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- **Professional Experiences**

Employment:

- Jul. 2011 – Present:* Elettra - Sincrotrone Trieste appointment as Leader of the Photon Beam Transport System group at the FERMI FEL facility.
- Feb. 2005 – Present:* Permanent IOM-CNR (Istituto Officina dei Materiali - former INFM-CNR) position as development scientist at the BACH beamline (Elettra) and at the Photon Beam Transport System group of the FERMI FEL facility.
- Oct. 2002 – Jan. 2005:* INFM tenure-track appointment as development scientist at the BACH beamline (Elettra).
- Jul. 2002 – Sep. 2002:* INFM appointment for the realization of the end station of the nano-microscopy branch line and the commissioning of the x-ray fluorescence spectrometer at the beamline BACH (Elettra).
Scientific supervisors Prof. F. Parmigiani and Dr. D. Cocco.
- Jul. 1999 – Jun. 2002:* INFM appointment as development scientist responsible for BACH beamline (Elettra) soft x-rays optics.
Scientific supervisors Prof. F. Parmigiani and Dr. D. Cocco.
- Feb. 1999 – Jun. 1999:* INFM (Istituto Nazionale per la Fisica della Materia) appointment to study VUV and SXR optics in the group of the beamline BACH (Elettra).
Scientific supervisor Prof. F. Parmigiani.
- Mar. 1998 – Jan. 1999:* Civil service at the Italian Society of Blind People (UIC).
- Feb. 1998 – Jun. 1998:* Department of Physics of the University of Trieste collaboration contract (“*Study of Sn/Ge(111) and Pb/Ge(111) systems*”).
Scientific supervisor Prof. S. Modesti.
- Mar. 1997 – Dec. 1997:* Research activity at Laboratorio TASC-INFM for the “Laurea” thesis.
Scientific supervisor Prof. S. Modesti.

Joint appointments:

- Oct. 2015 – Sep. 2018:* EUCALL Steering Committee Member and WP7 “PUCCA - Pulse Characterization and Control” representative for FERMI.
- Jun. 2015 – Present:* Project Leader and Technical Representative for Elettra of the Elettra-DESY scientific agreement for “Future developments, realizations and commissioning of specialized K-B (Kirkpatrick-Baez) bending mirror systems for FERMI and FLASH”.
- Aug. 2014 – Present:* Project Leader and Technical Representative for Elettra of the Elettra-DESY

scientific agreement for the “Development of a Hartmann wave front sensor for FERMI”.

Feb. 2013 – Present: EuroFEL “Photon Pulse Length Measurement” Expert Group Representative for FERMI.

Oct. 2008 – Jun. 2011: Technical Supervisor of the Sub-ps Streak Camera project at FERMI.

Sep. 2008 – Apr. 2011: IRUVX WP3 and WP7 panel member (photons). Spokesperson for the “Online Photon Beam Diagnostics and Transport” WP3 workgroup.

Feb. 2006 – Jun. 2011: Scientist in the FERMI Photon Beam Transport Systems group in charge of the photon beam diagnostics (time and energy distribution) Scientific supervisor Dr. D. Cocco

Apr. 2003 – May 2003: Visiting scientist at the Advanced Light Source (USA) in the group of Prof. Z.X. Shen (Stanford University) and Z. Hussain to work on the development and setup of a new experimental chamber (to be mounted on BACH beamline) for ARPES-spin resolved experiments.

• Academic Record

PhD degree in Mathematical and Physical Engineering, Department of Physics, Faculty of Mechanical Engineering (Czech Technical University in Prague – Czech Republic) awarded in December 2002, with a final mark of “Excellent”.

Advisors Doc.Ing. F. Černý, DrSc and Prof. F. Parmigiani.

Thesis: *SXR optics and SXR spectrometer for a circularly polarised radiation source at Elettra.*

Laurea degree in Physics (Master in Physics), Università degli Studi di Trieste awarded on December 1997, with a final mark of 109/110.

Advisor Prof. S. Modesti.

Thesis: *Structure and electronic excitations of correlated 2D systems: Sn/Ge(111) and Pb/Ge(111).*

• Duties, skills and specialties

Leader of the photon beam transport and diagnostics group at the FERMI FEL user facility:

- Definition of targets (technical and scientific), budgets, and roadmaps.
- Managing group’s budget, workforce, resources, and scheduling.
- Managing facility upgrade budget for what concerns photon transport and diagnostics.
- Experience in recruiting (scientists and technicians) and group organization.
- Coordination of support groups’ activities in the FERMI matrix structure.
- Periodical project reports to Scientific Advisory, Machine Advisory, and internal committees.
- Scientific collaborations establishment (national and international).
- Presentations at international conferences and workshops.
- Member of: FERMI Machine Physics Team,
FERMI Machine Physics Team Steering Board,
FERMI Engineering Team,
FERMI Construction and Upgrade Workpackages (Beamline Upgrade leader),
FERMI Integration, Construction and Commissioning (PADReS and beamlines),
FERMI User Proposals’ Technical Feasibility Evaluation Team.

Project Leader and Technical Representative of three Elettra-DESY scientific agreements for the development of a Hartmann wavefront sensor (WFS) and two active optics focusing mirror systems (KAOS and KAOS2):

- Definition of targets (technical and scientific), budgets, and roadmaps.
- Managing budget, workforce, resources, and scheduling.

- Opto-mechanical design, installation and commissioning at FERMI (WFS) and FLASH (KAOS/KAOS2).

Steering Committee Member, Spokesperson and Technical Representative for FERMI of the EUCALL (EC H2020 project) work package 7 (PUCCA - Pulse Characterization and Control):

- Definition of WP activities and coordination of FERMI participation.

Development Scientist at the FERMI FEL user facility:

- Participation in the commissioning of the FERMI FEL, the photon transport and the endstations.
- Organization of external groups' beamtimes for intensity, wavefront and polarization measurements.
- Involvement in the mechanical design of the photon diagnostics and transport systems.
- Definition of the procedures for the alignment of optical systems and endstations.
- Member of the task-forces devoted to: experimental hall occupancy and users' laser transport.

Spokesperson of the EuroFEL (EC FP7 project) work package 3 (Online Photon Beam Diagnostics and Transport):

- Definition of WP activities (coordinating several experts from European laboratories).
- Creation of an R&D network across European FEL laboratories.
- Budget and time schedule management.
- Organization of periodical meetings and workshops.
- Presentations of intermediate and final reports.

Development scientist at the BACH beamline:

- Extensive experience with UHV, sample preparation, synchrotron radiation and the most common techniques to study surfaces.
- Opto-mechanical design, installation and commissioning of the beamline and its endstations.
- Experience (8 years) in external users' support (XAS-XMCD, PES, RIXS and microscopy experiments).
- Optical surfaces' testing and characterization using LTP and MicroMap.
- Simulation techniques of x-rays sources and optical systems using computer codes.
- Software development for beamline control (LabVIEW).

Specific projects that have required the involvement as team member in the opto-mechanical design, scheduling, resource management, installation and commissioning:

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| • FEL EUV-SXR photon beam diagnostics and transport systems | - LEADER |
| • EIS-TIMER beamline at the FERMI FEL facility | - LEADER |
| • Optical elements for a FEL beamline at FERMI | - LEADER |
| • Sub-ps EUV-SXR streak camera for FEL beam diagnostics | - DEPUTY |
| • Endstation for low T (1.5K) and high H (7T) XAS-XMCD | |
| • Endstation for spectroscopic analysis on a synchrotron beamline | - LEADER |
| • Branch-line and endstation for SXR scanning microscopy | - LEADER |
| • SXR fluorescence spectrometer on a synchrotron beamline | |
| • 3rd generation synchrotron beamline at Elettra | |
| • Optical elements for a 3rd generation synchrotron beamline | - LEADER |

- **Other duties**

Conference/workshop Organizer and/or Chair

SPIE Conference OO115 "X-Ray Free-Electron Lasers: Advances in Source Development and Instrumentation" (Prague - April 2021) Co-Chair.

SPIE Conference EOO114 "X-Ray Free-Electron Lasers: Advances in Source Development and Instrumentation" (Prague - April 2019) Co-Chair.

SOS 2016 - Workshop on Softwares for Optical Simulations (Trieste - October 2016) Co-Organizer and Chair:

SOS Workshop: <https://www.elettra.eu/Conferences/2016/SOS/>

PhotonDiag2015 - Workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design (Trieste - June 2015) Organizer and Chair:

PhotonDiag2015: <http://www.elettra.eu/Conferences/2015/PhotonDiag/>

XFEL Users' Meeting 2015 Satellite Workshop "Photon Beam Diagnostics" (Hamburg - January 2015) co-Organizer.

