abramo, F. Venturi, E. Sangiorgi, J.M. Higman, B. Riccò, "A numerical method to compute isotropic band models from anisotropic semiconductor band structures", IEEE Transaction on Computer-Aided Design, 12, 1327 (1993).

**[IJ03]** A. Abramo, L. Baudry, R. Brunetti, R. Castagné, M. Charef, F. Dessenne, P. Dolfus, R. Dutton, W.L. Engl, R. Fauquembergue, C. Fiegna, M.V. Fischetti, S. Galdin, N. Goldsman, M. Hackel, C. Hamaguchi, K. Hess, K. Hennacy, P. Hesto, J.M. Higman, T. Iizuka, C. Jungemann, Y. Kamakura, H. Kosina, T. Kunikiyo, S. Laux, H. Lin, C. Maziar, H. Mizuno, H.J. Peifer, S. Ramaswamy, N. Sano, P.G. Scrobohaci, S. Selberherr, M. Takenaka, T-W. Tang, K. Taniguchi, J.L. Thobel, R. Thoma, K. Tomizawa, M. Tomizawa, T. Vogelsang, S-L. Wang, X. Wang, C-S. Yao, P.D. Yoder, A. Yoshii, "A comparison of numerical solutions of the Boltzmann Transport Equation for high energy electron transport silicon", IEEE Transaction on Electron Devices, 41, 1646 (1994).

**[IJ04]** A. Abramo, R. Brunetti, C. Jacoboni, F. Venturi, E. Sangiorgi, "A multi-Band Monte Carlo approach to Coulomb interaction for device analysis", Journal of Applied Physics, 76, 5786 (1994).

**[IJ05]** A. Abramo, J. Bude, F. Venturi, M.R. Pinto, "Mobility simulation of a novel Si/SiGe FET structure", IEEE Electron Device Letters, 17, 59 (1996).

**[IJ06]** A. Abramo, P. Casarini, C. Jacoboni, "Phase time for coherent transport in two-dimensional structures", Applied Physics Letters, 69, 629 (1996).

**[IJ07]** A. Abramo, C. Fiegna, "Electron energy distributions in silicon structures at low applied voltages and high electric fields", Journal of Applied Physics, 80, 889 (1996).

**[IJ08]** P. Bordone, A. Abramo, R. Brunetti, M. Pascoli, C. Jacoboni, "Wigner-function for open systems with electron-phonon interaction", Physica Status Solidi B, 204, 303 (1997).

**[IJ09]** I. Ferretti, A. Abramo, R. Brunetti, C. Jacoboni, "Full-band Monte Carlo analysis of hot-carrier light emission in GaAs", Physica Status Solidi B, 204, 538 (1997).

**[IJ10]** C. Fiegna, A. Abramo, "Analysis of quantum effects in non-uniformly doped MOS structure", IEEE Transaction Electron Devices, 45, 877 (1998).

**[IJ11]** C. Jacoboni, A. Abramo, P. Bordone, R. Brunetti, M. Pascoli, "Application of the Wigner-function formulation to mesoscopic systems in presence of the electron-phonon interaction", VLSI Design, 8, 185 (1998).

**[IJ12]** P. Bordone, M. Pascoli, R. Brunetti, A. Bertoni, C. Jacoboni, A. Abramo, "Quantum transport of electrons in open nanostructures with the Wigner-function formalism", Physical Review B, 59, 3060 (1999).

**[IJ13]** M.G. Betti, V. Corradini, V. De Renzi, C. Mariani, P. Casarini, A. Abramo, "Density of states of a two-dimensional electron gas measured by high resolution photoelectron spectroscopy", Solid State Communications, 110, 661 (1999).

**[IJ14]** A. Abramo, A. Cardin, L. Selmi, E. Sangiorgi, "Two-dimensional quantum mechanical simulation of charge distribution in silicon MOSFETs", IEEE Transaction Electron Devices, 47, 1858 (2000).

**[IJ15]** J.-S. Goo, C.-H. Choi, A. Abramo, J.-G. Ahn, Z. Yu, T. H. Lee, R. W. Dutton, "Physical origin of the excess thermal noise in short channel MOSFETs", IEEE Electron Device Letters, 22, 101 (2001).

**[IJ16]** A. Dalla Serra, A. Abramo, P. Palestri, L. Selmi, F. Widdershoven, "Closed- and open-boundary models for gate-current calculation in MOS devices", IEEE Transaction Electron Devices, 48, 1811 (2001).

**[IJ17]** M.G. Betti, V. Corradini, G. Bertoni, P. Casarini, C. Mariani, A. Abramo, "Density of states of a two-dimensional electron gas at semiconductor surfaces", Physical Review B, 63, 155315, (2001).

