

Curriculum Vitae :

Julie Grollier

Birth date:	14/02/1975
Birth place:	Poitiers, France
Contact information:	Unité Mixte de Physique CNRS-Thales 1 avenue A. Fresnel, campus de l'Ecole Polytechnique, 91767 Palaiseau Phone : +33.1.69.41.58.61 Mail : julie.grollier@cnrs-thales.fr Web site: julie.grollier.free.fr

Research : Spintronics / Memristors / Bio-inspired computing	
Since October 2005	CNRS research director at the Unité Mixte de Physique CNRS/Thales - Chair of the national interdisciplinary network BioComp Neuromorphic computing through the dynamics of physical nano-devices (spintronics and multifunctional oxides)
October 2004-October 2005	Post-doctoral position at the Institut d'Electronique Fondamentale, Paris-Sud University, Claude Chappert's group Synchronization of spin transfer nano-oscillators : models
October 2003- October 2004	Post-doctoral position in the Physics of Nanodevices group of Bart van Wees, Groningen, Netherlands Resonance of a single magnetic domain wall
October 2000- October 2003	Ph.D : Unité Mixte de Physique CNRS-Thales, Orsay, under the supervision of Albert Fert Current-induced magnetization switching

Teaching	
October 2000-October 2003	Monitorat (3 x 64 h) at Paris-Sud University, Orsay, France
1998-1999	« Agrégation » teaching level in Applied Physics , prepared at Ecole Normale Supérieure of Cachan (ranked 4 th)

Education	
1999-2000	Master « Sciences des Matériaux » (condensed matter) at Pierre et Marie Curie University, Paris, France
1998-2000	Student at the Ecole Normale Supérieure, Cachan
1995-1998	Ecole Supérieure d'Electricité (SUPELEC) A leading engineering school in France, Specialization in Device Physics
1992-1995	Preparation to the entrance to engineering schools Lycée Louis le Grand, Paris
1992	Bachelor degree with honors (Lycée Malherbes, Caen)

Languages	French, English, Spanish
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Prizes and Awards	<p>Wohlfarth Memorial Lecture (2019)</p> <p>Silver Medal of CNRS (2018)</p> <p>Prize awarded by the journal "La Recherche" for best publication in Physics (J. Torrejon et al, Nature 2017) (2018)</p> <p>Recognized as "One of the 100 French personalities in AI" by the journal "Usines Nouvelles" (2018)</p> <p>Elected Fellow of the American Physical Society ()</p> <p>ERC "Consolidator grant" (2016)</p> <p>ERC "Starting grant" (2010)</p> <p>"Jacques Herbrand" prize of the French Academy of Sciences (2010)</p>
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Funding	
PADR- FDDT-OPEN-03-2019 2020-2022	Participant
ANR Astrid SpinIA 2019-2021	Participant
European Research Council Consolidator Grant "bioSPINspired" 2016-2021	Principal Investigator
French GDR BioComp 2015-2018: National interdisciplinary research network focused on bio-inspired hardware, from materials to systems (more than 32 labs and 52 research teams)	Coordinator

French ANR BioIce 2018-2022 “Bio-inspired computation based on artificial spin Ice architectures”	Participant
EU ICT project Ulpec “Ultra-Low Power Event-Based Camera” 2017-2020	Participant
French ANR MIRA 2015-2018 “Memristive High-Speed Neuromorphic Processing”	Participant
French ANR MEMOS 2014-2018 “Magnetic Associative Memory based on Coupled Nano-Oscillators”	Coordinator
European Research Council Starting Grant “Nanobrain” 2010-2015	Principal Investigator
EU FET-Open Bambi “Bottom-up Approaches to Machines dedicated to Bayesian Inference” 2014-2016	Participant
French ANR P2N MHANN 2011-2015 “Memristive Hardware Artificial Neural Networks Accelerators”	WP leader
NanoSaclay Labex project 2012-2015 “A new paradigm in nanodesign : memristors”	Coordinator
Défi Nano CNRS 2013: “DEFIBAYES”	Participant
French PEPS (CNRS INS2I) “NanoBayes” project 2013	Participant
G3N CNRS project 2012 “Probabilistic Computing”	Coordinator
G3N CNRS project 2012 “Nano-processeur hybride neuro-reconfigurable”	Participant
French PEPS (CNRS INSIS)ACME “Memristive Accelerators” 2011-2012	Coordinator
French PEPS (CNRS INSIS) “Stochastic Synapses” 2011-2012	Participant
French PEPS (CNRS INSIS) “Logic in Memory” 2011-2012	Participant
French ANR P2N SPINNOVA 2011-2014 “Innovative spintronic devices : From collective excitations towards miniaturized microwave systems”	Participant
French ANR blanc Esperado 2011-2014 “Effects of Spin torques, Oersted and Rashba fields on domain wall dynamics”	Participant
European contract MASTER 2008-2012 “Microwave Amplification by Spin Transfer Emission Radiation”	Vice-coordinator, Work-package leader
French ANR VOICE 2009-2011 “Spin tranfer induced dynamics of isolated or interacting magnetic vortices”	Participant
French ANR Chemispin 2009-2011 “Chemically synthetized magnetic nanoparticles for spintronic devices”	Participant

French ANR Dynawall 2007-2010 “Magnetic DW dynamics induced by spin-polarized current “	Participant
European Network RTN SPINSWITCH 2006-2009 “Spin Current Induced Ultrafast switching”	Participant
French ANR Nanomaser 2006-2009 “Coherent microwave nano-oscillators integrable on a monolithic circuit”	Participant
ANR Pnano MAGICO 2005-2008 “Spin transfer microwave oscillator for telecommunications”	Participant
European Network RTN Spintronics 2005-2006	Young researcher

Referee / editorial activities	
Member of editorial board	Physical Review Applied
Guest Editor	Journal of Applied Physics: “New Physics and Materials for Neuromorphic Computation Special Topic” (October 2018)
Guest Editor	APL Special Topic Collection on Mesoscopic Magnetic systems: “Computing with spintronics and nanomagnets” (2020)
Referee	Physical Review Letters, Physical Review B, Physical Review Applied, Physical Review X, Journal of Applied Physics, Applied Physics Letters, European Physical Journal B, Nature journals, Spin, Modelling Simul. Mater. Sci. Eng, Frontiers in Neuromorphic Engineering

Supervision	
Master students	<p>Marie Drouhin (UMφ CNRS/Thales 2020)</p> <p>Anastasia Fierling (UMφ CNRS/Thales 2018)</p> <p>Nathan Leroux (UMφ CNRS/Thales 2018)</p> <p>Bastien Garitain (UMφ CNRS/Thales 2017)</p> <p>Philippe Talatchian (UMφ CNRS/Thales 2015)</p> <p>Mathieu Riou (UMφ CNRS/Thales 2015)</p> <p>Junior Samuel Lopez-Yepe (UMφ CNRS/Thales 2015)</p> <p>Christophe Roman Master 1 (UMφ CNRS/Thales 2013)</p> <p>Steven Lequeux, Master 2 (UMφ CNRS/Thales 2012)</p> <p>Sören Boyn, Master 2 (UMφ CNRS/Thales 2011-2012)</p> <p>Nicolas Locatelli, Master 2 (UMφ CNRS/Thales 2009)</p>

	<p>Nicolas Lapierre, Master 1 (UMφ CNRS/Thales, 2006)</p> <p>Olivier Copie, Master 2 (UMφ CNRS/Thales, 2006)</p> <p>Irina Craciun, Master 2 (Physics of Nanodevices, Groningen, 2004)</p> <p>Bram Slachter, Master 2 (Physics of Nanodevices, Groningen, 2004)</p>
Post-docs	<p>Dedalo Sanz-Hernandez (UMφ CNRS/Thales, 2019)</p> <p>“Jack” Shuai Li (UMφ CNRS/Thales, 2019)</p> <p>Danijela Markovic (UMφ CNRS/Thales, 2018)</p> <p>Miguel Romera (UMφ CNRS/Thales, 2015-2018)</p> <p>Flavio Miguel Abreu Araujo (UMφ CNRS/Thales, 2015-2017)</p> <p>Daniele Pinna (UMφ CNRS/Thales, 2015-2017)</p> <p>Jacob Torrejon (UMφ CNRS/Thales, 2014-2017)</p> <p>Nicolas Locatelli (UMφ CNRS/Thales, 2013-2014)</p> <p>Joao Sampaio (UMφ CNRS/Thales, 2011-2013)</p> <p>Peter Metaxas (UMφ CNRS/Thales, 2011-2012)</p> <p>Rie Matsumoto (UMφ CNRS/Thales, 2010-2012)</p> <p>Alexei Khvalkovskiy (UMφ CNRS/Thales, 2008-2010)</p>
Engineers	<p>Karin Garcia (UMφ CNRS/Thales, 2014-2016)</p> <p>Stéphanie Girod (UMφ CNRS/Thales, 2012-2013)</p>
Ph.D.	<p>Jérémie Laydevant (UMφ CNRS/Thales on-going) co-supervised with Juan Trastoy</p> <p>Erwann Martin (Thales TRT, on-going) co-supervised with Teodora Petrisor</p> <p>Nathan Leroux (UMφ CNRS/Thales on-going) co-supervised with Alice Mizrahi</p> <p>Maxence Ernoult (UMφ CNRS/Thales, on-going) co-supervised with Damien Querlioz</p> <p>Philippe Talatchian (UMφ CNRS/Thales, defense: 2019)</p> <p>Mathieu Riou (UMφ CNRS/Thales, defense: 2019)</p> <p>Alice Mizrahi (UMφ CNRS/Thales, defense: 2017) co-supervised with Damien Querlioz</p> <p>Artur Accioly (IEF, Univ. Federal do Rio Grande do Sul, Porto Alegre, defense: 2015) co-supervised with Luis Gustavo Pereira and Joo-Von Kim</p> <p>Steven Lequeux (UMφ CNRS/Thales, defense : 2016)</p> <p>Sören Boyn (UMφ CNRS/Thales, defense : 2016) co-supervised with Agnes Barthélémy</p> <p>André Chanthbouala (UMφ CNRS/Thales, defense : 2013) co-supervised with Agnes Barthélémy</p>