MEADOW - MEtrology, Astronomy, Diagnostics and Optics Workshop (Trieste - October 2013) Organizer and Chair:

MEADOW2013: <https://www.elettra.eu/Conferences/2013/MEADOW/>

XFEL Users' Meeting 2013 Satellite Workshop "Photon Beam Diagnostics" (Hamburg - January 2013) co-Organizer.

Conference/workshop program committee member and/or session chair

PhotonDiag2020 - Workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design (PSI - October 2020) Scientific Program Committee member:

PhotonDiag2018: <https://indico.psi.ch/event/7531/>

SPIE Conference EOO114 "X-Ray Free-Electron Lasers: Advances in Source Development and Instrumentation" (Prague - April 2019) Technical Committee Member and Session Chair.

PhotonDiag2018 - Workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design (Hamburg - September 2018) Scientific Program Committee member, Session Chair, and FELs of Europe Award on Photon Transport and Diagnostics Selection Committee member:

PhotonDiag2018: <https://indico.desy.de/indico/event/19622/>

IWXM 2018 - International Workshop on X-Ray Optics and Metrology (Hsinchu, Taiwan - June 2018) International Advisory Committee Member:

IWXM2018: <http://iwxm2018.nsrcc.org.tw/site/page.aspx?pid=901&sid=1203&lang=en>

PhotonDiag2017 - Workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design (Menlo Park/SLAC - May 2017) Scientific Program Committee member, Session Chair, and FELs of Europe Award on Photon Transport and Diagnostics Selection Committee member:

PhotonDiag2017: https://portal.slac.stanford.edu/sites/conf_public/photondiag2017/Pages/default.aspx

SPIE Conference OO117 "X-Ray Lasers and Coherent X-Ray Sources: Development and Applications" (Prague - April 2017) Program Committee member.

SPIE Conference EOO111 "Advances in X-ray Free-Electron Laser Instrumentation" (Prague - April 2017) Program Committee member.

IWXM 2015 - International Workshop on X-Ray Optics and Metrology (Berkeley - July 2015) Program Committee Member and Session Chair.

SPIE Conference OP315 "X-Ray Lasers and Coherent X-Ray Sources: Development and Applications XI" (San Diego - August 2015) Program Committee member.

SPIE Conference OP313 "X-Ray Lasers and Coherent X-Ray Sources: Development and Applications X" (San Diego - August 2013) Program Committee member.

SPIE Conference EOO111 "Advances in X-ray Free-Electron Laser Instrumentation" (Prague - April 2013) Program Committee member and Session Chair.

Evaluation committee member (beamlines, laboratories...)

Resonant Microwave EUV beam monitor project (2016-2020) User Committee Member for NWO and TU/e (Technical University Eindhoven).

Design and Project Planning for an Online Tender X-ray Spectrometer at SwissFEL (September 2017) Evaluator for the Swiss National Science Foundation.

Design and Project Planning for LOREA ALBA beamline (Barcelona - April 2016) Review Panel Member.

Design and Project Planning for SoftiMAX MAX IV beamline (Lund - October 2015) Review Panel Member.

Conceptual Design Review for LCLS II metrology lab (Stanford - July 2015) Committee Member.

Conceptual Design Review for LCLS II mirrors (Stanford - August 2012) Committee Member.

Conceptual Design Report for the FERMI@Elettra project (Trieste - 2007) Chapter Author.

Editorial activities

Review progetto Cocco 1 e 2

Journal of Synchrotron Radiation Guest Editor:
PhotonDiag2018 - https://journals.iucr.org/special_issues/2020/photodiag2018/

Journal of Synchrotron Radiation Guest Editor:
PhotonDiag2017 - <https://journals.iucr.org/s/issues/2018/01/00/index.html>

Journal of Synchrotron Radiation Guest Editor:
PhotonDiag2015 - <https://journals.iucr.org/s/issues/2016/01/00/index.html>

Nuclear Instruments and Methods A Proceedings Managing Guest Editor:
PhotonDiag2010 - <http://www.sciencedirect.com/science/article/pii/S0168900211004049>

International Journal of Optics Guest Editor:
Ultrafast pulse beamlines and diagnostics in the extreme-ultraviolet (EUV) and X-ray (2011) - <http://downloads.hindawi.com/journals/ijo/si/upux.pdf>

Elettra Highlights Editor.

Reviewer activities

Journal of Synchrotron Radiation Reviewer.

Journal of Instrumentation Reviewer.

Nuclear Instruments and Methods A Reviewer.

Optics Express Reviewer.

Applied Optics Reviewer.

Applied Physics B Reviewer.

Vacuum Reviewer.

SPIE Proceedings Reviewer.

Teaching/tutoring/divulagation activities

Interview on *Il Piccolo* newspaper "Il triestino Zangrando lavora a Elettra per conto del CNR" (Trieste -Nov 2018)

School on Synchrotron and Free-Electron-Laser Methods for Multidisciplinary Applications (Trieste - May 2018) Teacher:
<http://indico.ictp.it/event/8308/>

Participation to *Pint of Science 2018* - Trieste.

Interview on *RAI TV - TG3 News Broadcast* on *Pint of Science* event in Trieste (2018).

Participation to *RAI Radio Friuli Venezia Giulia "RADAR - Segnali dalla scienza, dalla cultura, dalla società"* radio Broadcast (2017).

XIII School on Synchrotron Radiation (Grado - September 2015) Teacher:
XIII SILS - <http://www.elettra.eu/XIIISILS/>

Participation to *RAI TV - TG3 Friuli Venezia Giulia "Il Settimanale"* TV Special on FERMI lightsource (2015).
<http://goo.gl/OtnH1s>

Interview on *RAI TV - TG3 News Broadcast* on PhotonDiag 2015 conference in Trieste (2015).

Co-author of a Research Project funded by Regione Friuli Venezia Giulia for 1.000.000€ (2010).

Member of the editorial and technical team in charge of re-designing the new Sincrotrone Trieste webpage (2012).

Teaching, tutoring, and divulgation activities such as:

PhD supervisor

Laurea Degree (M.Sc.) co-supervisor

Guest lecturer (Materials Engineering - University of Trieste)

Synchrotron Radiation School International Center for Theoretical Physics 2000, 2008

Synchrotron Radiation and FEL School International Center for Theoretical Physics 2018

Hercules European School 2004, 2016

Vasa International School work experience at Elettra 2008, 2009

High-school and University students teaching

Elettra Open Days 2005-2010

STAR (Science in Trieste And Researchers) 2010

Trieste NEXT 2016

Link - Premio Lucchetta Incontra 2017

- **Computer knowledge**

Optical systems and x-rays sources simulation softwares: SHADOW, URGENT, SPECTRA, REFLEC.
Data acquisition and analysis software: LabVIEW, Igor PRO.
Software development for beamline control, simulations and calculations of FEL and synchrotron beam behavior.

- **Languages**

Native speaker of Italian.

Excellent knowledge of written and spoken English.

Good knowledge of written and spoken French.

- **Interests**

Science divulgation, music, sports, bicycles, marathon running, motorcycles.