**[IJ18]** S. Zanchetta, A. Todon, A. Abramo, L. Selmi and E. Sangiorgi,
"Analytical and numerical study of the impact of HALOS on short channel and hot carrier effects in scaled MOSFETs",
Solid State Electronics, 46, 429 (2002).

**[IJ19]** P. Palestri, A. Dalla Serra, L. Selmi, M. Pavesi , P. Rigolli, A. Abramo, F. Widdershoven, E. Sangiorgi,
"A comparative analysis of substrate current generation mechanisms in tunneling MOS capacitors",
IEEE Transaction Electron Devices, 49, 1427 (2002).

**[IJ20]** E. Sangiorgi, P. Palestri, D. Esseni, C. Fiegna, A. Abramo, L. Selmi,
"Device simulation for decananometer MOSFETs",
Material Science in Semiconductor Processing, 6, 93 (2003).

**[IJ21]** A. Abramo,
"Modeling electron transport in MOSFET devices: evolution and state of the art",
International Journal of High Speed Electronics and Systems, 13, 701 (2003). (Invited paper)

**[IJ22]** D. Esseni, A. Abramo,
"Modeling of electron mobility degradation by remote Coulomb scattering in ultra-thin oxide MOSFETs",
IEEE Transaction Electron Devices, 50, 1665 (2003).

**[IJ23]** D. Esseni, A. Abramo, L. Selmi, E. Sangiorgi,
"Physically based modeling of low field electron transport in ultra-thin single- and double-gate SOI n-MOSFETs",
IEEE Transaction Electron Devices, 50, 2445 (2003).

**[IJ24]** D. Esseni, A. Abramo,
"Mobility modeling of SOI MOSFETs",
Semiconductor Science and Technology,19, S67 (2004).

**[IJ25]** M. Martincigh, A. Abramo,
"A new architecture for digital stochastic pulse-mode neurons based on the voting circuit",
IEEE Transaction on Neural Networks, 16, 1685 (2005).

**[IJ26]** A. Abramo, F. Blanchini, L. Geretti, C. Savorgnan,
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**[IJ27]** L.Geretti, A. Abramo,
"The Correspondence Between deterministic and stochastic digital neurons: analysis and methodology",
IEEE Transaction on Neural Networks, 19, 1739 (2008).

**[IJ28]** P. Merlino, A. Abramo,
"A fully pipelined architecture for the LOCO-I compression algorithm",
IEEE Transaction on VLSI Systems, 17, 967 (2009).

**[IJ29]** P. Merlino, A. Abramo,
"An integrated sensing/communication architecture for structural health monitoring",
IEEE Sensors Journal, 9,1397 (2009).

**[IJ30]** L. Geretti, A. Abramo,
"Distributed multi-level hierarchic strategy for broadcast collaborative mobile networks",
IEEE Mobile Computing, 9,1255 (2010).

**[IJ31]** C. Cavallotti, P. Merlino, M. Vatteroni, P. Valdastri, A. Abramo, A. Menciassi, P. Dario,
"An FPGA-based versatile development system for endoscopic capsule design optimization",
Sensors and Actuators A - Physical, 301 (2011).

**CONFERENZE INTERNAZIONALI**

**[IC01]** F. Venturi, C. Fiegna, A. Abramo, E. Sangiorgi, B. Riccò,
"Hot-holes generation and transport in n-MOSFETS: a Monte Carlo investigation",
IEDM Technical Digest, 455, S. Francisco, CA (USA), Dec. 1990.

**[IC02]** C. Fiegna, E. Sangiorgi, F. Venturi, A. Abramo, B. Riccò,
"Optimization of physical parameters for high energy transport simulation in Si based on efficient electron energy distribution calculation",
VPAD Technical Digest, 40, Oiso Kanagawa, (Japan), Mar. 1991.

**[IC03]** A. Abramo, C. Fiegna, F. Venturi, R. Brunetti, E. Sangiorgi, C. Bergonzoni, B. Riccò,
"A new microscopic model for hole transport in silicon with application to sub-micron LDD MOSFETs",
SISDEP Technical Digest, 257, Zurich, (Switzerland), Sep. 1991.

**[IC04]** B. Riccò, E. Sangiorgi, F. Venturi, C. Fiegna, A. Abramo,
"Monte Carlo simulator for semiconductor devices",
VI SB Micro Technical Digest, 18, Belo Horizonte (Brazil), Aug. 1991. (Invited paper)

**[IC05]** F. Venturi, A. Abramo, E. Sangiorgi, J. Higman, C. Fiegna, B. Riccò,
"An isotropic best-fitting band model for electrons and hole transport in Silicon",
IEDM Technical Digest, 503, Washington, DC (USA), Dec. 1991.

