Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Piero Torelli**
Work Address(es)	CNR-IOM, Area Science Park Basovizza, S.S. 14 km 163.5, 34149 Trieste, Italy
Telephone(s)	+39 040 3756457
E-mail	piero.torelli@elettra.eu
Nationality	Italian
Date of birth:	08/10/1973
Gender	Male
Family status:	Married, 2 children
Mother tongue(s)	Italian
Other language(s)	French (mother tongue), English (Fluent) and German (Basic)

Education

Dates	From 1992 to 1998
Position	Student at the University of Modena, Italy
Title of qualification awarded	Graduate in physics with 108/110 (05 October 1998)
Principal subjects	Title of Laurea Thesis: Magnetic properties of the Gd/Fe interface Supervisor: Prof. Giorgio Rossi
Dates	From November 1998 to February 2002
Position	Ph.D fellow at the University of Paris Sud (Paris XI) Orsay, France
Title of qualification awarded	Ph.D. in Physics (05 February 2002)

Work experience

Dates	February 2002-January 2005
position held workplace	Post-doc within the EU-STREP Project VOLPE ID 16 beamline ESRF, Polygone Scientifique Louis Néel, 6 rue Jules Horowitz, 38000 Grenoble, France
Dates	February 2005-September 2009
position held workplace	Researcher, fixed term (position founded on the EU-STREP project GSOMEN) INFM S^3 National Research Centre, via Campi 213/A, 41100 Modena, Italy
Dates	From September 2009-now
position held workplace	Researcher (permanent position) CNR-IOM, TASC Laboratory, Area Science Park Basovizza, S.S. 14 km 163.5, 34149 Trieste, Italy

Actual activities and responsibilities	I am a researcher of the CNR, the biggest public research institution of Italy. I coordinate a research group formed (except myself) by 2 fixed term CNR researcher, 2 CNR Post docs (assegni di ricerca) and 1 PhD student. I'm in charge of the coordination of the work on the APE-High Energy branchline of the Elettra synchrotron facility. Since my arrival in 2009 I have developed the activities of the APE-HE branch from all point of view (scientific, instrumental and administrative). The energy range of the beamline span from 200 to 1300 eV of photon energy, the endstation is equipped with an electron energy analyser and a system for performing NEXAFS in total electron yield both in UHV and in ambient pressure conditions. The APE-HE branch distributes public time independently for 8 experiments a semester, considering an average duration of 18 shifts (6 days) per-experiment. I also take care of coordinating the work on a separate UHV system devoted to the growth and the characterization of thin film for spintronics. The system called "MBE-Cluster" is formed by 3 UHV chamber connected in-vacuum. Two chambers are MBE growth systems and the third is an XPS station for chemical characterization.
Research interests	My actual research activity is divided into two main axes: the study of the magnetic properties of nanostructures and the study of the active site in heterogeneous catalysis. Both research lines are pursued by applying the synchrotron based spectroscopy to the study of these phenomena.