• **Publications:**

----- 1999 -----

1. L. Petaccia, L. Grill, M. Zangrando, S. Modesti,
 “Dispersion and intrinsic width of image resonances measured by resonant inelastic electron scattering: the α phase of Pb/Ge(111)”
Physical Review Letters **82** (1999) 386 – 389;

----- 2000 -----

2. M. Zangrando, M. Finazzi, F. Parmigiani, G. Paolucci, D. Cocco,
 “Optical layout of BACH: a Beamline for Advanced diChroism at ELETTRA”,
Proceedings SPIE Vol. 4146 (2000), 132 – 142;
3. D. Cocco, R. Sergo, G. Sostero, M. Zangrando,
 “High precision measurements of the groove density of diffraction gratings”,
Proceedings SPIE Vol. 4146 (2000), 143 – 150;
4. D. Cocco, G. Sostero, M. Zangrando,
 “Study of the clamping-induced deformations on SR optics by means of LTP”,
Proceedings SPIE Vol. 4145 (2000), 45 – 50;

----- 2001 -----

5. M. Zangrando, M. Finazzi, G. Paolucci, G. Comelli, B. Diviacco, R.P. Walker, D. Cocco, F. Parmigiani,
 “BACH, the Beamline for Advanced diChroic and scattering experiments at ELETTRA”,
Rev. Sci. Instrum. **72** (2001) 1313 – 1319;
6. M. Zangrando, M. Finazzi, M. Zacchigna, E.M. Di Fabrizio, D. Cocco, R. Rochow-Carbone, M. Kiskinova, B. Kaulich, R. Menk, F. Parmigiani,
 “A multipurpose experimental station for soft x-ray microscopy on BACH beamline at ELETTRA”,
Proceedings SPIE Vol. 4506 (2001), 154 – 162;
7. D. Cocco, M. Matteucci, K.C. Prince, M. Zangrando,
 “ComIXS: a Compact Inelastic X-ray Spectrometer”,
Proceedings SPIE Vol. 4506 (2001), 46 – 55;
8. G. Sostero, A. Bianco, M. Zangrando, D. Cocco,
 “Synchrotron radiation optics: quality demands and technical achievability”,
Proceedings SPIE Vol. 4501 (2001), 24 – 29;

----- 2002 -----

9. J.-L. Gallani, J.P. Kappler, M.A. Arrio, M. Finazzi, M. Zangrando, M. Zacchigna, E. Gorecka, A. Krowczynski, F. Parmigiani,
 “X-ray magnetic circular dichroism in a VO²⁺ complex”,
ELETTRA Highlights 2001-2002, 40 – 43;
10. F. Parmigiani, M. Zacchigna, M. Zangrando, R. Rochow-Carbone, M. Finazzi,
 “BACH – Beamline for Advanced diChroism at ELETTRA: a multipurpose beamline devoted to the study of magnetic materials by XMCD, XMLD, fluorescence and photoemission”,
ELETTRA Highlights 2001-2002, 79 – 80;
11. D. Cocco, M. Matteucci, K.C. Prince, M. Zangrando,
 “A compact soft x-ray spectrometer for high resolution inelastic scattering measurements”, *ELETTRA Highlights 2001-2002*, 81 – 83;
12. G. Sostero, A. Bianco, M. Zangrando, D. Cocco,
 “Temperature-dependent perturbations on LTP measurements”,
Proceedings SPIE Vol. 4782 (2002), 38 – 45;

----- 2003 -----

13. G. Champion, M.-A. Arrio, Ph. Saintavit, M. Zacchigna, M. Zangrando, M. Finazzi, F. Parmigiani, F. Villain, C. Mathonière, C. Cartier dit Moulin, "Size effect on local magnetic moments in ferrimagnetic molecular complexes: an XMCD investigation", *Chem. Mon.* **134** (2003), 277 – 284;
14. D. Cocco, G. Sostero, M. Zangrando, "Technique for measuring the groove density of diffraction gratings using the long trace profiler", *Rev. Sci. Instrum.* **74** (2003), 3544 – 3548;
15. M. Platè, F. Bondino, M. Zacchigna, M. Zangrando, I. Alessandro, D. Cocco, M. Matteucci, K.C. Prince, A. Comin, F. Parmigiani, "Doping-dependent electronic structure of Na-manganites determined by resonant x-ray emission", *ELETTRA Highlights 2002-2003*, 46 – 50;
- 2004 -----
16. M. Finazzi, M. Portalupi, A. Brambilla, L. Duò, G. Ghiringhelli, F. Parmigiani, M. Zacchigna, M. Zangrando, F. Cicacci, "Magnetic anisotropy of NiO epitaxial thin films on Fe(001)", *Phys. Rev. B* **69** (2004), 014410;
17. M. Zangrando, M. Finazzi, M. Zacchigna, D. Cocco, R. Rochow, F. Parmigiani, "A polarized high-brilliance and high-resolution soft x-ray source at ELETTRA: the performance of beamline BACH", *Rev. Sci. Instrum.* **75** (2004), 31 – 36;
18. M. Zangrando, M. Zacchigna, F. Bondino, M. Finazzi, T. Pardini, M. Platè, R. Rochow, D. Cocco, F. Parmigiani, "Performances and first experimental results of BACH, the beamline for dichroism and scattering experiments at ELETTRA", *AIP Conference Proceedings* **705** (2004), 324 – 327;
19. D. Cocco, M. Zangrando, M. Matteucci, F. Bondino, M. Platè, M. Zacchigna, F. Parmigiani, B. Nelles, K.C. Prince, "ComIXS on BACH: a compact soft x-ray spectrometer operating at Elettra", *AIP Conference Proceedings* **705** (2004), 873 – 876;
20. F. Bondino, M. Platè, M. Zangrando, M. Zacchigna, D. Cocco, A. Comin, I. Alessandri, L. Malavasi, F. Parmigiani, "Doping-dependence of the electronic structure of $\text{La}_{1-x}\text{Na}_x\text{MnO}_3$ by resonant x-ray emission and x-ray absorption spectroscopy", *J. Phys. Chem.* **108** (2004), 4018 – 4023;
21. K.C. Prince, K. Kuepper, M. Neumann, D. Cocco, F. Bondino, M. Zangrando, M. Zacchigna, F. Parmigiani, M. Matteucci, "Resonant Raman x-ray scattering at the S 2p edge of iron pyrite", *J. Phys. Cond. Matter* **16** (2004) 7397 – 7404;
22. J.-L. Gallani, J.-P. Kappler, A. Derory, P. Ohresser, P. Turek, M. Zangrando, M. Zacchigna, F. Parmigiani, E. Gorecka, A. Krowczynski, "X-Ray magnetic circular dichroism on vanadium molecular derivatives", *Eur. Phys. J. B – Cond. Mat.* **38** (2004), 43 – 48 ;
23. A. Brambilla , M. Portalupi, M. Finazzi, G. Ghiringhelli, L. Duo, F. Parmigiani, M. Zacchigna, M. Zangrando, F. Ciccacci, "Magnetic anisotropy of NiO epitaxial thin films on Fe(001)", *J. Magn. Magn. Mater.* **1221-1222** (2004), 272 – 276;
24. K. Kuepper, A. Takács, T. Crainic, M. Neumann, F. Bondino, M. Zangrando, M. Zacchigna, K.C. Prince, V.R. Galakhov, M. Matteucci, F. Parmigiani, Ya.M. Mukovskii, A. Winiarski, "Investigation of orbital ordering in $\text{La}_{7/8}\text{Sr}_{1/8}\text{MnO}_3$ by means of x-ray linear dichroism at the Mn L edge", *ELETTRA Highlights 2003-2004*, 37 – 41;
25. M. Finazzi, A. Brambilla, L. Duò, G. Ghiringhelli, M. Portalupi, F. Ciccacci, M. Zacchigna, M. Zangrando, "Chemical effects at the buried NiO/Fe(001) interface",

Phys. Rev. B **70** (2004), 235420;

----- 2005 -----

26. K.C. Prince, F. Bondino, M. Zangrando, M. Zacchigna, K. Kuepper, M. Neumann, F. Parmigiani,
“Dichroic O 1s photoabsorption and resonant X-ray scattering in haematite (Fe_2O_3)”,
J. Electron Spec. and Rel. Phen. **144-147** (2005), 719 – 722;
27. J. Szade, W. Burian, Z. Celiński, T. O’Keevan, M. Zangrando, F. Bondino, E. Magnano,
“Resonance induced divalent Eu states in EuF_3 ultrathin layer”,
Surf. Sci. **580** (2005), 163 – 166;
28. K. Kuepper, F. Bondino, K.C. Prince, M. Zangrando, M. Zacchigna, A.F. Takács, T. Crainic,
M. Matteucci, F. Parmigiani, A. Winiarski, V.R. Galakhov, Ya.M. Mukovskii, M. Neumann,
“Direct Investigation of Orbital Ordering in a Colossal Magnetoresistance Manganite by
Means of X-ray Linear Dichroism at the Mn L Edge”,
J. Phys. Chem. **109** (2005), 15667 – 15670;
29. B. Tyszka, J. Szade, W. Burian, G. Skorek, J. Deniszczyk, M. Sikora, D. Zając, Cz. Kapusta,
M. Matteucci, F. Bondino, M. Zacchigna, M. Zangrando,
“Investigation of Gd compounds using synchrotron radiation”,
J. Alloys and Compounds **401** (2005), 165 – 172;
30. V. Escax, G. Champion, C. Cartier dit Moulin, A. Bleuzen, M.A. Arrio, M. Zacchigna, M. Zangrando, F. Bondino,
“The Co ligand field: a key parameter in photomagnetic CoFe Prussian blue derivatives”,
ELETTRA Highlights 2004-2005, 14 – 16;
31. M. Platè, F. Bondino, M. Zacchigna, M. Zangrando, I. Alessandri, M. Affronte, L. Malavasi, F. Parmigiani,
“Lattice effects in the ferromagnetic insulating phase of manganites”,
Phys. Rev. B **72** (2005), 085102;

