

ELENCO COMPLETO PUBBLICAZIONI

Giovanni Finocchio, PhD – University of Messina

PUBBLICAZIONI SU RIVISTE INTERNAZIONALI

- 151RI) R. VERBA - M. CARPENTIERI - Y.-J. CHEN - I. KRIVOROTOV - **G. FINOCCHIO** - V. TIBERKEVICH - A. SLAVIN
"Correction of phase errors in a spin wave transmission line by nonadiabatic parametric pumping"
Phys. Rev. Appl., submitted.
- 150RI) J. CAI - L. ZHANG - B. FANG - W. LV - B. ZHANG - **G. FINOCCHIO** - Z. ZENG
"Sparse neuromorphic computing based on spin-torque diodes"
Applied Physics Letter, submitted.
- 149RI) R. DE ROSE - M. D'AQUINO - **G. FINOCCHIO** - F. CRUPI - M. CARPENTIERI - M. LANUZZA
"A Compact Model for Perpendicular STT-MTJs with Double Reference Layers "
IEEE Transaction on Nanotechnology, submitted.
- 148RI) R. ZIVIERI - F. GARESCI' - B. AZZERBONI - M. CHIAPPINI - **G. FINOCCHIO**
"Nonlinear dispersion relation in anharmonic periodic mass-spring and mass-in-mass systems".
Journal of Sound and Vibration, submitted.
- 147RI) J. CAI - B. FANG - L. ZHANG - W. LV - B. ZHANG - T. ZHOU - **G. FINOCCHIO** - Z. ZENG
"Voltage-controlled spintronic stochastic neuron based on a magnetic tunnel junction"
Phys. Rev. Appl., vol. 11, 034015, March 2019.
DOI: 10.1103/PhysRevApplied.11.034015
- 146RI) D. N. KHOAN - M. RAJU - A. P. PETROVIC - R. TOMASELLO - **G. FINOCCHIO** - C. PANAGOPOULOS
"Stabilizing zero-field skyrmions in Ir/Fe/Co/Pt thin film multilayers by magnetic history control"
Applied Physics Letter, vol. 114, 072401, February 2019.
DOI: 10.1063/1.5080713
- 145RI) W. LI - I. BYKOVA - S. ZHANG - G. YU - R. TOMASELLO - M. CARPENTIERI - Y. LIU - J. GRAFE - M. WEIGAND - D. M. BURN - G. VAN DEL LAAN - T. HESJEDAL - Z. YAN - C. WAN - J. FENG - X. ZHANG - J. WEI - X. WANG - C. GUO - **G. FINOCCHIO** - X. HAN - G. SCHUTZ
"Anatomy of skyrmionic textures in magnetic multilayers"
Advanced Materials, 1807683, February 2019.
DOI: 10.1002/adma.201807683
- 144RI) O. OZATAY - A. GOKCE - T. HAUET - A. GIORDANO - **G. FINOCCHIO**
"Three-dimensional magnetic page memory"
Phys. Rev. Appl., vol. 11, 014002, January 2019.
DOI: 10.1103/PhysRevApplied.11.014002
- 143RI) B. FANG - M. CARPENTIERI - S. LOUIS - V. TIBERKEVICH - A. SLAVIN - I. N. KRIVOROTOV - R. TOMASELLO - A. GIORDANO - H. JIANG - J. CAI - Y. FAN - Z. ZHANG - B. ZHANG - J. A. KATINE - K. L. WANG - P. KHALILI AMIRI - **G. FINOCCHIO** - Z. ZENG
"Experimental demonstration of spintronic broadband microwave detectors and their capability for powering nanodevices "
Phys. Rev. Appl., vol. 11, 014022, January 2019.
DOI: 10.1103/PhysRevApplied.11.014022
- 142RI) V. PULIAFITO - R. KHYMYN - M. CARPENTIERI - B. AZZERBONI - V. TIBERKEVICH - A. SLAVIN - **G. FINOCCHIO**
"Micromagnetic modeling of Terahertz oscillations in an antiferromagnetic material driven by spin-Hall effect"
Phys. Rev. B, vol. 99, 024405, January 2019.
DOI:10.1103/PhysRevB.99.024405

- 141RI) R. TOMASELLO - A. GIORDANO - S. CHIAPPINI - R. ZIVIERI - G. SIRACUSANO - V. PULIAFITO - I. MEDLEJ - A. LA CORTE - B. AZZERBONI - M. CARPENTIERI - Z. ZENG - **G. FINOCCHIO**
 "Micromagnetic understanding of the skyrmion Hall angle current dependence in perpendicularly magnetized ferromagnets"
Phys. Rev. B, vol. 98, 224418, December 2018.
 DOI:10.1103/PhysRevB.98.224418
- 140RI) L. ZHANG - B. FANG - J. CAI - M. CARPENTIERI - V. PULIAFITO - F. GARESCI' - **G. FINOCCHIO** - Z. ZENG
 "Ultrahigh detection sensitivity exceeding 10^5 V/W in spin-torque diode"
Applied Physics Letter, vol. 113, 102401, September 2018.
 DOI: 10.1063/1.5047547.
- 139RI) R. TOMASELLO - S. KOMINEAS - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO**
 "Chiral skyrmions in an anisotropy gradient"
Phys. Rev. B, vol. 98, 024421, July 2018.
 DOI:10.1103/PhysRevB.98.024421.
- 138RI) V. KARAKAS - A. GOKCE - A. T. HABIBOGLU - S. ARPACI - K. OZBOZDUMAN - I. CINAR - C YANIK - R. TOMASELLO - S. TACCHI - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. HAUET - O. OZATAY
 "Observation of Magnetic Radial Vortex Nucleation in a Multilayer Stack with Tunable Anisotropy"
Scientific Reports, vol. 8, 7180, May 2018.
 DOI: 10.1038/s41598-018-25392-x
- 137RI) O. CASABLANCA - G. VENTURA - F. GARESCI' - B. AZZERBONI - B. CHIAIA - M. CHIAPPINI - **G. FINOCCHIO**
 "Seismic cloaking of buildings via a composite foundation"
Journal of Applied Physics, vol. 123, 174903, May 2018.
 DOI: 10.1063/1.5018005.
- 136RI) G. SIRACUSANO - R. TOMASELLO - M. D'AQUINO - V. PULIAFITO - A. GIORDANO - B. AZZERBONI - P. BRAGANCA - **G. FINOCCHIO** - M. CARPENTIERI
 "Description of statistical switching in perpendicular STT-MRAM within an analytical and numerical micromagnetic framework".
IEEE Transaction on Magnetics, vol. 54, 5, 1400210, May 2018.
 DOI: 10.1109/TMAG.2018.2799856
- 135RI) R. ZIVIERI - A. GIORDANO - R. VERBA - B. AZZERBONI - M. CARPENTIERI - A.N. SLAVIN - **G. FINOCCHIO**
 "Theory of nonreciprocal spin waves excitation in spin-Hall oscillators with Dzyaloshinskii-Moriya interaction"
Phys. Rev. B, vol. 97, 134416, April 2018.
 DOI: 10.1103/PhysRevB.97.134416.
- 134RI) M. CARPENTIERI - R. TOMASELLO - S. VERGURA - F. GARESCI' - G. SIRACUSANO - M. D'AQUINO - **G. FINOCCHIO** -
 "Micromagnetic analysis of statistical switching in perpendicular MTJ with double reference layers".
IEEE Magnetic Letters, vol. 9, 3102105, March 2018.
 DOI: 10.1109/LMAG.2018.2806368.
- 133RI) R. DE ROSE - M. LANUZZA - F. CRUPI - G. SIRACUSANO - R. TOMASELLO - **G. FINOCCHIO** - M. CARPENTIERI - M. ALLIOTO
 "A Variation-Aware Timing Modeling Approach for Write Operation in Hybrid CMOS/STT-MTJ Circuits".
IEEE Transactions on Circuits and Systems I: Regular Papers, vol. 65, 3, 1086-1095, March 2018.
 DOI: 10.1109/TCSI.2017.2762431.
- 132RI) R. TOMASELLO - K. Y. GUSLIENKO - M. RICCI - A. GIORDANO - J. BARKER - M. CARPENTIERI - O. CHUBYKALO-FESENKO - **G. FINOCCHIO**
 "Origin of temperature and field dependence of magnetic skyrmion size in ultrathin nanodots"
Phys. Rev. B.: Rapid Communications 97, 060402(R), February 2018.
 DOI: 10.1103/PhysRevB.97.060402.

- 131RI) R. VERBA - M. CARPENTIERI - **G. FINOCCHIO** - V. TIBERKEVICH - A. SLAVIN
 "Amplification and stabilization of large-amplitude propagating spin waves by parametric pumping"
Applied Physics Letter, vol. 112, 042402, January 2018.
 DOI: 10.1063/1.5019357.
- 130RI) O. ALEJOS - V. RAPOSO - L. SANCHEZ-TEJERINA - R. TOMASELLO - **G. FINOCCHIO** - E. MARTINEZ
 Current-driven domain wall dynamics in ferromagnetic layers synthetically exchange-coupled by a spacer: A micromagnetic study"
Journal of Applied Physics, vol. 123, 013901, January 2018.
 DOI: 10.1063/1.5009739.
- 129RI) G. SIRACUSANO - A. LA CORTE - M. GAETA - **G. FINOCCHIO**
 "A data-Oriented based Self-Calibration And Robust chemical-shift encoding by using clusterization (OSCAR): Theory, Optimization and Clinical Validation in Neuromuscular disorders".
Magnetic Resonance Imaging, vol. 45, 84-96, January 2018.
 DOI: 10.1016/j.mri.2017.09.018.
- 128RI) G. SIRACUSANO - R. TOMASELLO - V. PULIAFITO - A. GIORDANO - B. AZZERBONI - A. LA CORTE - P. BURRASCANO - **G. FINOCCHIO** - M. CARPENTIERI
 "Micromagnetic Analysis of Statistical Switching in Perpendicular STT-MRAM With Interfacial Dzyaloshinskii–Moriya Interaction".
IEEE Transaction on Magnetics, vol. 53, 11, 8108605, November 2017.
 DOI 10.1109/TMAG.2017.2708125.
- 127RI) R. DE ROSE - M. LANUZZA - M. D'AQUINO - G. CARANGELO - **G. FINOCCHIO** - F. CRUPI - M. CARPENTIERI
 "A Compact Model with Spin-Polarization Asymmetry for Nanoscaled Perpendicular MTJs"
IEEE Transactions on Electron Devices, vol. 65, 10, 4346-4353, October 2017.
 DOI: 10.1109/TED.2017.2734967.
- 126RI) R. ZIVIERI - N. PACINI - **G. FINOCCHIO** - M. CARPENTIERI
 "Rate of entropy model for irreversible processes in living systems"
Scientific Reports, vol. 7, 9134, August 2017.
 DOI: 10.1038/s41598-017-09530-5.
- 125RI) R. TOMASELLO - V. PULIAFITO - E. MARTINEZ - A. MANCHON - M. RICCI - M. CARPENTIERI - **G. FINOCCHIO**
 "Performance of SAF racetrack memory: domain walls vs skyrmions".
Journal of Physics D: Applied Physics, vol. 50, 325302, July 2017.
 DOI: 10.1088/1361-6463/aa7a98.
- 124RI) R. VERBA - M. CARPENTIERI - **G. FINOCCHIO** - V. TIBERKEVICH - A. SLAVIN
 "Excitation of spin waves in an in-plane magnetized ferromagnetic nanowire using voltage-controlled magnetic anisotropy"
Physical Review Applied, vol. 7, 064023, June 2017.
 DOI: 10.1103/PhysRevApplied.7.064023.
- 123RI) S. PERNA - R. TOMASELLO - T. SCIMONE - M. D'AQUINO - C. SERPICO -M. CARPENTIERI - **G. FINOCCHIO**
 "Influence of the second order uniaxial anisotropy on the dynamical proprieties of magnetic tunnel junctions".
IEEE Transaction on Magnetics, vol. 53, 1400107, April 2017.
 DOI: 10.1109/TMAG.2016.2628521.
- 122RI) R. DE ROSE - M. LANUZZA - F. CRUPI - G. SIRACUSANO - R. TOMASELLO - **G. FINOCCHIO** - M. CARPENTIERI
 "Variability-Aware Analysis of Hybrid MTJ/CMOS Circuits by a Micromagnetic-Based Simulation Framework".
IEEE Transaction on Nanotechnology, vol. 16, 160-168 March 2017.
 DOI: 10.1109/TNANO.2016.2641681.

- 121RI) R. TOMASELLO - M. RICCI - P. BURRASCANO - V. PULIAFITO - M. CARPENTIERI - **G. FINOCCHIO**
 "Electrical detection of single magnetic skyrmion at room temperature".
AIP advances, vol. 7, 056022, February 2017.
 DOI: 10.1063/1.4975998.
- 120RI) G. SIRACUSANO - A. LA CORTE - C. MILAZZO - G. P. ANASTASI - **G. FINOCCHIO** - M. GAETA
 "On the R2* Relaxometry in Complex Multi-Peak Multi-Echo Chemical Shift-Based Water-Fat Quantification: Applications to the Neuromuscular Diseases".
Magnetic Resonance Imaging, vol. 35, 4-14, January 2017.
 DOI: 10.1016/j.mri.2016.08.006.
- 119RI) V. PULIAFITO - A. GIORDANO - A. LAUDANI - F. GARESCÌ - M. CARPENTIERI - B. AZZERBONI - **G. FINOCCHIO**
 "Scalable synchronization of spin-Hall oscillators in out-of-plane field".
Appl. Phys. Lett., vol. 109, 202402, November 2016.
 DOI: 10.1063/1.4967842.
- 118RI) A. GIORDANO - R. VERBA - R. ZIVIERI - A. LAUDANI - V. PULIAFITO - G. GUBBIOTTI - R. TOMASELLO - G. SIRACUSANO - B. AZZERBONI - M. CARPENTIERI - A. SLAVIN - **G. FINOCCHIO**
 "Spin-Hall nano-oscillator with oblique magnetization and Dzyaloshinskii-Moriya interaction as generator of skyrmions and nonreciprocal spin-waves".
Scientific Reports (NPG), vol. 6, 36020, October 2016.
 DOI: 10.1038/srep36020.
- 117RI) **G. FINOCCHIO** - F. BUTTNER - R. TOMASELLO - M. CARPENTIERI - M. KLUEI
 "Magnetic skyrmions from fundamental to applications".
Journal of Physics D: Applied Physics, vol. 49, 42300, September 2016. Topical review.
 DOI: 10.1088/0022-3727/49/42/423001
- 116RI) G. SIRACUSANO - R. TOMASELLO - A. GIORDANO - V. PULIAFITO - B. AZZERBONI - O. OZATAY - M. CARPENTIERI - **G. FINOCCHIO**
 "Magnetic radial vortex stabilization and efficient manipulation driven by the Dzyaloshinskii–Moriya Interaction and spin-transfer torque".
Physical Review Letters, vol. 117, 087204, August 2016.
 DOI: 10.1103/PhysRevLett.117.087204
- 115RI) G. SIRACUSANO - F. LAMONACA - R. TOMASELLO - F. GARESCÌ - A. LA CORTE - D. L. CARNÌ - M. CARPENTIERI - D. GRIMALDI - **G. FINOCCHIO**
 "Damage evaluation through Hilbert Huang Transform of acoustic emission signals".
Mechanical Systems and Signal Processing, vol. 75, 109–122, June 2016.
 DOI: 10.1016/j.ymsp.2015.12.004
- 114RI) T. LIU - V. PULIAFITO - F. MONTAIGNE - S. PETIT - C. DERANLOT - O. OZATAY - **G. FINOCCHIO** - T. HAUET
 "Mechanism of single bubble formation in patterned dot array under in-plane magnetic field".
Journal of Physics D: Applied Physics, vol. 49, 245002, April 2016.
 Highlighted by IOP as being particularly significant to the community
[\(https://jphysplus.iop.org/2016/05/13/reproducible-formation-of-single-magnetic-bubbles/\)](https://jphysplus.iop.org/2016/05/13/reproducible-formation-of-single-magnetic-bubbles/)
 DOI: 10.1088/0022-3727/49/24/245002
- 113RI) R. VERBA - M. CARPENTIERI - **G. FINOCCHIO** - V. TIBERKEVICH - A. SLAVIN
 "Excitation of propagating spin waves in ferromagnetic nanowires by microwave voltage-controlled magnetic anisotropy".
Scientific Reports, vol. 6, 25018, 1-9, April 2016.
 DOI: 10.1038/srep25018.
- 112RI) B. FANG - M. CARPENTIERI - X. J. HAO - H. W. JIANG - J. A. KATINE - I. N. KRIVOROTOV - B. OCKER - J. LANGER - K. L. WANG - B. S. ZHANG - B. AZZERBONI - P. KHALILI AMIRI - **G. FINOCCHIO** - Z. M. ZENG
 "Giant spin-torque diode sensitivity at low input power in the absence of bias magnetic field".
Nature Communications, vol. 7, 11259, April 2016.

DOI: 10.1038/ncomms11259.