	<p>Nicolas Locatelli (UMφ CNRS/Thales, defense: 2012) co-supervised with Vincent Cros</p> <p>Antoine Dussaux (UMφ CNRS/Thales, defense: 2011) co-supervised with Vincent Cros</p> <p>Miguel Romera (Ph.D student CSIC Madrid, 3 months at UMφ CNRS/Thales in 2011)</p> <p>Rie Matsumoto, (Ph.D student at AIST Tsukuba, Japon, 2 months at UMφ CNRS/Thales in 2009)</p> <p>Benoît Georges (UMφ CNRS/Thales, defense 2009) co-supervised with Vincent Cros and Albert Fert</p>
<p>Member of Ph.D / HDR committees</p>	<p>Defense of Denys Ly (supervisors Elisa Vianello, Calire Fenouillet-Beranger), CEA LETI, Grenoble, June 2020: referee</p> <p>Defense of Ghouthi Blouki Hacene (supervisors Michel Jezequel, Vincent Gripon), IMT Atlantique, Brest, October 2019: referee</p> <p>Defense of Gilles Zahnd (supervisors J.-P. Attané and L. Vila) Spintec, Grenoble, November 2017: referee</p> <p>Habilitation thesis (HDR) of Timothée Masquelier, Laboratoire Cerco, Cerveau et Cognition, Toulouse, Octobre 2017</p> <p>Defense of Antonio Baylon Fuentes (supervisors L. Larger, M. Paquot), Femto-ST Besaçon, 2016: referee</p> <p>Defense of Mohammed Salah El Hadri (supervisors S. Mangin, G. Malinowski), IJL Nancy, 2016: referee</p> <p>Defense of Selina La Barbera (supervisors D. Vuillaume, F. Alibert), IEMN 2015: referee</p> <p>Defense of Zhaohao Wang (supervisors J.-O. Klein, W. Zhao) IEF, Orsay, 2015: referee</p> <p>Defense of Alexandre Lopez (supervisors G. Gaudin, I.M. Miron, O. Boulle), Spintec, Grenoble, 2015: referee</p> <p>Defense of Anthony Beguivin (supervisor R. Cowburn) University of Cambridge, October 2014: referee</p> <p>Defense of Gwendal Lecerf (supervisor S. Saïghi) IMS, University of Bordeaux, October 2014</p> <p>Defense of Williams Savero (supervisor J.-P. Attané and L. Vila) LNM, Grenoble, September 2014: referee</p> <p>Defense of Yue Zhang (supervisor D. Ravelosona, W. Zhao) IEF, Orsay, July 2014: referee</p> <p>Defense of Ezio Iaccoca (supervisor J. Akerman) Gothenburg, Sweden, June 2014</p> <p>Defense of Emilie Juet (supervisor A. Schul, G. Gaudin, I.M. Miron), Spintec, Grenoble, December 2013: referee</p> <p>Defense of Sylvain Y. Martin (supervisors C. Baraduc, C. Thirion), Spintec, Grenoble, November 2013: referee</p> <p>Defense of Andrei Mihai (supervisors A. Marty, J.-P. Attané), CEA Grenoble, November 2012</p>

	<p>Defense of Miguel Romera (supervisors J. L. Prieto, M. Munoz) , CSIC Madrid, May 2012</p> <p>Defense of Minh Ngoc Nguyen (supervisor D. Ravelosona) , IEF Orsay, December 2012</p>
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Scientific events organization	
“Magnetics and Spintronics Materials and Devices” symposium (ICMAT 2021, Singapore)	Co-chair
Spice Workshop Spintronics meets Neuromorphics (Mainz, October 2018)	Co-organizer
ICM Conference (San Francisco, July 2018)	Member of Program Committee
3 rd GDR Biocomp Workshop Bordeaux, June 2018)	Member of Organization Committee
MMM Conference (Pittsburg, November 2017)	Co-organizer of the “Spintronics-based neuromorphic computing” symposium
IEEE Rebooting Computing conf. (Washington DC, October 2017)	Member of Program Committee
SPIE conference (San Diego, August 2017)	Co-Organizer of the “Spintronics/Neuromorphic computing” symposium
Magnonics 2017 conference (Oxford, August 2017)	Member of Program Committee
BioComp International Summer School (Roscoff, June 2017)	Chair of Program and Organization Committee
IEEE Rebooting Computing conf. (San Diego, October 2016)	Member of Program Committee
2 nd GDR Biocomp Workshop (Lyon, October 2016)	Chair of Program and Organization Committee
Joint MMM-Intermag Conf. (San Diego, January 2016)	Member of Program Committee
1 st GDR Biocomp Workshop (Saint Paul de Vence, October 2015)	Member of Program and Organization Committee

MMM Conference (Hawai, November 2014)	Member of Program Committee
Memristor Symposium at E-MRS Spring (Lille, May 2014)	Co-organizer of the international symposium on “Memristor materials, mechanisms and devices for unconventional computing” at E-MRS 2014 Spring Meeting
MemTDAC workshop (Vienna, January 2014)	Co-organizer of the international MemTDAC workshop on Memristor Technology, Design, Automation and Computing affiliated with the HiPEAC'14 conference
International Japanese-French workshop on spintronics (Orsay, 28 November 2013)	Co-organizer of the workshop
Workshop Memco (Fréjus, 19-21 November 2012)	Chair of the international Memco workshop, “Memristor for Computing”
Journées Nanoélectronique EEA (Orsay, 26 November 2012)	Co-organizer of the EEA club Nanoelectronics day
JMC13 (Montpellier, August 2012)	Co-organizer of the “Micro and Nano-Magnetism” session of the “Journées de la Matière Condensée”
ICM (Busan, July 2012)	Session-chair (International Conference on Magnetism)
MSNOWS (les Houches, January 2012)	Session-chair (international workshop)
FET11 (Budapest, May 2011)	Organizer of the session “Memristors : Artificial Synapses” at the FET11 “Science Beyond Fiction” European Conference
Intermag (Taipei, April 2011)	Session-chair (Intermag Conference)
Palaiseau (March 2011)	Organizer of the “Memristors : devices and dedicated architectures” French one-day workshop
SPIE (San Diego, USA 2008)	Session-chair (International Society for Optics & Photonics)
MML (Perth, Australia 2007)	Session-chair (Magnetic Multi-Layers Conference)
JMC10 (Toulouse, 2006)	Co-organizer of the “Spintronics” session of the “Journées de la Matière Condensée” 10

Publications and presentation in conferences : Summary	
Total citation number*	9850
Publications	129
Average citations per Item*	76

h-index*	49
Number of invited presentations	150
Number of filed patents	15

Articles (112)	
(112) Accepted in Nature Reviews Physics (2020)	<i>Physics for neuromorphic computing</i> D. Marković, A. Mizrahi, D. Querlioz and J. Grollier
(111) Phys. Rev. Applied 13 , 044050 (2020) <i>Cited 0*</i>	<i>Detection of the Microwave Emission from a Spin-Torque Oscillator by a Spin Diode</i> D. Marković, N. Leroux, A. Mizrahi, J. Trastoy, V. Cros, P. Bortolotti, L. Martins, A. Jenkins, R. Ferreira, and J. Grollier
(110) Nature Electronics (2020) <i>Cited 5*</i>	<i>Neuromorphic spintronics</i> J. Grollier , D. Querlioz, K. Y. Camsari, K. Everschor-Sitte, S. Fukami & M. D. Stiles
(109) Phys. Rev. Applied 13 , (2020) <i>Cited 0*</i>	<i>Designing Large Arrays of Interacting Spin-Torque Nano-Oscillators for Microwave Information Processing</i> P. Talatchian, M. Romera, F. Abreu Araujo, P. Bortolotti, V. Cros, D. Vodenicarevic, N. Locatelli, D. Querlioz, and J. Grollier
(108) Scientific Reports 10 , 328 (2020) <i>Cited 3*</i>	<i>Role of non-linear data processing on speech recognition task in the framework of reservoir computing</i> F. Abreu Araujo, M. Riou, J. Torrejon, S. Tsunegi, D. Querlioz, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles & J. Grollier
(107) Physical Review Applied 12 (2), 024049 (2019) <i>Cited 8*</i>	<i>Temporal Pattern Recognition with Delayed-Feedback Spin-Torque Nano-Oscillators</i> M. Riou, J. Torrejon, B. Garitane, F. Abreu Araujo, P. Bortolotti, V. Cros, S. Tsunegi, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, D. Querlioz, M. D. Stiles and J. Grollier
(106) Physical Review Applied 11 (4), 044093 (2019) <i>Cited 4*</i>	<i>Chaos and Relaxation Oscillations in Spin-Torque Windmill Spiking Oscillators</i> R. Matsumoto, S. Lequeux, H. Imamura, J. Grollier
(105) Scientific reports 9 (1), 1851 (2019) <i>Cited 3*</i>	<i>Using Memristors for Robust Local Learning of Hardware Restricted Boltzmann Machines</i> M. Ernoult, J. Grollier , D. Querlioz
(104) Applied surface science 482 , 1-93 (2019) <i>Cited 56*</i>	<i>Towards oxide electronics: a roadmap</i> M. Coll et al
(103) Appl. Phys. Lett. 114 , 012409 (2019) <i>Cited 16*</i>	<i>Reservoir computing with the frequency, phase, and amplitude of spin-torque nano-oscillators</i>