----- 2006 -----

32. F. Carbone, M. Zangrando, A. Brinkman, A. Nicolaou, F. Bondino, E. Magnano, A.A. Nugroho, F. Parmigiani, Th. Jarlborg, D. van der Marel,
“Electronic structure of MnSi: the role of electron-electron interactions”,
Phys. Rev. B **73** (2006), 085114
33. E. Magnano, E. Carleschi, A. Nicolaou, T. Pardini, M. Zangrando, F. Parmigiani,
“Growth of manganese silicide films by co-deposition of Mn and Si on Si(111): A spectroscopic and morphological investigation”,
Surf. Sci. **600** (2006), 3932 – 3937;
34. U. del Pennino, V. De Renzi, R. Biagi, V. Corradini, L. Zobbi, A. Cornia, D. Gatteschi, F. Bondino, E. Magnano, M. Zangrando, M. Zacchigna, A. Lichtenstein, D.W. Boukhvalov,
“Valence band resonant photoemission of Mn_{12} single molecules grafted on Au(111) surface”,
Surf. Sci. **600** (2006), 4185 – 4189;
35. T.O. Montes, F. Bondino, E. Magnano, M. Zangrando, K. Kuepper, V.R. Galakhov, Y.M. Mukovskii, M. Neumann, F. Parmigiani,
“Excitation dynamics in $\text{La}_{0.875}\text{Sr}_{0.125}\text{MnO}_3$ measured by resonant Auger electron and resonant x-ray emission spectroscopies”,
Phys. Rev. B **74** (2006), 205409;
36. F. Bondino, E. Magnano, E. Carleschi, M. Zangrando, F. Galli, J.A. Mydosh, F. Parmigiani,
“Electronic structure of the charge-density-wave compound $\text{Er}_5\text{Ir}_4\text{Si}_{10}$ ”,
J. Phys.: Cond. Mat. **18** (2006), 5773-5782;
37. FERMI@elettra team,
“Conceptual design of FERMI@Elettra”,
ELETTRA Highlights 2005-2006, 143 – 145;
38. FERMI@Elettra team,
“VUV and X-ray free-electron lasers: The technology and its scientific promise”,
Rivista del Nuovo Cimento della Società Italiana di Fisica **29** (2006), 1 – 104;

----- 2007 -----

39. M. Zangrando, E. Magnano, A. Nicolaou, E. Carleschi, F. Parmigiani,
“Resonant Photoemission Spectroscopy of Thick Mn Films on Si(111) at the 2p Edge:
Detection of the Two-Hole Valence-Band Satellite of Mn”,
ELETTRA Highlights 2006-2007, 38-39
40. F. Bondino, M. Zangrando, M. Zacchigna, F. Parmigiani, D. Dhalenne, A. Revcolevschi,
“Clear Identification of Zhang-Rice-singlet in CuGeO₃ from Resonant X-ray Emission”,
ELETTRA Highlights 2006-2007, 36-37
41. F. Bondino, A. Brinkman, M. Zangrando, F. Carbone, D. van der Marel, D.L. Schlagel, T.A.
Lograsso, A. Gschneidner Jr, V.K. Pecharsky, F. Parmigiani,
“Experimental investigation of the electronic structure of Gd₅Ge₂Si₂ by photoemission and
x-ray absorption spectroscopy”,
J. Phys.: Cond. Mat. **19** (2007), 186219;
42. E. Carleschi, E. Magnano, M. Zangrando, F. Bondino, A. Nicolaou, F. Carbone, D. van der
Marel, F. Parmigiani,
“Manganese silicide single crystal and films deposited on Si(111): a comparative
spectroscopic study”,
Surf. Sci. **600** (2007), 4066-4073;
43. F. Bondino, M. Zangrando, M. Zacchigna, G. Dhalenne, A. Revcolevschi, F. Parmigiani,
“Crystal-field and Zhang-Rice-singlet excitations in CuGe_{1-x}Si_xO₃ (x = 0, 0.05, and 0.1)
from temperature-, angle-, and polarization-dependent resonant soft x-ray emission”,
Phys. Rev. B **75** (2007), 195106;
44. M. Zangrando, E. Magnano, A. Nicolaou, E. Carleschi, F. Parmigiani,
“Resonant photoemission spectroscopy of thick Mn films on Si(111) at the 2p edge:
Detection of the two-hole valence-band satellite of Mn”,
Phys. Rev. B **75** (2007), 233402;

----- 2008 -----

45. J. Szade, W. Burian, M. Zangrando, F. Bondino, E. Magnano, S. Widuch, Z. Celinski,
“Eu valence in ultra-thin layers of EuF₃ derived from photon energy dependent
photoemission and photoabsorption”,
Surf. Sci. **602** (2008), 1525-1531;
46. F. Frassetto, D. Cocco, M. Zangrando, L. Poletto,
“On-line spectrometer for FEL radiation at FERMI@Elettra”,
Nucl. Instrum. and Meth. A **593** (2008), 129-131;
47. B. Kaulich, D. Bacescu, J. Susini, C. David, E. Di Fabrizio, G.R. Morrison,
P. Charalambous, J. Thieme, T. Wilhein, J. Kovac, D. Cocco, M. Salome, O. Dhez, T.
Weitkamp, S. Cabrini, D. Cojoc, A. Gianoncelli, U. Vogt, M. Podnar, M. Zangrando, M.
Zacchigna, M. Kiskinova,
“TwinMic - A European Twin X-ray Microscopy Station Commissioned at ELETTRA”,
Proceedings 8th Int. Conf. X-ray Microscopy, IPAP Conf. Series 7 (2008), 22 – 25;

----- 2009 -----

48. D. Cocco, A. Abrami, A. Bianco, I. Cudin, C. Fava, D. Giuressi, R. Godnig, F. Parmigiani, L.
Rumiz, R. Sergo, C. Svetina, M. Zangrando,
“The FERMI@Elettra FEL Photon Transport System”,
Proceedings SPIE 7361 (2009), 736106;
49. M. Zangrando, A. Abrami, D. Bacescu, I. Cudin, C. Fava, F. Frassetto, A. Galimberti, R.
Godnig, D. Giuressi, L. Poletto, L. Rumiz, R. Sergo, C. Svetina, D. Cocco,
“The photon analysis delivery and reduction system at the FERMI@Elettra FEL user
facility”,
Rev. Sci. Instrum. **80** (2009), 113110;
50. F. Bondino, M. Malvestuto, E. Magnano, M. Zangrando, M. Zacchigna, P. Ghigna and F.
Parmigiani,
“Overlap of Cu 3d and F 2p orbitals and low-energy excitations in KCuF₃ studied by
polarization-dependent x-ray absorption and emission spectroscopy”,