**[IC06]** C. Fiegna, E. Sangiorgi, F. Venturi, A. Abramo, B. Riccò,
"Modeling of high energy electrons in n-MOSFETs",
IEDM Technical Digest, 119, Washington, DC (USA), Dec. 1991.

**[IC07]** F. Venturi, E. Sangiorgi, C. Fiegna, A. Abramo, F. Capasso,
"Non-local effects on the electron energy distribution in short devices under high-field conditions",
IWCE Technical Digest, 221, Urbana-Champaign, IL (USA), May 1992.

**[IC08]** A. Abramo, F. Venturi, E. Sangiorgi, J.M. Higman, C. Fiegna, B. Riccò,
"A numerical method to compute isotropic band models from anisotropic semiconductor band structures",
NUPAD IV Technical Digest, 85, Seattle, WH (USA), May 1992.

**[IC09]** A. Abramo, F. Venturi, E. Sangiorgi, C. Fiegna, B. Riccò,
"Device simulation of small silicon MOSFET's using the Monte Carlo method",
Workshop on Parallel Algorithms Technical Digest, 85, Sofia, Aug. 1992. (Invited paper)

**[IC10]** P. Vitanov, M. Nedjalkov, C. Jacoboni, F. Rossi, A. Abramo,
"Unified Monte Carlo approach to the Boltzmann and Wigner equations",
Workshop on Parallel Algorithms Technical Digest, 117, Sofia, Aug. 1992. (Invited paper)

**[IC11]** E. Sangiorgi, C. Fiegna, A. Abramo,
"Modeling of high energy transport in silicon by means of the Monte Carlo method",
SMS Technical Digest, 17, Taipei, Taiwan, Mar. 1993. (Invited paper)

**[IC12]** C.-S. Yao, D. Chen, R.W. Dutton, F. Venturi, E. Sangiorgi, A. Abramo,
"An efficient impact ionization model for silicon Monte Carlo simulation",
VPAD Technical Digest, 42, Nara, Japan, May 1993.

**[IC13]** A. Abramo, R. Brunetti, C. Jacoboni, F. Venturi,
"Monte Carlo simulation of carrier-carrier interaction in silicon devices",
SISDEP Technical Digest, 181, Wien, (Austria), Sep. 1993.

**[IC14]** A. Ghetti, L. Selmi, E. Sangiorgi, A. Abramo, F. Venturi,
"A combined transport-injection model for hot-electron and hot-hole injection in the gate oxide of MOS structures",
IEDM Technical Digest, 363, S. Francisco, CA (USA), Dec. 1994.

**[IC15]** A. Abramo, J. Bude, F. Venturi, M.R. Pinto,
"Mobility simulation in Si/SiGe heterostructure FETs",
IEDM Technical Digest, 731, S. Francisco, CA (USA), Dec. 1994.

**[IC16]** A. Abramo, J. Bude, F. Venturi, M.R. Pinto, E. Sangiorgi,
"Performance optimization in Si/SiGe heterostructure FETs",
SISPAD Technical Digest, 106, Erlangen, (Germany), Sep. 1995.

**[IC17]** A. Abramo, C. Fiegna, F. Venturi,
"Hot carrier effects in short MOSFETs at low applied voltages",
IEDM Technical Digest, 301, Washington, DC (USA), Dec. 1995.

**[IC18]** A. Abramo, P. Casarini, C. Jacoboni,
"Transmission properties of resonant cavities and rough quantum wells",
HCIS Technical Digest, 509, Chicago, IL (USA), Aug. 1996.

**[IC19]** C. Fiegna, A. Abramo,
"Optimization of channel profiles for ultra-short MOSFETs by quantum simulation",
IEDM Technical Digest, 815, S. Francisco, CA (USA), Dec. 1996.

**[IC20]** A. Abramo,
"A general purpose 2D Schrödinger solver with open/closed boundary conditions for quantum device analysis", SISPAD Technical Digest, 105, Boston, MA (USA), Sep. 1997.

**[IC21]** C. Fiegna, A. Abramo,
"Solution of 1-D Schrödinger and Poisson equations in single and double gate SOI MOS",
SISPAD Technical Digest, 93, Boston, MA (USA), Sep. 1997.

**[IC22]** A. Abramo, C. Fiegna, P. Casarini,
"Quantum effects in the simulation of conventional devices",
SISPAD Technical Digest, 121, Leuven, (Belgium), Sep. 1998. (Invited paper)

**[IC23]** C. Fiegna, A. Abramo, E. Sangiorgi,
"Simulation study of the impact of channel doping profiles on MOSFET analog performance",
ESSDERC Technical Digest, 688, Leuven, (Belgium), Sep. 1999.