- 111RI) V. PULIAFITO - A. GIORDANO - B. AZZERBONI - **G. FINOCCHIO**
"Nanomagnetic logic with non-uniform states of clocking".
Journal of Physics D: Applied Physics, vol. 49, 145001, March 2016.
DOI: 10.1088/0022-3727/49/14/145001
- 110RI) **G. FINOCCHIO** - M. RICCI - R. TOMASELLO - A. GIORDANO - M. LANUZZA - P. BURRASCANO - B. AZZERBONI - M. CARPENTIERI
"Skyrmion based microwave detectors and harvesting".
Appl. Phys. Lett., vol. 107, 262401, December 2015.
DOI: 10.1063/1.4938539
- 109RI) S. FIN - R. TOMASELLO - D. BISERO - M. MARANGOLO - M. SACCHI - H. POPESCU - M. EDDRIEF - C. HEPBURN - **G. FINOCCHIO** - M. CARPENTIERI - A. RETTORI - M. G. PINI - S. TACCHI
"In-plane rotation of magnetic stripe domains in Fe_{1-x}Ga_x thin films"
Phys. Rev. B, vol. 92, 224411, December 2015.
DOI: 10.1103/PhysRevB.92.224411
- 108RI) M. CARPENTIERI - R. TOMASELLO - R. ZIVIERI - **G. FINOCCHIO**
"Topological, non-topological and instanton droplets driven by spin-transfer torque in materials with perpendicular magnetic anisotropy and Dzyaloshinskii-Moriya Interaction"
Scientific Reports, vol. 5, 16184, November 2015.
DOI: 10.1038/srep16184
- 107RI) D. MILARDI - M. GAETA - S. MARINO - A. ARRIGO - G. VACCARINO - E. M. MORMINA - G. RIZZO - C. MILAZZO - **G. FINOCCHIO** - A. BAGLIERI - G. ANASTASI - A. QUARTARONE
"Basal Ganglia Network by Constrained Spherical Deconvolution: A Possible Cortico-Pallidal Pathway?"
Movement Disorders, vol. 30(3), 342-9, March 2015.
Published online (August 2014) at <http://onlinelibrary.wiley.com/doi/10.1002/mds.25995/pdf>.
DOI: 10.1002/mds.25995;
- 106RI) G. SIRACUSANO - R. TOMASELLO - V. PULIAFITO - A. GIORDANO - M. CARPENTIERI - B. AZZERBONI - A. LA CORTE - M. CARPENTIERI - **G. FINOCCHIO**
"Intrinsic synchronization of an array of spin-torque oscillators driven by the spin-Hall effect"
Journal of Applied Physics, vol. 117, 17E504, March 2015.
DOI: 10.1063/1.4914880
- 105RI) D. MILARDI - P. BRAMANTI - C. MILAZZO - **G. FINOCCHIO** - A. ARRIGO - G. SANTORO - F. TRIMARCHI - A. QUARTARONE - G. ANASTASI - M. GAETA
"Cortical and sub-cortical connections of the human claustrum revealed in vivo by high definition fiber tractography constrained spherical deconvolution tractography".
Cerebral Cortex, vol. 25, (2), 406-414, February 2015.
Published online (September 2013) at:
<http://cercor.oxfordjournals.org/content/early/2013/09/07/cercor.bht231.abstract>.
DOI: 10.1093/cercor/bht231.
- 104RI) M. MADAMI - G. GUBBIOTTI - T. MORIYAMA - K. TANAKA - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. ONO - S. TACCHI - G. CARLOTTI
"Micro-focused Brillouin light scattering study of the magnetization dynamics driven by Spin Hall effect in a transversely magnetized NiFe nanowire"
Journal of Applied Physics, vol. 117, 17D504, Febbraio 2015.
DOI: 10.1063/1.4907612
- 103RI) M. CARPENTIERI - R. TOMASELLO - M. RICCI - P. BURRASCANO - **G. FINOCCHIO**
"Micromagnetic study of electrical-field-assisted magnetization switching in MTJ devices".
IEEE Trans. on Magnetics, vol. 50, 1401804, November 2014.
DOI: 10.1109/TMAG.2014.2327192
- 102RI) A. GIORDANO - V. PULIAFITO - L. TORRES - M. CARPENTIERI - B. AZZERBONI - **G. FINOCCHIO**
"Micromagnetic study of spin-transfer-driven vortex dipole and vortex quadrupole dynamics".

IEEE Trans. on Magnetics, vol. 50, 4300404, November 2014.
DOI: 10.1109/TMAG.2014.2323478

- 101RI) A. GIORDANO - M. CARPENTIERI - R. ZIVIERI - G. SIRACUSANO - B. AZZERBONI - **G. FINOCCHIO**
“Nanowire spin-torque oscillator with non-uniform polarizer: a micromagnetic study”.
IEEE Trans. on Magnetics, vol. 50, 1402204, November 2014.
DOI: 10.1109/TMAG.2014.2330765
- 100RI) M. RICCI - P. BURRASCANO - M. CARPENTIERI - R. TOMASELLO - **G. FINOCCHIO**
“Chirp spectroscopy applied to the characterization of Ferromagnetic resonance in Magnetic Tunnel Junctions”.
IEEE Trans. on Magnetics, vol. 50, 1402305, November 2014.
DOI: 10.1109/TMAG.2014.2323269
- 99RI) R. TOMASELLO - E. MARTINEZ - R. ZIVIERI - L. TORRES - M. CARPENTIERI - **G. FINOCCHIO**
“A strategy for the design of skyrmion racetrack memories”.
Scientific Reports, vol. 4, 6784, October 2014.
DOI: 10.1038/srep06784
- 98RI) A. GIORDANO - M. CARPENTIERI - A. LAUDANI - G. GUBBIOTTI - B. AZZERBONI - **G. FINOCCHIO**
“Spin-Hall Nano-oscillator: a micromagnetic study”.
Appl. Phys. Lett., vol. 105, 042412, July 2014.
DOI: 10.1063/1.4892168
- 97RI) R. TOMASELLO - V. PULIAFITO - B. AZZERBONI - **G. FINOCCHIO**
“Switching properties in magnetic tunnel junctions with interfacial perpendicular anisotropy: micromagnetic study.”
IEEE Trans. on Magnetics, vol. 5, 7100305, July 2014.
DOI: 10.1109/TMAG.2014.2307280
- 96RI) **G. FINOCCHIO** - O. CASABLANCA - G. RICCIADI - U. ALIBRANDI - F. GARESCI - M. CHIAPPINI - B. AZZERBONI
“Seismic metamaterials based on isochronous mechanical oscillators”.
Appl. Phys. Lett., vol. 104, 191903, May 2014.
DOI: 10.1063/1.4876961
This paper has been selected as “**Feature Paper**” from the **Applied Physics Letters**.
- 95RI) V. PULIAFITO - Y. POGORYELOV - B. AZZERBONI - J. AKERMAN - **G. FINOCCHIO**
“Hysteretic Synchronization in Spin-Torque Nano-Contact Oscillators: a Micromagnetic Study”.
IEEE Trans. on Nanotechnology, vol. 13, 532 - 536, May 2014.
DOI: 10.1109/TNANO.2014.2308474
- 94RI) V. PULIAFITO - G. SIRACUSANO - B. AZZERBONI - **G. FINOCCHIO**
“Self-modulated soliton modes excited in a nanocontact spin-torque oscillator”.
IEEE Magnetism Letters, vol. 5, 3000104, April 2014.
DOI: 10.1109/LMAG.2014.2315973
- 93RI) V. PULIAFITO - L. TORRES - O. OZATAY - T. HAUET - B. AZZERBONI - **G. FINOCCHIO**
“Micromagnetic analysis of dynamical bubble-like solitons based on the time domain evolution of the topological density”
Journal of Applied Physics, vol. 115, 17D139, March 2014.
DOI: 10.1063/1.4867747
- 92RI) R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
“Influence of the Dzyaloshinskii-Moriya interaction on the spin-torque diode effect”.
Journal of Applied Physics, vol. 115, 17C730, March 2014.
DOI: 10.1063/1.4867750
- 91RI) E. CARDELLI - M. CARPENTIERI - A. FABBA - **G. FINOCCHIO**
“Modeling of Hysteresis in Magnetic Multidomains”.

Physica B: Condensed Matter, vol. 435, 62–65, February 2014.
DOI: 10.1016/j.physb.2013.06.009

- 90RI) G. SIRACUSANO – A. LA CORTE - V. PULIAFITO - **G. FINOCCHIO**
“A generalized tool for accurate time-domain separation of excited modes in spin-torque oscillators.”
Journal of Applied Physics, vol. 115, 17D108, January 2014.
DOI: 10.1063/1.4861212
- 89RI) R. TOMASELLO – M. CARPENTIERI - **G. FINOCCHIO**
“Dynamical properties of three terminal magnetic tunnel junctions: Spintronics meets spin-orbitronics”.
Appl. Phys. Lett., vol. 103, 252408, December 2013.
DOI: 10.1063/1.4851939.
- 88RI) **G. FINOCCHIO** – V. PULIAFITO – S. KOMINEAS – L. TORRES – O. OZATAY - T. HAUET – B. AZZERBONI
“Nanoscale spintronic oscillators based on the excitation of confined soliton modes”.
Journal of Applied Physics, vol. 114 , 163908, October 2013.
DOI: 10.1063/1.4827384.
- 87RI) G. CONSOLO - **G. FINOCCHIO** – G. SIRACUSANO – S. BONETTI – A. EKLUND – J. AKERMAN - B. AZZERBONI
“Non-stationary excitation of two localized spin-wave modes in a nano-contact spin torque oscillator”.
Journal of Applied Physics, vol. 114 , 153906, October 2013.
DOI: 10.1063/1.4825065.
- 86RI) E. MARTINEZ - **G. FINOCCHIO** – L. TORRES – L. LOPEZ-DIAZ
“The influence of the spin-orbit torques on the current-driven domain wall motion”.
AIP advances, vol. 3, 072109, July 2013.
DOI: 10.1063/1.4813845.
- 85RI) D. AURELIO – A. GIORDANO - L. TORRES - **G. FINOCCHIO** - E. MARTINEZ
“The role of the Oersted field on the current-driven domain wall dynamics along wires with square cross section”.
IEEE Trans. on Magnetism, vol. 49, 3211-3214, July 2013.
DOI: 10.1109/TMAG.2013.2241745.
- 84RI) E. MARTINEZ - **G. FINOCCHIO**
“Domain wall dynamics in asymmetric stacks: the roles of Rashba field and the Spin Hall effect”.
IEEE Trans. on Magnetism, vol. 49, 3105-3108, July 2013.
DOI: 10.1109/TMAG.2013.2238899.
- 83RI) L. TORRES - M. CARPENTIERI - E. MARTINEZ - L. LOPEZ-DIAZ - M. A. HERNANDEZ-LOPEZ - D. AURELIO - **G. FINOCCHIO**
“Intrinsic and Thermal Linewidths of Spin-Transfer-Driven Vortex Self-oscillations”.
IEEE Trans. on Magnetism, vol. 49, 3203-3206, July 2013.
DOI: 10.1109/TMAG.2013.2248135.
- 82RI) P. M. BRAGANCA - O. J. LEE - O. OZATAY - L. LIU - **G. FINOCCHIO** - D. C. RALPH - R. A. BUHRMAN
“Coherent and incoherent spin torque oscillations in a nanopillar magnetic spin-valve”.
Appl. Phys. Lett., vol. 102, 252402, June 2013.
DOI: 10.1063/1.4812299.
This paper has been selected as “**Research Highlights**” from the **Applied Physics Letters**.
- 81RI) **G. FINOCCHIO** - M. CARPENTIERI – E. MARTINEZ - B. AZZERBONI
“Switching of a single ferromagnetic layer driven by spin-orbit torque from spin Hall effect”.
Appl. Phys. Lett., vol. 102, 212410, May 2013.
DOI: 10.1063/1.4808092.
- 80RI) Z. M. ZENG - **G. FINOCCHIO** – B. S. ZHANG - J. A. KATINE - I. KRIVOROTOV - Y. HUAI - J. LANGER – B. AZZERBONI - P. KHALILI AMIRI - K. L. WANG - H. W. JIANG
“Ultralow current density and bias-field-free spin-transfer nano-oscillator”.

Scientific Reports, vol. 3, 1426, 1-5, March 2013.
DOI:10.1038/srep01426.

- 79RI) M. CARPENTIERI – T. MORIYAMA - B. AZZERBONI – **G. FINOCCHIO**
“Injection locking at zero field in two free layer spin-valves”.
Appl. Phys. Lett., vol. 102, 102413, March 2013.
DOI: 10.1063/1.4795597.
- 78RI) Z. M. ZENG - **G. FINOCCHIO** - H. W. JIANG
“Spin-transfer nano-oscillators”.
Nanoscale, Advance Article, vol. 5, 2219–2231, January 2013. Feature Article.
DOI: 10.1039/C2NR33407K.
- 77RI) U. KILIC - **G. FINOCCHIO** - T. HAUET - S. H. FLOREZ - G. AKTAS - O. OZATAY
“Magnetic Switching Driven by Nanosecond scale Heat and Magnetic Field Pulses: An Application of Macrospin Landau-Lifshitz-Bloch Model”.
Appl. Phys. Lett., vol. 101, 252407, December 2012.
DOI: 10.1063/1.4772486.
- 76RI) E. CARDELLI – A. FABA - **G. FINOCCHIO** – B. AZZERBONI
“Mathematical Modelling of Magnetic Hysteresis in Exchange-Bias Spin Valves”.
IEEE Trans. on Magnetic, vol. 48, 3367-3370, November 2012.
DOI: 10.1109/TMAG.2012.2195721.
- 75RI) M. CARPENTIERI - **G. FINOCCHIO** – A. GIORDANO – B. AZZERBONI - F. LATTARULO
“Micromagnetic study of synchronization of nonlinear spin-torque oscillators to microwave current and field”.
“*Advances in Condensed Matter Physics*”. Research Article. vol. 2012, (951976), 1-5, 2012.
DOI:10.1155/2012/951976.
- 74RI) M. CARPENTIERI – M. RICCI – P. BURRASCANO - L. TORRES - **G. FINOCCHIO**
“Noise-Like Sequences to Resonant Excite the Writing of a Universal Memory Based on Spin-Transfer-Torque MRAM”.
IEEE Trans. on Magnetic, vol. 48, 2007-2014, September 2012.
DOI: 10.1109/TMAG.2012.2194718.
- 73RI) T. MORIYAMA - **G. FINOCCHIO** - M. CARPENTIERI – B. AZZERBONI – D. C. RALPH – R. A. BUHRMAN
“Phase locking and frequency doubling in spin transfer torque oscillators with two coupled free layers”.
Physical Review B, vol. 86, 060411(R), August 2012.
DOI: 10.1103/PhysRevB.86.060411.
- 72RI) **G. FINOCCHIO** - M. CARPENTIERI – A. GIORDANO - B. AZZERBONI
“Non-Adlerian phase slip and non stationary synchronization of spin-torque oscillators to a microwave source”.
Physical Review B, vol. 86, 014438, July 2012.
DOI: 10.1103/PhysRevB.86.014438.
- 71RI) L. LOPEZ-DIAZ - D. AURELIO - L. TORRES - E. MARTINEZ - M. A. HERNANDEZ-LOPEZ - J. GOMEZ - O. ALEJOS - M. CARPENTIERI - **G. FINOCCHIO** - G. CONSOLO
“Micromagnetic simulations using Graphics Processing Units”.
J. Phys. D: Appl. Phys., TOPICAL REVIEW, vol. 45, 323001, July 2012.
DOI:10.1088/0022-3727/45/32/323001.
- 70RI) Z. M. ZENG - P. KHALILI AMIRI - I. KRIVOROTOV - H. ZHAO - **G. FINOCCHIO** - J.-P. WANG - J. A. KATINE - Y. HUAI - J. LANGER - K. GALATSIS - K. L. WANG - H. W. JIANG
“High-power coherent microwave emission from magnetic tunnel junction nano-oscillators with perpendicular anisotropy”.
ACS Nano, vol. 6, 6115–6121, June 2012.
DOI: 10.1021/nn301222v.
- 69RI) M. CARPENTIERI – M. RICCI – P. BURRASCANO - L. TORRES - **G. FINOCCHIO**
“Wideband RF signal to trigger fast switching processes in magnetic tunnel junctions”.

Journal of Applied Physics, vol. 111, 07C909, February 2012.
DOI: 10.1063/1.3675149.

This paper has been selected for the March 2012 Vol. 11, Issue 3 of **Virtual Journal of Ultrafast Science**.

- 68RI) A. GIORDANO - **G. FINOCCHIO** - M. CARPENTIERI – L. TORRES – B. AZZERBONI
“Semi-implicit integration scheme for Landau–Lifshitz–Gilbert–Slonczewski equation”.
Journal of Applied Physics, vol. 111, 07D112, February 2012.
DOI: 10.1063/1.3673428.

- 67RI) **G. FINOCCHIO** – A. PRATTELLA – G. CONSOLO – E. MARTINEZ – A. GIORDANO - B. AZZERBONI
“Hysteretic spin-wave excitation in spin-torque oscillators as a function of the in-plane field angle: a micromagnetic description”.
Journal of Applied Physics, vol. 110, 123910, December 2011.
DOI: 10.1063/1.3671632.
This paper has been selected as “**Research Highlights**” from the **Journal of Applied Physics**.

- 66RI) M. CARPENTIERI - E. MARTINEZ - **G. FINOCCHIO**
“High frequency spin-transfer-torque oscillators with reduced perpendicular torque effect based on asymmetric vortex polarizer”.
Journal of Applied Physics, vol. 110, 093911, November 2011.
DOI: 10.1063/1.3657844.
This paper has been selected as “**Research Highlights**” from the **Journal of Applied Physics**.

This paper has been selected for the November 21, 2011 Vol. 24, Issue 11 of **Virtual Journal of Nanoscale Science & Technology**.

- 65RI) C. RAGUSA - M. CARPENTIERI - F. CELEGATO - P. TIBERTO - E. ENRICO - L. BOARINO - **G. FINOCCHIO**
“Magnonics crystal by magnetic antivortices confined in antidots”.
IEEE Trans. on Magnetic, vol. 47, 2498-2501, October 2011.
DOI: 10.1109/TMAG.2011.2158578.

- 64RI) **G. FINOCCHIO** – I. KRIVOROTOV – X. CHENG - L. TORRES - B. AZZERBONI
“Micromagnetic understanding of stochastic resonance driven by spin-transfer-torque”.
Physical Review B, vol. 83, 134402, April 2011.
DOI: 10.1103/PhysRevB.83.134402.

- 63RI) E. MARTINEZ - **G. FINOCCHIO** – M. CARPENTIERI
“Stochastic resonance of a domain wall in a stripe with two pinning sites”.
Applied Physics Letter, vol. 98, 072507, February 2011.
DOI: 10.1063/1.3556314.

This paper has been selected for the February 28, 2011 Vol. 23, Issue 8 of **Virtual Journal of Nanoscale Science & Technology**.

- 62RI) S. BONETTI – V. TIBERKEVICH – G. CONSOLO - **G. FINOCCHIO** – P. MUDULI – F. MANCOFF – A. SLAVIN - J. AKERMAN
“Experimental evidence of self-localized and propagating spin wave modes in obliquely magnetized current-driven nanocontacts”.
Physical Review Letter, vol. 105, 217204, November 2010.
DOI: 10.1103/PhysRevLett.105.217204.

This paper has been selected for the November 22, 2010 Vol. 22, Issue 22 of **Virtual Journal of Nanoscale Science & Technology**.

- 61RI) D. AURELIO – L. TORRES - **G. FINOCCHIO**
“Thermal effects on spin-torque-driven switching in high-tunneling magnetoresistance magnetic tunnel junctions”.
Journal of Applied Physics, vol. 108, 083911, October 2010.
DOI: 10.1063/1.3499641.

- 60RI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI – L. TORRES
“Spin-transfer-torque resonant switching and injection locking in presence of a “weak” external microwave field for spin valves with perpendicular materials”.
Physical Review B, vol. 82, 094434, September 2010.
DOI: 10.1103/PhysRevB.82.094434.