- Phys. Rev. B* **79** (2009), 115120 and 129903(E);
51. C. Svetina, M. Zangrando, A. Bianco, D. Cocco,
 “A fixed included angle monochromator for the 4th generation light source at FERMI@elettra”,
Proceedings SPIE **7488** (2009), 74480O;
- 2010 -----
52. D. Cocco, M. Zangrando,
 “Synchrotron Radiation Sources and Optical Devices”,
 Book chapter in “*Magnetism and Synchrotron Radiation*”, *Springer Proceedings in Physics* **133** (2010), 127 – 144;
53. M. Zangrando, I. Cudin, C. Fava, R. Godnig, M. Kiskinova, C. Masciovecchio, F. Parmigiani,
 L. Rumiz, C. Svetina, A. Turchet, D. Cocco,
 “The FERMI@Elettra FEL Photon Transport System”,
AIP Conference Proceedings **1234** (2010), 3 – 8;
54. M. Zangrando, D. Cocco,
 “Non-Invasive Diagnostics on FEL Photon Beams: General Remarks and the Case of FERMI@Elettra”,
FEL2010 Conference Proceedings (2010), FROAI2;
- 2011 -----
55. C. Svetina, A. Abrami, I. Cudin, C. Fava, S. Gerusina, R. Gobessi, L. Rumiz, G. Sostero, M. Zangrando, D. Cocco,
 “Characterization of the FERMI@Elettra’s on-line photon energy spectrometer”,
Proceedings SPIE **8139** (2011), 81390J;
56. M. Zangrando, I. Cudin, C. Fava, S. Gerusina, R. Gobessi, R. Godnig, L. Rumiz, C. Svetina,
 F. Parmigiani, D. Cocco,
 “First results from the commissioning of the FERMI@Elettra free electron laser by means of the photon analysis delivery and reduction system (PADReS)”,
Proceedings SPIE **8078** (2011), 80780I;
57. E. Pedersoli, F. Capotondi, D. Cocco, M. Zangrando, B. Kaulich, R. H. Menk, A. Locatelli, T. O. Montes, C. Spezzani, G. Sandrin, D. M. Bacescu, M. Kiskinova, S. Bajt, M. Barthelmess, A. Barty, J. Schulz, L. Gumprecht, H. N. Chapman, A. J. Nelson, M. Frank, M. J. Pivovarov, B. W. Woods, M. J. Bogan, J. Hajdu,
 “Multipurpose Modular Experimental Station for the DiProl Beamline of Fermi@Elettra Free Electron Laser”,
Rev. Sci. Instrum. **82** (2011), 043711;
58. R. Cucini, F. Bencivenga, M. Zangrando, C. Masciovecchio,
 “Technical Advances of the TIMER Project”,
Nucl. Instrum. and Meth. A **635** (2011), S69 – S74;
59. L. Rumiz, D. Cocco, C. Fava, S. Gerusina, R. Gobessi, E. Mazzucco, F. Zudini, M. Zangrando,
 “The gas attenuator vacuum system of FERMI@Elettra”,
Proceedings IPAC 2011 TUPS008 (2011), 1530;
60. S. Di Mitri, E. Allaria, R. Appio, L. Badano, S. Bassanese, F. Bencivenga, A. Borga, M. Bossi, E. Busetto, C. Callegari, F. Capotondi, K. Casarin, D. Castronovo, P. Cinquegrana, D. Cocco, M. Cornacchia, P. Craievich, R. Cucini, I. Cudin, M. Dal Forno, F. D’Amico, G. D’Auria, M. B. Danailov, P. Delgiusto, A. Demidovich, R. De Monte, G. De Ninno, B. Diviacco, A. Fabris, R. Fabris, W. Fawley, M. Ferianis, E. Ferrari, S. Ferry, L. Froehlich, P. Furlan Radivo, E. Karantzoulis, M. Kiskinova, G. Gaio, F. Gelmetti, L. Giannessi, R. Gobessi, R. Ivanov, M. Lonza, A. Lutman, B. Mahieu, C. Masciovecchio, R. H. Menk, M. Milloch, M. Musardo, S. Noe, I. Nikolov, F. Parmigiani, L. Pavlovic, E. Pedersoli, G. Penco, M. Petronio, M. Predonzani, E. Principi, E. Quai, G. Quondam, F. Rossi, L. Rumiz, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlik, C. Svetina, M. Trovo, A. Vascotto, M. Veronese, R. Visintini, M. Zaccaria, D. Zangrando, M. Zangrando, D. Wang, M. Alagia, L. Avaldi, M. Coreno, V. Feyer, A. Kivimaki, P. Bolognesi, M. de Simone, P. O’Keeffe, M. Devetta, T. Mazza, P. Piseri, K. Prince, R. Richter, R.

Sergo, S. Stranges, V. Lyamayev, Y. Ovcharenko, M. Sjostrom, S. Biedron, S. Milton,
“Commissioning and initial operation of FERMI@Elettra”,
Proceedings IPAC 2011 TUZA01 (2011), 918;

----- 2012 -----

61. A.J. Corso, P. Zuppella, D. Windt, M. Zangrando, M.G. Pelizzo,
“Extreme ultraviolet multilayer for the FERMI@Elettra free electron laser beam transport system”,
Optics Express **20** (2012), 8006 – 8014;
62. M. Zangrando, A. Abrami, D. Cocco, C. Fava, S. Gerusina, R. Gobessi, N. Mahne, E. Mazzucco, L. Raimondi, L. Rumiz, C. Svetina, F. Parmigiani,
“The photon beam transport and diagnostics system at FERMI@Elettra, the Italian seeded FEL source: commissioning experience and most recent results”,
Proceedings SPIE **8504** (2012), 850404;
63. C. Svetina, D. Cocco, A. Di Cicco, C. Fava, S. Gerusina, R. Gobessi, N. Mahne, C. Masciovecchio, E. Principi, L. Raimondi, L. Rumiz, R. Sergo, G. Sostero, D. Spiga, M. Zangrando,
“An active optics system for EUV/Soft x-ray beam shaping”,
Proceedings SPIE **8503** (2012), 850302;
64. M. Zangrando, A. Abrami, D. Cocco, C. Fava, S. Gerusina, R. Gobessi, N. Mahne, E. Mazzucco, L. Raimondi, L. Rumiz, C. Svetina, F. Parmigiani
“PADReS, the Photon Analysis Delivery and Reduction System of FERMI: commissioning and results”,
ELETTRA Highlights 2011-2012, 124 – 125;
65. F. Capotondi, E. Pedersoli, L. Raimondi, M. Zangrando, C. Svetina, R. H. Menk, G. Sandrin, M. Kiskinova, S. Bajt, M. Barthelmess, H. Fleckenstein, J. Schulz, H. N. Chapman, L. Muller, S. Schleitzei, C. Gutt, G. Grubel
“First coherent diffraction images measured at DiProl beamline of FERMI@Elettra free electron laser”,
ELETTRA Highlights 2011-2012, 126 – 127;
66. E. Allaria, R. Appio, L. Badano, W.A. Barletta, S. Bassanese, S.G. Biedron, A. Borga, E. Busetto, D. Castronovo, P. Cinquegrana, S. Cleva, D. Cocco, M. Cornacchia, P. Craievich, I. Cudin, G. D'Auria, M. Dal Forno, M.B. Danailov, R. De Monte, G. De Ninno, P. Delgiusto, A. Demidovich, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W. Fawley, M. Ferianis, E. Ferrari, S. Ferry, L. Froehlich, P. Furlan, G. Gaio, F. Gelmetti, L. Giannessi, M. Giannini, R. Gobessi, R. Ivanov, E. Karantzoulis, M. Lonza, A. Lutman, B. Mahieu, M. Milloch, S. V. Milton, M. Musardo, I. Nikolov, S. Noe', F. Parmigiani, G. Penco, M. Petronio, L. Pivetta, M. Predonzani, F. Rossi, L. Rumiz, A. Salom, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlík, C. Svetina, S. Tazzari, M. Trovo', R. Umer, A. Vascotto, M. Veronese, R. Visintini, M. Zaccaria, D. Zangrando, M. Zangrando,
“Highly coherent and stable pulses from the FERMI seeded free-electron laser in the extreme ultraviolet”,
Nature Photonics **6** (2012), 699 – 704;
67. E. Allaria, A. Battistoni, F. Bencivenga, R. Borghes, C. Callegari, F. Capotondi, D. Castronovo, P. Cinquegrana, M. Coreno, P. Craievich, R. Cucini, F. D'Amico, M.B. Danailov, A. Demidovich, G. De Ninno, A. Di Cicco, S. Di Fonzo, M. Di Fraia, S. Di Mitri, B. Diviacco, W. Fawley, E. Ferrari, A. Filipponi, L. Froehlich, A. Gessini, E. Giangrisostomi, L. Giannessi, D. Giuressi, C. Grazioli, R. Gunnella, R. Ivanov, M. Kiskinova, B. Mahieu, N. Mahne, C. Masciovecchio, I.P. Nikolov, G. Passos, E. Pedersoli, G. Penco, E. Principi, L. Raimondi, R. Sergo, P. Sigalotti, C. Spezzani, C. Svetina, M. Trovo', M. Zangrando,
“Tunability experiments at FERMI@Elettra Free Electron Laser”,
New Journal of Physics **14** (2012), 113009 - Selected for IOPselect;
68. M. Svandrlík, E. Allaria, L. Badano, S. Bassanese, F. Bencivenga, E. Busetto, C. Callegari, F. Capotondi, D. Castronovo, M. Coreno, P. Craievich, I. Cudin, M. Dal Forno, M.B. Danailov, G. D'Auria, R. De Monte, A. Demidovich, G. De Ninno, M. Di Fraia, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W.M. Fawley, M. Ferianis, E. Ferrari, L. Fröhlich, P.