	D. Marković, N. Leroux, M. Riou, F. Abreu Araujo, J. Torrejon, D. Querlioz, A. Fukushima, S. Yuasa, J. Trastoy, P. Bortolotti, and <u>J. Grollier</u>
(102) Appl. Phys. Lett. 113 , 232902 (2018) <i>Cited 5*</i>	<i>Real-time switching dynamics of ferroelectric tunnel junctions under single-shot voltage pulses</i> S. Boyn, A. Chanthbouala, S. Girod, C. Carrétéro, A. Barthélémy, M. Bibes, <u>J. Grollier</u> , S. Fusil, and V. Garcia
(101) Nature 563 , 230 (2018) <i>Cited 120*</i>	<i>Vowel recognition with four coupled spin-torque nano-oscillators</i> M. Romera, P. Talatchian, S. Tsunegi, F. Abreu Araujo, V. Cros, P. Bortolotti, J. Trastoy, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. Ernoult, D. Vodenicarevic, T. Hirtzlin, N. Locatelli, D. Querlioz and <u>J. Grollier</u>
(100) J. Appl. Phys. 124 , 152111 (2018) <i>Cited 2*</i>	<i>Overcoming device unreliability with continuous learning in a population coding based computing system</i> A. Mizrahi, <u>J. Grollier</u> , D. Querlioz and M. D. Stiles
(99) J. Appl. Phys. 124 , 152117 (2018) <i>Cited 5*</i>	<i>Nano-oscillator-based classification with a machine learning-compatible architecture</i> D. Vodenicarevic, N. Locatelli, <u>J. Grollier</u> and D. Querlioz
(98) Sci. Rep. 8 , 13475 (2018) <i>Cited 19*</i>	<i>Scaling up electrically synchronized spin torque oscillator networks</i> S. Tsunegi, T. Taniguchi, R. Lebrun, K. Yakushiji, V. Cros, <u>J. Grollier</u> , A. Fukushima, S. Yuasa, H. Kubota
(97) Phys. Rev. Appl. 9 , 064018 (2018) <i>Cited 65*</i>	<i>Skyrmion Gas Manipulation for Probabilistic Computing</i> D. Pinna, F. Abreu Araujo, J.-V. Kim, V. Cros, D. Querlioz, P. Bessiere J. Droulez, and <u>J. Grollier</u>
(96) Nature Com. 9 , 1533 (2018) <i>Cited 66*</i>	<i>Neural-like computing with populations of superparamagnetic basis functions</i> A. Mizrahi, T. Hirtzlin, A. Fukushima, H. Kubota, S. Yuasa, <u>J. Grollier</u> & D. Querlioz
(95) Appl. Phys. Lett. 112 , 022405 (2018) <i>Cited 2*</i>	<i>Selective control of vortex polarities by microwave field in two robustly synchronized spin-torque nano-oscillators</i> Yi Li, X. de Milly, O. Klein, V. Cros, <u>J. Grollier</u> , and G. de Loubens
(94) Phys. Rev. Applied 8 , 054045 (2017) <i>Cited 48*</i>	<i>Low-Energy Truly Random Number Generation with Superparamagnetic Tunnel Junctions for Unconventional Computing</i> D. Vodenicarevic, N. Locatelli, A. Mizrahi, J. S. Friedman, A. F. Vincent, M. Romera, A. Fukushima, K. Yakushiji, H. Kubota, S. Yuasa, S. Tiwari, <u>J. Grollier</u> , and D. Querlioz
(93) Nature 547 , 428 (2017) <i>Cited 373*</i>	<i>Neuromorphic computing with nanoscale spintronic oscillators</i> J. Torrejon, M. Riou, F. Abreu Araujo, S. Tsunegi, G. Khalsa, D. Querlioz, P. Bortolotti, V. Cros, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles and <u>J. Grollier</u>
(92) Phys. Rev. Lett. 118 , 247202 (2017) <i>Cited 11*</i>	<i>Probing Phase Coupling Between Two Spin-Torque Nano-Oscillators with an External Source</i> Y. Li, X. de Milly, F. Abreu Araujo, O. Klein, V. Cros, <u>J. Grollier</u> , and G. de Loubens

(91) Nature Com. 8 , 15825 (2017) <i>Cited 51*</i>	<i>Mutual synchronization of spin torque nano-oscillators through a long-range and tunable electrical coupling scheme</i> R. Lebrun, S. Tsunegi, P. Bortolotti, H. Kubota, A.S. Jenkins, M. Romera, K. Yakushiji, A. Fukushima, <u>J. Grollier</u> , S. Yuasa & V.Cros
(90) Rev. Mod. Phys. 89 , 025006 (2017) <i>Cited 226*</i>	<i>Interface-induced phenomena in magnetism</i> Frances Hellman, + many authors including <u>JG</u> , <i>et al.</i>
(89) Phys. Rev. B 95 , 134444 (2017) <i>Cited 1*</i>	<i>Driven energy transfer between coupled modes in spin-torque oscillators</i> R. Lebrun, <u>J. Grollier</u> , F. Abreu Araujo, P. Bortolotti, V. Cros, A. Hamadeh, X. de Milly, Y. Li, G. de Loubens, O. Klein, S. Tsunegi, H. Kubota, K. Yakushiji, A. Fukushima, and S. Yuasa
(88) Nature Communications 8 , 14736 (2017) <i>Cited 176*</i>	<i>Learning through ferroelectric domain dynamics in solid-state synapses</i> S. Boyn, <u>J. Grollier</u> , G. Lecerf, B. Xu, N. Locatelli, S.Fusil, S. Girod, C. Carretero, K. Garcia, S. Xavier, J. Tomas, L. Bellaiche, M. Bibes, A. Barthelemy, S. Saïghi and V. Garcia
(87) Scientific Reports 7 , 44772 (2017) <i>Cited 37*</i>	<i>A Nanotechnology-Ready Computing Scheme based on a Weakly Coupled Oscillator Network</i> D. Vodenicarevic, N. Locatelli, F. Abreu Araujo, <u>J. Grollier</u> , D. Querlioz
(86) Appl. Phys. Lett. 109 , 252404 (2016) <i>Cited 8*</i>	<i>Enhancing the injection locking range of spin torque oscillators through mutual coupling</i> M. Romera, P. Talatchian, R. Lebrun, K. J. Merazzo, P. Bortolotti, L. Vila, J. D. Costa, R. Ferreira, P. P. Freitas, M.-C. Cyrille, U. Ebels, V. Cros, and <u>J. Grollier</u>
(85) PIEEE 104 , 2024 (2016) <i>Cited 229*</i>	<i>Spintronic Nanodevices for Bioinspired Computing</i> <u>J. Grollier</u> , D. Querlioz, M. D. Stiles
(84) J. Appl. Phys. 120 , 103903 (2016) <i>Cited 10*</i>	<i>Controlling the synchronization properties of two dipolarly coupled vortex based spin-torque nano-oscillators by the intermediate of a third one</i> F. Abreu Araujo and <u>J. Grollier</u>
(83) J. Appl. Phys. 120 , 093902 (2016) <i>Cited 3*</i>	<i>Role of spin-transfer torques on synchronization and resonance phenomena in stochastic magnetic oscillators</i> A. Accioly, N. Locatelli, A. Mizrahi, D. Querlioz, L. G. Pereira, <u>J. Grollier</u> and J-V Kim
(82) Scientific Reports 6 , 31510 (2016) <i>Cited 115*</i>	<i>A magnetic synapse: multilevel spin-torque memristor with perpendicular anisotropy</i> S. Lequeux, J. Sampaio, V. Cros, K. Yakushiji, A. Fukushima, R. Matsumoto, H. Kubota, S. Yuasa and <u>J. Grollier</u>
(81) Phys. Rev. B 94 , 054419 (2016) <i>Cited 5*</i>	<i>Synchronization of electrically coupled stochastic magnetic oscillators induced by thermal and electrical noise</i> A. Mizrahi, N. Locatelli, <u>J. Grollier</u> , and D. Querlioz
(80) Scientific Reports 6 , 30535 (2016) <i>Cited 27*</i>	<i>Controlling the phase locking of stochastic magnetic bits for ultra-low power computation</i> A. Mizrahi, N. Locatelli, R. Lebrun, V. Cros, A. Fukushima, H. Kubota, S. Yuasa, D. Querlioz and <u>J. Grollier</u>

(79) Phys. Rev. B 93 , 224427 (2016) <i>Cited 2*</i>	<i>Twist in the bias dependence of spin torques in magnetic tunnel junctions</i> S. Boyn, J. Sampaio, V. Cros, <u>J. Grollier</u> , A. Fukushima, H. Kubota, K. Yakushiji, and S. Yuasa
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(3) J. Magn. Magn. Mater. 242 , 68 (2002) <i>Cited 56 *</i>	Magnetoresistance and spin electronics A. Barthélémy, A. Fert, J-P. Contour, M. Bowen, V. Cros, J.M. De Teresa, A. Hamzic, G. Faini, J.M. George, <u>J. Grollier</u> , F. Montaigne, F. Pailloux, F. Petroff, C. Vouille
(2) Mat. Sci. Eng. B84 (2001) <i>Cited 29 *</i>	Review of recent results on spin polarized tunneling and magnetic switching by spin injection A. Fert, A. Barthélémy, J. Ben Youssef, J-P. Contour, V. Cros, J.M. De Teresa, A. Hamzic, J.M. George, G. Faini, <u>J. Grollier</u> , H. Jaffrès, H. LeGall, F. Montaigne, F. Pailloux, F. Petroff
(1) Appl. Phys. Lett. 78 , 3663 (2001) <i>Cited 612*</i>	Spin-polarized current induced switching in Co/Cu/Co pillars <u>J. Grollier</u> , V. Cros, A. Hamzic, J. M. George, H. Jaffrès, A. Fert, G. Faini, J. Ben Youssef, H. LeGall

Conference proceedings (15)	
(15) NeurIPS 2019 (Advances in Neural Information Processing Systems), 7081-7091 (2019)	Updates of Equilibrium Prop Match Gradients of Backprop Through Time in an RNN with Static Input M. Ernoult, <u>J. Grollier</u> , D. Querlioz, Y. Bengio and B. Scellier
(14) BioCAS 2019, DOI: 10.1109/BIOCAS.2019.8919010	Memory-Centric Neuromorphic Computing With Nanodevices D. Querlioz, T. Hirtzlin, J.-O. Klein, E. Nowak, E. Vianello, M. Bocquet, J.-M. Portal, M. Romera, P. Talatchian, <u>J. Grollier</u>