This paper has been selected for the September 24, 2010 Vol. 22, Issue 14 of **Virtual Journal of Nanoscale Science & Technology**.

- 59RI) G. CONSOLO – V. PULIAFITO - **G. FINOCCHIO** – L. LOPEZ-DIAZ – R. ZIVIERI – L. GIOVANNINI – F. NIZZOLI – G. VALENTI - B. AZZERBONI
“Combined frequency-amplitude nonlinear modulation: theory and applications”.
IEEE Trans. on Magnetic, vol. 46, 3629-3634, September 2010.
DOI: 10.1109/TMAG.2010.2046178.

- 58RI) **G. FINOCCHIO** – N. MAUGERI – L. TORRES – B. AZZERBONI
“Domain wall dynamics driven by a localized injection of a spin-polarized current”.
IEEE Trans. on Magnetic, vol. 46, 1523-1526, June 2010.
DOI: 10.1109/TMAG.2009.2038721.

- 57RI) **G. FINOCCHIO** – A. PRATTELLA – G. CONSOLO – L. TORRES – E. CARDELLI – A. FABBA – B. AZZERBONI
“Reducing the non-linearities of a Spin-Torque Oscillator by Varying the Amplitude of the External Field applied along the in-plane Hard-Axis”.
IEEE Trans. on Magnetic, vol. 46, 1519-1522, June 2010.
DOI: 10.1109/TMAG.2010.2041327.

- 56RI) **G. FINOCCHIO** – G. SIRACUSANO – V. TIBERKEVICH - I. KRIVOROTOV - L. TORRES – B. AZZERBONI
“Time domain study of frequency-power correlation in spin-torque oscillators”.
Physical Review B, vol. 81, 184411, May 2010.
DOI: 10.1103/PhysRevB.81.184411.

This paper has been selected for the May 24, 2010 Vol. 21, Issue 21 of **Virtual Journal of Nanoscale Science & Technology**.

- 55RI) **G. FINOCCHIO** - V. S. PRIBIAG – L. TORRES - R. A. BUHRMAN – B. AZZERBONI
“Spin-torque driven magnetic vortex self-oscillations in perpendicular magnetic fields”.
Applied Physics Letter, vol. 96, 102508, March 2010.
DOI: 10.1063/1.3358387.

- 54RI) Y. T. CUI - **G. FINOCCHIO** - C. WANG – J. A. KATINE - R. A. BUHRMAN - D. C. RALPH
“Single-Shot Time-Domain Studies of Spin-Torque-Driven Switching in Magnetic Tunnel Junctions”.
Physical Review Letter, vol. 104, 097201, March 2010.
DOI: 10.1103/PhysRevLett.104.097201.

This paper has been highlighted with a Viewpoint on the Physics website (<http://physics.aps.org>). Link: (<http://physics.aps.org/viewpoint-for/10.1103/PhysRevLett.104.097201>).

- 53RI) V. S. PRIBIAG - **G. FINOCCHIO** - B. J. WILLIAMS - D. C. RALPH - R. A. BUHRMAN
“Long timescale fluctuations in zero-field magnetic vortex oscillations driven by dc spin-polarized current”.
Physical Review B(R), vol. 80, 180411, November 2009.
DOI: 10.1103/PhysRevB.80.180411.

- 52RI) G. CONSOLO - **G. FINOCCHIO** – L. LOPEZ-DIAZ – B. AZZERBONI
“Numerical analysis of the nonlinear excitation of subcritical spin-wave modes within a micromagnetic framework”.
IEEE Trans. on Magnetic, vol. 45, 5220-5222, November 2009.
DOI: 10.1109/TMAG.2009.2031083.

- 51RI) D. AURELIO – L. TORRES - **G. FINOCCHIO**
“Magnetization switching driven by spin-transfer-torque in high-TMR magnetic tunnel junctions”.

Journal of Magnetism and Magnetic Materials, vol. 321, pp. 3913–3920, August 2009.
DOI: 10.1016/j.jmmm.2009.07.050.

- 50RI) G. SIRACUSANO - **G. FINOCCHIO** – A. LA CORTE – G. CONSOLO - L. TORRES – B. AZZERBONI
“Non-Stationary magnetization dynamics driven by spin transfer torque”.
Physical Review B, vol. 79, 104438, March 2009.
DOI: 10.1103/PhysRevB.79.104438.

This paper has been selected for the April 13, 2009 Vol. 19, Issue 15 of **Virtual Journal of Nanoscale Science & Technology**.

- 49RI) **G. FINOCCHIO** – L. TORRES - G. CONSOLO - M. CARPENTIERI – B. AZZERBONI
“Magnetic vortex driven by non-uniform injection of spin-polarized current in nano-scale spin valves”.
Journal of Magnetism and Magnetic Materials, vol. 321, pp.602-606, February 2009.
DOI: 10.1016/j.jmmm.2008.10.017.
- 48RI) G. SIRACUSANO - **G. FINOCCHIO** – I. KRIVOROTOV - L. TORRES - G. CONSOLO – B. AZZERBONI
“Micromagnetic simulations of persistent oscillatory modes excited by spin-polarized current in nanoscale exchange-biased spin valves”.
Journal of Applied Physics, vol. 105, 07D107, February 2009.
DOI: 10.1063/1.3057912.
- 47RI) **G. FINOCCHIO** - O. OZATAY – L. TORRES - R. A. BUHRMAN - D. C. RALPH – B. AZZERBONI
“Spin-Torque-Induced Rotational Dynamics of a Magnetic Vortex Dipole”.
Physical Review B, vol. 78, 174408, November 2008.
DOI: 10.1103/PhysRevB.78.174408.
- 46RI) V. PULIAFITO – B. AZZERBONI – G. CONSOLO - **G. FINOCCHIO** – L. TORRES – L. LOPEZ-DIAZ
“Micromagnetic Modeling of Nanocontact Spin-Torque Oscillators With Perpendicular Anisotropy at Zero Bias Field”.
IEEE Trans. on Magnetic, vol. 44, n°11, pp. 2512-2515, November 2008.
DOI: 10.1109/TMAG.2008.2002596.
- 45RI) K. V. THADANI - **G. FINOCCHIO** - Z.P. LI - O. OZATAY - J. C. SANKEY - I. N. KRIVOROTOV - Y. T. CUI - R. A. BUHRMAN - D. C. RALPH
“Strong linewidth variation for spin-torque nano-oscillators as a function of in-plane magnetic field angle”.
Physical Review B, vol. 78, 024409, July 2008.
10.1103/PhysRevB.78.024409.

This paper has been selected for the July 28, 2008 Vol. 18, Issue 4 of **Virtual Journal of Nanoscale Science & Technology**.

- 44RI) **G. FINOCCHIO**
“Micromagnetic model of magnetization reversal driven by spin-polarized current in MgO-based magnetic tunnel junctions”.
Physica Status Solidi (c), vol. 5, n°7, pp. 2396-2398, May 2008.
DOI: 10.1002/pssc.200777632.
- 43RI) M. CARPENTIERI - **G. FINOCCHIO** – L. TORRES - B. AZZERBONI
“Modeling of fast switching processes in nano-scale spin-valves”.
Journal of Applied Physics, vol. 103, (07B117), February 2008.
DOI: 10.1063/1.2832882.
- 42RI) M. CARPENTIERI – L. TORRES - **G. FINOCCHIO** - B. AZZERBONI
“Micromagnetic study of full widths at half maximum in spin-transfer-driven self-oscillations of individual nanomagnets”.
Journal of Applied Physics, vol. 103, (07B107), February 2008.
DOI: 10.1063/1.2832882.

This paper has been selected for the February 18, 2008 Vol. 17, Issue 7 of **Virtual Journal of Nanoscale Science & Technology**.

- 41RI) **G. FINOCCHIO** – M. CARPENTIERI - L. TORRES - G. CONSOLO - A. ROMEO – L. LOPEZ-DIAZ – B. AZZERBONI
 “Numerical study of the magnetization reversal driven by spin-polarized current in MgO-based magnetic tunnel junctions”.
Physica B Condensed Matter, vol. 403, pp. 364-367, February 2008.
 DOI: 10.1016/j.physb.2007.08.050.
- 40RI) A. ROMEO – **G. FINOCCHIO** – M. CARPENTIERI - L. TORRES - G. CONSOLO - B. AZZERBONI
 “A Numerical Solution of the Magnetization Reversal Modeling in a Permalloy Thin Film using Fifth Order Runge-Kutta Method with Adaptive Step Size Control”.
Physica B Condensed Matter, vol. 403, pp.464-468, February 2008.
 DOI: 10.1016/j.physb.2007.08.076.
- 39RI) **G. FINOCCHIO** – I. N. KRIVOROTOV - L. TORRES – R.A. BUHRMAN – D.C. RALPH - B. AZZERBONI
 “Magnetization Reversal Driven by Spin-Polarized Current in Exchange Biased Nanoscale Spin Valves”.
Physical Review B, vol. 76, 174408, November 2007.
 DOI: 10.1103/PhysRevB.76.174408.
- 38RI) G. CONSOLO - **G. FINOCCHIO** - A. ROMEO - B. AZZERBONI – L. LOPEZ-DIAZ – L. TORRES
 “Nanocontact Spin-Transfer Oscillators based on Perpendicular Anisotropy in the Free Layer”.
Applied Physics Letters, vol. 91, (1625069), October 2007.
 DOI: 10.1063/1.2797967.
- 37RI) **G. FINOCCHIO** – O. OZATAY - L. TORRES - M. CARPENTIERI - G. CONSOLO - B. AZZERBONI
 “Micromagnetic Modeling of Magnetization Reversal in Nano-Scale Point Contacts.”
IEEE Trans. On Magnetic, vol. 43, n°6, pp. 2938-2940, June 2007.
 DOI: 10.1109/TMAG.2007.892326.
- 36RI) M. CARPENTIERI - L. TORRES – **G. FINOCCHIO** - B. AZZERBONI – L. LOPEZ-DIAZ
 “Micromagnetic Investigation of Precession Dynamics in magnetic nanopillars.”
IEEE Trans. On Magnetic, vol. 43, n°6, pp. 3135-3137, June 2007.
 DOI: 10.1109/TMAG.2007.892329.
- 35RI) **G. FINOCCHIO** - L. TORRES - G. CONSOLO - M. CARPENTIERI – A. ROMEO - B. AZZERBONI
 “Magnetization Dynamics in CoFe/AIO/Py and CoFe/MgO/Py Magnetic Tunnel Junctions.”
Journal of Applied Physics, vol. 101, (09A508), April 2007.
 DOI: 10.1063/1.2713711.
- 34RI) G. CONSOLO - B. AZZERBONI – **G. FINOCCHIO** - L. LOPEZ-DIAZ - L. TORRES
 “Influence of the Oersted Field in the dynamics of spin-transfer microwave oscillators.”
Journal of Applied Physics, vol. 101, (09C108), April 2007.
 DOI: 10.1063/1.2712946.
- 33RI) L. TORRES - **G. FINOCCHIO** – L. LOPEZ-DIAZ - E. MARTINEZ- M. CARPENTIERI - G. CONSOLO – B. AZZERBONI
 “Micromagnetic Modal Analysis of Spin-Transfer-Driven Ferromagnetic Resonance of Individual Nanomagnets”.
Journal of Applied Physics, vol. 101, (09A502), April 2007.
 DOI: 10.1063/1.2710737.
- This paper has been selected for the April 16, 2007 Vol. 15, Issue 15 of **Virtual Journal of Nanoscale Science & Technology**.
- 32RI) M. CARPENTIERI - L. TORRES - B. AZZERBONI - **G. FINOCCHIO** - G. CONSOLO – L. LOPEZ-DIAZ
 “Magnetization dynamics driven by spin-polarized current in nanomagnets”.
Journal of Magnetism and Magnetic Materials, vol. 316, pp. 488-491, March 2007.
 DOI: 10.1016/j.jmmm.2007.03.163.
- 31RI) G. CONSOLO - **G. FINOCCHIO** – L. TORRES - M. CARPENTIERI – L. LOPEZ-DIAZ - B. AZZERBONI
 “Spin torque switching in Py/Cu/Py and Py/Cu/CoPt spin-valve nanopillars”.
Journal of Magnetism and Magnetic Materials, vol. 316, pp. 492-495, March 2007.

DOI: 10.1016/j.jmmm.2007.03.164.

- 30RI) **G. FINOCCHIO** - G. D. FUCHS - L. TORRES - R. A. BUHRMAN – B. AZZERBONI
“Micromagnetic Modeling of Magnetization switching Driven by Spin-Polarized Current in Magnetic Tunnel Junctions”.
Journal of Applied Physics, vol. 101, (063914), March 2007.
DOI: 10.1063/1.2496202.

This paper has been selected for the April 9, 2007 Vol. 15, Issue 14 of **Virtual Journal of Nanoscale Science & Technology**.

- 29RI) L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - **G. FINOCCHIO** - M. CARPENTIERI – B. AZZERBONI
“Coupling of the Spin-Transfer Torque to Microwave Field: Micromagnetic Modal Analysis”.
Journal of Applied Physics, vol. 101, (053914), March 2007.
DOI: 10.1063/1.2435812.

This paper has been selected for the March 26, 2007 Vol. 15, Issue 12 of **Virtual Journal of Nanoscale Science & Technology**.

- 28RI) **G. FINOCCHIO** - L. TORRES - G. CONSOLO - M. CARPENTIERI – A. ROMEO - B. AZZERBONI – L. LOPEZ-DIAZ
“Trends in Spin-Transfer Driven Magnetization Dynamics of CoFe/AlO/Py and CoFe/MgO/Py Magnetic Tunnel Junctions.”
Applied Physics Letters, vol. 89, (262509), December 2006.
DOI: 10.1063/1.2425017.

- 27RI) P. BURRASCANO - E. CARDELLI - M. CARPENTIERI - E. DELLA TORRE - A. FABBA - **G. FINOCCHIO**
“Vector Hysteresis Model at Micromagnetic Scale”.
IEEE Trans. On Magnetic, vol. 42, n°10, pp. 3138-3140, October 2006.
DOI: 10.1109/TMAG.2006.880143.

- 26RI) G. CONSOLO - **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI
“A Genetic Approach to Solve Numerical Problems in the Preisach Model Identification”.
IEEE Trans. On Magnetic, vol. 42, n°5, pp. 1526-1537, May 2006.
DOI: 10.1109/TMAG.2006.871661.

- 25RI) **G. FINOCCHIO** – M. CARPENTIERI - E. CARDELLI – B. AZZERBONI
“Analytical solution of Everett Integral using Lorentzian Preisach Function Approximation”.
Journal of Magnetism and Magnetic Materials, vol. 300, pp. 451-470, May 2006.
DOI: 10.1016/j.jmmm.2005.05.032

- 24RI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“Micromagnetic Simulations of Nanosecond Magnetization Reversal Processes in Magnetic Nanopillar”.
Journal of Applied Physics, vol. 99, (08G522), April 2006.
DOI: 10.1063/1.2177049.

- 23RI) **G. FINOCCHIO** – I. N. KRIVOROTOV - M. CARPENTIERI – G. CONSOLO - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“Magnetization Dynamics Driven by the Combined Action of AC Magnetic Field and DC Spin-Polarized Current”.
Journal of Applied Physics, vol. 99, (08G507), April 2006.
DOI: 10.1063/1.2165136.

- 22RI) G. CONSOLO - **G. FINOCCHIO** - M. CARPENTIERI – E. CARDELLI - B. AZZERBONI
“About identification of Scalar Preisach Functions of Magnetic Material with Hysteresis”.
IEEE Trans. On Magnetic, vol. 42, n°4, pp. 923-926, April 2006.
DOI: 10.1109/TMAG.2006.871915.

- 21RI) **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
“A Simplified Model for Vector Hysteresis Computation”.
IEEE Trans. On Magnetic, vol. 42, n°4, pp. 955-958, April 2006.

DOI: 10.1109/TMAG.2006.871991.

- 20RI) G. CONSOLO - **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI
“Removing Numerical Instabilities in the Preisach Model Identification Using Genetic Algorithms”.
Physica B Condensed Matter, vol. 372, pp. 91-96, February 2006.
DOI: 10.1016/j.physb.2005.10.014.
- 19RI) **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
“Fast Computing Vector Hysteresis Model”.
Physica B Condensed Matter, vol. 372, pp. 128-132, February 2006.
DOI: 10.1016/j.physb.2005.10.032.
- 18RI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“A Comparison of Spin-Polarized Current Driven Magnetization Reversal in Co/Cu/Co Magnetic Multilayers”.
Physica B Condensed Matter, vol. 372, pp. 294-298, February 2006.
DOI: 10.1016/j.physb.2005.10.070.
- 17RI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - L. TORRES - E. MARTINEZ - L. LOPEZ-DIAZ
“Influence of the Magnetostatic Coupling in Magnetization Switching driven by Spin-Polarized Current”.
Science and Engineering: B, vol. 126, pp. 190-193, January 2006.
DOI: 10.1016/j.mseb.2005.09.057.
- 16RI) E. MARTINEZ - L. TORRES - L. LOPEZ-DIAZ - M. CARPENTIERI - **G. FINOCCHIO**
“Spin Polarized Current-Driven Switching in Permalloy Nanostructures”.
Journal of Applied Physics, vol. 97, (10E302), May 2005.
DOI: 10.1063/1.1847292
- This paper has been selected for the May 23, 2005, Vol 11, issue 20 of **Virtual Journal of Nanoscale Science & Technology**.
- 15RI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“Effect of the Classical Ampere Field in Micromagnetic Computations of Spin Polarized Current-Driven Magnetization Processes”.
Journal of Applied Physics, vol. 97, (10C713), May 2005.
DOI: 10.1063/1.1853291.
- This paper has been selected for the May 16, 2005, Vol 11, issue 19 of **Virtual Journal of Nanoscale Science & Technology**.
- 14RI) **G. FINOCCHIO** - M. CARPENTIERI - G. CONSOLO - B. AZZERBONI - F. LA FORESTA
“Remarks about Fuzzy Approach to Model Scalar Hysteresis”.
Journal of Applied Physics, vol. 97, (10E507), May 2005.
DOI: 10.1063/1.1848352.
- 13RI) L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - M. CARPENTIERI - **G. FINOCCHIO**
“Micromagnetic Computation of Spin Polarized Current-Driven Magnetization Reversal in Co/Cu/Co nanopillars”.
Journal of Magnetism and Magnetic Materials, vol. 286, pp. 381-385, February 2005.
DOI: 10.1016/j.jmmm.2004.09.126.
- 12RI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - C. AMPELLI - G. MASCHIO
“An Analytical Isotropic Vector Preisach Model Based on the Lorentzian Function”.
Physica Status Solidi (c), vol. 12, pp. 3740-3743, December 2004.
DOI: 10.1002/pssc.200405563.
- 11RI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - F. LA FORESTA
“A General Fuzzy Model of Scalar Hysteresis”.
Physica Status Solidi (c), vol. 12, pp. 3428-3431, December 2004.
DOI: 10.1002/pssc.200405472.
- 10RI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
“Influence of the Cut Angle and Grain Size on the Behaviour of Non-Oriented Magnetic Steels”.