**[IC24]** A. Abramo, A. Cardin, L. Selmi, E. Sangiorgi,
"Two-dimensional quantum simulation of silicon MOSFETs",
ISDRS Technical Digest, 77, Charlottesville, VA (USA), Dec. 1999.

**[IC25]** A. Todon, L. Selmi, A. Abramo, E. Sangiorgi,
"On the optimization of HALOs for 0.1 mm MOSFETs and below",
ISDRS Technical Digest, 41, Charlottesville, VA (USA), Dec. 1999.

**[IC26]** A. Abramo, A. Cardin, L. Selmi, E. Sangiorgi,
"Two-dimensional quantum mechanical aspects in the charge distribution of ULSI silicon MOSFETs", ULIS 2000 Technical Digest, 107, Grenoble, (FR), Jan 2000.

**[IC27]** A. Todon, L. Selmi, A. Abramo, E. Sangiorgi,
"Short channel and hot carrier performance of ULSI MOSFETs with halo structures",
ULIS 2000 Technical Digest, 111, Grenoble, (FR), Jan. 2000.

**[IC28]** A. Abramo, L. Selmi, Z. Yu, R. W. Dutton,
"Well-Tempered MOSFETs: 1D versus 2D quantum analysis",
SISPAD Technical Digest, 188, Seattle, WA (USA), Sep. 2000.

**[IC29]** A. Dalla Serra, A. Abramo, P. Palestri, L. Selmi,
"A comparison between semi-classical and quantum-mechanical escape-times for gate current calculations", ESSDERC Technical Digest, 340, Cork, (IR), Sep. 2000.

**[IC30]** P. Palestri, M. Pavesi, P. Rigolli,
L. Selmi, A. Dalla Serra, A. Abramo, F. Widdershoven, E. Sangiorgi,
"Impact ionization and photon emission in MOS capacitors and FETs",
IEDM Technical Digest, 97, S. Francisco, CA (USA), Dec. 2000.

**[IC31]** C. Fiegna, A. Abramo,
"Simulation of tunneling gate currents in ultra-thin SOI MOSFETs",
ISDRS Technical Digest, 110, Washington DC (USA), Dec. 2001.

**[IC32]** D. Esseni, A. Abramo,
"An improved model for electron mobility degradation by remote Coulomb scattering in ultra-thin oxide MOSFETs", ESSDERC Technical Digest, 183, Florence, (IT), Sep. 2002.

**[IC33]** R. Clerc, P. Palestri, A. Abramo,
"Investigation on convergence and stability of self-consistent Monte Carlo device simulations",
ESSDERC Technical Digest, 191, Florence, (IT), Sep. 2002.

**[IC34]** D. Esseni, A. Abramo, L. Selmi, E. Sangiorgi,
"Study of low field electron transport in ultra-thin single and double gate SOI MOSFETs",
IEDM Technical Digest, 719, S. Francisco, CA (USA), Dec. 2002.

**[IC35]** P. Palestri, D. Esseni, A. Abramo, R. Clerc, L. Selmi,
"Carrier quantization in SOI MOSFETs using an effective potential based Monte Carlo tool",
ESSDERC Technical Digest, 407, Lisbona, Sept. 2003.

**[IC36]** L. Lucci, D. Esseni, J. Loo, Y. Ponomarev, L. Selmi, A. Abramo, E. Sangiorgi,
"Quantitative assessment of mobility degradation by remote Coulomb scattering in ultra-thin oxide MOSFETs: measurements and simulations",
IEDM Technical Digest, 463, Washington, DC (USA), Dec. 2003.

**[IC37]** M. Martincigh, A. Abramo,
"A new stochastic neuron architecture for efficient FPGA implementation",
Austrochip Technical Digest, 95, Villach (Austria), Oct. 2004.

**[IC38]** A. Abramo, F. Blanchini, L. Geretti, C. Savorgnan,
"Mixed convex/non-convex distributed localization algorithm for the deployment of indoor positioning services", American Control Conference Technical Digest, 3967 (2007).

**[IC39]** C. Cavallotti, P. Merlino, E. Susilo, M. Vatteroni, P. Valdastri, A. Abramo, A. Menciassi, P. Dario,
"An FPGA-based flexible demo-board for endoscopic capsule design optimization",
Eurosensors XXIV Technical Digest - Elsevier Procedia Engineering, 70 (2010).