Main Professional Achievements:	
Publications	115 publications in international journals, (7 as first, 18 as second and 19 as last author) ResearcherID: F-8940-2010 ORCID ID:0000-0001-9300-9685 Web of Science ResearcherID: AAJ-5890-2020
Publications in high impact Journals	1 Nature communication 1 Advanced Materials 2 Nano Letters 2 ACS Nano 2 Angewante Chimie (Int. Ed.) 3 Advanced Functional Materials 4 Physical Review Letters
Bibliometric data (Source: Scopus)	Results found: 115 Sum of the Times Cited: 2040 (250 citations in 2019) h-index: 22
Leading of project/fundrising	-Principal investigator of a national INFM-CNR SEED project 2008 "Nanopatterning of oxide films by misfit dislocation networks" (grant: 27.000 euro) -Responsible of the CNR unit of the PRIN project "Cutting-edge X-ray methods and models for the understanding of surface site reactivity in heterogeneous catalysts and sensors" PRIN 2017 (grant: 104.000 euro) -Responsible of workpackage "In-operando activities an APE beamline" of NFFA-MIUR project (grant: 250.000 euro)
Commercial activity	Chemical characterization of electrodes (for De Nora company) 6.000 euro
Participation at international projects	I participated at 5 different European project (2 STREP in the FP6 scheme, 1 Large in the FP7 and I was involved in the supervision of a Marie Curie under FP7), 1 H2020 Infraia
Presentation at conferences Invited seminars	More than 20 presentations (oral contributions) at national and international conferences 6 Invited seminars at national and international research centres

Invited presentation at conferences	8 Invited talks at international workshops and conferences (JEMS Parma 2012, MONAS Rome, 2012, MISM Moskow 2014, SPINTRONICS IX San Diego 2016, CEOX Trieste 2017, SPINTRONICS X San Diego 2017, EMN Vienna 2018, FISMAT Catania, 2019)
Session Chair at conferences	3 (at Diluted magnetic semiconductors session at JEMS 2012 conference, at multiferroics session MISM 2014 conference and at nanostructures and nanotechnology session at FISMAT2019)
Lectures at international schools	4 (`School on Synchrotron and Free-Electron-Laser Methods for Multidisciplinary Applications' (ICTP, 7-18 May 2018), Second NFFA-Eu Summer school (Elettra 9-14 July 2018), XV school on Synchrotron radiation (Muggia, 16-27 sept. 2019), ELCOREL Meeting, (Milano 27-29 Jan. 2020))
Review activity for international scientific journals	Nature Commun., Adv. Func. Mat, Phys. Rev. Lett., Phys. Rev. B, Phys. Rev. Appl., Appl. Phys. Lett., Surf. Sci., J. Chem. Phys., Phys. Lett. A, Physica Status Solidi A, Commun. Chem.
Review activity for international funding agencies	Referee for ANR French National founding scheme
Review for the Italian Government (MIUR and MISE)	-Referee for the VQR 2011-2014 (Italian public research evaluation scheme) (for MIUR) -Referee of the “materiali avanzati” panel of the “Fabbrica intelligente” scheme (for MISE)
Teaching activity	Supervisor of 1 PhD student, Co-supervisor of: 2 PhD Student, 1 Degree Student and 3 Master Students
Scientific responsible	Scientific responsible of 6 CNR post-doc fellows (assegni di ricerca)
Awards	Eligibility for italian university Professor position. “ASN 2016 Abilitazione professore 2 fascia” and “ASN 2018 Abilitazione professore 1 fascia” Settore 02/B1 fisica sperimentale della materia