Physica Status Solidi (c), vol. 12, pp. 3365-3368, December 2004.
DOI: 10.1002/pssc.200405459.

- 9RI) M. CARPENTIERI - **G. FINOCCHIO** -L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - B. AZZERBONI
“Thermal Activation in Spin Polarized Current-Driven Magnetization Reversal Processes”.
Physica Status Solidi (c), vol. 12, pp. 3381-3384, December 2004.
DOI: 10.1002/pssc.200405461.
- 8RI) M. CARPENTIERI - **G. FINOCCHIO** – F. LA FORESTA – B. AZZERBONI
“State Independent Hypothesis to Model the Behaviour of Magnetic Materials”.
Journal of Magnetism and Magnetic Materials, vol. 280, pp. 158-163, September 2004.
DOI: 10.1016/j.jmmm.2004.03.007.
- 7RI) E. CARDELLI - **G. FINOCCHIO** – E. PINZAGLIA
“Increasing the Accuracy of the Numerical Identification of the Modified Scalar Preisach Model”.
IEEE Trans. On Magnetic, vol. 40, n°2, pp. 892-895, March 2004.
DOI: 10.1109/TMAG.2004.825420.
- 6RI) B. AZZERBONI – E. CARDELLI – **G. FINOCCHIO**
“A Comparative Study of Preisach Scalar Hysteresis Models”.
Physica B Condensed Matter, vol. 343 pp. 164-170, January 2004.
DOI: 10.1016/j.physb.2003.09.055.
- 5RI) B. AZZERBONI – M. CARPENTIERI – **G. FINOCCHIO** – M. IPSALE
“Super-Lorentzian Preisach Function and Its Applicability to Model Scalar Hysteresis”.
Physica B Condensed Matter, vol. 343 pp. 121-126, January 2004.
DOI: 10.1016/j.physb.2003.08.082.
- 4RI) B. AZZERBONI – M. CARPENTIERI – **G. FINOCCHIO** – F. LA FORESTA
“A Fuzzy Model of Scalar Hysteresis on Soft Magnetic Materials”.
Physica B Condensed Matter, vol. 343 pp. 132-136, January 2004.
DOI: 10.1016/j.physb.2003.08.084.
- 3RI) B. AZZERBONI – E. CARDELLI – **G. FINOCCHIO** – F. LA FORESTA
“Remarks about the Lorentzian Function Approximation and its Identification in Hysteresis Modeling of Non-Oriented Grain Steels”.
IEEE Trans. On Magnetic, vol. 39, n°5, pp. 3028-3030. September 2003.
DOI: 10.1109/TMAG.2003.815879.
- 2RI) B. AZZERBONI – E. CARDELLI – E. DELLA TORRE – **G. FINOCCHIO**
“Reversible Magnetization and Lorentzian Function Approximation”.
Journal of Applied Physics, vol. 93 number 10, pp. 6635-6637, May 2003.
DOI: 10.1063/1.1557698
- 1RI) B. AZZERBONI – **G. FINOCCHIO** – M. IPSALE – F. LA FORESTA – F.C. MORABITO
“A New Approach to Detection of Muscle Activation by Independent Component Analysis and Wavelet Transform”.
Lecture Notes in Computer Science, Springer –Verlag, vol. 2486, pp. 109-116, September 2002.

LIBRI – BC (AUTORE CAPITOLO), BE (EDITORE LIBRO)

- 9BC) **M. CARPENTIERI - G. FINOCCHIO**
"Spintronic Oscillators Based on Spin-Transfer Torque and Spin-Orbit Torque". Chapter 7.
"Magnetism of Surfaces, Interfaces, and Nanoscale Materials" - ISBN 9780444626349- Elsevier Science.
Edited by R. Camley, Z. Celinski and R. Stamps – October 2015
- 8BC) **C. MILAZZO - G. ANASTASI - P. BRAMANTI - A. QUARTARONE - A. ARRIGO - A. GIORDANO - B. AZZERBONI - G. FINOCCHIO - D. MILARDI**
"A multimodal approach to trace motor cortical-peripheral pathways based on mixed Transcranial Magnetic Stimulation and Diffusion Tensor Imaging technique". *Advances in Biomedical Engineering*. ISBN 978-1-61275-039-2. Vol. 14. Pp. 482-487. Edited by Information Engineering Research Institute (IERI).
Proceedings of 4th International Conference on Environmental Science and Information Application Technology (ESIAT 2012). Bali, Indonesia, December 1-2, 2012
- 7BC) **B. AZZERBONI – G. CONSOLO - G. FINOCCHIO**
"Micromagnetics of nanoscale spin-valves".
"HandBook of NanoPhysics". ISBN 978-1-4200754-4-1. Vol. 7. Chapter 8. CRC Press. Edited by K. D. Sattler. September 2010.
- 6BC) **G. FINOCCHIO - L. TORRES - B. AZZERBONI**
"Micromagnetic Modeling of Magnetization dynamics Driven by Spin Polarized Current: Basics of Numerical Modeling,. Analysis of a Confined System".
"Magnetic Nanostructures in Modern Technology: Spintronics, Magnetic MEMS and Recording". ISBN 978-1-4020-6337-4 – pp. 61-67. Springer – NATO ASI Book Series. September 2007.
- 5BC) **G. FINOCCHIO – L. TORRES – B. AZZERBONI**
"Modeling of Spin Polarized Current Driven Magnetization Dynamics in Nanostructures"
Magnetic Nanostructures for Micro-Electromechanical Systems and Spintronic Applications: Lectures. (Vol. 1) - ISBN 88-8296-209-1 – pp. 187-210 - Falzea Editore – July 2006
- 4BE) **G. FINOCCHIO - M. CARPENTIERI - G. CONSOLO - A. ROMEO**
Magnetic Nanostructures for Micro-Electromechanical Systems and Spintronic Applications: Students. (Vol. 2) - ISBN 88-8296-209-1 - Falzea Editore – July 2006
- 3BE) **G. FINOCCHIO - M. CARPENTIERI - G. CONSOLO - A. ROMEO**
Magnetic Nanostructures for Micro-Electromechanical Systems and Spintronic Applications: Lectures. (Vol. 1) - ISBN 88-8296-209-1 - Falzea Editore – July 2006
- 2BC) **G. FINOCCHIO - M. CARPENTIERI - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ**
"Magnetization Dynamics Driven by Spin-Polarized Current in Ferromagnetic Nanopillars – A Computational Study"
Magnetic Properties of Laterally Confined Nanometric Structures. ISBN 81-7895-212-2 – pp. 209 - 216 - Research Signpost – June 2006.
- 1BC) **G. FINOCCHIO – M. CARPENTIERI – B. AZZERBONI – E. CARDELLI**
"Analytical Scalar Preisach Model and State Independent Hypothesis Formulation".
Preisach Memorial Book. ISBN 963058264-3 - pp. 165 – 174 - Akadémiai Kiadó, Budapest, January 2005.

PUBBLICAZIONI E COMUNICAZIONI A CONGRESSI INTERNAZIONALI

- 203CI) R. TOMASELLO - M. RICCI - G. SIRACUSANO - P. BURRASCANO - Z. ZENG - M. CARPENTIERI - **G. FINOCCHIO**
Influence of the second order perpendicular anisotropy on the spin-torque diode effect in MTJ and implications on energy harvesting. AQ-15. The 60th Annual Conference on Magnetism and Magnetic Materials (MMM - 16). 31 October - 4 November, 2016. New Orleans, Louisiana, USA.
- 202CI) A. GIORDANO - R.V. VERBA - R. ZIVIERI - A. LAUDANI - V. PULIAFITO - G. GUBBIOTTI - R. TOMASELLO - G. SIRACUSANO - B. AZZERBONI - M. CARPENTIERI - A.N. SLAVIN - **G. FINOCCHIO**
Spin-Hall nano-oscillator with oblique magnetization and Dzyaloshinskii-Moriya interaction as generator of skyrmions and nonreciprocal spin-waves. Oral presentation. BB-08. The 60th Annual Conference on Magnetism and Magnetic Materials (MMM - 16). 31 October - 4 November, 2016. New Orleans, Louisiana, USA.
- 201CI) R. TOMASELLO - M. RICCI - P. BURRASCANO - V. PULIAFITO - M. CARPENTIERI - **G. FINOCCHIO**
Electrical detection of single magnetic skyrmion at room temperature. ET-02. The 60th Annual Conference on Magnetism and Magnetic Materials (MMM - 16). 31 October - 4 November, 2016. New Orleans, Louisiana, USA.
- 200CI) V. PULIAFITO - A. GIORDANO - B. AZZERBONI - **G. FINOCCHIO**
Transmission of Information along a Nanomagnetic Logic Path Clocked by Current. EU-08. The 60th Annual Conference on Magnetism and Magnetic Materials (MMM - 16). 31 October - 4 November, 2016. New Orleans, Louisiana, USA.
- 199CI) Z. ZENG - B. FANG - M. CARPENTIERI - X. HAO - H. JIANG - J. KATINE - I. KRIVOROTOV - B. OCKER - J. LANGER - K.L. WANG - B. ZHANG - B. AZZERBONI - P. KHALILI - **G. FINOCCHIO**
Ultra-high sensitivity spin-torque diode in the absence of external magnetic fields. Invited talk. GF-01 The 60th Annual Conference on Magnetism and Magnetic Materials (MMM - 16). 31 October - 4 November, 2016. New Orleans, Louisiana, USA.
- 198CI) A. GIORDANO, A. LAUDANI, V. PULIAFITO, R. ZIVIERI, G. GUBBIOTTI, B. AZZERBONI, M. CARPENTIERI, G. FINOCCHIO
Effect of the Oersted field and Dzyaloshinskii-Moriya interaction on the dynamical behavior of a spin-Hall oscillator. Oral #69. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 197CI) VITO PULIAFITO, ANNA GIORDANO, BRUNO AZZERBONI AND GIOVANNI FINOCCHIO
Clocking for nanomagnetic logic driven by spin-Hall effect: a micromagnetic analysis. Oral #109. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 196CI) **G. FINOCCHIO** - M. RICCI - R. TOMASELLO - A. GIORDANO - M. LANUZZA - V. PULIAFITO - P. BURRASCANO - B. AZZERBONI - M. CARPENTIERI
Skyrmion based microwave detectors and harvesting. Oral #217. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 195CI) R. V. VERBA - M. CARPENTIERI - **G. FINOCCHIO** - V.S. TIBERKEVICH - A.N. SLAVIN
Parametric excitation of propagating spin waves in ferromagnetic nanowires by voltage-controlled magnetic anisotropy. Oral #113. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 194CI) **G. FINOCCHIO**
Improvement of the MTJ based oscillators and detectors by controlling the trade-off between the interfacial perpendicular anisotropy and the demagnetizing field. Invited talk of the session "Nanomagnetism and Spintronics part IV". Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 193CI) G. SIRACUSANO - R. TOMASELLO - A. GIORDANO - V. PULIAFITO - B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO**
Stability and dynamics of radial vortex with interfacial Dzyaloshinskii – Moriya Interaction. Oral #64. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.

- 192CI) R. TOMASELLO - V. PULIAFITO - A. GIORDANO - B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO**
Effect of the second order perpendicular anisotropy on skyrmion stability and motion in racetrack memories. Oral #102. Advance in Magnetism (AIM 2016). Bormio, Italy. March 14-16, 2016.
- 191CI) **G. FINOCCHIO** - M. RICCI - R. TOMASELLO - A. GIORDANO - M. LANUZZA - V. PULIAFITO - P. BURRASCANO - B. AZZERBONI - M. CARPENTIERI.
Skyrmion based microwave detectors (oral presentation). AC-03. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 190CI) A. GOKCE - O. OZATAY - T. HAUET - **G. FINOCCHIO** - A. GIORDANO - J. KATINE
Spin Torque Driven Bubble Motion in Magnetic Nanowires with Perpendicular Anisotropy. (oral presentation). AD-13. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 189CI) A. GIORDANO - V. PULIAFITO - A. LAUDANI - G. GUBBIOTTI - M. CARPENTIERI - B. AZZERBONI - **G. FINOCCHIO**
Effect of the Oersted field and Dzyaloshinskii-Moriya interaction on the dynamical behavior of a spin-Hall oscillator (oral presentation). BD-02. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 188CI) M. MADAMI - G. GUBBIOTTI - T. MORIYAMA - K. TANAKA - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. ONO - S. TACCHI - G. CARLOTTI
Spin Hall amplification of magnetic eigenmodes in transversely magnetized rectangular NiFe dots with different width. DU-06. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 187CI) M. CARPENTIERI - R. ZIVIERI - R. TOMASELLO - **G. FINOCCHIO**
Instanton droplet driven by spin-transfer torque in perpendicular materials with Dzyaloshinskii–Moriya Interaction (oral presentation). FC-04. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 186CI) V. PULIAFITO - A. GIORDANO - B. AZZERBONI - **G. FINOCCHIO**
Nanomagnetic logic with unstable and non-uniform states of clocking. FT-10. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 185CI) G. SIRACUSANO - R. TOMASELLO - A. GIORDANO - V. PULIAFITO - B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO**
Stabilization and dynamics of radial vortex with interfacial Dzyaloshinskii–Moriya Interaction. GU-04. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 184CI) R.V. VERBA, M. CARPENTIERI, G. FINOCCHIO, V. TYBERKEVYCH, A.N. SLAVIN
Excitation of propagating spin waves in ferromagnetic nanowires by microwave voltage-controlled magnetic anisotropy (oral presentation). HF-03. The 13th Joint MMM/Intermag Conference. San Diego, CA, USA, January 11 – 15, 2016.
- 183CI) R. TOMASELLO - E. MARTINEZ - R. ZIVIERI - L. TORRES - M. CARPENTIERI - **G. FINOCCHIO**
Skyrmion Racetrack Memory Driven By Spin Hall Effect (oral). O1. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 182CI) V. PULIAFITO - A. GIORDANO - B. AZZERBONI - **G. FINOCCHIO**
Clocking of Nanomagnetic Logic Driven By Spin-Hall Effect: A Micromagnetic Analysis (oral presentation). O5. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 181CI) M. CARPENTIERI - R. TOMASELLO - **G. FINOCCHIO** - R. ZIVIERI
Topological Skyrmion Dynamics Driven By Spin-Transfer Torque (oral presentation). O7. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 180CI) A. GIORDANO - R. ZIVIERI - M. CARPENTIERI - A. LAUDANI - G. GUBBIOTTI - B. AZZERBONI - **G. FINOCCHIO**
Dynamical Response Of Spin-Hall Nano-Oscillators As Function Of External Bias Field (oral presentation). O11. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.

- 179CI) R. ZIVIERI - R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
Skyrmion Motion Under A Spin-Hall Current In Confined Magnetic Nanostructures (oral presentation). O12. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 178CI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - B. FANG - Z. ZENG
Advances In Spin-Torque Diode Sensitivity: Theory And Experiments (oral presentation). O25. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 177CI) O. CASABLANCA - F. GARESCÌ - **G. FINOCCHIO** - B. AZZERBONI - M. CHIAPPINI
Dynamical Response Of Seismic Metamaterials In Presence of Soil Hysteresis. P7. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 176CI) O. CASABLANCA - F. GARESCÌ - L. BONACCORSI - B. AZZERBONI - M. CHIAPPINI - **G. FINOCCHIO**
Periodic System With Hysteresis. P8. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 175CI) A. GIORDANO - V. PULIAFITO - A. LAUDANI - G. GUBBIOTTI - B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO**
"Synchronization Of Spin-Hall Oscillators: A Micromagnetic Study". P19. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 174CI) M. MADAMI - G. GUBBIOTTI - T. MORIYAMA - K. TANAKA - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. ONO - S. TACCHI - G. CARLOTTI
"Magnetic Eigenmodes Excited By Spin Hall Effect In Transversely Magnetized Rectangular NiFe Dots". P30. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 173CI) S. PERNA - R. TOMASELLO - C. SERPICO - M. D'AQUINO - **G. FINOCCHIO**
"Switching Properties Of Perpendicular STT-MRAMs With Second Order Anisotropy". P33. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 172CI) LIU - V. PULIAFITO - C. DERANLOT - F. MONTAIGNE - S. PETIT - S. ANDRIEU - O. OZATAY - **G. FINOCCHIO** - T. HAUET
"Single Bubble Formation In Patterned Dot Array Under In-Plane Magnetic Field". P38. 10th Hysteresis Modeling and Micromagnetics HMM 2015. IASI, Romania, 18-20 May 2015.
- 171CI) R. ZIVIERI - R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
"Skyrmion motion induced by spin-Hall current in constrained geometries". (oral presentation) AF-07. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 170CI) A. GIORDANO - A. LAUDANI - G. GUBBIOTTI - B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO**
"Spin-Hall Nano-oscillator: a study based on the synchronization". (oral presentation) BB-07. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 169CI) M. CARPENTIERI - R. TOMASELLO - **G. FINOCCHIO** - R. ZIVIERI
"Topological Skyrmion Dynamics Driven by Spin-Transfer Torque". (oral presentation) CB-10. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 168CI) R. TOMASELLO - M. RICCI - P. BURRASCANO - M. LANUZZA - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO**
"Skyrmion Based Microwave Detector and STT-MRAM". (oral presentation) CB-11. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 167CI) S. PERNA - R. TOMASELLO - C. SERPICO - M. D'AQUINO - **G. FINOCCHIO**
"Switching properties of perpendicular STT-MRAMs with second order anisotropy". FV-12. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 166CI) T. LIU - V. PULIAFITO - C. DERANLOT - F. MONTAIGNE - S. PETIT - S. ANDRIEU - O. OZHATAY - **G. FINOCCHIO** - T. HAUET
"Mechanism of single bubble formation in patterned dot array under in-plane magnetic field". GU-01. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.