(13) IEDM 2018, DOI: 10.1109/IEDM.2018.8614585	<i>Microwave Neural Processing and Broadcasting with Spintronic Nano-Oscillators</i> P. Talatchian, M. Romera, S. Tsunegi, F. Abreu Araujo, V. Cros, P. Bortolotti, J. Trastoy, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. Ernoult, D. Vodenicarevic, T. Hirtzlin, N. Locatelli, D. Querlioz, <u>J. Grollier</u>
(12) ICECS 2018 (25th IEEE Int. Conf. on Electronics, Circuits and Systems) DOI: 10.1109/ICECS.2018.8618054	<i>Verilog-A model of ferroelectric memristors dedicated to neuromorphic design</i> C. Meyer, A. Chanthbouala, S. Boyn, J. Tomas, V. Garcia, M. Bibes, S.Fusil, <u>J. Grollier</u> , S. Saighi
(11) IMFEDK 2018 (IEEE International Meeting for Future of Electron Devices, Kansai) DOI: 10.1109/IMFEDK.2018.8581955	<i>Brain-Inspired Computing with Spintronics Devices</i> S. Tsunegi, J.Torrejon, M. Riou, F. Abreu Araujo, V. Cros, <u>J. Grollier</u> , K. Yakushiji, A. Fukushima, S. Yuasa, H. Kubota
(10) ISCAS 2018, DOI: 10.1109/ISCAS.2018.8351771	<i>Circuit-Level Evaluation of the Generation of Truly Random Bits with Superparamagnetic Tunnel Junctions</i> D. Vodenicarevic, N. Locatelli, A. Mizrahi, T. Hirtzlin, J. S. Friedman, <u>J. Grollier</u> and D. Querlioz
(9) ECCTD 2017, DOI: 10.1109/ECCTD.2017.8093287 <i>Cited 0*</i>	<i>Spintronic nanoscillators for unconventional circuits</i> D. Vodenicarevic, A. Mizrahi, N. Locatelli, <u>J. Grollier</u> , D. Querlioz
(8) IEDM 2017, DOI: 10.1109/IEDM.2017.8268505	<i>Neuromorphic Computing through Time-Multiplexing with a Spin-Torque Nano-Oscillator</i> M. Riou, F. Abreu Araujo, J. Torrejon, S. Tsunegi, G. Khalsa, D. Querlioz, P. Bortolotti, V. Cros, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles, and <u>J. Grollier</u>
(7) Proceedings of SPIE 2016 (International Society for Optical Engineering). DOI: 10.1117/12.2235822	<i>Spin-transfer torque in ferromagnetic bilayers generated by anomalous Hall effect and anisotropic magnetoresistance</i> T. Taniguchi, <u>J. Grollier</u> , M. D. Stiles
(6) IJCNN 2016 (IEEE International Joint Conference on Neural Networks). DOI: 10.1109/IJCNN.2016.7727447	<i>Synchronization detection in networks of coupled oscillators for pattern recognition</i> D.Vodenicarevic, N. Locatelli, <u>J. Grollier</u> , D. Querlioz
(5) DATE 2015 (IEEE Conf. on Design, Automation & Test in Europe), DOI: 10.7873/DATE.2015.1117	<i>Spintronic devices as key elements for energy-efficient neuroinspired architectures</i> N. Locatelli, A.F. Vincent, A. Mizrahi, J.S. Friedman, D. Vodenicarevic, J.-V. Kim, J.-O. Klein, W. Zhao, <u>J. Grollier</u> , D. Querlioz
(4) ISCAS 2015 (IEEE Int. Symp. on Circuits and Systems), DOI: 10.1109/ISCAS.2015.7168702	<i>Vortex-based spin transfer oscillator compact model for IC design</i> N. Locatelli, D. Vodenicarevic, W. Zhao, J.-O. Klein, <u>J. Grollier</u> , D. Querlioz
(3) ISCAS 2014 (IEEE Inter. Symposium on Circuits and Systems), DOI: 10.1109/ISCAS.2014.6865448	<i>Silicon Neuron dedicated to Memristive Spiking Neural Networks</i> G. Lecerf, J. Tomas, S. Boyn, S. Girod, A. Mangalore, <u>J. Grollier</u> and S. Saighi

(2) CNNA 2014 (14th Inter. Workshop on Cellular Nanoscale Networks and their Applications) DOI: 10.1109/CNNA.2014.6888659	<i>Spin torque nanodevices for bio-inspired computing</i> N. Locatelli, A. Mizrahi, A. Accioly, D. Querlioz, J.-V. Kim, V. Cros, and <u>J. Grollier</u>
(1) FCS 2014 (IEEE International Frequency Control Symposium), DOI: 10.1109/FCS.2014.6859850	<i>Spintronic nano-oscillators: towards nanoscale and tunable frequency devices</i> E. Grimaldi, R. Lebrun, A. Jenkins, A. Dussaux, <u>J. Grollier</u> , V. Cros, A. Fert, H. Kubota, K. Yakushiji, A. Fukushima, R. Matsumoto, S. Yuasa, G. Cibiel, P. Bortolotti, G. Pilllet

Book Chapters (2)	
(2) Magnetism of surfaces, Interfaces and Nanoscale Materials Ed. : Robert Camley, Zbigniew Celinski, Robert Stamps (2016)	<i>Domain wall motion in nanostructures</i> J. Sampaio, <u>J. Grollier</u> , P.J. Metaxas
(1) Magnonics, Springer Ed. : A. N. Slavin & S. O. Demokritov (2013) <i>Cited 10*</i>	<i>Bottom up Magnonics : Magnetization Dynamics of Individual Nanomagnets</i> P. S. Keatley, P. Gangmei, M. Dvornik, R.H. Hicken, <u>J. Grollier</u> , C. Ulysse, J.R. Childress and J.A. Katine

Patents (15)	
(15) FR 20 01162	<i>Dispositif de classification, ensemble de classification et procédé de classification associé</i> M. Romera, P. Talatchian, J. Trastoy, P. Bortolotti, <u>J. Grollier</u>
(14) FR 18 00807 PCT/EP2019/070221	<i>Chaîne synaptique comprenant ...</i> <u>J. Grollier</u>
(13) FR 18 00806 PCT/EP2019/070260	<i>Chaîne synaptique comprenant ...</i> <u>J. Grollier</u>
(12) FR 18 00805 PCT/EP2019/070027	<i>Réseau de neurones comportant ...</i> <u>J. Grollier</u>
(11) FR16/00791 PCT/EP2017/061941 US16302619	<i>Device for Generating A Random Electrical Signal and Associated Architecture</i> D. Pinna, <u>J. Grollier</u> , V. Cros, D. Querlioz, P. Bessière, J. Droulez
(10) FR 17 01263 Euro-PCT No. 8807648.3	<i>Réseau neuromimétique et procédé de fabrication associé</i> M. Bibes, <u>J. Grollier</u> , V. Garcia, N. Locatelli

(9) FR16/01463, US20200050957A1	Modular stochastic machine and related method P. Bessiere, J. Droulez, E. Mazer, R. Laurent, J. Grollier, M. Faix, A. Coninx, D. Colliaux, D. Querlio
(8) EP3053107A1, WO2015049347A1 US10,410,110	Neuromimetic Circuit and Method of Fabrication, P. Bondavalli, <u>J. Grollier</u> , F. Nguyen van Dau
(7) FR11/02192 WO2013/007797A1	Spintronic oscillator, and use thereof in radiofrequency devices N. Locatelli, V. Cros, <u>J. Grollier</u> , J-C. Mage, A. Khvalkovskiy, B. Marcilhac
(6) FR09/02845 WO2010/142762A1	Ferroelectric device with adjustable resistance M. Bibes, <u>J. Grollier</u> , A. Barthélémy et J-C. Mage
(5) FR09/02122 WO2010/125181A1	Memristor device with resistance adjustable by moving a magnetic wall by spin transfer and use of said memristors in a neural network <u>J. Grollier</u> , V. Cros et F. Nguyen Van Dau
(4) FR/0901032	Microwave frequency converter, has magneto-resistive element served as oscillating element comprising magnetic layers that are separated by nonmagnetic layer, where layer is made of insulating metal or semi-conductor material B. Georges, <u>J. Grollier</u> , V. Cros, J-C. Mage, B. Marcilhac et A. Fert
(3) FR09/00718	Spin electronic device i.e. three-bit magnetic shift register, for industrial application, has injector to inject electric current whose intensity is sufficient for providing displacement of magnetic wall in region of free magnetic layer A. Khvalkovskiy, <u>J. Grollier</u> et V. Cros
(2) FR04/13338 WO2006/064022A1	Spintronic device with control by domain wall displacement induced by a current of spin-polarized carriers V. Cros, <u>J. Grollier</u> , M. Munoz-Sanchez, A. Fert, Nguyen Van Dau
(1) FR01/10126 WO2003/03019568A3	Control device for reversing the direction of magnetisation without an external magnetic field V. Cros, J-M. George, H. Jaffrès, <u>J. Grollier</u> , F. Petroff, A. Fert, Nguyen Van Dau

Personal invited talks in international conferences / colloquia (109)	
(109) Cell press Conference “AI and the brain” Beijing, November 2019	<i>Non-linear dynamics and oscillations in spintronic neural nets</i> <u>J. Grollier et al</u>
(108) Nature Conference on Neuromorphic Computing Beijing, October 2019	<i>Non-linear dynamics and oscillations in spintronic neural nets</i> <u>J. Grollier et al</u>
(107) French-US workshop on Nanoelectronics Palaiseau, September 2019	<i>Dynamics and oscillations in spintronic neural nets</i> <u>J. Grollier et al</u>