Participation at boards of international Institutions	-Member of the Review Panel of the French synchrotron radiation facility (SOLEIL) (from 2018 to now)
Participation at board of Italian institutions	-Member of the “Consiglio d’Istituto” of the IOM Institute (from 2016 to 2020) -Member of the “Consiglio dei docenti della scuola di dottorato di nanotecnologie dell’Università di Trieste” from 2020-now
Participation at commissions	Committee member (opponent) of PhD thesis of Luca Braglia and Aram Bugaev. Defense held in Turin (università di Torino) 03/11/2017 (membro esterno della commisione giudicatrice dell'esame finale di dottorato del dott. Luca Braglia e del dott. Aram Bugaev del corso di dottorato in scienze Chimiche e dei Materiali dell'Università di Torino) 3 time president of commisione per assegno di ricerca 3 time member of commissione per assegno di ricerca
Dissemination to large public	Articles related to my research appeared on the home page of large distribution journals such as: repubblica.it, corriere.it, ansa.it, ilsussidiario.net and in some blogs dedicated to science dissemination: e.g. tomshow.it I participated in dissemination meetings with general public and schools at the “teatro del Carbone” in Mantova on the digital memories

Former students and post-docs	D. Calzolari (former Uni-Friburg post-doc) L. Gragnaniello (now development engineer at ATTACUBE GMBH) B.R. Salles (now Professor at Universitade Federal Rio de Janeiro, Br) B. Gobaut (now Research engineer at IPCMS-CNRS Strasbour, Fr) T. Pincelli (now Helmotz Fellowship at FHI Berlin, De) R. Ciprian (scientist at the Magnedyn beamline Fermi, deceaded) V. Bonanni (now Junior scientist on the TWINMIC beamline at Elettra) G. Vinai (now researcher at APE-HE beamline CNR, It) R. Edla (now Beamline scientist at KTI Karlsrhue, De) F. Motti (now post doc at PSI, Ch)

Publications list

1. G. Panaccione, P. Torelli, G. Rossi, G. van der Laan, M. Sacchi and F. Sirotti, *Local magnetic moment coupling of Gd on Fe(100) studied by magnetic dichroism in angular-dependent photoemission,* **Phys. Rev B 58 5916(R) (1998)**
2. G. Panaccione, P. Torelli, G. Rossi, G. van der Laan, P. Prieto and F. Sirotti, *Magnetic linear dichroism in Gd 4f and 4d photoemission of magnetic interfaces* **J. Phys. Condens. Matter 11 3431-3442 (1999)**
3. F. Bournel, F. Jolly, F. Rochet, G. Dufour, F. Sirotti and P. Torelli, *Core-electron spectroscopy of nonconjugated linear dienes chemiosorbed on Si(001)-2X1 with synchrotron radiation,* **Phys. Rev B 62, 7645 (2000)**
4. F. Sirotti, P. Torelli, A. Mirone, S. Girlando, L. Floreano, G. Panaccione and G. Rossi, *Surface magnetization dynamics at the nanosecond time scale,* **J. Magn. Magn. Mat. 226-230 (2001) 463-464**
5. F. Bruno, D. Cvetko, L. Floreano, R. Gotter, A. Morgante, A. Verdini, G. Panaccione, F. Sirotti, m. Sacchi, P. Torelli and G. Rossi*, Structure modulated LMDAD effects in BCC-Fe vs. RCP-Fe*, **J. Magn. Magn. Mat. 233, 123 (2001)**
6. F. Sirotti, S. Girlando, C. Spezzani, L. Floreano, P. Torelli, A. Mirone, G. Panaccione and G. Rossi, *Surface magnetization dynamics at the nanosecond time scale*, **Nuclear Instruments and Methods in Physics Research A, 467-468 (2001) 1430-1433**