- 165CI) Z. ZENG - G. FINOCCHIO - B. FANG - H. JIANG - J. LANGER - J. KATINE - P. KHALILI - K.L. WANG
"Spin-torque diode with a perpendicularly magnetized free layer". HP-05. INTERMAG Asia 2015. 11-15 May 2015, Beijing, China.
- 164CI) A. T. HABIBOGLU - V. KARAKAS - M. METE - A. COSKUNER - Y. B. KALYONCU - A. GOKCE - O. OZATAY - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO** - F. CELEGATO - P. TIBERTO
"Spin Torque Driven Anti-vortex Dynamics in Patterned Nanomagnets" (oral presentation) H1.00169. APS March Meeting 2015. 2–6 March 2015, San Antonio, Texas, USA.
- 163CI) M. METE - A. COSKUNER - A. T. HABIBOGLU - V. KARAKAS - Y. B. KALYONCU - I. GOKCE - O. OZATAY - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO** - F. CELEGATO - P. TIBERTO
"Static and Dynamic Properties of Magnetic Antivortices in Asteroid-Shaped Permalloy Nanomagnets" (oral presentation) D30.00012. APS March Meeting 2015. 2–6 March 2015, San Antonio, Texas, USA.
- 162CI) A. GOKCE - O. OZATAY - B. BULUT - C. RAINEY - J. A. KATINE - T. HAUET - A. GIORDANO - **G. FINOCCHIO**
"Lateral Domain Transfer In a Magnetic Nanowire With Perpendicular-to-Plane-Anisotropy For Three-Dimensional Memory Applications" (oral presentation) D30.00007. APS March Meeting 2015. 2–6 March 2015, San Antonio, Texas, USA.
- 161CI) R. ZIVIERI - R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
"Thiele's Equation for Magnetic Skyrmion in the Presence of Spin Hall Current". HC-13 (oral presentation). The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 160CI) R. TOMASELLO - E. MARTINEZ - R. ZIVIERI - L. TORRES - M. CARPENTIERI - **G. FINOCCHIO**
"Skyrmion based racetrack memories". HC-10 (oral presentation). The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 159CI) V. KARAKAS - M. METE - A. T. HABIBOĞLU - A. COSKUNER - A. GOKCE - O. OZATAY - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO** - F. CELEGATO - P. TIBERTO
"Static and Dynamic Properties of Magnetic Antivortices in Patterned Permalloy Nanomagnets". GW-06. The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 157CI) V. PULIAFITO - G. CAMPOBELLO - G. CONSOLO - **G. FINOCCHIO** - B. AZZERBONI
"A Modulation Adaptive Scheme based on a Spin-Torque Oscillator to Match Communication Channel Features". GS-01. The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 156CI) A. GIORDANO - M. CARPENTIERI - A. LAUDANI - G. GUBBIOTTI - B. AZZERBONI - **G. FINOCCHIO**
"Synchronization of spin-Hall nano oscillators". FV-14. The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 155CI) R. TOMASELLO - M. LANUZZA - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO**
"Use of skyrmions in the design of multi-level STT-MRAMs." CW-08. The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 154CI) M. CARPENTIERI - R. TOMASELLO - R. ZIVIERI - **G. FINOCCHIO**
"Topological skyrmion mode driven by spin transfer-torque". CW-05. The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 153CI) G. SIRACUSANO - R. TOMASELLO - A. GIORDANO - V. PULIAFITO - B. AZZERBONI - M. CARPENTIERI - A. LA CORTE - **G. FINOCCHIO**
"Intrinsic synchronization of an array of spin-torque oscillators driven by the Spin Hall Effect". CH-11 (oral presentation). The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 152CI) Z. M. ZENG - **G. FINOCCHIO** - H. W. JIANG - J. LANGER - J. KATINE - P. KHALILI AMIRI - K. L. WANG.

"Ultrahigh sensitivity spin-torque diode in the absence of external magnetic fields". BD-09 (oral presentation). The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.

- 151CI) M. MADAMI - G. GUBBIOTTI - T. MORIYAMA - K. TANAKA - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. ONO - S. TACCHI - G. CARLOTTI
"Micro-focused Brillouin light scattering study of the magnetic eigenmodes excited by Spin Hall effect in a transversely magnetized rectangular NiFe dot". BB-10 (oral presentation). The 59th Annual Conference on Magnetism and Magnetic Materials (MMM - 14). 3-7 November 2014, Honolulu, Hawaii, USA.
- 150CI) R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
"Micromagnetic study of the electrical-field-assisted magnetization switching in MTJ devices". The 16th Conference on Electromagnetic Field Computation (CEFC 2014). ID: 853. 25-28 May, 2014. Annecy, France.
Micromagnetic study of the electrical-field-assisted magnetization switching in MTJ devices
- 149CI) M. CARPENTIERI - M. RICCI - P. BURRASCANO - **G. FINOCCHIO**
"Analysis of Spin-Torque Driven Magnetization Dynamics in Magnetic Tunnel Junction structures excited by wideband coded current signals". The 16th Conference on Electromagnetic Field Computation (CEFC 2014). ID: 788. 25-28 May, 2014. Annecy, France.
- 148CI) R. TOMASELLO - M. CARPENTIERI - **G. FINOCCHIO**
"Synchronization scheme of spintronic nano-oscillators based on the spin-Hall effect". The 16th Conference on Electromagnetic Field Computation (CEFC 2014). ID: 311. 25-28 May, 2014. Annecy, France.
- 147CI) M. RICCI - P. BURRASCANO - M. CARPENTIERI - **G. FINOCCHIO**
"Chirp spectroscopy applied to the characterization of Ferromagnetic resonance in Magnetic Tunnel Junction". GW-20. INTERMAG Europe 2014. 4-8 May 2014, Dresden, Germany.
- 146CI) M. CARPENTIERI - R. TOMASELLO - M. RICCI - P. BURRASCANO - F. LATTARULO - **G. FINOCCHIO**
Micromagnetic study of electrical-field-assisted magnetization switching in MTJ devices. HQ-10. INTERMAG Europe 2014. 4-8 May 2014, Dresden, Germany.
- 145CI) A. GIORDANO - M. CARPENTIERI - A. LAUDANI - B. AZZERBONI - **G. FINOCCHIO**
"Excitation of localized and propagating spin wave modes in spin-Hall Nano-oscillators". BT-04. INTERMAG Europe 2014. 4-8 May 2014, Dresden, Germany.
- 144CI) A. GIORDANO - V. PULIAFITO - L. TORRES - M. CARPENTIERI - B. AZZERBONI - **G. FINOCCHIO**
"Micromagnetic study of spin-transfer-driven vortex dipole and vortex quadrupole dynamics". INTERMAG Europe 2014. BS-11. 4-8 May 2014, Dresden, Germany.
- 143CI) V. PULIAFITO - B. AZZERBONI - **G. FINOCCHIO**
"Numerical study on the self-modulated solitons excited in a spin-torque nano-contact oscillator". INTERMAG Europe 2014. GR-15. 4-8 May 2014, Dresden, Germany.
- 142CI) R. TOMASELLO - E. MARTINEZ - L. TORRES - M. CARPENTIERI - **G. FINOCCHIO**
"Skyrmion lattice motion driven by the spin-Hall effect". INTERMAG Europe 2014. AS-17. 4-8 May 2014, Dresden, Germany.
- 141CI) G. SIRACUSANO - A. GIORDANO - V. PULIAFITO - M. CARPENTIERI - R. TOMASELLO - B. AZZERBONI - **G. FINOCCHIO**
"Nanowire Spin-Hall oscillator stationary vs non-stationary dynamics". INTERMAG Europe 2014. AS-07. 4-8 May 2014, Dresden, Germany.
- 140CI) A. GIORDANO - M. CARPENTIERI - R. ZIVIERI - G. SIRACUSANO - B. AZZERBONI - **G. FINOCCHIO**
"Nanowire spin-torque oscillator with non-uniform polarizer: a micromagnetic study". INTERMAG Europe 2014. GS-01. 4-8 May 2014, Dresden, Germany.
- 139CI) V. PULIAFITO - B. AZZERBONI - **G. FINOCCHIO**

“Self-modulated solitons excited in an STNO”. The 58th Annual Conference on Magnetism and Magnetic Materials (MMM - 13). AH-02. (Oral Presentation). 4-8 November 2013, Denver, Colorado, USA.

- 138CI) G. SIRACUSANO – A. LA CORTE - **G. FINOCCHIO**
“A generalized tool for accurate time-domain separation of excited modes in spin-torque oscillators”. The 58th Annual Conference on Magnetism and Magnetic Materials (MMM - 13). BX-04. 4-8 November 2013, Denver, Colorado, USA.
- 137CI) A. GIORDANO – M. CARPENTIERI – A. LAUDANI – B. AZZERBONI - **G. FINOCCHIO**
“Spin-Hall Nano-oscillator: a micromagnetic study”. The 58th Annual Conference on Magnetism and Magnetic Materials (MMM - 13). DH-02. (Oral Presentation). 4-8 November 2013, Denver, Colorado, USA.
- 136CI) R. TOMASELLO – M. CARPENTIERI - **G. FINOCCHIO**
“Magnetization dynamics driven by the combined effect of the Spin Transfer Torque and the Spin Orbit Torque”. DH-12. (Oral Presentation). The 58th Annual Conference on Magnetism and Magnetic Materials (MMM - 13). 4-8 November 2013, Denver, Colorado, USA.
- 135CI) V. PULIAFITO – S. KOMINEAS – O. OZATAY - L. TORRES – T. HAUET - B. AZZERBONI - **G. FINOCCHIO**
“Micromagnetic analysis of dynamical solitons based on the time domain evolution of the topological density”. The 58th Annual Conference on Magnetism and Magnetic Materials (MMM - 13). BG-08. (Oral Presentation). 4-8 November 2013, Denver, Colorado, USA.
- 134CI) **G. FINOCCHIO** – Z. ZENG
“Spin-torque nano-oscillators: trends and challenges”. CI1-01 (Invited presentation). 20th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM 2013). Torino, Italy, 30 June-5 July 2013.
- 133CI) U. KILIC - **G. FINOCCHIO** - T. HAUET - S. H. FLOREZ - G. AKTAS - O. OZATAY
“Macrospin model of magnetic reversal process in CoNi/Pd multilayers based on stochastic LLB equation”. p. 122 (Oral presentation). 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 132CI) V. PULIAFITO – S. KOMINEAS – O. OZATAY - L. TORRES – T. HAUET - B. AZZERBONI - **G. FINOCCHIO**
“Micromagnetic modelling of soliton mode in in-plane ferromagnets”. p. 82 (Oral presentation). 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 131CI) A. GIORDANO – M. CARPENTIERI – A. LAUDANI - **G. FINOCCHIO**
“A soliton mode excited by the spin-Hall effect”. p. 69. 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 130CI) A. GIORDANO – S. KOMINEAS – L. TORRES - B. AZZERBONI - **G. FINOCCHIO**
“Micromagnetic modelling of soliton mode in in-plane ferromagnets”. p. 68. 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 129CI) **G. FINOCCHIO** – V. PULIAFITO - N. DONATO – L. TORRES - M. LATINO - B. AZZERBONI
“Magnetic vortex based biosensor”. p. 66. 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 128CI) E. CARDELLI - M. CARPENTIERI - A. FABBA - **G. FINOCCHIO**
“Modeling of Hysteresis in Magnetic Multidomains”. p. 24. 9th Hysteresis Modeling and Micromagnetics HMM 2013. Taormina, Italy, 13-15 May 2013.
- 127CI) E. CARDELLI – M. CARPENTIERI – A. FABBA - **G. FINOCCHIO**
“Modeling of hysteresis in multidomain nanostructures”. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 126CI) E. MARTINEZ - **G. FINOCCHIO**
“Domain wall dynamics in asymmetric stacks: the roles of Rashba field and the Spin Hall effect”. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.

- 125CI) D. AURELIO – A: GIORDANO - L. TORRES - **G. FINOCCHIO** – E. MARTINEZ
 “Micromagnetic study of domain wall dynamics in square crossed section wires: the role of the Oersted field”. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 124CI) U. KILIC - **G. FINOCCHIO** – T. HAUET – S. H. FLOREZ – B. D. TERRIS - G. AKTAS - O. OZATAY
 “Stochastic Landau Lifshitz Bloch Macrospin Model of Thermally Assisted Switching in CoNi/Pd Magnetic Multilayers”. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 123CI) P. TIBERTO - F. CELEGATO - G. BARRERA - E. ENRICO - M. CARPENTIERI – **G. FINOCCHIO**
 “Magnetization processes in two-dimensional dot arrays of Ni₈₀Fe₂₀ films fabricated by Focused Ion Beam lithography”. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 122CI) L. TORRES – **G. FINOCCHIO** - M. CARPENTIERI – E. MARTINEZ – L. LOPEZ-DIAZ – A. HERNANDEZ-LOPEZ - D. AURELIO
 “Intrinsic and Thermal Activated Linewidths of Spin-Transfer-Driven Vortex Self-oscillations”. GP-04. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 121CI) M. CARPENTIERI – F. LATTARULLO - **G. FINOCCHIO** - A: GIORDANO - B. AZZERBONI
 “Non-Adlerian phase slip and non-stationary synchronization of spin-torque oscillators to a microwave source”. BR-12. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 120CI) **G. FINOCCHIO** – A. GIORDANO – R. ZIVIERI - M. CARPENTIERI – B. AZZERBONI
 “Spin-waves excitation in ferromagnetic nanowire”. BP-14. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 119CI) M. CARPENTIERI – L. LIU - L. TORRES – D. RALPH - **G. FINOCCHIO**
 “Micromagnetic understanding of magnetization dynamics driven by the spin-Hall effect”. BD-02. (Oral Presentation) The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 118CI) R. TOMASELLO - V. PULIAFITO - B. AZZERBONI - **G. FINOCCHIO**
 “Switching properties in magnetic tunnel junctions with interfacial perpendicular anisotropy”. AQ-13. The 12th Joint MMM/Intermag Conference. Chicago, IL, USA, January 14 – 18, 2013.
- 117CI) M. CARPENTIERI - F. LATTARULO - **G. FINOCCHIO** - L. TORRES
 “Parallel Computation of linewidths of spin-transfer driven vortex self-oscillations”. XII International Workshop on Optimization and Inverse Problems in Electromagnetism (OIPE). Ghent, Belgium, September 19 – 21, 2012.
- 116CI) V. PULIAFITO – **G. FINOCCHIO** - B. AZZERBONI
 “Numerical analysis on the output frequency and power of a spin-torque nano-contact oscillator”. Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.
- 115CI) **G. FINOCCHIO** - M. CARPENTIERI – A: GIORDANO - B. AZZERBONI
 “Non stationary synchronization of spin-torque oscillators to a microwave source”. Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.
- 114CI) A. GIORDANO - D. AURELIO – L. TORRES - **G. FINOCCHIO** – E. MARTINEZ
 “Micromagnetic study of the domain wall dynamics along square cross section wires: the role of the Oersted field”. Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.
- 113CI) L. TORRES – D. AURELIO – E. MARTINEZ - M. CARPENTIERI – **G. FINOCCHIO**
 “Linewidths of Spin Transfer Driven Vortex Self-oscillations”. Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.
- 112CI) **G. FINOCCHIO** - M. CARPENTIERI – B. AZZERBONI
 “Injection locking at zero field in hybrid spin-valves”. (Oral Presentation) Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.
- 111CI) F. CELEGATO - G. BARRERA - E. ENRICO - P. TIBERTO - M. CARPENTIERI - **G. FINOCCHIO**
 “Magnetisation process of dot arrays in Ni₈₀Fe₂₀ films fabricated by Focused Ion Beam lithography”. Joint European Magnetic Symposia (JEMS 2012). Parma, Italy. September, 9-14, 2012.

- 110CI) U. KILIC - **G. FINOCCHIO** - I. CINAR - I.V. INLEK - G. AKTAS - O. OZATAY
 “Landau-Lifshitz Bloch Macrospin Simulations of Magnetization Switching Dynamics in Perpendicular Anisotropy CoNi/Pd Magnetic Multilayer Thin Films”. (Oral Presentation) 2012 APS (American Physical Society) March Meeting. Boston, USA, February 27 - March 2, 2012.
- 109CI) A. GIORDANO - **G. FINOCCHIO** - L. TORRES - M. CARPENTIERI – B. AZZERBONI
 “Semi-implicit integration scheme for Landau–Lifshitz–Gilbert–Slonczewski equation”. HV-12 The 56th Annual Conference on Magnetism and Magnetic Materials (MMM - 11). Scottsdale, AZ, USA, October 30 – November 3, 2011.
- 108CI) **G. FINOCCHIO** - M. CARPENTIERI – T. MORIYAMA – B. AZZERBONI - R. A. BUHRMAN - D. C. RALPH
 “Injection locking at zero field in spin-valves composed by two free layers and perpendicular polarizers”. (Oral presentation) HC-02 The 56th Annual Conference on Magnetism and Magnetic Materials (MMM - 11). Scottsdale, AZ, USA, October 30 – November 3, 2011.
- 107CI) **G. FINOCCHIO** - A. PRATTELLA – L. TORRES - S. KOMINEAS – B. AZZERBONI
 “Magnetic bubble nucleation and dynamics driven by spin-transfer torque”. AW-08 The 56th Annual Conference on Magnetism and Magnetic Materials (MMM - 11). Scottsdale, AZ, USA, October 30 – November 3, 2011.
- 106CI) M. CARPENTIERI – M. RICCI – P. BURRASCANO - L. TORRES - **G. FINOCCHIO**
 “Wideband RF signal to trigger fast switching processes in magnetic tunnel junctions”. HR-06 The 56th Annual Conference on Magnetism and Magnetic Materials (MMM - 11). Scottsdale, AZ, USA, October 30 – November 3, 2011.
- 105CI) **G. FINOCCHIO** – A. PRATTELLA – G. CONSOLO – E. MARTINEZ - B. AZZERBONI
 “Complete micromagnetic description of the spin-transfer-torque oscillators as function of the in-plane field angle”. WAP-06 - 8th Hysteresis Modeling and Micromagnetics HMM 2011. Levico, Italy, 9-11 May 2011.
- 104CI) **G. FINOCCHIO** – I. KRIVOROTOV – X. CHENG - L. TORRES – B. AZZERBONI
 “Micromagnetic understanding of stochastic resonance driven by spin-transfer-torque”. (Oral presentation) - WDO-04 - 8th Hysteresis Modeling and Micromagnetics HMM 2011. Levico, Italy, 9-11 May 2011.
- 103CI) M. CARPENTIERI – C. RAGUSA - **G. FINOCCHIO** – L. TORRES
 “Coupled magnetic antivortex in a 2D magnonic crystal”. MBP-04 - 8th Hysteresis Modeling and Micromagnetics HMM 2011. Levico, Italy, 9-11 May 2011.
- 102CI) M. CARPENTIERI – E. MARTINEZ - **G. FINOCCHIO**
 “Micromagnetic dynamics of coupled vortices driven by spin-polarized current”. WAP-02 – 8th Hysteresis Modeling and Micromagnetics HMM 2011. Levico, Italy, 9-11 May 2011.
- 101CI) J. AKERMAN - S. BONETTI – G. CONSOLO - **G. FINOCCHIO** – P. MODULI - F. MANCOFF
 “Propagating and Localized Spin Wave Modes in Nano-Contact Spin Torque Oscillators.” (Invited) INTERMAG Conference 2011. AA – 04. Taipei, Taiwan, April 25-29, 2011.
- 100CI) C. RAGUSA – M. CARPENTIERI - P. TIBERTO – F. CELEGATO - E. ENRICO - L. BOARINO - **G. FINOCCHIO** - F. KHAN - O. KHAN
 “Magnonics crystal by magnetic antivortices confined in antidots”. INTERMAG Conference 2011. AR – 02. Taipei, Taiwan, April 25-29, 2011.
- 99CI) G. CONTE - **G. FINOCCHIO** - P. TIBERTO – A. FABÀ – F. CELEGATO – A. PRATTELLA – B. AZZERBONI – E. CARDELLI
 “Double negative metamaterials based on ferromagnetic microwire: a numerical study”. INTERMAG Conference 2011. AN – 02. Taipei, Taiwan, April 25-29, 2011.
- 98CI) P. MODULI – V. PULIAFITO - **G. FINOCCHIO** – G. CONSOLO - S. BONETTI – Y. POGORYELOV - J. AKERMAN - O. G. HEINONEN
 “Non-stationary magnetization oscillations excited in a magnetic tunnel junction”. (Oral - Presentation) The 55th Annual Conference on Magnetism and Magnetic Materials (MMM - 10). GC – 09. Atlanta, GA, USA, November 14-18, 2010.