Furlan Radivo, G. Gaio, R. Gobessi, C. Grazioli, E. Karantzoulis, M. Kiskinova, M. Lonza, B. Mahieu, C. Masciovecchio, S. Noè, F. Parmigiani, G. Penco, E. Principi, F. Rossi, L. Rumiz, C. Scafuri, S. Spampinati, C. Spezzani, C. Svetina, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, M. Zaccaria, D. Zangrando, M. Zangrando, L. Giannessi, “Status of the FERMI@Elettra project”, *Proceedings IPAC 2012 TUOBB03* (2012), 1092;

----- 2013 -----

69. L. Raimondi, C. Svetina, N. Mahne, D. Cocco, A. Abrami, M. De Marco, C. Fava, S. Gerusina, R. Gobessi, F. Capotondi, E. Pedersoli, M. Kiskinova, G. De Ninno, P. Zeitoun, G. Dovillaire, G. Lambert, W. Boutu, H. Merdji, A.I. Gonzalez, D. Gauthier, M. Zangrando, “Microfocusing of the FERMI@Elettra FEL beam with a K-B active optics system: spot size predictions by application of the WISE code”, *Nucl. Instrum. and Meth. A* **710** (2013), 131– 138;
70. D. Spiga, L. Raimondi, C. Svetina, M. Zangrando, “X-ray beam-shaping via deformable mirrors: analytical computation of the required mirror profile”, *Nucl. Instrum. and Meth. A* **710** (2013), 125 – 130;
71. F. Capotondi, E. Pedersoli, N. Mahne, G. Passos, L. Raimondi, C. Svetina, G. Sandrin, M. Zangrando, M. Kiskinova, S. Bajt, M. Barthelmess, H. Fleckenstein, H. N. Chapman, J. Schulz, J. Bach, R. Frömter, S. Schleitzer, L. Müller, C. Gutt, G. Grübel, “Invited Article: Coherent imaging using seeded free-electron laser pulses with variable polarization: First results and research opportunities”, *Review of Scientific Instruments* **84** (2013), 051301 - Invited Article;
72. B. Mahieu, E. Allaria, D. Castronovo, M. B. Danailov, A. Demidovich, G. De Ninno, S. Di Mitri, W. M. Fawley, E. Ferrari, L. Froehlich, D. Gauthier, L. Giannessi, N. Mahne, G. Penco, L. Raimondi, S. Spampinati, C. Spezzani, C. Svetina, M. Trovò, M. Zangrando, “Two-colour generation in a chirped seeded Free-Electron Laser: a close look”, *Optics Express* **21** (2013), 22728-22741;
73. E. Allaria, F. Bencivenga, R. Borghes, F. Capotondi, D. Castronovo, P. Charalambous, P. Cinquegrana, M.B. Danailov, G. De Ninno, A. Demidovich, S. Di Mitri, B. Diviacco, D. Fausti, W. Fawley, E. Ferrari, L. Froehlich, D. Gauthier, A. Gessini, L. Giannessi, R. Ivanov, M. Kiskinova, G. Kurdi, B. Mahieu, N. Mahne, I. Nikolov, C. Masciovecchio, E. Pedersoli, G. Penco, L. Raimondi, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, C. Svetina, M. Trovò, M. Zangrando, “Two-colour pump-probe experiments with a twin-pulse-seed extreme ultraviolet free-electron laser”, *Nature Communications* **4** (2013), 2476;
74. E. Allaria, D. Castronovo, P. Cinquegrana, P. Craievich, I. Cudin, G. D'Auria, M. Dal Forno, M.B. Danailov, G. D'Auria, A. Demidovich, G. De Ninno, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W. Fawley, M. Ferianis, E. Ferrari, L. Froehlich, G. Gaio, D. Gauthier, L. Giannessi, R. Ivanov, B. Mahieu, N. Mahne, I. Nikolov, S. Noe, F. Parmigiani, G. Penco, L. Raimondi, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlík, C. Svetina, M. Trovò, M. Veronese, D. Zangrando, M. Zangrando, “Two Stage Seeded Soft X-Ray Free-Electron Laser”, *Nature Photonics* **7** (2013), 913 – 918;
75. M. Zangrando, L. Giannessi, E. Allaria, F. Bencivenga, F. Capotondi, D. Castronovo, P. Cinquegrana, M.B. Danailov, A. Demidovich, S. Di Mitri, B. Diviacco, W.M. Fawley, E. Ferrari, L. Froehlich, R. Ivanov, M. Kiskinova, B. Mahieu, N. Mahne, C. Masciovecchio, I. Nikolov, E. Pedersoli, G. Penco, L. Raimondi, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, C. Svetina, M. Trovò, D. Gauthier, G. De Ninno, D. Fausti; “Jitter-free time resolved resonant cdi experiments using two-color fel pulses generated by the same electron bunch”, *FEL 2013: Proceedings of the 35th International Free-Electron Laser Conference 753-756* (2013);
76. E. Allaria, F. Bencivenga, C. Callegari, F. Capotondi, D. Castronovo, P. Cinquegrana, I. Cudin, M. Dal Forno, M.B. Danailov, G. D'Auria, R. De Monte, G. De Ninno, A. Demidovich, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W.M. Fawley, M. Ferianis, E.

- Ferrari, L. Froehlich, P. Furlan Radivo, G. Gaio, L. Giannessi, M. Kiskinova, M. Lonza, B. Mahieu, N. Mahne, C. Masciovecchio, C. Parmigiani, G. Penco, M. Predonzani, E. Principi, L. Raimondi, F. Rossi, L. Rumiz, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlík, C. Svetina, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, D. Zangrando, M. Zangrando, P. Craievich;
 “Fermi@elettra status report”,
FEL 2013: Proceedings of the 35th International Free-Electron Laser Conference 546-549 (2013);
77. E. Allaria, D. Castronovo, P. Cinquegrana, M.B. Danailov, G. D'Auria, A. Demidovich, S. Di Mitri, B. Diviacco, W.M. Fawley, M. Ferianis, L. Froehlich, G. Gaio, R. Ivanov, N. Mahne, I. Nikolov, G. Penco, L. Raimondi, C. Serpico, P. Sigalotti, C. Spezzani, M. Svandrlík, C. Svetina, M. Trovò, M. Veronese, D. Zangrando, B. Mahieu, M. Dal Forno, L. Giannessi, M. Zangrando, G. De Ninno, E. Ferrari, F. Parmigiani, D. Gauthier;
 “Double stage seeded fel with fresh bunch injection technique at fermi”,
FEL 2013: Proceedings of the 35th International Free-Electron Laser Conference 723-727 (2013);
78. M. Svandrlík, E. Allaria, F. Bencivenga, C. Callegari, F. Capotondi, D. Castronovo, P. Cinquegrana, I. Cudin, M. Dal Forno, M.B. Danailov, G. D'Auria, R. De Monte, G. De Ninno, A. Demidovich, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W.M. Fawley, M. Ferianis, E. Ferrari, P. Finetti, L. Froehlich, P. Furlan Radivo, G. Gaio, L. Giannessi, M. Kiskinova, G. Loda, M. Lonza, N. Mahne, C. Masciovecchio, C. Parmigiani, G. Penco, O. Plekan, M. Predonzani, E. Principi, L. Raimondi, F. Rossi, L. Rumiz, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, L. Sturari, C. Svetina, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, D. Zangrando, M. Zangrando, B. Mahieu, P. Craievich;
 “FERMI seeded FEL progress report”,
4th International Particle Accelerator Conference, IPAC 2013 1182-1184 (2013);
79. S. Di Mitri, E. Allaria, D. Castronovo, P. Cinquegrana, P. Craievich, M.B. Danailov, G. D'Auria, G. De Ninno, A. Demidovich, B. Diviacco, W.M. Fawley, M. Ferianis, E. Ferrari, L. Froehlich, D. Gauthier, G. Gaio, L. Giannessi, R. Ivanov, B. Mahieu, N. Mahne, I. Nikolov, C. Parmigiani, G. Penco, L. Raimondi, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlík, C. Svetina, M. Trovò, A. Vascotto, M. Veronese, D. Zangrando, M. Zangrando;
 “Double stage seeded FEL with fresh bunch injection technique at FERMI@Elettra”,
4th International Particle Accelerator Conference, IPAC 2013 1185-1186 (2013);
80. L. Raimondi, C. Svetina, N. Mahne, D. Cocco, F. Capotondi, E. Pedersoli, M. Kiskinova, B. Keitel, G. Brenner, E. Ploenjes, T. Mey, K. Mann, M. Zangrando,
 “K-B bendable system optimization at FERMI@Elettra FEL: impact of different spatial wavelengths on the spot size”,
Proceedings SPIE 8848 (2013), 88480B;
81. C. Svetina, N. Mahne, L. Raimondi, L. Rumiz, M. Zangrando, E. Allaria, F. Bencivenga, C. Callegari, F. Capotondi, D. Castronovo, P. Cinquegrana, P. Craievich, I. Cudin, M. Dal Forno, M. B. Danailov, G. D'Auria, R. De Monte, G. De Ninno, A. Demidovich, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W. M. Fawley, M. Ferianis, E. Ferrari, L. Froehlich, P. Furlan Radivo, G. Gaio, L. Giannessi, M. Kiskinova, M. Lonza, B. Mahieu, C. Masciovecchio, I. P. Nikolov, F. Parmigiani, E. Pedersoli, G. Penco, M. Predonzani, E. Principi, F. Rossi, C. Scafuri, C. Serpico, P. Sigalotti, S. Spampinati, C. Spezzani, M. Svandrlík, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, D. Zangrando,
 “Status and achievements at FERMI@Elettra: the first double cascade seeded EUV-SXR FEL facility open to users”,
Proceedings SPIE 8849 (2013), 88490O;
- 2014 -----
82. E. Allaria, B. Diviacco, C. Callegari, P. Finetti, B. Mahieu, J. Viefhaus, M. Zangrando, G. De Ninno, G. Lambert, E. Ferrari, J. Buck, M. Ilchen, B. Vodungbo, N. Mahne, C. Svetina, C. Spezzani, S. Di Mitri, G. Penco, M. Trovò, W. M. Fawley, P. R. Rebernik, D. Gauthier, C. Grazioli, M. Coreno, B. Ressel, A. Kivimaki, T. Mazza, L. Glaser, F. Scholz, J. Seltmann, P. Gessler, J. Gruenert, A. De Fanis, M. Meyer, A. Knie, S. P. Moeller, L.