7. F. Bruno, G. Panaccione, A. Verdini, R. Gotter, L. Floreano, P. Torelli, M.Sacchi, F. Sirotti, A. Morgante, G. Rossi, *Surface and Bulk contribution in ferromagnetic transition metals via photoelectron diffraction in magnetic dichroism,* **Phys. Rev. B 66, 024417 (2002)**
8. C. Spezzani, P. Torelli, M. Sacchi, R. Delaunay, C. F. Hague, F. Salmassi and E. M. Gullikson, *Hysteresis curve of ferromagnetic and antiferromagnetic order in metallic multilayers by resonant X-ray scattering,* **Phys. Rev. B 66, 052408, (2002)**
9. C. Spezzani, P. Torelli, M. Sacchi, R. Delaunay, C. F. Hague, A. Mirone, F. Salmassi, E. M. Gullikson and J. H. Underwood, *Magnetic coupling in Co/Cu multilayers: field dependent antiferromagnetic ordering investigated by resonant X-ray scattering,* **Surf. Rev. and Lett. Vol. 9, (2002) 921-924**
10. F. Bruno, R. Gotter, G. Panaccione, M. Sacchi, P. Torelli and A. Verdini *Surface vs. bulk magnetic properties of Co/Fe(001) and Fe/Co/Fe(001) as probed by linear magnetic dichroism in photoemission,* **Physica B 320, 210 (2002)**
11. C. Spezzani, P. Torelli, M. Sacchi, R. Delaunay, C. F. Hague, V. Cros and F. Petroff, *Antiferromagnetic hysteresis in magnetoresistive multilayers investigated by X-ray resonant scattering*, **Appl. Phys. Lett. 81, 3425 (2002)**
12. J.J. Gallet, F. Jolly, F. Rochet, F. Burnel, G. Dufour, P. A. Avila, F. Sirotti and P. Torelli, *Resonant Auger spectroscopy of poly(4-hydroxystilene)* **J. Electron Spectrosc. Relat. Phenom. 122, 11 (2002)**
13. P. Torelli, F. Sirotti and P. Ballone, *Surface alloying and mixing at the Mn/Fe(001) interface: Real-time photoelectron spectroscopy and modified embedded atom simulations,* **Phys. Rev. B 68, 205413 (2003)**
14. M. Sacchi, C. Spezzani, P. Torelli, A. Avila, R. Delaunay and C. F. Hague, *Ultrahigh-Vacuum Soft X-ray reflectometer,* **Rev. Sci. Instrum. 74, 2791 (2003)**
15. C. Spezzani, P. Torelli, R. Delaunay, C. F. Hague, Frederic Petroff, A Scholl, E. M. Gullikson and M. Sacchi, *Resonant diffuse X-ray scattering from magnetic multilayers*, **Physica B, 345, 153 (2004)**

16. G. Paolicelli, G. Cautero, M. Cautero, A. Fondacaro, M. Grioni, P. Lacovig, B. Krastanov, G. Monaco, F. Offi, P. Pittana, M. Sacchi, R. Sergo, G. Stefani, R. Tommasini, P. Torelli and G. Panaccione, *Bulk sensitive photoemission: first results of VOLPE project at ESRF,* **J. Electron Spectrosc. Relat. Phenom., 144 -147 (2005) 963**
17. L. Giovannelli, M. De Santis, G. Panaccione, F. Sirotti, P. Torelli, I. Vobornik, R. Larciprete, S. Egger and G. Rossi. *Magnetic and electronic properties of Pt-Co bilayer on Pt(111)*, **J. Magn. Magn. Mat., 288, 236 (2005)**
18. P. Torelli, G. Cautero, M. Cautero, A. Fondacaro, M. Grioni, B. Krastanov , P. Lacovig, G. Monaco, F. Offi, G. Paolicelli, M. Sacchi, G. Stefani, R. Tommasini, R. Verbeni and G. Panaccione, *VOLPE: a new experimental setup for high energy photoemission using synchrotron radiation,* **Rev Sci. Instrum. 76, 023909 (2005)**
19. G. Panaccione, G. Cautero, A. Fondacaro, M. Grioni, P. Lacovig, G. Monaco, F. Offi, G. Paolicelli, M. Sacchi, G. Stefani and P. Torelli, *High resolution HAXPES and the status of the VOLPE project,* **Nuclear Instruments and Methods A 547 (2005) 56**.