- 97CI) S. BONETTI – G. CONSOLO - **G. FINOCCHIO** –F. MANCOFF – J. AKERMAN
 “Spin wave mode hopping in nanocontact spin torque oscillators: time-domain analysis”. (Oral - Presentation)
 The 55th Annual Conference on Magnetism and Magnetic Materials (MMM - 10). GC – 07. Atlanta, GA, USA, November 14-18, 2010.
- 96CI) **G. FINOCCHIO** – I. KRIVOROTOV – X. CHENG - L. TORRES – B. AZZERBONI
 “Interwell vs intrawell stochastic resonance driven by spin-transfer torque in nanomagnet”. The 55th Annual
 Conference on Magnetism and Magnetic Materials (MMM - 10). FP – 11. Atlanta, GA, USA, November 14-
 18, 2010.
- 95CI) E. MARTINEZ – **G. FINOCCHIO** – M. CARPENTIERI
 “Analysis of stochastic resonance in a bistable system based on a domain wall.” (Oral - Presentation) The 55th
 Annual Conference on Magnetism and Magnetic Materials (MMM - 10). CC – 08. Atlanta, GA, USA,
 November 14-18, 2010.
- 94CI) **G. FINOCCHIO** – N. DONATO – L. TORRES - M. LATINO - B. AZZERBONI
 “Magnetoresistance biosensor based on vortex state”, (Oral - Presentation) The 55th Annual Conference on
 Magnetism and Magnetic Materials (MMM - 10). BG – 04. Atlanta, GA, USA, November 14-18, 2010.
- 93CI) M. CARPENTIERI – **G. FINOCCHIO** – B. AZZERBONI – L. TORRES
 “Spin-transfer-torque resonant switching and injection locking in presence of a weak external AC field for spin
 valves with perpendicular materials.” The 55th Annual Conference on Magnetism and Magnetic Materials
 (MMM - 10). BP – 09. Atlanta, GA, USA, November 14-18, 2010.
- 92CI) S. BONETTI - G. CONSOLO - V. PULIAFITO - **G. FINOCCHIO** - F. MANCOFF - V. TIBERKEVICH - A.
 SLAVIN - J. ÅKERMAN
 “Nano-contact spin torque oscillators: mind the angle”. Gordon Research Conferences: Magnetic
 Nanostructure. 8 – 13 August 2010 Bates College, Lewiston, ME (USA)
- 91CI) M. CARPENTIERI – **G. FINOCCHIO** – B. AZZERBONI – E. CARDELLI – A. FABA
 “Magnetic vortex chirality switching driven by a spin-polarized current”. 14th Biennial IEEE Conference on
 Electromagnetic Filed Computation. 36P1. 9-12 May, 2010, Chicago, IL, (USA).
- 90CI) **G. FINOCCHIO** – V. PRIBIAG – L. TORRES - R. A. BUHRMAN – B. AZZERBONI
 “Spin-torque driven magnetic vortex self-oscillations in perpendicular magnetic fields”. The 11th Joint MMM-
 INTERMAG Conference. GD-15 (Oral Presentation), p.1584. 18-22 January, 2010, Washington DC, USA.
- 89CI) M. CARPENTIERI – **G. FINOCCHIO** – L. TORRES – B. AZZERBONI
 “A strategy to reduce magnetization reversal time in nanopillars with perpendicular anisotropy.”. The 11th
 Joint MMM-INTERMAG Conference, p.1501. FV-13. 18-22 January, 2010, Washington DC, USA.
- 88CI) **G. FINOCCHIO** – N. MAUGERI – L. TORRES – B. AZZERBONI
 “Domain wall motion driven by localized spin-polarized current”. The 11th Joint MMM-INTERMAG
 Conference. FS-09, p.1458. 18-22 January, 2010, Washington DC, USA.
- 87CI) **G. FINOCCHIO** – G. SIRACUSANO – V. TIBERKEVICH – I. KRIVOROTOV – L. TORRES – B.
 AZZERBONI
 “Time domain study of frequency-power correlation in spin-torque oscillator”. The 11th Joint MMM-
 INTERMAG Conference. EY-16, p.1295. 18-22 January, 2010, Washington DC, USA.
- 86CI) D- AURELIO – L- TORRES - **G. FINOCCHIO**
 “Thermal effect on spin-torque-driven high-TMR magnetic tunnel junctions”. The 11th Joint MMM-
 INTERMAG Conference. EV-14, p.1241. 18-22 January, 2010, Washington DC, USA.
- 85CI) V. PRIBIAG – J. B. PARK - **G. FINOCCHIO** – O. J. LEE – P. G. GOWTHAM – B. WILLIAMS – D. C-
 RALPH – R. A. BUHRMAN
 “Spin-torque driven vortex dynamics in nanopillars with in-plane or out-of-plane polarizers”. The 11th Joint
 MMM-INTERMAG Conference. EA-12, p.1028. 18-22 January, 2010, Washington DC, USA.
- 84CI) **G. FINOCCHIO** – A. PRATTELLA – G. CONSOLO – L. TORRES – E. CARDELLI – A. FABA – B.
 AZZERBONI

- “Hysteresis driven by spin-polarized-current in spin-torque oscillator as function of the field angle”. The 11th Joint MMM-INTERMAG Conference. DP-12, p. 884. 18-22 January, 2010, Washington DC, USA.
- 83CI) L. TORRES – J. GOMEZ – D. AURELIO – E. JAROMIRSKA – L. LOPEZ-DIAZ – O. ALEJOS – M. HERNANDEZ-LOPEZ - **G. FINOCCHIO** – M. CARPENTIERI – G. CONSOLO
 “Parallelizing micromagnetic computations using FFT in compute unified device architecture (CUDA)”. The 11th Joint MMM-INTERMAG Conference. DP-02, p.874. 18-22 January, 2010, Washington DC, USA.
- 82CI) Y. T. CUI - **G. FINOCCHIO** - C. WANG – J. A. KATINE - R. A. BUHRMAN - D. C. RALPH
 “Single-Shot Time-Domain Studies of Spin-Torque-Driven Switching in Magnetic Tunnel Junctions”. The 11th Joint MMM-INTERMAG Conference. CA-07, p.551. 18-22 January, 2010, Washington DC, USA.
- 81CI) A. FABBA – **G. FINOCCHIO** - B. AZZERBONI – E. CARDELLI
 “Hysteresis modeling of Nanoscale Exchange-biased spin valves”. The 19th International Conference on Soft Magnetic Materials (SMM 2009), 6-8 September, 2009, Torino, Italy.
- 80CI) **G. FINOCCHIO** - G. SIRACUSANO – A. LA CORTE - L. TORRES - B. AZZERBONI
 “Time-frequency characterization of magnetization dynamics in spin-torque oscillators”. (Oral - Presentation) 7th Hysteresis Modeling and Micromagnetics HMM 2009. Gaithersburg, MD, USA, May 11-14, 2009.
- 79CI) G. CONSOLO - **G. FINOCCHIO** - L. LOPEZ-DIAZ - B. AZZERBONI
 “Numerical analysis of the nonlinear excitation of subcritical spin-wave modes within a micromagnetic framework”. 7th Hysteresis Modeling and Micromagnetics HMM 2009. Gaithersburg, MD, USA, May 11-14, 2009.
- 78CI) M. CARPENTIERI - L. TORRES - **G. FINOCCHIO** - B. AZZERBONI
 “Micromagnetic investigation of temperature dependence of microwave nanoscillator linewidths driven by spin-polarized currents. 7th Hysteresis Modeling and Micromagnetics HMM 2009. Gaithersburg, MD, USA, May 11-14, 2009.
- 77CI) **G. FINOCCHIO** - G. CONSOLO - L. TORRES - B. AZZERBONI
 “Non-stationary soliton-like modes driven by spin-polarized current”. 7th Hysteresis Modeling and Micromagnetics HMM 2009. Gaithersburg, MD, USA, May 11-14, 2009.
- 76CI) **G. FINOCCHIO** - G. SIRACUSANO - L. TORRES - B. AZZERBONI
 “Non-stationary magnetization dynamics driven by spin-transfer-torque in nanoscale spin-valves”. (Oral - Presentation) INTERMAG 2009. Sacramento, CA, USA, May 4 - May 8, 2009.
- 75CI) G. CONSOLO - **G. FINOCCHIO** - L. LOPEZ_DIAZ - B. AZZERBONI
 “Numerical investigations on the excitation of spin wave bullet modes within a micromagnetic framework”. INTERMAG 2009. Sacramento, CA, USA, May 4 - May 8, 2009.
- 74CI) **G. FINOCCHIO** - G. CONSOLO - L. TORRES - B. AZZERBONI
 “Excitation of non-propagative modes in a confined point-contact”. INTERMAG 2009. Sacramento, CA, USA, May 4 - May 8, 2009.
- 73CI) V. PULIAFITO – B. AZZERBONI – G. CONSOLO - **G. FINOCCHIO** – L. LOPEZ-DIAZ
 “Analytical and Numerical Modeling of Nonlinear Spin-Transfer Frequency Modulators”. The 53th Annual Conference on Magnetism and Magnetic Materials (MMM - 08). Austin, Texas, USA, November 10-14, 2008.
- 72CI) B. AZZERBONI – E. CARDELLI - **G. FINOCCHIO**
 “Hysteresis modeling of exchange-bias nanoscale spin valves”. The 53th Annual Conference on Magnetism and Magnetic Materials (MMM - 08). Austin, Texas, USA, November 10-14, 2008.
- 71CI) **G. FINOCCHIO** - O. OZATAY – L. TORRES - R. A. BUHRMAN - D. C. RALPH – B. AZZERBONI
 “Spin-Torque-Induced Rotational Dynamics of a Magnetic Vortex Dipole”. (Oral) The 53th Annual Conference on Magnetism and Magnetic Materials (MMM - 08). Austin, Texas, USA, November 10-14, 2008.
- 70CI) G. SIRACUSANO – **G. FINOCCHIO** – I. KRIVOROTOV - L. TORRES – G. CONSOLO – B. AZZERBONI

“Non-stationary signal processing of multiple oscillatory modes excited by spin-polarized current in nanoscale exchange-bias spin valves”. The 53th Annual Conference on Magnetism and Magnetic Materials (MMM - 08). Austin, Texas, USA, November 10-14, 2008.

- 69CI) L. TORRES – **G. FINOCCHIO** – G. CONSOLO – B. AZZERBONI
“Thermal effects in the magnetization dynamics of nanoscale spin-valves”. The 53th Annual Conference on Magnetism and Magnetic Materials (MMM - 08). Austin, Texas, USA, November 10-14, 2008.
- 68CI) I. KRIVOROTOV – N. EMLEY – J. SANKEY - **G. FINOCCHIO** – L. TORRES - B. AZZERBONI – R. BUHRMAN – D. RALPH
“Time-Domain Studies of Nonlinear Magnetization Dynamics Excited by Spin Transfer Torque”. (Oral - Invited) INTERMAG 2008. Madrid, Spain, May 4 - May 8, 2008.
- 67CI) V. PULIAFITO – B. AZZERBONI – G. CONSOLO - **G. FINOCCHIO** – L. TORRES – L. LOPEZ-DIAZ
“Magnetic Vortex Oscillators driven by Spin-Polarized Current and Perpendicular Anisotropy at Zero-Field”. INTERMAG 2008. Madrid, Spain, May 4 - May 8, 2008.
- 66CI) **G. FINOCCHIO** – L. TORRES – M. CARPENTIERI – G. CONSOLO – B. AZZERBONI
“Non-stationary analysis of large magnetization dynamics in nanoscale spin-valves”. INTERMAG 2008. Madrid, Spain, May 4 - May 8, 2008.
- 65CI) K. V. THADANI, **G. FINOCCHIO**, Z.-P LI, O. OZATAY, J. C. SANKEY, I. N. KRIVOROTOV, Y.-T. CUI, R. A. BUHRMAN, D. C. RALPH
“Tuning the Coherence of Spin-Torque-Driven Dynamics in Nanomagnetic Oscillators”. INTERMAG 2008. Madrid, Spain, May 4 - May 8, 2008.
- 64CI) L. TORRES – **G. FINOCCHIO** – M. CARPENTIERI – E. MARTINEZ – E. JAROMIRSKA – O. ALEJOS – L. LOPEZ-DIAZ
“Micromagnetic modeling of magnetization switching mechanisms in high magnetoresistance tunnel junctions”. INTERMAG 2008. Madrid, Spain, May 4 - May 8, 2008.
- 63CI) K. V. THADANI, Z.-P LI, O. OZATAY, J. C. SANKEY, I. N. KRIVOROTOV, Y.-T. CUI, R. A. BUHRMAN, D. C. RALPH, **G. FINOCCHIO**,
“Linewidths of Spin-Torque-Driven Nanomagnetic Oscillators as a Function of Field Angle and Temperature”. (Oral Presentation) 2008 APS (American Physical Society) March Meeting. New Orleans, USA, March 8-10, 2008.
- 62CI) G. CONSOLO - L. LOPEZ-DIAZ - L. TORRES – **G. FINOCCHIO** – B. AZZERBONI
“Bias-Field-Free Spin-Transfer Oscillators with Perpendicular Anisotropy in the Free Layer”. The 52th Annual Conference on Magnetism and Magnetic Materials (MMM - 07). Tampa, Florida, USA, November 5-9, 2007.
- 61CI) **G. FINOCCHIO** – L. TORRES – G. CONSOLO - B. AZZERBONI – L. LOPEZ-DIAZ - A. ROMEO
“Magnetization dynamics driven by non-uniform Spin-Polarized Current density in High TMR - Magnetic Tunnel Junctions”. The 52th Annual Conference on Magnetism and Magnetic Materials (MMM - 07). Tampa, Florida, USA, November 5-9, 2007.
- 60CI) M. CARPENTIERI – **G. FINOCCHIO** – L. TORRES - B. AZZERBONI
“Modeling of fast reversal processes in nano-scale spin valves”. The 52th Annual Conference on Magnetism and Magnetic Materials (MMM - 07). Tampa, Florida, USA, November 5-9, 2007.
- 59CI) **G. FINOCCHIO** – I. KRIVOROTOV - L. TORRES - B. AZZERBONI
“Micromagnetic simulations of multiple oscillatory modes excited by spin-polarized current in nanoscale spin valves”. The 52th Annual Conference on Magnetism and Magnetic Materials (MMM - 07). Tampa, Florida, USA, November 5-9, 2007.
- 58CI) **G. FINOCCHIO** – L. TORRES – B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - A. ROMEO – G. SIRACUSANO
“Modeling of magnetization switching driven by spin-polarized-current in magnetoresistive random access memory”. International Conference on Modelling and Simulations (MS'07). Terni, Italy, October 1-3, 2007.
- 57CI) **G. FINOCCHIO** – B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - A. ROMEO