- Raimondi, F. Capotondi, E. Pedersoli, O. Plekan, M. B. Danailov, A. Demidovich, I. Nikolov, A. Abrami, J. Gautier, J. Luning, P. Zeitoun, L. Giannessi,
 “Control of the polarization of a vacuum-ultraviolet, high-gain, free-electron laser”,
Phys. Rev. X **4** (2014), 041040;
83. C. Spezzani, E. Ferrari, E. Allaria, F. Vidal, A. Ciavardini, R. Delaunay, F. Capotondi, E. Pedersoli, M. Coreno, C. Svetina, L. Raimondi, M. Zangrando, R. Ivanov, I. Nikolov, A. Demidovich, M. B. Danailov, H. Popescu, M. Eddrief, G. De Ninno, M. Kiskinova, M. Sacchi,
 “Magnetization and microstructure dynamics in Fe/MnAs/GaAs(001): Fe magnetization reversal by a femtosecond laser pulse”,
Phys. Rev. Lett. **113** (2014), 247202;
84. M. Zangrando, C. Fava, S. Gerusina, R. Gobessi, N. Mahne, E. Mazzucco, L. Raimondi, L. Rumiz, C. Svetina,
 “The experience of the FERMI@Elettra photon beam transport and diagnostics system (PADReS) during three years of continuous support of machine and user experiments: achievements, lessons learned, and future upgrades”,
Proceedings SPIE **9210** (2014), 921003;
85. P. Finetti, E. Allaria, B. Diviacco, C. Callegari, B. Mahieu, J. Viefhaus, M. Zangrando, G. De Ninno, G. Lambert, E. Ferrari, J. Buck, M. Ilchen, B. Vodungbo, N. Mahne, C. Svetina, C. Spezzani, S. Di Mitri, G. Penco, M. Trovò, W. M. Fawley, P. Rebernik, D. Gauthier, C. Grazioli, M. Coreno, B. Ressel, A. Kivimäki, T. Mazza, L. Glaser, F. Scholz, J. Seltmann, P. Gessler, J. Grünert, A. De Fanis, M. Meyer, A. Knie, S. P. Moeller, L. Raimondi, F. Capotondi, E. Pedersoli, O. Plekan, M. Danailov, A. Demidovich, I. Nikolov, A. Abrami, J. Gautier, J. Luning, P. Zeitoun, L. Giannessi,
 “Polarization measurement of free electron laser pulses in the VUV generated by the variable polarization source FERMI”,
Proceedings SPIE **9210** (2014), 92100K;
86. L. Raimondi, C. Svetina, N. Mahne, D. Cocco, F. Capotondi, E. Pedersoli, M. Manfredda, M. Kiskinova, B. Keitel, G. Brenner, E. Plönjes, T. Mey, K. Mann, M. Zangrando,
 “Status of the K-B bendable optics at FERMI@Elettra FEL”,
Proceedings SPIE **9208** (2014), 920804;
87. C. Svetina, M. Dell'Angela, N. Mahne, M. Malvestuto, F. Parmigiani, L. Raimondi, M. Zangrando,
 “MagneDyn: the future beamline for ultrafast magnetodynamical studies at FERMI”,
Proceedings SPIE **9207** (2014), 92070E;
- 2015 -----
88. M. Zangrando, N. Mahne, L. Raimondi, C. Svetina,
 “The Soft X-ray Free-Electron Laser FERMI@Elettra”,
Chapter in “Optical Technologies for Extreme-Ultraviolet and Soft X-ray Coherent Sources”, Volume **197** of the series *Springer Series in Optical Sciences* (2015), 23-40;
89. M. Zangrando, D. Cocco, C. Fava, S. Gerusina, R. Gobessi, N. Mahne, E. Mazzucco, L. Raimondi, L. Rumiz, C. Svetina,
 “Recent results of PADReS, the Photon Analysis Delivery and REduction System, from the FERMI FEL commissioning and user operations”,
J. Synchr. Rad. **22** (2015), 565-570;
90. C. Svetina, C. Grazioli, N. Mahne, L. Raimondi, C. Fava, M. Zangrando, S. Gerusina, M. Alagia, L. Avaldi, G. Cautero, M. de Simone, M. Devetta, M. Di Fraia, M. Drabbels, V. Feyer, P. Finetti, R. Katzy, A. Kivimäki, V. Lyamayev, T. Mazza, A. Moise, T. Möller, P. O’Keeffe, Y. Ovcharenko, P. Piseri, O. Plekan, K. C. Prince, R. Sergo, F. Stienkemeier, S. Stranges, M. Coreno, C. Callegari,
 “The Low Density Matter (LDM) beamline at FERMI: optical layout and first commissioning”,
J. Synchr. Rad. **22** (2015), 538-543;
91. F. Capotondi, E. Pedersoli, F. Bencivenga, M. Manfredda, N. Mahne, L. Raimondi, C. Svetina, M. Zangrando, A. Demidovich, I. Nikolov, M. Danailov, C. Masciovecchio, M. Kiskinova,
 “Multipurpose end-station for coherent diffraction imaging and scattering at