20. M. Sacchi, F. Offi, P. Torelli, A. Fondacaro, C. Spezzani, M. Cautero, G. Cautero, S. Huotari, M. Grioni, R. Delaunay, M. Fabrizioli, G. Vanko, G. Monaco, G. Paolicelli, G. Stefani and G. Panaccione, *Quantifying the effective attenuation length in high energy photoemission experiments*, **Phys. Rev. B 71, 155117 (2005)**
21. G. Panaccione, G. Cautero, M. Cautero, A. Fondacaro, M. Grioni, P. Lacovig, G. Monaco, F. Offi, G. Paolicelli, M. Sacchi, N. Stojic, G. Stefani, R. Tommasini and P. Torelli*,"High-energy photoemission in silver: resolving d and sp contributions in valence band spectra",* **J. Phys.: Condens. Matter 17 (2005) 2671-2679.**
22. S. Benedetti, P. Torelli, P. Luches, A. Rota and S. Valeri, *Morphology and chemical activity at the Au/NiO interface,* **Surf. Sci. 600, 4251 (2006)**
23. G. Panaccione, G. Cautero, M. Cautero, A. Fondacaro, M. Grioni, C. Henriquet, G. Monaco, M. Mulazzi, F. Offi, L. Paolasini, G. Paolicelli, P. Pittana, M. Sacchi, G. Stefani and P. Torelli, *Results and perspectives in hard X-ray photoemission spectroscopy (HAXPES) from solids*, **Nuclear Instruments and Methods B, 246, 106 (2006)**
24. P. Torelli, E. A. Soares, G. Renaud, S. Valeri, X. X. Guo and P. Luches*, Nano-structuration of CoO film by misfit dislocations,* **Surf. Sci. 601, 2651 (2007)**
25. M. Cantoni, R. Bertacco, F. Ciccacci, E. Puppin, E. Pinotti, M. Brenna, M. Marangolo, M. Eddrieff, V. Etgens, P. Torelli, F. Maccherozzi, G. Panaccione, *Temperature dependent magnetism of Fe thin films on ZnSe(001,* **J. Magn. Magn. Mat. 316, e545 (2007)**
26. S. Benedetti, P. Torelli, P. Luches, E. Gualtieri, A. Rota and S. Valeri, *Preparation and characterization of MgO stepped surfaces,* **Surf. Sci. 601, 2636 (2007)**
27. F. Offi, W. S. M. Werner, M. Sacchi, P. Torelli, G. Cautero, M. Cautero, A. Fondacaro, S. Houtari, G. Monaco, G. Paolicelli, W. Smekal, G. Stefani and G. Panaccione, *Comparison of Hard and Soft X-ray photoelectron spectra of Silicon,* **Phys. Rev B 76, 085422 (2007)**
28. F. Offi, P. Torelli, M. Sacchi, P. Lacovig, A. Fondacaro, S. Houtari, G. Monaco, G. Paolicelli, C. S. Fadley, J. F. Mitchell, G. Stefani and G. Panaccione, *Bulk electronic properties of bilayered manganites*, **Phys. Rev. B 75, 014422 (2007)**
29. G. Panaccione, M. Sacchi, P.Torelli, F.Offi, G. Cautero, R. Sergo, A. Fondacaro, C. Henriquet, S. Huotari, G. Monaco, L. Paolasini, *Bulk electronic properties of V_2O_3 probed by Hard X-ray Photoelectron Spectroscopy,* **J. Electron Spectrosc. Relat. Phenom. 156-158, 64 (2007)**
30. L. Moreschini, C. Dallera, J.J. Joyce, J. L. Sarrao, E. D. Bauer, V. Fritsch, S. Bobev, E. Carpene, S. Huotari, G. Vanko, G. Monaco, P. Lacovig, G. Panaccione, A. Fondacaro, G. Paolicelli, P. Torelli and M. Grioni, *A comparison of bulk sensitive probes of Yb valence in Kondo systems*, **Phys. Rev. B 75, 035113 (2007)**
31. P. Luches, P. Torelli, S. Benedetti, E. Ferramola, R. Gotter and S. Valeri, *Structure and electronic properties of Fe nanostructures on MgO(001)*, **Surf. Sci. 601, 3902 (2007)**
32. F. Vidal, M. Marangolo, P. Torelli, M. Eddrief, M. Mulazzi, and G. Panaccione, *Circular dichroism in photoemission as a fingerprint of surface band structure: The case of ZnSe(001)-c(2×2)*, **Phys. Rev. B 76, 081302(R) (2007)**