- “Magnetization Reversal driven by spin-polarized-current in MgO based Magnetic Tunnel Junctions”. Tenth International Meeting on Optics of Excitons in Confined Systems. Messina, Italy, September 10-13, 2007.
- 56CI) G. CONSOLO - B. AZZERBONI – **G. FINOCCHIO**
 “Spin-wave excitation by spin-polarized current in magnetic nanostructures”. Tenth International Meeting on Optics of Excitons in Confined Systems. Messina, Italy, September 10-13, 2007.
- 55CI) M. CARPENTIERI – **G. FINOCCHIO** – B. AZZERBONI – G. CONSOLO - A. ROMEO
 “Macrospin approximation and Micromagnetic Model of Spin Transfer Dynamics”. The 16th International Conference on the Computation of Electromagnetic Fields (Compumag 2007). Aachen, Germany, June 24-28, 2007.
- 54CI) **G. FINOCCHIO** – M. CARPENTIERI – L. TORRES – G. CONSOLO - A. ROMEO – B. AZZERBONI
 “Micromagnetic Simulations of Magnetization Reversal in MgO based Magnetic Tunnel Junctions driven by Spin-Polarized Current”. The 16th International Conference on the Computation of Electromagnetic Fields (Compumag 2007). Aachen, Germany, June 24-28, 2007.
- 53CI) **G. FINOCCHIO** – I. KRIVOROTOV - L. TORRES - B. AZZERBONI
 “Dynamics due to Spin Transfer Torque in Symmetric Spin-Valves”. 6th Symposium on Hysteresis and Micromagnetic Modeling 2007 (HMM 07). Naples, Italy, June 4-6, 2007.
- 52CI) A. ROMEO – **G. FINOCCHIO** – M. CARPENTIERI - L. TORRES - G. CONSOLO - B. AZZERBONI
 “A Numerical Solution of the Standard Problem #4 using Fifth Order Runge-Kutta Method with Adaptive Stepsize Control”. 6th Symposium on Hysteresis and Micromagnetic Modeling 2007 (HMM 07). Naples, Italy, June 4-6, 2007.
- 51CI) G. CONSOLO - B. AZZERBONI – **G. FINOCCHIO** – M. CARPENTIERI - A. ROMEO - L. LOPEZ-DIAZ - L. TORRES
 “Micromagnetic Simulations of the Magnetization Precession in Point-Contact Devices with Perpendicular Anisotropy”. 6th Symposium on Hysteresis and Micromagnetic Modeling 2007 (HMM 07). Naples, Italy, June 4-6, 2007.
- 50CI) **G. FINOCCHIO** – M. CARPENTIERI - L. TORRES - G. CONSOLO – A. ROMEO - L. LOPEZ-DIAZ - B. AZZERBONI
 “A Numerical Study of the Magnetization Reversal driven by Spin-Polarized Current in MgO based Magnetic Tunnel Junctions”. 6th Symposium on Hysteresis and Micromagnetic Modeling 2007 (HMM 07). Naples, Italy, June 4-6, 2007.
- 49CI) L. TORRES - **G. FINOCCHIO** – L. LOPEZ-DIAZ - E. MARTINEZ - M. CARPENTIERI - G. CONSOLO – B. AZZERBONI
 “Micromagnetic Modal Analysis of Spin-Transfer-Driven Ferromagnetic Resonance of Individual Nanomagnets”. (oral) International 10th Joint MMM – INTERMAG Conference - Baltimore, Maryland, U.S.A., January 7-11, 2007.
- 48CI) M. CARPENTIERI - L. TORRES – **G. FINOCCHIO** - B. AZZERBONI – L. LOPEZ-DIAZ
 “Micromagnetic Investigation of Precession Dynamics in magnetic nanopillars”. International 10th Joint MMM – INTERMAG Conference - Baltimore, Maryland, U.S.A., January 7-11, 2007.
- 47CI) **G. FINOCCHIO** – O. OZATAY - L. TORRES - M. CARPENTIERI - G. CONSOLO - B. AZZERBONI
 “Micromagnetic Modeling of Magnetization Reversal in Nano-Point Contacts.” International 10th Joint MMM – INTERMAG Conference - Baltimore, Maryland, U.S.A., January 7-11, 2007.
- 46CI) **G. FINOCCHIO** - L. TORRES - G. CONSOLO - M. CARPENTIERI – A. ROMEO - B. AZZERBONI
 “Magnetization Dynamics in CoFe/AlO/Py and CoFe/MgO/Py Magnetic Tunnel Junctions”. International 10th Joint MMM – INTERMAG Conference - Baltimore, Maryland, U.S.A., January 7-11, 2007.
- 45CI) G. CONSOLO - B. AZZERBONI – **G. FINOCCHIO** - L. LOPEZ-DIAZ - L. TORRES
 “Triggering the symmetry break including the Oersted Field in the Magnetization Dynamics of Spin-Transfer Oscillators”. International 10th Joint MMM – INTERMAG Conference - Baltimore, Maryland, U.S.A., January 7-11, 2007.
- 44CI) **G. FINOCCHIO** - L. TORRES - M. CARPENTIERI – G. CONSOLO - B. AZZERBONI

“Spin Transfer Torque Drives Magnetization Dynamics in Co/Cu/Co Multilayer”. International Conference on Magnetism (ICM 2006). Kyoto, Japan, August 20-25, 2006.

- 43CI) M. CARPENTIERI - **G. FINOCCHIO** - L. TORRES - L. LOPEZ-DIAZ - G. CONSOLO – B. AZZERBONI
“Magnetization Dynamics Driven by Spin-Polarized Current in Permalloy Nanomagnets” (Oral). III JOINT EUROPEAN MAGNETIC SYMPOSIA (JEMS). San Sebastian, Spain, June 26 - June 30, 2006.
- 42CI) L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ- **G. FINOCCHIO** – M. CARPENTIERI - G. CONSOLO – B. AZZERBONI
“Micromagnetic Modal Analysis of Persistent Dynamics Driven by Spin Transfer Torque”. III JOINT EUROPEAN MAGNETIC SYMPOSIA (JEMS). San Sebastian, Spain, June 26 - June 30, 2006.
- 41CI) G. CONSOLO - **G. FINOCCHIO** – L. TORRES - M. CARPENTIERI - L. LOPEZ-DIAZ - B. AZZERBONI
“Spin Torque Switching in Py/Cu/Py and Py/Cu/CoPt Spin-Valve Nanopillars” (Oral). III JOINT EUROPEAN MAGNETIC SYMPOSIA (JEMS). San Sebastian, Spain, June 26 - June 30, 2006.
- 40CI) P. BURRASCANO - E. CARDELLI - M. CARPENTIERI- E. DELLA TORRE - A. FABA - **G. FINOCCHIO**
“Vector Hysteresis Model at Micromagnetic Scale” (Oral). INTERMAG 2006. San Diego, California, USA, May 8 - May 12, 2006.
- 39CI) **G. FINOCCHIO** – G. FUCHS - L. TORRES - M. CARPENTIERI – G. CONSOLO - L. LOPEZ-DIAZ - B. AZZERBONI
“Micromagnetic Modeling of Magnetization Dynamics in Magnetic Tunnel Junctions Driven by Spin-Polarized Current” (Oral). CEFC 2006 Miami, FL USA - April 30 - May 3, 2006.
- 38CI) **G. FINOCCHIO** - I. KRIVOROTOV - L. TORRES - B. AZZERBONI
“Magnetization Reversal driven by Spin-Polarized Current in Exchanged Biased Samples”. CEFC 2006 Miami, FL USA - April 30 - May 3, 2006.
- 37CI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“Micromagnetic Simulations of Nanosecond Magnetization Reversal Processes in Magnetic Nanopillar”. The 50th Annual Conference on Magnetism and Magnetic Materials (MMM - 05) pp. 268-269. San Jose USA, October 30 – November 3, 2005.
- 36CI) **G. FINOCCHIO** – I. KRIVOROTOV - M. CARPENTIERI – G. CONSOLO - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
“Magnetization Dynamics Driven by the Combined Action of AC Magnetic Field and DC Spin-Polarized Current” (Oral) p. 154. The 50th Annual Conference on Magnetism and Magnetic Materials (MMM - 05). San Jose USA, October 30 – November 3, 2005.
- 35CI) G. CONSOLO - **G. FINOCCHIO** - M. CARPENTIERI – E. CARDELLI - B. AZZERBONI
“About identification of Scalar Preisach Functions of Magnetic Material with Hysteresis”. COMPUMAG 05 (CD ROM). Shenyang, Liaoning, China, June 26 - 30, 2005.
- 34CI) **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
“A Simplified Model for Vector Hysteresis Computation”. COMPUMAG 05 (CD ROM). Shenyang, Liaoning, China, June 26 - 30, 2005.
- 33CI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - E. MARTINEZ - L. TORRES - L. LOPEZ-DIAZ
“Theoretical Dynamic Stability Diagram of Magnetic Multilayers Driven by Spin-Polarized Current”. 2005 EMRS (European Materials Research Society), (CD ROM). Strasbourg, France, May 31- June 3, 2005.
- 32CI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - E. MARTINEZ - L. TORRES - L. LOPEZ-DIAZ
“Influence of the Antiferromagnetic Coupling in Dynamical Switching of Permalloy Nanopillars”. 2005 EMRS (European Materials Research Society), (CD ROM). Strasbourg, France, May 31- June 3, 2005.
- 31CI) L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - M. CARPENTIERI - **G. FINOCCHIO**
“Ferromagnetic Relaxation Modes in Permalloy Nanostructures and its excitation by Spin Polarized Currents”. 5th Symposium on Hysteresis and Micromagnetic Modeling 2005 (HMM 05) (Oral), pp. 10-11. – Invited Paper – Budapest, Hungary, May 30 - June 1 2005.

- 30CI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
 “A Comparison of Current Driven Magnetization Dynamics in Different Co/Cu/Co Magnetic Multilayer”. 5th Symposium on Hysteresis and Micromagnetic Modeling 2005 (HMM 05), pp. 44-45. Budapest, Hungary, May 30 - June 1 2005.
- 29CI) G. CONSOLO - **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI
 “Removing Numerical Instabilities in the Preisach Model Identification Using Genetic Algorithms”. 5th Symposium on Hysteresis and Micromagnetic Modeling 2005 (HMM 05), pp. 104-105. Budapest, Hungary, May 30 - June 1 2005.
- 28CI) **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
 “Fast Computing Vector Hysteresis Model”. 5th Symposium on Hysteresis and Micromagnetic Modeling 2005 (HMM 05), pp. 162-163. Budapest, Hungary, May 30 - June 1 2005.
- 27CI) **G. FINOCCHIO** - B. AZZERBONI - M. CARPENTIERI
 “A Simple Vector Preisach Model”. The 49th Annual Conference on Magnetism and Magnetic Materials (MMM - 04), pp. 432-433. Jacksonville USA, November 7- 11, 2004.
- 26CI) **G. FINOCCHIO** - M. CARPENTIERI - G. CONSOLO - B. AZZERBONI - F. LA FORESTA
 “Remarks about Fuzzy Approach to Model Scalar Hysteresis”. The 49th Annual Conference on Magnetism and Magnetic Materials (MMM - 04), pp. 434-435. Jacksonville USA, November 7- 11, 2004.
- 25CI) E. MARTINEZ - L. TORRES - L. LOPEZ-DIAZ - M. CARPENTIERI - **G. FINOCCHIO**
 “Spin Polarized Current-Driven Switching in Permalloy Nanostructures”. The 49th Annual Conference on Magnetism and Magnetic Materials (MMM - 04), p. 265. Jacksonville USA, November 7- 11, 2004.
- 24CI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
 “Effect of the Classical Ampere Field in Micromagnetic Computations of Spin Polarized Current-Driven Magnetization Processes”. The 49th Annual Conference on Magnetism and Magnetic Materials (MMM - 04), p. 269. Jacksonville USA, November 7- 11, 2004.
- 23CI) M. CARPENTIERI - **G. FINOCCHIO** - B. AZZERBONI - E. CARDELLI
 “Influence of the Cut Angle and Grain Size on the Behaviour of Non-Oriented Magnetic Steels”. Second Seeheim Conference on Magnetism Seeheim (SCM 04), p. 79 - Germany, June 27- July 1, 2004.
- 22CI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - C. AMPELLI - G. MASCHIO
 “An Analytical Vector Preisach Model Based on the Lorentzian Function”. Second Seeheim Conference on Magnetism Seeheim (SCM 04), p. 106 - Germany, June 27- July 1, 2004.
- 21CI) **G. FINOCCHIO** - M. CARPENTIERI - B. AZZERBONI - F. LA FORESTA
 “A General Fuzzy Model of Scalar Hysteresis”. Second Seeheim Conference on Magnetism Seeheim, Germany (SCM 04), p. 107 - June 27- July 1, 2004.
- 20CI) **G. FINOCCHIO** - M. CARPENTIERI - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - B. AZZERBONI
 “Thermal Activation in Spin Polarized Current-Driven Magnetization Reversal Processes”. Second Seeheim Conference on Magnetism Seeheim (SCM 04), p. 84 - Germany, June 27- July 1, 2004.
- 19CI) L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ - M. CARPENTIERI - **G. FINOCCHIO**
 “Micromagnetic Computation of Spin Polarized Current-Driven Magnetization Reversal in Co/Cu/Co nanopillars”. 5th International Symposium on Metallic Multilayers (MML 04), Boulder, Colorado, U.S.A., June 7-11, 2004.
- 18CI) B. AZZERBONI - E. CARDELLI - M. CARPENTIERI - **G. FINOCCHIO**
 “Modeling of cut incidence of laminated magnetic steels”. International 9th Joint MMM – INTERMAG Conference – p.42 - Anaheim, California, U.S.A., January 5-9, 2004.
- 17CI) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - F.C. MORABITO
 “Time-Frequency Characterization of Multi-Channel Dynamic sEMG Recordings by Neural Networks”. 2003 International Joint Conference on Neural Networks (IJCNN 03) (Oral) pp. 172 - 176 - Portland, Oregon, July 20-24, 2003.
- 16CI) E. CARDELLI - **G. FINOCCHIO** – E. PINZAGLIA

“Increasing the Accuracy of the Numerical Identification of the Modified Scalar Preisach Model”. The 14th Conference on the Computation of Electromagnetic Fields (COMPUMAG 03). Proceeding of COMPUMAG 03 (CD ROM). Saratoga Springs, New York USA, July 13-17, 2003.

- 15CI) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - F. LA FORESTA
“Reversible Magnetization and State Independent Model”. International Symposium on Theoretical Electrical Engineering (ISTET’03) (Oral) – pp. 515-518 – Warsaw, Poland, July 6-9, 2003.
- 14CI) C. AMPELLI - D. DI BELLA - **G. FINOCCHIO** - D.G. LISTER - G. MASCHIO
“On Line Determination of Heat Transfer Coefficient in Polymerisation Reactors”. ICheaP-6 (Oral) - *Chemical Engineering Transactions*, pp. 243-248 Vol. 3.- Pisa, Italy, June 8-11, 2003.
- 13CI) B. AZZERBONI - E. CARDELLI - **G. FINOCCHIO**
“A Comparative Study of Scalar Hysteresis Models based on the Preisach Approach”. 4th Symposium on Hysteresis and Micromagnetic Modeling 2003 (HMM) (Oral). p.85 - Salamanca, Spain, May 28-30, 2003.
- 12CI) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE
“Super-Lorentzian Preisach Function and Its Applicability to Model Scalar Hysteresis”. 4th Symposium on Hysteresis and Micromagnetic Modeling 2003 (HMM). p.43 - Salamanca, Spain, May 28-30, 2003.
- 11CI) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - F. LA FORESTA
“Remarks about Fuzzy Approach to Model Scalar Hysteresis of Soft Magnetic Materials”. 4th Symposium on Hysteresis and Micromagnetic Modeling 2003 (HMM). p. 79 - Salamanca, Spain, May 28-30, 2003.
- 10CI) B. AZZERBONI - E. CARDELLI - **G. FINOCCHIO**
“Remarks about the Lorentzian Function Approximation in Hysteresis Modeling of Not Oriented Grain Steels”. INTERMAG 2003 (Oral) – Proceeding of INTERMAG 2003 (CD-ROM) – Boston USA, March 30-April 3, 2003.
- 9CI) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA
“Fuzzy Approach to Modeling Scalar Hysteresis”. INTERMAG 2003 (Oral) - Proceeding of INTERMAG 2003 (CD-ROM) – Boston USA, March 30-April 3, 2003.
- 8CI) B. AZZERBONI - E. CARDELLI - **G. FINOCCHIO** - F. LA FORESTA
“Irreversible and Reversible Magnetization of Soft Steels for Hard and Easy Axes”. 2nd North American Perpendicular Magnetic Recording Conference (NAPMRC) – p. 30 - Monterey, California, January 6-8, 2003.
- 7CI) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - F. LA FORESTA
“Experimental Characterization of Reversible Magnetization by Classical Scalar Preisach Model”. 2nd North American Perpendicular Magnetic Recording Conference (NAPMRC) – p. 31 - Monterey, California, January 6-8, 2003.
- 6CI) B. AZZERBONI - E. CARDELLI – E. DELLA TORRE- **G. FINOCCHIO**
“Reversible Magnetization and Lorentzian Function Approximation”. The 47th Annual Conference on Magnetism and Magnetic Materials (MMM) – p. 49 - Tampa, Florida USA, November 11-15, 2002.
- 5CI) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - F.C. MORABITO.
“Intracranial Pressure Signals Forecasting with Wavelet Transform and Neuro-Fuzzy Network”. The Second Joint Meeting of the IEEE Engineering in Medicine and Biology And Biomedical Engineering Society - pp. 1343, 1344. Houston, Texas USA, October 23-26, 2002.
- 4CI) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - M.J. MCKEOWN - F.C. MORABITO.
“Spatio-temporal analysis of surface Electromyography signals by Independent Component and Time Scale Analysis”. The Second Joint Meeting of the IEEE Engineering in Medicine and Biology And Biomedical Engineering Society (Oral) - pp. 112, 113. Houston, Texas USA, October 23-26, 2002.
- 3CI) B. AZZERBONI - E. CARDELLI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA
“Lorentzian functions approach to the modelling of the scalar hysteresis of magnetic steels”. The Tenth Biennial IEEE Conference on Electromagnetic Field Computation (CEFC) p. 178 - Perugia, Italy, June 16-19, 2002.

- 2CI) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA -F.C. MORABITO
“A wavelet approach to intracranial pressure signal forecasting”. The Tenth Biennial IEEE Conference on Electromagnetic Field Computation (CEFC) p. 215 - Perugia, Italy, June 16-19, 2002.
- 1CI) B. AZZERBONI – **G. FINOCCHIO** – M. IPSALE – F. LA FORESTA – F.C. MORABITO
“A New Approach to Detection of Muscle Activation by Independent Component Analysis and Wavelet transform”. XIII Italian Workshop On Neural Networks (WIRN). Vietri Sul Mare SA, Italy, May 30 - June 1, 2002.

PUBBLICAZIONI A CONGRESSI NAZIONALI

- 64CN) M. CARPENTIERI, G. FINOCCHIO, R. TOMASELLO, B. AZZERBONI
"Dimostrazione sperimentale di diodi spintronici a larga banda per energy harvesting". ET 2018 - Roma, 14-15 Giugno 2018.
- 63CN) V. PULIAFITO, A. GIORDANO, G. FINOCCHIO, B. AZZERBONI
"Studio micromagnetico di un oscillatore spin-Hall antiferromagnetico nel range dei terahertz". ET 2018 - Roma, 14-15 Giugno 2018.
- 62CN) A. GIORDANO, V. PULIAFITO, G. FINOCCHIO, B. AZZERBONI
"Studio di oscillatori spintronici basati sull'effetto spin-hall con campo magnetico obliquo e interazione DMI (Dzyaloshinskii-Moriya) come generatore di skyrmions". ET 2018 - Roma, 14-15 Giugno 2018.
- 61CN) M. CARPENTIERI - G. SIRACUSANO - V. PULIAFITO - A. GIORDANO - S. VERGURA - B. AZZERBONI - G. FINOCCHIO
"Descrizione statistica dello switching in STT-MRAM". ET 2017 - Milano, 29-30 Giugno 2017.
- 60CN) A. GIORDANO - V. PULIAFITO - G. SIRACUSANO - G. FINOCCHIO - B. AZZERBONI
"PETASPIN: soluzione petascale-nativa per calcoli micromagnetici e spintronici su GPU". ET 2017 - Milano, 29-30 Giugno 2017.
- 59CN) V. PULIAFITO - A. GIORDANO - A. LAUDANI - M. CARPENTIERI - G. FINOCCHIO - B. AZZERBONI
"Sincronizzazione di oscillatori Spin-Hall" ET 2017 - Milano, 29-30 Giugno 2017.