**[IC40]** M. Vatteroni , C. Cavallotti, P. Valdastri, A. Menciassi, P. Dario, P. Merlino, A. Abramo,
"Vision system for high frame rate wireless capsule endoscope",
IEEE Sensors 2011 Technical Digest, 809 (2011).

**[IC41]** A. Guerrieri , L. Geretti, G. Fortino, A. Abramo,
"A service-oriented gateway for remote monitoring of building sensor networks",
IEEE CAMAD Technical Digest, 139 (2012).

**CONTRIBUTI IN LIBRI**

**[IB01]** A. Abramo, R. Brunetti, C. Fiegna, C. Jacoboni, B. Riccò, E. Sangiorgi, F. Venturi,
In “Monte Carlo simulation of silicon devices”,
Elsevier Science Publishers B.V., Amsterdam, G. Baccarani Ed., 155 (1993).

**[IB02]** C. Jacoboni, A. Abramo, R. Brunetti,
“Monte Carlo simulation of hot electrons in semiconductor devices”,
In “Hot electrons in semiconductors: physics and devices”,
Oxford University Press, N. Balkan Ed., 429 (1998). (Invited contribution)

**[IB03]** C. Fiegna, A. Abramo, E. Sangiorgi,
“Single- and double-gate SOI MOS structures for future ULSI: a simulation study”,
In “Future trends in microelectronics”, Wiley,
S. Luryi, J. Xu, A. Zaslavsky Eds., 115, (1999).

**[IB04]** P. Palestri, L. Selmi, A. Dalla Serra, A. Abramo, E. Sangiorgi, M. Pavesi, P. Rigolli, F. Widdershoven,
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In “Future trends in microelectronics”, Wiley,
S. Luryi, J. Xu, A. Zaslavsky Eds., 99, (2002).

**[IB05]** A. Abramo,
“Modeling electron transport in MOSFET devices: evolution and state of the art”,
In “Advanced Device Modeling and Simulation”, Word Scientific Publishing Company,
T. Grasser Ed., 1, (2003). (Invited contribution)

**[IB06]** L. Geretti, A. Abramo,
“The synthesis of stochastic artificial neural network application using a genetic algorithm approach”.
In “Advances in Imaging and Electron Physics”, Wiley,
Academic Press, P.W. Hawkes Ed., 1, (2011). (Invited contribution)

**[IB07]** P. Merlino, A. Abramo,
“Deformation detection in Structural Health Monitoring”.
In “Developments in Sensing Technology for Structural Health Monitoring - Lecture Notes in Electrical Engineering”,
Springer, S.C. Mukhopadhyay Ed., 96, 41, (2011). (Invited contribution)

**[IB08]** P. Azzoni, K. Rantos, L. Geretti, A. Abramo, S. Gosetti,
“Biometric security domain”,
In “Measurable and composable security, privacy and dependability: the SHIELD Methodology”,
CRC Press, A. Fiaschetti, J. Noll, P. Azzoni, R. Uribeetxeberria Eds., 29 (2018).

**[IB09]** P. Azzoni, L. Geretti, A. Abramo, K. Stefanidis, J. Gialelis, A. Papalambrou, D. Serpanos, K. Rantos, A. Toma, N. Tassadaq, K. Dabcevic, C. Regazzoni, L. Marcenaro, M. Traversone, M. Cesena, S. Mignanti,
“Security, privacy, and dependability technologies”,
In “Measurable and composable security, privacy and dependability: the SHIELD Methodology”,
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**RAPPORTI DI RICERCA**

**[IR01]** A. Abramo, J. Bude, F. Venturi, M.R. Pinto,
“Mobility simulation in Si/SiGe heterostructure FETs”,
AT&T Technical Memorandum, 11125-941004-22TM (38543), Oct. 4, 1994.

**RIVISTE O CONTRIBUTI IN LIBRI NAZIONALI**

**[IN01]** A. Abramo,
“Il miracolo dell'ubiquità”,
Rassegna Tecnica del Friuli-Venezia Giulia, 3, 19 (2006). (Invited paper)

**[IN02]** A. Abramo, R. Siagri,
“La tecnologia dell’informazione e i servizi per l’accessibilità”
In: “Accessibilità e valorizzazione dei beni culturali”, 382.4, 87 (Franco Angeli) (2012)

**WORKSHOP INTERNAZIONALI**

**[IW01]** A. Abramo,
“Quantum effects and limits in device scaling”
Workshop “Challenges in Advanced Electronic Device Simulation”
Seattle, WA (USA), Sep. 2000. (Invited panelist)

**BREVETTI**

**[IP01]** M. Carrer, C. De Alti, D. Rughetti, A. Abramo, S. Adami,
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