33. P. Torelli, E. A. Soares, G. Renaud, L. Gragnaniello, S. Valeri, X. X. Guo, and P. Luches, *Self-organized growth of Ni nanoparticles on a cobalt-oxide thin film induced by a buried misfit dislocation network,* **Phys. Rev. B 77, 081409(R) (2008)**
34. G. Panaccione, F. Offi, P. Torelli, G. Vanko, O. Tjernberg, P. Lacovig, A. Guarino, A. Fondacaro, A. Nigro, M. Sacchi, N. B. Brookes, and G. Monaco, *Analysis of surface-bulk screening competition in the electron-doped $Nd_{2-x}Ce_xCuO_4$ cuprate using x-ray photoemission spectroscopy,* **Phys. Rev. B 77, 125133 (2008)**
35. A. Walsh, J. L. Da Silva, S-H. Wei, C. Körber, A. Klein, L. F. Piper, Alex DeMasi, K. E. Smith, G. Panaccione, P. Torelli, D. J. Payne, A. Bourlange, and R. G. Egdell, *Nature of the Band Gap of In2O3 Revealed by First-Principles Calculations and X-Ray Spectroscopy*, **Phys. Rev. Lett. 100, 167402 (2008)**
36. F. Offi, N. Mannella, T. Pardini, G. Panaccione, A. Fondacaro, P. Torelli, M. W. West, J. F. Mitchell, and C. S. Fadley, *Temperature-dependent electronic structure of the colossal magnetoresistive manganite La0.7Sr0.3MnO3 from hard x-ray photoemission,* **Phys. Rev. B 77, 174422 (2008)**

37. S. Benedetti, P. Torelli, S. Valeri, H. M. Benia, N. Nilius, and G. Renaud, *Structure and morphology of thin MgO films on Mo(001),* **Phys. Rev. B 78, 195411 (2008)**
38. G. Panaccione, F. Offi, M. Sacchi and P. Torelli, *Hard X-ray PhotoEmission Spectroscopy of strongly correlated systems,* **Comptes Rendus de Physique 9, 524 (2008)**
39. P. Torelli, S. Benedetti, P. Luches, L. Gragnaniello, J. Fujii and S. Valeri, *Morphology-induced magnetic phase transitions in the Fe deposits on MgO films investigated with XMCD and STM*, **Phys. Rev. B 79, 035408 (2009)**
40. S. Benedetti, L. Gragnaniello, M. Franchini, P. Torelli and S. Valeri, *Fe self-organisation on stepped MgO surfaces*, **Superlattice and Microstructure 46, 153-158 (2009)**
41. P. Torelli, L. Giordano, S. Benedetti, P. Luches, E. Annese, S. Valeri and G. Pacchioni, *X-ray photoemission study of the charge state of Au nanoparticles on thin MgO/Fe(001) films*, **J. Phys. Chem C 113, 19957 (2009)**
42. C. Korber; V. Krishnakumar, A. Klein, G. Panaccione, P. Torelli, A. Walsh, J. L. F. Da Silva, S.H. Wei, R.G. Egdell and D. J. Payne, *Electronic structure of In_2O_3 and Sn-doped In_2O_3 by hard x-ray photoemission spectroscopy,* **Phys. Rev. B 81, 165207 (2010)**
43. G. Panaccione, U. Manju, F. Offi, E. Annese, I. Vobornik, P. Torelli, Z. H. Zhu, M. A. Hossain, L. Simonelli, A. Fondacaro, P. Lacovig, A. Guarino, Y. Yoshida, G. A. Sawatzky, A. Damascelli, *Depth dependence of itinerant character in Mn-substituted $Sr_3Ru_2O_7$*, **New Journal of Physics 13, 053059 (2011)**
44. I. Vobornik, U. Manju, J. Fujii, F. Borgatti, P. Torelli, D. Krizmancic, Y. S. Hor, R. J. Cava and G. Panaccione, *Magnetic Proximity Effect as a Pathway to Spintronic Applications of Topological Insulators,* **Nano Letters 11, 4079 (2011)**
45. M. Gabas, P. Torelli, N. T. Barret, M. Sacchi, F. Bruneval, Y. Cui, L. Simonelli. P. Diaz-Carrasco and J. R. R. Barrado, *Direct observation of Al-doping-induced electronic states in the valence band and band gap of ZnO films,* **Phys. Rev. B 84, 153303, (2011)**
46. S. Benedetti, N. Nilius, P. Torelli, G. Renaud, H. –J. Freund and S. Valeri, *Competition between polar and Nonpolar growth of MgO Thin Film on Au(111)*, **J. Phys. Chem. C 115, 23043 (2011)**