ET 2016 - Palermo, 15-17 Giugno 2016.

- 55CN) A. GIORDANO – V. PULIAFITO – A. LAUDANI – **G. FINOCCHIO** – B. AZZERBONI
"Studio sulla sincronizzazione di nano-oscillatori basati sull'effetto spin-Hall". ET 2015 - Genova, 17-19 Giugno 2015.
- 54CN) V. PULIAFITO– A. GIORDANO – **G. FINOCCHIO** – B. AZZERBONI
"Logica nanomagnetica: uno studio numerico". ET 2015 - Genova, 17-19 Giugno 2015.
- 53CN) M. CARPENTIERI - R. TOMASELLO - B. AZZERBONI - **G. FINOCCHIO**
"Progettazione di nano-oscillatori basati sul trasferimento del momento angolare di spin e sull'effetto spin-Hall". ET 2015 - Genova, 17-19 Giugno 2015.
- 52CN) P. BURRASCANO - M. RICCI - M. CARPENTIERI - **G. FINOCCHIO**
"Segnali codificati in ambito spintronico: utilizzo di segnali a larga banda per la caratterizzazione e la manipolazione dell'effetto spin-transfer torque in dispositivi micromagnetici". ET 2015 - Genova, 17-19 Giugno 2015.
- 51CN) M. MADAMI - G. GUBBIOTTI - T. MORIYAMA - K. TANAKA - G. SIRACUSANO - M. CARPENTIERI - **G. FINOCCHIO** - T. ONO - S. TACCHI - G. CARLOTTI
"Micro-focused Brillouin light scattering study of the magnetization dynamics driven by Spin Hall effect in a transversely magnetized NiFe nanowire". CO2-03. The 4th Italian Conference on Magnetism MAGNET 2015. Bologna, Italy. 17-19 February 2015.
- 50CN) R. ZIVIERI - R. TOMASELLO - **G. FINOCCHIO** - M. CARPENTIERI
"Topological modes driven by spin-transfer torque". CP2-05. The 4th Italian Conference on Magnetism MAGNET 2015. Bologna, Italy. 17-19 February 2015.
- 49CN) A. GIORDANO – M. CARPENTIERI – A. LAUDANI – G. GUBBIOTTI – B. AZZERBONI – **G. FINOCCHIO**
"Synchronization of spin-Hall nano oscillators". CP2-02. The 4th Italian Conference on Magnetism MAGNET 2015. Bologna, Italy. 17-19 February 2015.
- 48CN) F. CELEGATO - P. TIBERTO - G. BARRERA - G. CONTA - M. COISSON - A. GIORDANO - M. CARPENTIERI - **G. FINOCCHIO** - A. GOKCE - O. OZATAY

"Skyrmion Racetrack Memory Driven By Spin Hall Effect". BP3-05. The 4th Italian Conference on Magnetism MAGNET 2015. Bologna, Italy. 17-19 February 2015.

- 47CN) R. TOMASELLO - E. MARTINEZ - R. ZIVIERI - L. TORRES - M. CARPENTIERI - **G. FINOCCHIO**
"Skyrmion Racetrack Memory Driven By Spin Hall Effect". CO2-04 (oral presentation). The 4th Italian Conference on Magnetism MAGNET 2015. Bologna, Italy. 17-19 February 2015.
- 46CN) **G. FINOCCHIO** - M. CARPENTIERI - M. RICCI - P. BURRASCANO
"Segnali codificati in ambito spintronico: utilizzo di segnali a larga banda per la caratterizzazione e la manipolazione dell'effetto spin-transfer torque in dispositivi micromagnetici". ET 2014 - Sorrento, Napoli, 19-20 Giugno 2014.
- 45CN) S. VERGURA - M. CARPENTIERI - G. SIRACUSANO - **G. FINOCCHIO**
"Studio di reti intelligenti con approccio adattativo basato su wavelet". ET 2014 - Sorrento, Napoli, 19-20 Giugno 2014.
- 44CN) M. CARPENTIERI - R. TOMASELLO - B. AZZERBONI - **G. FINOCCHIO**
"Schema di sincronizzazione di dispositivi MTJ a tre terminali". ET 2014 - Sorrento, Napoli, 19-20 Giugno 2014.
- 43CN) V. PULIAFITO – **G. FINOCCHIO** – A. GIORDANO – G. CONSOLO – S. KOMINEAS – L. TORRES – O. OZATAY – T. HAUET – B. AZZERBONI
"Dinamiche non-lineari in nano-strutture magnetiche dovute all'eccitazione di modi non-uniformi". ET 2013 - Padova 20-21 Giugno 2013.
- 42CN) A. GIORDANO – V. PULIAFITO – M. CARPENTIERI – A. LAUDANI – G. CONSOLO – B. AZZERBONI – **G. FINOCCHIO**
"Solitoni eccitati da effetto spin-Hall". ET 2013 - Padova 20-21 Giugno 2013.
- 41CN) **G. FINOCCHIO** – B. AZZERBONI
"Nano-oscillatori spintronici basati su giunzioni magnetiche ad effetto tunnel – effetto dell'anisotropia di interfaccia nelle prestazioni dinamiche". ET 2013 - Padova 20-21 Giugno 2013.
- 40CN) M. CARPENTIERI – **G. FINOCCHIO** – R. TOMASELLO – F. LATTARULO – B. AZZERBONI
"Dinamica della magnetizzazione dovuta al trasferimento di spin mediante l'effetto spin-Hall". Oral presentation. ET 2013 - Padova 20-21 Giugno 2013.
- 39CN) M. CARPENTIERI - F. LATTARULO - L. CARNIMEO - **G. FINOCCHIO** - B. AZZERBONI - L. TORRES
"Studio numerico di fenomeni di sincronizzazione degli oscillatori spintronici". ET 2012 - Catania 21-22 Giugno 2012.
- 38CN) V. PULIAFITO, A. BRAMANTI, G. CONSOLO, **G. FINOCCHIO**, A. GIORDANO, A. PRATTELLA, E. MARTINEZ, B. AZZERBONI
"Analisi numerica della frequenza e della potenza in uscita da un oscillatore spintronico a nano-contatto". ET 2012 - Catania 21-22 Giugno 2012.
- 37CN) A. GIORDANO - A. BRAMANTI - G. CONSOLO - **G. FINOCCHIO** - A. PRATTELLA - V. PULIAFITO - E. MARTINEZ - B. AZZERBONI
"Studio Micromagnetico delle dinamiche delle domain wall attraverso sezioni quadrate: il ruolo del campo di Oersted". ET 2012 - Catania 21-22 Giugno 2012.
- 36CN) A. CALISTO – A. BRAMANTI - **G. FINOCCHIO** - A. GIORDANO – A. PRATTELLA - V. PULIAFITO - B. AZZERBONI
"Fenomeni di risonanza stocastica dovuti a correnti spin-polarizzate e fluttuazioni termiche in dispositivi spintronici". ET 2011 - Bologna 15-17 Giugno 2011.
- 35CN) A. CALISTO – A. BRAMANTI - **G. FINOCCHIO** - A. GIORDANO – A. PRATTELLA - V. PULIAFITO - B. AZZERBONI
"Diagnosi della patologia idrocefalo normoteso: elaborazione numerica e classificazione statistica di features estratte da segnali di pressione intracranica". ET 2011 - Bologna 15-17 Giugno 2011.

- 34CN) A. GIORDANO – **G. FINOCCHIO** - V. PULIAFITO - A. PRATTELLA - A. BRAMANTI - A. CALISTO – G. CONSOLO – M. CARPENTIERI – L. TORRES - B. AZZERBONI
 “Codice di calcolo micromagnetico per le dinamiche collettive in cristalli magnonici”. ET 2011 - Bologna 15-17 Giugno 2011.
- 33CN) A. PRATTELLA - **G. FINOCCHIO** - A. BRAMANTI - A. CALISTO – A. GIORDANO – V. PULIAFITO - B. AZZERBONI
 “Dinamiche di oscillazione persistente di oscillazione della magnetizzazione in funzione dell’angolo del campo magnetico applicato”. ET 2011 - Bologna 15-17 Giugno 2011.
- 32CN) V. PULIAFITO - A. BRAMANTI - A. CALISTO – G. CONSOLO - **G. FINOCCHIO** – A. GIORDANO - A. PRATTELLA - B. AZZERBONI
 “Studio numerico della sincronizzazione in oscillatori spintronici a doppio contatto”. ET 2011 - Bologna 15-17 Giugno 2011.
- 31CN) A. CALISTO – A. BRAMANTI - G. CONSOLO - **G. FINOCCHIO** - A. PRATTELLA – V. PULIAFITO - B. AZZERBONI
 “Confronto di metodi di filtraggio per l’analisi di segnali di pressione intracranica: PCA vs signal averaging”. ET 2010 - Napoli 9-11 Giugno 2010.
- 30CN) **G. FINOCCHIO** - A. BRAMANTI - A. CALISTO – G. CONSOLO - A. PRATTELLA – V. PULIAFITO - B. AZZERBONI
 “Inversione della Magnetizzazione in giunzioni magnetiche ad effetto tunnel”. ET 2010 - Napoli 9-11 Giugno 2010.
- 29CN) V. PULIAFITO - A. BRAMANTI - A. CALISTO – G. CONSOLO - **G. FINOCCHIO** – A. PRATTELLA - B. AZZERBONI
 “Modulazione non-lineare combinata di ampiezza e frequenza in nano-oscillatori spintronici: modello matematico, simulazioni micromagnetiche e confronto con i risultati sperimentali”. ET 2010 - Napoli 9-11 Giugno 2010.
- 28CN) **G. FINOCCHIO** – A. PRATTELLA – G. CONSOLO – B. AZZERBONI
 “Non linear oscillator based on spin torque effects”. 15th National conference on sensor and microsystems. Abstract #81, p. 190-192. 8-10 Febbraio, 2010, Messina, Italy.
- 27CN) V. PULIAFITO - B. AZZERBONI – A. BRAMANTI - A. CALISTO - G. CONSOLO - **G. FINOCCHIO**
 “Analisi micromagnetica delle dinamiche non lineari in nano-modulatori spintronici”. ET 2009 - Lecce 19-21 Giugno 2009.
- 26CN) A. BRAMANTI - A. CALISTO - B. AZZERBONI – G. CONSOLO - **G. FINOCCHIO** – V. PULIAFITO
 “Caratterizzazione delle discontinuità dei segnali dell’attività cerebrale nelle fasi che precedono le crisi epilettiche utilizzando tecniche di analisi non-lineari”. ET 2009 - Lecce 19-21 Giugno 2009.
- 25CN) A. CALISTO - B. AZZERBONI – A. BRAMANTI - G. CONSOLO - **G. FINOCCHIO** – V. PULIAFITO
 “Analisi delle dinamiche magnetiche in nano-oscillatori non lineari in presenza di configurazioni magnetiche non-uniformi”. ET 2009 - Lecce 19-21 Giugno 2009.
- 24CN) **G. FINOCCHIO** – B. AZZERBONI – A. BRAMANTI - A. CALISTO - G. CONSOLO - V. PULIAFITO
 “Un nuovo metodo d’investigazione per l’idrocefalo normoteso mediante analisi di segnali di pressione intracranica: estrazione delle caratteristiche e classificazione dei parametri statistici”. ET 2009 - Lecce 19-21 Giugno 2009.
- 23CN) A. CALISTO – B. AZZERBONI – G. CONSOLO - **G. FINOCCHIO** – V. PULIAFITO - A. ROMEO
 “Indagine di patologie dovute a variazioni di parametri elettrolitici mediante analisi e riconoscimento di segnali biologici ECG”. ET2008 – Pavia 19-21 Giugno 2008.
- 22CN) G. CONSOLO - B. AZZERBONI – A. CALISTO – **G. FINOCCHIO** – V. PULIAFITO - A. ROMEO
 “Caratterizzazione micromagnetica dei modi di onde di spin eccitati in nanostrutture magnetiche con geometria point-contact”. ET2008 – Pavia 19-21 Giugno 2008.

- 21CN) G. CONSOLO - B. AZZERBONI – A. CALISTO – **G. FINOCCHIO** – V. PULIAFITO - A. ROMEO
 “Studio micromagnetico delle proprietà esibite da nano-oscillatori spintronici pilotati da una corrente spin-polarizzata ed un campo di anisotropia perpendicolare”. ET2008 – Pavia 19-21 Giugno 2008.
- 20CN) **G. FINOCCHIO** - B. AZZERBONI – A. CALISTO – G. CONSOLO - V. PULIAFITO – A. ROMEO
 “Dinamiche micromagnetiche in spin-valves dovute ad una corrente spin-polarizzata”. ET2008 – Pavia 19-21 Giugno 2008. INVITED ORAL.
- 19CN) V. PULIAFITO - B. AZZERBONI – A. CALISTO – G. CONSOLO - **G. FINOCCHIO** – A. ROMEO
 “Modulazione di frequenza lineare e non-lineare in nano-oscillatori spintronici”. ET2008 – Pavia 19-21 Giugno 2008.
- 18CN) A. ROMEO - B. AZZERBONI – A. CALISTO – G. CONSOLO - **G. FINOCCHIO** – V. PULIAFITO
 “Soluzione numerica del problema standard #4 mediante l’algoritmo Adams-Bashforth-Moulton”. ET2008 – Pavia 19-21 Giugno 2008.
- 17CN) A. ROMEO - **G. FINOCCHIO** – B. AZZERBONI – M. CARPENTIERI – P. CARTA – G. CONSOLO
 “Soluzione numerica del problema standard #4 mediante l’algoritmi Runge-Kutta adattativi del quinto ordine”. ET2007 – Firenze 28-30 Giugno 2007.
- 16CN) **G. FINOCCHIO** – B. AZZERBONI – M. CARPENTIERI – P. CARTA – G. CONSOLO – A. ROMEO
 “Dinamiche di magnetizzazione dovute a correnti spin-polarizzate in magnetic tunnel junctions”. ET2007 – Firenze 28-30 Giugno 2007.
- 15CN) G. CONSOLO – B. AZZERBONI – M. CARPENTIERI – P. CARTA – **G. FINOCCHIO** – A. ROMEO
 “Eccitazioni di onde di spin mediante correnti spin-polarizzate in nanostrutture magnetiche non confinate con geometria point contact”. ET2007 – Firenze 28-30 Giugno 2007.
- 14CN) B. AZZERBONI – G. CONSOLO – **G. FINOCCHIO** – A. ROMEO – – M. CARPENTIERI
 “Modellizzazione micromagnetica di dinamiche di magnetizzazione in nanopillar dovute ad un’azione combinata di una corrente spin polarizzata e campo magnetico”. ET2006 - Torino 15-17 Giugno 2006.
- 13CN) B. AZZERBONI – G. CONSOLO – **G. FINOCCHIO** – A. ROMEO – – M. CARPENTIERI
 “Identificazione della funzione di Preisach scalare per materiali magnetici dolci”. ET2006 - Torino 15-17 Giugno 2006.
- 12CN) J. BRACCO – P. BURRASCANO – E. CARDELLI – M. CARPENTIERI – A. FABBA – A. PIRANI – M. POMPEI – E. RASCHI – M. RICCI – F. TISSI – B. AZZERBONI – G. CONSOLO – **G. FINOCCHIO** – A. ROMEO
 “Dinamiche di magnetizzazione in processi di correnti polarizzate di spin”. ET2006 - Torino 15-17 Giugno 2006.
- 11CN) B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - **G. FINOCCHIO** - F. LA FORESTA - L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
 “Dinamiche di magnetizzazione in processi di correnti polarizzate di spin”. ET2005 - Roma, Giugno 16-18, 2005.
- 10CN) B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - **G. FINOCCHIO** - F. LA FORESTA
 “Identificazione del modello di Preisach per materiali magnetici mediante algoritmi genetici”. ET2005 - Roma, Giugno 16-18, 2005.
- 9CN) B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - D. COSTANTINO – N. MAMMONE – F.C. MORABITO – M. VERSACI – U. VITALE – P. BRAMANTI – A. CANNATA – P. DI BELLA – N. MUSCARA’
 “Identificazione e rimozione di artefatti in segnali biomedici mediante filtri Wavelet-ICA”. ET2005 - Roma, Giugno 16-18, 2005.
- 8CN) B. AZZERBONI – M. CARPENTIERI – G. CONSOLO - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - E. CARDELLI – E. PINZAGLIA
 “Un modello Fuzzy di Isteresi Scalare per Materiali Magnetici Dolci”. ET2004 - Salerno, Giugno 16-19, 2004.

- 7CN) B. AZZERBONI – M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA – L. TORRES - L. LOPEZ-DIAZ - E. MARTINEZ
 “Calcolo Micromagnetico di Dinamiche in Processi di Magnetizzazione Spin-Polarized Driven Current”. ET2004 - Salerno, Giugno 16-19, 2004.
- 6CN) B. AZZERBONI - M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA – D. COSTANTINO – N. MAMMONE - F.C. MORABITO – M. VERSACI – P. BRAMANTI – A. CANNATA – P. DI BELLA – N. MUSCARÁ.
 “Elaborazioni di Segnali ed Immagini Biomedicali mediante Reti Neurali, Filtri Adattativi e Trasformata Wavelet”. ET2004 - Salerno, Giugno 16-19, 2004.
- 5CN) B. AZZERBONI –M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA- E. CARDELLI – E. PINZAGLIA
 “Funzione di Preisach e sua Approssimazione Lorenziana”. ET2003 - Perugia, Giugno 18-20, 2003.
- 4CN) B. AZZERBONI –M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA – D. COSTANTINO - F.C. MORABITO – M. VERSACI.
 “Elaborazioni di Serie Storiche di Natura Biomedica Mediante Reti Neurali e Trasformata Wavelet”. ET2003 - Perugia, Giugno 18-20, 2003.
- 3CN) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - F.C. MORABITO.
 “Elaborazione di Segnali Elettromiografici Mediante Analisi delle Componenti Indipendenti e Trasformata Wavelet”. ET2002 - Messina, Giugno 26-29, 2002.
- 2CN) B. AZZERBONI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA - F.C. MORABITO.
 “Predizione di Segnali Biomedicali mediante Tecniche di Intelligenza artificiale”. ET2002 - Messina, Giugno 26-29, 2002.
- 1CN) B. AZZERBONI – E. CARDELLI - M. CARPENTIERI - **G. FINOCCHIO** - M. IPSALE - F. LA FORESTA
 “Modellizzazione di Sistemi con Isteresi Magnetica”. ET2002 - Messina, Giugno 26-29, 2002.