(106) Condensed Matter Physics in the Cities Paris, July 2019	<i>Neuromorphic computing: overview and challenges</i> J. Grollier et al
(105) Colloquium at INL Braga, July 2019	<i>Neuromorphic computing: overview and challenges</i> J. Grollier et al
(104) Magnetism Conference Leeds, April 2019 Wolfarth lecture	<i>Neuromorphic computing with spintronic nano-oscillators</i> J. Grollier et al
(103) Gordon Research Conference on Dendrites Ventura, April 2019	<i>Towards deep learning with emerging nanodevices</i> J. Grollier et al
(102) APS March meeting Boston, March 2019	<i>The physics and challenges of neuromorphic computing with spintronic nano-oscillators</i> J. Grollier et al
(101) Physics at Veldhoven Eindhoven, January 2019 Plenary talk + Masterclass	<i>Neuromorphic computing with spintronic nano-oscillators</i> J. Grollier et al <i>Neuromorphic physics</i> J. Grollier
(100) We Heraus Seminar Bad Honnef, January 2019	<i>Neuromorphic computing with spintronic nano-oscillators</i> J. Grollier et al
(99) IEDM 2018 San Francisco, December 2018	<i>Microwave neural processing and broadcasting with spintronic nano-oscillators</i> P. Talatchian, M. Romera, S. Tsunegi, F. Abreu Araujo, V. Cros, P. Bortolotti, J. Trastoy, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. Ernoult, D. Vodenicarevic, T. Hirtzlin, N. Locatelli, D. Querlioz, J. Grollier
(98) Kick-off meeting of the GogniGron Institute Groningen, October 2018	<i>Neuromorphic computing with spintronic nanodevices</i> J. Grollier et al
(97) France is AI workshop Paris, October 2018	<i>Nano-neurons and synapses for future AI</i> J. Grollier et al
(92) DARPA workshop on neuromorphic computing Video, September 2018	<i>Neuromorphic computing with spintronic nanodevices</i> J. Grollier et al
(96) MSNOWS conference Nancy, September 2018	<i>Neuromorphic computing with spintronic nanodevices</i> J. Grollier et al
(95) CECAM/CSM/IRTG school on machine learning Mainz, September 2018	<i>Neuromorphic computing: AI needs new hardware</i> J. Grollier et al
(94) JEMS conference, Mainz, September 2018 Plenary talk	<i>Neuromorphic computing with spintronic nanodevices</i> J. Grollier et al

(93) ICM conference San Francisco, July 2018	<i>Neuromorphic computing with spintronic nanodevices</i> J. Grollier et al
(92) Workshop on Spintronics and Nanomagnetism for Neuromorphic Computing Leeds, June 2018	<i>Spin-Torque Nano-Oscillators for Neuromorphic Computing</i> J. Grollier et al
(91) European Nanoelectronics Applications, Design & Technology Conference Grenoble, June 2018	<i>Magnetic Nano-Oscillators for Neuromorphic Computing</i> J. Grollier et al
(90) Intermag 2018 Singapore, April 2018	<i>Neuromorphic computing with spintronic devices</i> J. Grollier , M. Riou, P. Talatchian, A. Mizrahi, J. Torrejon, M. Romera, F. Abreu Araujo, P. Bortolotti, J. Trastoy, V. Cros, G. Khalsa, M. Stiles, S. Tsunegi, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, D. Vodenicarevic, T. Hirtzlin, N. Locatelli, D. Querlioz
(89) EITN workshop "Dendritic integration and computation with active dendrites" Paris, February 8-9, 2018	<i>Magnetic Nano-Oscillators for Neuromorphic Computing</i> J. Grollier et al
(88) Neuromorphic Spintronics Workshop Tokyo, January 2018	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(87) Seminar at AIST Tsukuba, January 2018	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(86) IEDM conference 2017 San Francisco (USA), Dec. 2017	<i>Neuromorphic Computing through Time-Multiplexing with a Spin-Torque Nano-Oscillator</i> J. Torrejon, M. Riou, F. Abreu Araujo, S. Tsunegi, G. Khalsa, D. Querlioz, P. Bortolotti, V. Cros, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles and J. Grollier
(85) Colloquium talk at Peter Grünberg Institute Jülich (Germany), November 2017	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(84) Paris-Saclay Spintronics Symposium Palaiseau (France), Sept. 2017	<i>Magnetic Nano-Oscillators for Neuromorphic Computing</i> J. Grollier et al
(83) Colloquium talk at Université Catholique de Louvain Louvain la Neuve (Belgique), Sept. 2017	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(82) DPG school "Magnetism: From Fundamentals to Spin based Nanotechnology" Bad Honnef (Germany), Sept. 2017	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(81) Leopoldina - Max Planck Symposium "Beyond von	<i>Electronic Nanodevices for Bio-inspired Computing</i> J. Grollier et al

Neumann Computing” Halle (Germany), Sept. 2017	
(80) SPIE conf. (keynote talk) San Diego (USA), August 2017	<i>Nanodevices for Bio-inspired Computing</i> J. Grollier et al
(79) MRS Spring Phoenix (USA), April 2017	<i>Neuromorphic computing with nanoscale magnetic oscillators</i> J. Torrejon, M. Riou, F. Abreu Araujo, S. Tsunegi, G. Khalsa, D. Querlioz, P. Bortolotti, V. Cros, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles and J. Grollier
(78) Colloquium Nist Boulder Boulder (USA), April 2017	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(77) APS March Meeting New Orleans (USA), March 2017	<i>Neuromorphic computing with nanoscale magnetic oscillators</i> J. Torrejon, M. Riou, F. Abreu Araujo, S. Tsunegi, G. Khalsa, D. Querlioz, P. Bortolotti, V. Cros, K. Yakushiji, A. Fukushima, H. Kubota, S. Yuasa, M. D. Stiles and J. Grollier
(76) Colloquium Argonne National Lab Chicago (USA), March 2017	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(75) Spintronics Symposium Purdue University, March 2017	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(74) FOM meeting, “Brains and bits” session Veldhoven (Netherlands), Jan. 2017	<i>Dynamical neuromorphic computing with nanoscale magnetic oscillators</i> J. Grollier et al
(73) DGIF conference Daegu (Korea), December 2016	<i>The spin-torque neural orchestra</i> J. Grollier et al
(72) Seminar at KIST Seoul (Korea), November 2016	<i>The spin-torque neural orchestra</i> J. Grollier et al.
(71) MMM conference New-Orleans (USA), Nov 2016	<i>The spin-torque neural orchestra</i> J. Grollier et al (plenary talk)
(70) IWST conference Nancy (France), October 2016	<i>Brain-inspired computing with spin-torque nano-oscillators</i> J. Grollier et al
(69) NeuRAM3 workshop: Technology and architectures development for Brain Inspired Integrated Circuits Lausanne (Switzerland), Sept. 2016	<i>Superparamagnetic tunnel junctions for bio-inspired computing</i> J. Grollier et al
(68) 1st International Workshop on Memristive Devices Kiel (Germany), September 2016	<i>Brain-inspired computing with spin-torque nano-oscillators</i> J. Grollier et al
(67) Seminar at UCSD San Diego (USA), August 2016	<i>Brain-inspired computing with spin-torque nano-oscillators</i> J. Grollier et al
(66) SPIE conference San Diego (USA), August 2016	<i>Superparamagnetic tunnel junctions for bio-inspired computing</i> J. Grollier et al

(65) MML conference Uppsala (Sweden), June 2016	<i>Towards brain-inspired computing with spin-torque nano-oscillators</i> J. Grollier et al
(64) World Economic Forum, ERC IdeasLab Davos (Switzerland), January 2016	<i>Realizing a Brain on a Chip</i> J. Grollier
(63) Colloquium talk at the University of Uppsala Uppsala (Sweden), December 2015	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(62) 13th RIEC International Workshop on Spintronics Tohoku (Japan), November 2015	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(61) Dynamical systems and brain-inspired information processing Besançon (France), November 2015	<i>Magnetic nanodevices for bio-inspired computing</i> J. Grollier et al
(60) EU-Korea Workshop on Nanoelectronics – ICT2015 Lisbon (Portugal), September 2015	<i>Nanodevices for bio-inspired computing: purely electronic memristors</i> J. Grollier et al
(59) SpinIcur Summer School Braga (Portugal), September 2015	<i>Spin-torque nanodevices for bio-inspired computing</i> J. Grollier et al
(58) ICMFS conference Cracow (Poland), July 2015	<i>Spin-torque nanodevices for bio-inspired computing</i> J. Grollier et al
(57) INC2015 Summer School Miraflores (Spain), July 2015	<i>Spin-torque nanodevices for bio-inspired computing</i> J. Grollier et al
(56) ICM conference Barcelona (Spain), July 2015	<i>Spin-torque building blocks</i> J. Grollier et al
(55) EMRS Spring meeting Lille (France), May 2015	<i>Ferroelectric Memristors for Neuromorphic Computing</i> J. Grollier et al
(54) Static and Dynamic Interfacial Effects in Magnetism workshop Washington DC (USA), April 2015	<i>Spin-torque nanodevices for bio-inspired computing</i> J. Grollier et al
(53) IEEE workshop on "Memristive Devices and Neuromorphic Applications" IBM Zurich, November 2014	<i>Purely electronic memristors: Spin Torque and Ferroelectric synapses</i> J. Grollier et al
(52) 1 day conference GRMN Nancy (France), November 2014	<i>Spin torque nanodevices for bio-inspired computing</i> J. Grollier et al
(51) 4th memristor and memristive systems symposium Notre Dame (USA), July 2014	<i>Ferroelectric and ferromagnetic tunnel junctions: purely electronic memristors</i> J. Grollier et al