47. J. Fujii, M. Sperl, S. Ueda, K. Kobayashi, Y. Yamashita, M. Kobata, P. Torelli, F. Borgatti, M. Utz, C. S. Fadley, A. X. Gray, G. Monaco, C. H. Back, G. van der Laan, and G. Panaccione, *Identification of Different Electron Screening Behavior Between the Bulk and Surface of (Ga,Mn)As*, **Phys. Rev Lett. 107, 187203 (2011)**
48. F. M. Römer, M. Möller, K. Wagner, L. Gathmann, R. Narkowicz, H. Zähres, B. R. Salles, P. Torelli, R. Meckenstock, J. Lindner, and M. Farle*, In situ multifrequency ferromagnetic resonance and x-ray magnetic circular dichroism investigations on Fe/GaAs(110): Enhanced g-factor,* **Appl. Phys. Lett. 100, 092402 (2012)**
49. M. Sperl, P. Torelli, F. Eigenmann, M. Soda, S. Polesya, M. Utz, D. Bougeard, H. Ebert, G. Panaccione, and C. H. Back*, Reorientation transition of the magnetic proximity polarization in Fe/(Ga,Mn)As bilayers,* **Phys. Rev. B 85, 184428 (2012)**
50. M. Calandra, J. P. Rueff, C. Gougoussis, D. Céolin, M. Gorgoi, S. Benedetti, P. Torelli, A. Shukla, D. Chandesris, and Ch. Brouder, *K-edge x-ray absorption spectra in transition-metal oxides beyond the single-particle approximation: Shake-up many-body effect,* **Phys. Rev. B 86, 165102 (2012)**
51. P. Torelli, M. Sperl, R. Ciancio, J. Fujii, C. Rinaldi, M. Cantoni, R. Bertacco, M. Utz, D. Bougeard, M. Soda, E. Carlino, G. Rossi, C. H. Back and G. Panaccione, *Growth of ultrathin epitaxial Fe/MgO spin injector on (0, 0, 1) (Ga, Mn)As,* **Nanotechnology 23, 465202 (2012)**
52. S. M. Suturin, V.V. Fedorov, A. G. Banshchikov, D.A. Baranov, K.V. Koshmak, P. Torelli, J. Fujii, G. Panaccione, K. Amemiya, M. Sakamaki, T. Nakamura, M. Tabuchi, L. Pasquali, N.S. Sokolov, *Proximity effects and exchange bias in Co/MnF2(111) heterostructures studied by x-ray magnetic circular dichroism*, **J. Phys.: Condensed Matter 25, 046002, (2013)**
53. J. Fujii, B.R. Salles, M. Sperl, S. Ueda, M. Kobata, K. Kobayashi, Y. Yamashita, P. Torelli, M. Utz, C. S. Fadley, A. X. Gray, J. Braun, H. Ebert, I. Di Marco, O. Eriksson, P. Thunstrom, G.H. Fecher, H. Stryhanyuk, E. Ikenaga, J. Minar, C.H. Back, G. van der Laan and G. Panaccione, *Identifying the Electronic Character and Role of the Mn States in the Valence Band of (Ga,Mn)As,* **Phys. Rev. Lett. 111, 097201 (2013)**
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55. F. Borgatti, F. Offi, P. Torelli, G. Monaco, G. Panaccione, "*Interfacial and bulk electronic properties of complex oxides and buried interfaces probed by HAXPES*" **J. Electron Spectrosc. Relat. Phenom. 190, 228 (2013)**
56. M. Caminale, R. Moroni, P. Torelli, W. C. Lin, M. Canepa, L. Mattera, and F. Bisio, "*Reentrant Surface Anisotropy in the Antiferromagnetic/Ferromagnetic Bilayer Mn/Co/Cu(001*" **Phys. Rev. Lett., 112, 037201 (2014)**
57. M. Gabás, P. Torelli, N. T. Barrett, M. Sacchi and José R. Ramos Barrado, "*Electronic structure of Al- and Ga-doped ZnO films studied by hard X-ray photoelectron spectroscopy*" **APL Mat. 2, 012112 (2014)**
58. A Debernardi, D. Sangalli, A. Lamperti, E. Cianci, P. Lupo, F. Casoli, F. Albertini, L. Nasi, R. Ciprian and P. Torelli, "*Electronic and magnetic propeperties of iron doped zirconia:Theory and experiment*" **J. Appl. Phys. 115, 17D718 (2014)**

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