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Born: August 23, 1966—Bergamo, Italy
Nationality: Italian

Current position

Full Professor, Politecnico di Milano

Research interests

Non-volatile memories; NAND Flash reliability.

Positions held

2006-now Full professor, Politecnico di Milano, Milano, Italy
2004-2006 Associate professor, Politecnico di Milano, Milano, Italy
2001 Visiting professor, Institute National Polytechnique de Grenoble, Grenoble, France
1998-2004 Associate professor, University of Como, Como, Italy
1997-1998 Research assistant, Politecnico di Milano, Milano, Italy
1996 Consultant, STMicroelectronics, Agrate Brianza, Italy.
1995 Visiting scholar, University of Tennessee Space Institute, Tullahoma, TN, USA

Education

1996 PhD in Electronics Engineering, Politecnico di Milano
1992 MSc in Electronics Engineering, Politecnico di Milano

Awards

2015 *Best poster award* at the IRPS conference
2014 *Best student paper award* at the IRPS conference
2013 *Best student paper award* at the IRPS conference

2012 *Best student paper award* at the IRPS conference
2008 *Outstanding paper award* at the IRPS conference
Best student paper award at the Biodevices conference
2007 *Senior member* of the IEEE

International patents

[3] S. Aritome, S. Wi, A. Visconti, S. Beltrami, C. Monzio Compagnoni, A. S. Spinelli, "Methods to operate a memory cell", US 2013/0033936 A1 (2013)

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Publications & talks

Journal articles

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[133] A. S. Spinelli, C. Monzio Compagnoni, and A. L. Lacaita, "Variability effects in Nanowire and Macaroni MOSFETs – Part I: random dopant fluctuations", *IEEE Trans. Electron Devices* **67**, 1485–1491 (2020). ISSN 0018-9383. doi 10.1109/TED.2020.2971219

[132] G. Malavena, M. Filippi, A. S. Spinelli and C. Monzio Compagnoni, "Unsupervised learning by spike-timing-dependent plasticity in a mainstream NOR Flash memory array – Part II: array learning", *IEEE Trans. Electron Devices* **66**, 4733–4738 (2019). ISSN 0018-9383. doi 10.1109/TED.2019.2940599

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[129] G. Malavena, A. Mannara, A. L. Lacaita, A. S. Spinelli and C. Monzio Compagnoni, "Compact modeling of GIDL-assisted erase in 3D NAND Flash strings", *J. Comp. Elec.* **18**, 561–568 (2019). ISSN 1569-8025. doi 10.1007/s10825-019-01328-0

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temperature effects in 3-D NAND Flash arrays – Part I: polysilicon-induced variability", *IEEE Trans. Electron Devices* **65**, 3199–3206 (2018). ISSN 0018-9383. doi 10.1109/TED.2018.2838524

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of data retention to cell position in the programmed distribution of NAND Flash memory arrays", *IEEE Electron Dev. Lett.* **36**, 678–680 (2015). ISSN 0741-3106

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charge migration on retention performance of planar and 3D SONOS devices", *Solid-State Electron.* **74**, 64–70 (2012). ISSN 0038-1101

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Last updated: November 25, 2021