(50) CNNA conference 2014 Notre Dame (USA), July 2014	<i>Spin torque nano-oscillators for bio-inspired computing</i> J. Grollier et al
(49) Summer School Nanoscience IdF 2014 Etiolles (France), June 2014	<i>Memristors: artificial nano-synapses</i> J. Grollier et al
(48) CIMTEC conference 2014 Montecatini (Italy), June 2014	<i>Nanodevices for bio-inspired computing: memristors and more</i> J. Grollier et al
(47) Workshop on Magnetic Solitons Gothenburg (Sweden), June 2014	<i>Spin torque and magnetic solitons for bio-inspired computing</i> J. Grollier et al
(46) Nano Giga conference 2014 Phoenix (USA), March 2014	<i>Multi-functional Spintronic and Ferroelectric nanodevices for neuromorphic computing</i> J. Grollier et al
(45) NIST seminar Gaithersburg (USA), January 2014	<i>Memristors: artificial nano-synapses</i> J. Grollier et al
(44) Nanotechnologies and Advanced Materials (CNRS-Ben Gourion University) Workshop Paris (France), November 2013	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(43) MMM conference Denver (USA), November 2013	<i>Non linear spin transfer induced vortex dynamics</i> J. Grollier , V. Cros, A. Dussaux, P. Bortolotti, E. Grimaldi, A. Khvalkovskiy, K. A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa, A. Fert
(42) Rocky Mountain IEEE seminars – Colorado State University Fort Collins (USA), October 2013	<i>The Spin Torque Lego - from spin torque nano-devices to advanced computing architectures</i> J. Grollier et al
(41) Rocky Mountain IEEE seminars – UCCS Colorado Springs (USA), October 2013	<i>The Spin Torque Lego - from spin torque nano-devices to advanced computing architectures</i> J. Grollier et al
(40) JSAP-MRS joint symposia Kyoto (Japan), September 2013	<i>Ferroelectric and Spin Torque memristors: purely electronic nano-synapses</i> J. Grollier , A. Chanthbouala, A. Barthélémy, M. Bibes, K. Bouzehouane, S. Boyn, F. Bruno, C. Carretero, R. Chérifi, S. Fusil, V. Garcia, S. Girod, E. Jacquet, S. Xavier, H. Yamada, N. Mathur, X. Moya, J. Sampaio, S. Lequeux, P. Metaxas, N. Locatelli, P. Bortolotti, A. Anane, C. Deranlot, A. Fert, V. Cros, R. Matsumoto, A. Fukushima, K. Yakushiji, H. Kubota, S. Yuasa
(39) ISOE school Cargese (France), September 2013	<i>The Spin Torque Lego - from spin torque nano-devices to advanced computing architectures</i> J. Grollier et al
(38) ISOE school Cargese (France), September 2013	<i>Memristors</i> J. Grollier et al

(37) Conference ISAMMA Taichung (Taiwan), July 2013	<i>The Spin Torque Lego - from spin torque nano-devices to advanced computing architectures</i> <u>J. Grollier et al</u> (plenary talk)
(36) Colloquium "Emerging Non-Volatile Memories" Nantes (France), June 2013	<i>Multi-functional nanodevices for bio-inspired computing</i> <u>J. Grollier et al</u>
(35) Invited seminar, KAUST Thuwal (Saudi Arabia), May 2013	<i>Multi-functional nanodevices for bio-inspired computing</i> <u>J. Grollier et al</u>
(34) New Tech Talk of the Hipeac European Network of Excellence on High Performance and Embedded Architecture and Compilation Paris (France), May 2013	<i>Memristors and other Multi-functional nanodevices for bio-inspired computing</i> <u>J. Grollier et al</u>
(33) Workshop "Oxydes fonctionnels pour l'intégration en micro/nanoélectronique" Autrans (France), April 2013	<i>Ferroelectric and spin torque memristors</i> <u>J. Grollier et al</u>
(32) APS March meeting Baltimore (USA), March 2013	<i>The Spin Torque Lego - from spin torque nano-devices to advanced computing architectures</i> <u>J. Grollier</u>
(31) Colloquium at Exeter University Exeter (UK), October 2012	<i>How a little spin transfusion can help to build multi-functional magnetic nano-devices: from spin torque oscillators to artificial synapses devices</i> <u>J. Grollier</u>
(30) ICM 2012 Busan (Korea), July 2012	<i>Domain wall manipulation by spin currents in magnetic tunnel junctions</i> <u>J. Grollier</u> , P. Metaxas, J. Sampaio, A. Chanthbouala, R. Matsumoto, V. Cros, A. Anane, A.V. Khvalkovskiy, A. Fert, K.A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa
(29) ICM 2012 Busan (Korea), July 2012	<i>Non-linear Spin transfer induced Vortex Dynamics</i> V. Cros, A. Dussaux, P. Bortolotti, E. Grimaldi, <u>J. Grollier</u> , A. Fert, A.V. Khvalkovskiy, K.A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa, K. Ando
(28) Nano-radio Pioneer Workshop Seoul (Korea), July 2012	<i>Spin transfer dynamics in vortex based oscillators</i> <u>J. Grollier</u> , E. Grimaldi, N. Locatelli, A. Dussaux, P. Bortolotti, V. Cros, A. Fert, A.V. Khvalkovskiy, K.A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa
(27) Nanotec Workshop Lausanne (Switzerland), May 2012	<i>Neuromorphic Computing - Memristors</i> <u>J. Grollier</u>
(26) Colloquium at Chalmers University Göthenburg (Sweden), April 2012	<i>Spin transfer induced dynamics: from magnetic nano-oscillators to spintronic memristive devices</i> <u>J. Grollier</u>

(25) Workshop MSNOW 2012 Les Houches (France), February 2012	<i>Current induced domain wall motion by perpendicular injection in MgO- based magnetic tunnel junctions</i> <u>J. Grollier</u> , A. Chanthbouala, P. Metaxas, R. Matsumoto, J. Sampaio, S. Boyn, V. Cros, A. Anane, A.V. Khvalkovskiy, A. Fert, K.A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa
(24) Colloquium of the Heidelberg faculty of Physics and Astronomy Heidelberg (Germany), October 2011	<i>Memristors : Artificial Synapses</i> <u>J. Grollier et al</u>
(23) Nanotec Workshop Athens (Greece), October 2011	<i>Memristors</i> <u>J. Grollier et al</u>
(22) Neuromorphic Systems Workshop Heidelberg (Germany), September 2011	<i>Memristors : Artificial Synapses</i> <u>J. Grollier et al</u>
(21) Final workshop of the EU Bion project Tübingen (Germany), September 2011	<i>Memristors : Artificial Synapses</i> <u>J. Grollier et al</u>
(20) Magnonics conference Porto de Galinhas (Brazil), August 2011	<i>Spin Transfer Dynamics in Vortex based Oscillators</i> <u>J. Grollier</u> , V. Cros, N. Locatelli, A. Dussaux, A. Khvalkovskiy, P. Bortolotti, V.V. Naletov, A. Fukushima, G. de Loubens, S. Yuasa, O. Klein, K. Ando, A. Fert
(19) FET11 “Science beyond Fiction” conference Budapest (Hungary), May 2011	<i>An introduction to memristors</i> <u>J. Grollier et al</u>
(18) Eulasur school Bariloche (Argentina), October 2010	<i>Spintronics</i> <u>J. Grollier et al</u>
(17) International Symposium on Integrated Functionalities (ISIF) Porto Rico, June 2010	<i>Spin-transfer Induced Microwave Oscillations</i> <u>J. Grollier</u> , A. Dussaux, A.V. Khvalkovskiy, B. Georges, V. Cros, A. Fert , A. Fukushima, M. Konoto, H. Kubota, R. Matsumoto, K. Yakushiji, S. Yuasa, K. Ando
(16) Solid State Devices and Materials (SSDM) conference Sendai (Japon), October 2009	<i>Spin-transfer Oscillations in MgO Based Tunnel Junctions</i> <u>J. Grollier</u> , B. Georges, A. Dussaux, A.V. Khvalkovskiy, V. Cros, A. Fert , A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa, K. Ando
(15) International Conference on Magnetism (ICM) conference Karlsruhe (Allemagne), July 2009	<i>Spin-transfer Induced Vortex Oscillations</i> <u>J. Grollier</u> , V. Cros, B. Georges, A. Dussaux, C. Deranlot, A. Fert , A.V. Khvalkovskiy, K. A. Zvezdin, G. Faini, A. Fukushima, H. Kubota, K. Yakushijin, S. Yuasa, K. Ando
(14) New Frontier in Spintronics Workshop Jerusalem (Israël), May 2009	<i>Spin-transfer Induced Vortex Oscillations : Model and experiments</i> <u>J. Grollier</u> , V. Cros, B. Georges, A. Dussaux, C. Deranlot, A. Fert , A.V. Khvalkovskiy, K. A. Zvezdin, G. Faini, A. Fukushima, H. Kubota, K. Yakushijin, S. Yuasa, K. Ando

<p>(13) Magnetism and Magnetic Materials (MMM) conference Austin (USA), November 2008</p>	<p><i>Measurement of phase-locking of a Spin-Transfer Nano-Oscillator to an external signal in the presence of noise : a milestone for the synchronization of a large assembly of STNOs</i> J. Grollier, B. Georges, M. Darques, V. Cros, C. Deranlot, B. Marcilhac, G. Faini, A. Fert</p>
<p>(12) SPIN SWITCH Workshop Krakow (Pologne) September 2008</p>	<p><i>Phase locking of a Spin Transfer Oscillator to an external microwave current : a milestone for the synchronization of a large assembly of STOs</i> J. Grollier, B. Georges, M. Darques, V. Cros, C. Deranlot, B. Marcilhac, G. Faini, A. Fert</p>
<p>(11) SPIE Optics & Photonics San Diego (USA), August 2008</p>	<p><i>Phase locking of a Spin Transfer Nano-Oscillator to an external microwave current</i> J. Grollier, B. Georges, M. Darques, V. Cros, G. Faini, C. Deranlot, B. Marcilhac, A. Fert</p>
<p>(10) 14 th ICSFS conference Dublin (Irlande), June 2008</p>	<p><i>Phase locking of a Spin Transfer Oscillator to an external microwave current : a milestone for the synchronization of a large assembly of STOs</i> J. Grollier, B. Georges, V. Cros, C. Deranlot, G. Faini, A. Fert</p>
<p>(9) NordicSpin'08 workshop Gimo (Sweden), April 2008</p>	<p><i>On the path to synchronization of spin-transfer oscillators by their self-emitted microwave currents</i> J. Grollier, B. Georges, V. Cros, M. Darques, C. Deranlot, F. Petroff, G. Faini, A. Fert</p>
<p>(8) E. Luescher seminar Klosters (Switzerland) , February 2008</p>	<p><i>Shaping the angular dependence of the spin transfer torque for microwave emission without applied field</i> J. Grollier, O. Boulle, B. Georges, V. Cros, M. Darques, L. G. Pereira*, C. Deranlot, F. Petroff, G. Faini, J. Barnas, A. Fert</p>
<p>(7) WE-Heraeus Seminar Bad Honnef (Germany) January 2007</p>	<p><i>Spin Transfer Oscillators connected in series : Numerical simulations and Experiments</i> J. Grollier, B. Georges, O. Boulle, V. Cros, C. Deranlot, A. Fert, G. Faini</p>
<p>(6) Franco-British Spintronex Seminar UK Embassy Paris (France), April 2006</p>	<p><i>Synchronization of spin transfer oscillators : a numerical study</i> J. Grollier, V. Cros, A. Fert</p>
<p>(5) Modern Problems of Spin Dynamics Strasbourg (France), October 2006</p>	<p><i>Spin transfer : adjusting the torque angular dependence for steady precession at zero field and synchronization</i> J. Grollier, O. Boulle, V. Cros, C. Deranlot, A. Fert, G. Faini</p>
<p>(4) Invited Seminar University of Konstanz (Germany), June 2006</p>	<p><i>Domain wall motion, magnetization switching and microwave emission by spin transfer</i> J. Grollier, V. Cros, O. Boulle, M. Elsen, S. Laribi, A. Hamzic, H. Jaffrès, J-M George, A. Fert, G. Faini</p>
<p>(3) WE-Heraeus-Seminar Bad Honnef (Germany) April 2004</p>	<p><i>Spin transfer : current-induced magnetization reversal and domain wall motion</i> J. Grollier, V. Cros, H. Jaffrès, A. Hamzic, J. M. George, G. Faini, J. Ben Youssef, H. LeGall, A. Vaurès, A. Fert</p>
<p>(2) E. Luescher seminar Klosters (Switzerland) , February 2004</p>	<p><i>Magnetization reversal by spin transfer in Co/Cu/Co pillars</i> J. Grollier, V. Cros, A. Hamzic, H. Jaffrès, J. M. George, A. Fert, G. Faini, J. Ben Youssef, H. LeGall</p>

(1) LATSIS Workshop EPFL Lausanne (Switzerland), June 2002	<i>Magnetisation reversal by spin injection in Co/Cu/Co pillars</i> J. Grollier, V. Cros, H. Jaffrès, A. Hamzic, J. M. George, G. Faini, J. Ben Youssef, H. LeGall, A. Fert
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Personal invited talks in national conferences / seminars (41)	
(41) Colloque du département de physique de l'ENS Paris, Novembre 2019	<i>Neuromorphic Computing: overview and challenges</i> J. Grollier et al
(40) Forum CNRS Nouveaux Mondes Cité des sciences, octobre 2019	<i>Les circuits de l'intelligence artificielle</i> J. Grollier
(39) Séminaire Spintec Grenoble, Octobre 2019	<i>Dynamics and oscillations in spintronic neural nets</i> J. Grollier et al
(38) Workshop Labex Nanosaclay Palaiseau, Septembre 2019	<i>Neuromorphic Computing: overview and challenges</i> J. Grollier et al
(37) Congrès général de la SFP Nantes, Juillet 2019 Conférence plénière	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(36) Séminaire chez Google Paris, Juin 2019	<i>Neuromorphic Computing: overview and challenges</i> J. Grollier et al
(35) Séminaire général du SPEC Saclay, Juin 2019	<i>Neuromorphic Computing with spintronic nano-oscillators</i> J. Grollier et al
(34) Workshop Ceebios sur le biomimétisme Paris, Avril 2019	<i>Neuromorphic Computing: overview and challenges</i> J. Grollier et al
(33) Colloque Innovation bio-inspirée EDF labs, Avril 2019	<i>Towards deep learning with emerging nanodevices</i> J. Grollier et al
(32) Séminaire au LIP6 Paris, Février 2019	<i>Neuromorphic Computing with spintronic nano-oscillators</i> J. Grollier et al
(31) Journées Science et Progrès ENS Paris, Janvier 2019	<i>Microwave neural processing and broadcasting with spintronic nano-oscillators</i> J. Grollier et al
(30) Séminaire au groupe de Neurosciences Théoriques de l'ENS Paris, Décembre 2018	<i>Electronic Nanodevices for Neuromorphic Computing</i> J. Grollier et al
(29) Séminaire à Soleil Saclay, Novembre 2018	<i>Electronic Nanodevices for Neuromorphic Computing</i> J. Grollier et al
(28) Séminaire à l'IPCMS	<i>Electronic Nanodevices for Neuromorphic Computing</i>

Strasbourg, Novembre 2018	J. Grollier et al
(27) Séminaire général de l'X Palaiseau, Octobre 2018	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(26) Forum Vivatech Paris 2018	<i>Nano-neurones artificiels</i> J. Grollier
(25) Conférence grand public Observatoire Océanologique Banyuls 2018	<i>Les circuits de l'intelligence artificielle</i> J. Grollier
(24) Conférence dans le cadre du Cycle Pluridisciplinaire d'Etudes Supérieures Chimie Paris, mars 2018	<i>Electronic Nanodevices for bio-inspired computing</i> J. Grollier et al
(23) Séminaire à l'ISMO Orsay, Février 2018	<i>Electronic Nanodevices for bio-inspired computing</i> J. Grollier et al
(22) Paris Machine Learning meetup Paris, Février 2018	<i>Artificial Hardware Nano-Neurons</i> J. Grollier et al
(21) Séminaire au LPS Orsay, Décembre 2017	<i>Electronic Nanodevices for bio-inspired computing</i> J. Grollier et al
(20) Séminaire au Laboratoire Physique de la Matière Condensée à l'X Palaiseau, Décembre 2017	<i>Electronic Nanodevices for bio-inspired computing</i> J. Grollier et al
(19) TEDx Saclay Centrale-Supélec, Nov. 2017	<i>How artificial nano-neurons can fix computer's energy addiction</i> J. Grollier
(18) Séminaire au LLR X-CNRS Palaiseau, Juin 2017	<i>Electronic Nanodevices for bio-inspired computing</i> J. Grollier et al
(17) Journée d'avancement du DIM NanoK UPMC (France), Novembre 2016	<i>Fantastique, ma jonction tunnel magnétique est stochastique !</i> J. Grollier et al
(16) Invited seminar MPQ Université Paris-Diderot (France), Décembre 2015	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(15) Journées Neurostic Cergy-Pontoise (France), Juillet 2014	<i>Nanodevices for bio-inspired computing</i> J. Grollier et al
(14) Bio-inspired Computing and Architectures Workshop IRCICA Lille (France), December 2012	<i>Memristors : Artificial Nano-Synapses</i> J. Grollier et al
(13) Invited Seminar CEA-SPEC, Saclay (France), November 2012	<i>The Spin Torque Lego : from spin torque oscillators to artificial synapses devices</i> J. Grollier et al

(12) JMC13 Montpellier (France), August 2012	<i>Multi-functional magnetic nanodevices : from spin torque oscillators to artificial synapses devices</i> J. Grollier et al
(11) Invited Seminar LPN-CNRS, Marcoussis (France), April 2012	<i>Memristors : Nano-Synapses Artificielles</i> J. Grollier et al
(10) Invited Seminar UNIC-CNRS, Gif sur Yvette (France), January 2012	<i>Memristors and other nanodevices for neuromorphic computing</i> J. Grollier et al
(9) Journées Cnano Jussieu Paris (France), November 2011	<i>Memristors : Nouveaux composants pour Synapses Artificielles</i> J. Grollier et al
(8) Journées Nationales Nanosciences et Nanotechnologies (J3N) Strasbourg (France), November 2011	<i>Memristors : Nano- Synapses Artificielles</i> J. Grollier et al
(7) Atelier Nouveaux Paradigmes du traitement de l'information Paris (France), May 2011	<i>Memristors : artificial synapses</i> J. Grollier et al
(6) Invited Seminar UJL Nancy (France), April 2011	<i>Memristors : artificial synapses</i> J. Grollier et al
(5) Colloque sur les vortex magnétiques CEA-SPEC Saclay (France), November 2009	<i>Spin-transfer induced vortex oscillations : comparison between micromagnetic simulations and analytical calculations</i> J. Grollier , A. Dussaux, B. Georges, N. Locatelli, V. Cros, A. Fert., A.V. Khvalkovskiy, K.A. Zvezdin
(4) Journées Cnano Campus Boussicault Paris (France), 2007	<i>Synchronisation d'oscillateurs à transfert de spin : simulations numériques et expériences</i> J. Grollier , B. Georges, O. Boulle, V. Cros, C. Deranlot, A. Fert, G. Faini
(3) Invited Seminar SPEC, CEA Saclay (France), January 2006	<i>Synchronisation des oscillateurs à transfert de spin : simulations numériques</i> J. Grollier , V. Cros, A. Fert
(2) Colloque Alain Bouyssy Université Paris Sud, Orsay (France), February 2006 <i>Best oral presentation prize</i>	<i>Synchronisation des oscillateurs à transfert de spin : simulations numériques</i> J. Grollier , V. Cros, A. Fert
(1) Symposium anniversaire de Peter Levy UMφ CNRS–Thales, Palaiseau (France), 2006	<i>Synchronization of spin transfer oscillators : a numerical study</i> J. Grollier , V. Cros, A. Fert

Personal talks in international conferences (21)	
(21) MMM Conference Chicago (USA), January 2013	<i>Spin Torque Diode Measurements of Domain Wall Resonance in Magnetic Tunnel Junctions</i> S. Lequeux, <u>J. Grollier</u> , J. Sampaio, P. Bortolotti, V. Cros, R. Matsumoto, A. Fukushima, K. Yakushiji, H. Kubota and S. Yuasa
(20) MMM Conference Chicago (USA), January 2013	<i>Single Shot time-domain measurements of Spin Transfer induced Domain Wall propagation in Magnetic Tunnel Junctions</i> J. Sampaio, <u>J. Grollier</u> , S. Lequeux, V. Cros, R. Matsumoto, A. Fukushima, H. Kubota, K. Yakushiji, and S. Yuasa
(19) Granada Seminar “Physics, Computation and the Mind” La Herradura (Spain), Sept. 2012	<i>Memristors and novel nano-devices for neuromorphic computing</i> <u>J. Grollier</u>
(18) ICM Busan (Korea), July 2012	<i>Bias Dependence of Spin Transfer Torques in Magnetic Tunnel Junctions</i> S. Boyn, R. Matsumoto, J. Sampaio, V. Cros, <u>J. Grollier</u> , A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa
(17) Nature Conference FEM2012 Aachen (Germany), June 2012	<i>A Spintronic Memristor</i> <u>J. Grollier</u> , A. Chanthbouala, J. Sampaio, P. Metaxas, R. Matsumoto, A. Anane, A. V. Khvalkovskiy, V. Cros, A. Fert, K. A. Zvezdin, A. Fukushima, H. Kubota, K. Yakushiji, S. Yuasa
(16) Intermag Vancouver (Canada), May 2012	<i>Non-linear gyrotropic motion and phase locking behavior of a magnetic vortex in a MTJ based spin transfer nano-oscillators</i> A. Dussaux, V. Cros, P. Bortolotti, A.V. Khvalkovskiy, <u>J. Grollier</u> , A. Fukushima, H. Kubota, K. Yakushiji, K. A. Zvezdin, S. Yuasa, K. Ando, A. Fert
(15) Intermag Vancouver (Canada), May 2012	<i>Zero field spin transfer induced large amplitude vortex oscillations in MgO magnetic tunnel junction with perpendicular polarizer</i> E. Grimaldi, A. Dussaux, V. Cros, B. Salles, A.V. Khvalkovskiy, <u>J. Grollier</u> , K. Yakushiji, M. Konoto, H. Kubota, A. Fukushima, S. Yuasa, A. Fert
(14) Conference on Magnetism and Magnetic Materials Scottsdale (USA), November 2011	<i>Coupling parameters and selection rules for spin-transfer induced dynamics of two coupled vortices</i> N. Locatelli, P. Bortolotti, <u>J. Grollier</u> , V. Cros, A. Fert, V.V. Naletoc, G. De Loubens, O. Klein, A.V. Khvalkovskiy, G. Avanesyan, K.A. Zvezdin, C. Ulysse, G. Faini
(13) Conference on Magnetism and Magnetic Materials Scottsdale (USA), November 2011	<i>Current induced domain wall motion by perpendicular injection in MgO-based magnetic tunnel junctions</i> <u>J. Grollier</u> , A. Chanthbouala, R. Matsumoto, V. Cros, A. Anane, A. Fert, A.V. Khvalkovskiy, K.A. Zvezdin, A. Fukushima, S. Yuasa
(12) Moris conference Nijmegen (Netherlands), June 2011	<i>Vertical current induced domain wall motion in MgO- tunnel junction with low current densities</i> <u>J. Grollier</u> , A. Chanthbouala, R. Matsumoto, V. Cros, A. Anane, A.V. Khvalkovskiy, A. Fert, K.A. Zvezdin, A. Fukushima, S. Yuasa
(11) RTNSA workshop Ordizia (Spain), June 2011	<i>Spin-torque diode measurements of MgO-based magnetic tunnel junctions with asymmetric electrodes</i> R. Matsumoto, A. Chanthbouala, <u>J. Grollier</u> , V. Cros, A. Fert, A. Fukushima, S. Yuasa

(10) Intermag conference Taipei (Taiwan), May 2011	<i>Spin-transfer Induced domain wall motion in MgO-based magnetic tunnel junction controlled by perpendicular current injection</i> <u>J. Grollier</u> , A. Chanthbouala, R. Matsumoto, V. Cros, A. Anane, A.V. Khvalkovskiy, A. Fert, K.A. Zvezdin, A. Fukushima, S. Yuasa
(9) MMM conference Austin (USA), November 2008	<i>Temperature dependence of Spin Transfer induced high frequency response of MgO based magnetic tunnel junctions</i> B. Georges, <u>J. Grollier</u> , V. Cros, A. Fert, A. Fukushima, H. Kubota, K. Yakushijin, S. Yuasa, K. Ando
(8) Intermag conference Madrid (Espagne), May 2008	<i>Spin transfer induced microwave emission and spin diode effects in MgO based magnetic tunnel junctions</i> B. Georges, V. Cros, <u>J. Grollier</u> , A. Fert, A. Fukushima, H. Kubota, K. Yakushijin, S. Yuasa, K. Ando
(7) Magnetic Multilayers MML Perth (Australie), October 2007	<i>RF excitations in zero field associated with a wavy angular dependence of the spin transfer torque</i> O. Boulle, M. Darques, B. Georges, V. Cros, <u>J. Grollier</u> , G. Pereira, C. Deranlot, G. faini, J. Barnas, A. Fert
(6) 10th joint MMM/Intermag conference Baltimore (USA), January 2007	<i>Spin Transfer Oscillators connected in series : Numerical simulations and Experiments</i> O. Boulle, <u>J. Grollier</u> , V. Cros, C. Deranlot, A. Fert, G. Faini
(5) INTERMAG San Diego (USA), May 2006	<i>Synchronization of spin transfer oscillators : a numerical study</i> <u>J. Grollier</u> , O. Boulle, V. Cros, A. Fert
(4) Moscow International Symposium on Magnetism Moscou (Russia), June 2005	<i>Magnetization reversal by injection and transfer of spin : experiments and theory</i> <u>J. Grollier</u> ,O. Boulle ,V. Cros, A. Hamzic ,H. Jaffrès ,F. Petroff, A. F
(3) 47th Annual Conference on Magnetism and Magnetic Materials Tampa (USA), 2002	<i>Field dependence of the magnetic switching induced by a spin polarized current : a probe for theoretical models</i> <u>J. Grollier</u> , V. Cros, H. Jaffrès, A. Hamzic, J. M. George, G. Faini, J. Ben Youssef, H. LeGall, A. Fert
(2) 47th Annual Conference on Magnetism and Magnetic Materials Tampa (USA), 2002	<i>Domain wall displacement induced by a large dc current</i> <u>J. Grollier</u> , V. Cros, D. Lacour, A. Hamzic, A. Vaurès, A. Fert, D. Adam, G. Faini
(1) 1st Annual Meeting of the RTN "Computational Magnetolectronics" Budapest (Hungary), October 2001	<i>Magnetization reversal induced by spin polarized current</i> <u>J. Grollier</u> , V. Cros, H. Jaffrès, J.M. George, A. Hamzic, G. Faini , J. Ben Youssef , H. Legall , A. Fert

Personal talks in national conferences (6)

(6) “memristors : devices and dedicate architectures” workshop Palaiseau, France, March 2011	<i>An introduction to memristors</i> <u>J. Grollier</u>
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(5) 9 ^{ème} colloque Louis Néel France, March 2004	<i>Déplacement de paroi magnétique par transfert de spin dans une vanne de spin</i> J. Grollier, P. Boulenc, V. Cros, A. Hamzic, A. Vaurès, A. Fert, G. Faini
(4) 8 ^{ème} colloque Louis Néel France, September 2002	<i>Déplacement de paroi par injection d'un fort courant continu : contrôle de la configuration magnétique d'une vanne de spin</i> J. Grollier, D. Lacour, V. Cros, A. Hamzic, A. Vaurès, A. Fert, D. Adam, G. Faini
(3) VIII ^{èmes} Journées de la Matière Condensée France, August 2002	<i>Renversement d'aimantation par injection d'un courant polarisé en spin : comparaison avec les différents modèles</i> J. Grollier, V. Cros, H. Jaffrès, A. Hamzic, J. M. George, G. Faini, J. Ben Youssef, H. LeGall, A. Fert
(2) VIII ^{èmes} Journées de la Matière Condensée France, August 2002	<i>Déplacement de paroi par injection d'un courant continu : contrôle de la configuration magnétique d'une vanne de spin</i> J. Grollier, D. Lacour, V. Cros, A. Hamzic, A. Vaurès, A. Fert, D. Adam, G. Faini
(1) 7 ^{ème} colloque Louis Néel France, March 2001	<i>Renversement d'aimantation par injection de spin dans des piliers de type Co/Cu/Co</i> J. Grollier, V. Cros, H. Jaffrès, J.M. George, A. Hamzic, A. Fert, G. Faini, J. Ben Youssef, H. Legall

Press and general audience communications (26)

(26) Interview in Nature Communications (2019): Building brain-inspired computing

<https://www.nature.com/articles/s41467-019-12521-x>

(25) « Nano-neurones, maxi effets », interview on France 24 TV (April 2019)

<https://www.youtube.com/watch?v=IrY8BfXT8zM>

(24) Les Echos, « Quand l'ordinateur copiera le cerveau » (Jan. 2019)

<https://www.lesechos.fr/idees-debats/sciences-prospective/0600341179488-quand-lordinateur-copiera-le-cerveau-2234502.php>

(23) General audience conference in French: "Les circuits de l'intelligence artificielle" Banyuls (May 2018)

https://www.youtube.com/watch?v=e_1-c_jYBMc

(22) Forum Vivatech, « Nano-neurones artificiels » (May 2018)

Interview on France 24 TV:

<https://www.youtube.com/watch?v=S9dHNNH7MJ2k&t=0s&list=PLCnUnV3yCIYuQv7khUDDFQ7EP314nLNsC&index=2>

(21) Usines Nouvelles «La French touch de l'IA» (Feb. 2018)

<https://www.usinenouvelle.com/article/exploratrice-de-nano-neurones-julie-grollier-directrice-de-recherche-a-l-unite-mixte-cnrs-thales.N648243>

(20) Journal du CNRS « Demain, un ordinateur inspiré de notre cerveau ? »

<https://lejournald.cnrs.fr/articles/demain-un-ordinateur-inspire-de-notre-cerveau>

(19) Presentation at Tedx Saclay (Nov. 2017)

<https://www.youtube.com/watch?v=gCH3zCIQnvY>

(18) Usines Nouvelles «Sur la piste neuromorphique» (Nov. 2017)

<https://www.usinenouvelle.com/editorial/sur-la-piste-neuromorphique.N607628>

(17) RFI Nouvelles Technologies « Nano neurone artificiel » (Oct. 2017)

<http://www.rfi.fr/emission/20171022-nano-neurone-artificiel>

(16) Next Impact « IA : des nano-neurones pour « repenser l'architecture interne de l'électronique » (Oct. 2017)

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