- FERMI@Elettra free-electron laser facility”,
J. Synchr. Rad. **22** (2015), 544-552;
92. E. Allaria, L. Badano, S. Bassanese, F. Capotondi, D. Castronovo, P. Cinquegrana, M. B. Danailov, G. D'Auria, A. Demidovich, R. De Monte, G. De Ninno, S. Di Mitri, B. Diviacco, W. M. Fawley, M. Ferianis, E. Ferrari, G. Gaio, D. Gauthier, L. Giannessi, F. Iazzourene, G. Kurdi, N. Mahne, I. Nikolov, F. Parmigiani, G. Penco, L. Raimondi, P. Rebernik, F. Rossi, E. Roussel, C. Scafuri, C. Serpico, P. Sigalotti, C. Spezzani, M. Svandrlik, C. Svetina, M. Trovó, M. Veronese, D. Zangrando, M. Zangrando,
 “The FERMI free-electron lasers”,
J. Synchr. Rad. **22** (2015), 585-591;
93. C. Masciovecchio, A. Battistoni, E. Giangrisostomi, F. Bencivenga, E. Principi, R. Mincigrucci, R. Cucini, A. Gessini, F. D'Amico, R. Borghes, M. Prica, V. Chenda, M. Scarcia, G. Gaio, G. Kurdi, A. Demidovich, M. B. Danailov, A. Di Cicco, A. Filipponi, R. Gunnella, K. Hatada, N. Mahne, L. Raimondi, C. Svetina, R. Godnig, A. Abrami, M. Zangrando,
 “EIS: the scattering beamline at FERMI”,
J. Synchr. Rad. **22** (2015), 553-564;
94. L. Raimondi, C. Svetina, N. Mahne, D. Cocco, F. Capotondi, E. Pedersoli, M. Manfredda, M. Kiskinova, M. Zangrando,
 “Active Optics Systems at FERMI Free Electron Laser”,
Imaging and Applied Optics - Adaptive Optics: Analysis, Methods & Systems, AOM4B (2015);
95. C. Spezzani, E. Ferrari, E. Allaria, F. Vidal, L. Lounis, A. Ciavardini, R. Delaunay, F. Capotondi, E. Pedersoli, M. Coreno, C. Svetina, L. Raimondi, M. Zangrando, R. Ivanov, I. Nikolov, A. Demidovich, M. Danailov, G. De Ninno, H. Popescu, M. Eddrief, M. Kiskinova, M. Sacchi,
 “Optically induced Fe magnetization reversal in Fe/MnAs/GaAs(001)”,
Proceedings SPIE 9212 (2015), 921201;
96. L. Poletto, F. Frassetto, P. Miotti, D. Gauthier, M. Fajardo, B. Mahieu, C. Svetina, M. Zangrando, P. Zeitoun, G. De Ninno,
 “Grating-based pulse compressor for applications to FEL sources”,
Proceedings SPIE 9212 (2015), 921210;
97. Svandrlik, M., Allaria, E., Bencivenga, F., Callegari, C., Capotondi, F., Castronovo, D., Cinquegrana, P., Coreno, M., Cucini, R., Cudin, I., Danailov, M.B., D'Auria, G., De Monte, R., De Ninno, G., Delgiusto, P., Demidovich, A., Di Mitri, S., Diviacco, B., Fabris, A., Fabris, R., Fawley, W.M., Ferianis, M., Ferrari, E., Finetti, P., Fröhlich, L., Furlan Radivo, P., Gaio, G., Gauthier, D., Gelmetti, F., Giannessi, L., Kiskinova, M., Krecic, S., Lonza, M., Mahne, N., Masciovecchio, C., Milloch, M., Parmigiani, F., Penco, G., Pivetta, L., Plekan, O., Predonzani, M., Principi, E., Raimondi, L., Rebernik Ribic, P., Rossi, F., Rumiz, L., Scafuri, C., Serpico, C., Sigalotti, P., Spezzani, C., Svetina, C., Trovò, M., Vascotto, A., Veronese, M., Visintini, R., Zangrando, D., Zangrando, M.;
 “Fermi status report”,
5th International Particle Accelerator Conference, IPAC 2014 2885-2887 (2015);
- 2016 -----
98. D. Cocco, E. Plönjes, M. Zangrando,
 “PhotonDiag2015 workshop: introductory overview”,
J. Synchr. Rad. **23** (2016), 1-2;
99. A. Matruglio, S. Dal Zilio, R. Sergo, R. Mincigrucci, C. Svetina, E. Principi, N. Mahne, L. Raimondi, A. Turchet, C. Masciovecchio, M. Lazzarino, G. Cautero, M. Zangrando,
 “A novel approach in the free-electron laser diagnosis based on a pixelated phosphor detector”,
J. Synchr. Rad. **23** (2016), 29-34;
100. C. Svetina, D. Cocco, N. Mahne, L. Raimondi, E. Ferrari, M. Zangrando,
 “PRESTO, the on-line photon energy spectrometer at FERMI: design, features and commissioning results”,
J. Synchr. Rad. **23** (2016), 35-42;
101. C. Svetina, N. Mahne, L. Raimondi, A. Caretta, B. Casarin, M. Dell'Angela, M. Malvestuto, F.

- Parmigiani, M. Zangrando,
 “MagneDyn: the beamline for magneto dynamics studies at FERMI”,
J. Synchr. Rad. **23** (2016), 98-105;
102. C. Svetina, N. Mahne, L. Raimondi, A. Perucchi, P. Di Pietro, S. Lupi, B. Schmidt, M. Zangrando,
 “Photon transport of the superradiant TeraFERMI THz beamline at the FERMI free-electron laser”,
J. Synchr. Rad. **23** (2016), 106-110;
103. F. Bencivenga, M. Zangrando, C. Svetina, A. Abrami, A. Battistoni, R. Borghes, F. Capotondi, R. Cucini, F. Dallari, M. Danailov, A. Demidovich, C. Fava, G. Gaio, S. Gerusina, A. Gessini, F. Giacuzzo, R. Gobessi, R. Godnig, R. Grisonich, M. Kiskinova, G. Kurdi, G. Loda, M. Lonza, N. Mahne, M. Manfreda, R. Mincigrucci, G. Pangon, P. Parisse, R. Passuello, E. Pedersoli, L. Pivetta, M. Prica, E. Principi, I. Rago, L. Raimondi, R. Sauro, M. Scarcia, P. Sigalotti, M. Zaccaria, C. Masciovecchio,
 “Experimental setups for FEL-based four-wave mixing experiments at FERMI”,
J. Synchr. Rad. **23** (2016), 132-140;
104. K. C. Prince, E. Allaria, C. Callegari, R. Cucini, G. De Ninno, S. Di Mitri, B. Diviacco, E. Ferrari, P. Finetti, D. Gauthier, L. Giannessi, N. Mahne, G. Penco, O. Plekan, L. Raimondi, P. Rebernik, E. Roussel, C. Svetina, M. Trovò, M. Zangrando, M. Negro, P. Carpeggiani, M. Reduzzi, G. Sansone, A. N. Grum-Grzhimailo, E. V. Gryzlova, S. I. Strakhova, K. Bartschat, N. Douguet, J. Venzke, D. Iablonskyi, Y. Kumagai, T. Takanashi, K. Ueda, A. Fischer, M. Coreno, F. Stienkemeier, Y. Ovcharenko, T. Mazza, M. Meyer,
 “Coherent control with a short-wavelength free-electron laser”,
Nature Photonics **10** (2016), 176 – 179;
105. E. Ferrari, C. Spezzani, F. Fortuna, R. Delaunay, F. Vidal, I. Nikolov, P. Cinquegrana, B. Diviacco, D. Gauthier, G. Penco, P. Rebernik Ribič, E. Roussel, M. Trovò, J.-B. Moussy, T. Pincelli, L. Lounis, M. Manfreda, E. Pedersoli, F. Capotondi, C. Svetina, N. Mahne, M. Zangrando, L. Raimondi, A. Demidovich, L. Giannessi, G. De Ninno, M. B. Danailov, E. Allaria, M. Sacchi,
 “Widely tunable two-colour seeded free-electron laser source for resonant-pump resonant-probe magnetic scattering”,
Nature Communications **7** (2016), 10343;
106. F. Bencivenga, A. Calvi, F. Capotondi, R. Cucini, R. Mincigrucci, A. Simoncig, M. Manfreda, E. Pedersoli, E. Principi, E. Dallari, R.A. Duncan, M.G. Izzo, G. Knopp, A.A. Maznev, G. Monaco, S. Di Mitri, A. Gessini, L. Giannessi, N. Mahne, I.P. Nikolov, R. Passuello, L. Raimondi, M. Zangrando, C. Masciovecchio,
 “Four-wave-mixing experiments with seeded free electron lasers”,
Faraday Discussions **194** (2016), 283-303;
107. E. Allaria, L. Badano, F. Bencivenga, C. Callegari, F. Capotondi, D. Castronovo, P. Cinquegrana, M. Coreno, R. Cucini, I. Cudin, M.B. Danailov, G. D’Auria, R. De Monte, G. De Ninno, P. Delgiusto, A. Demidovich, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W.M. Fawley, M. Ferianis, E. Ferrari, P. Finetti, P.F. Radivo, G. Gaio, D. Gauthier, F. Gelmetti, L. Giannessi, F. Iazzourene, M. Kiskinova, S. Krecic, M. Lonza, N. Mahne, M. Manfreda, C. Masciovecchio, M. Milloch, F. Parmigiani, E. Pedersoli, G. Penco, A. Perucchi, L. Pivetta, O. Plekan, M. Predonzani, E. Principi, L. Raimondi, P.R. Ribic, F. Rossi, E. Roussel, L. Rumiz, C. Scafuri, C. Serpico, P. Sigalotti, M. Svandrlík, C. Svetina, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, D. Zangrando, M. Zangrando,
 “The FERMI seeded-FEL facility: Status and perspectives”,
AIP Conference Proceedings **1741** (2016), 020006;
108. D. Gauthier, E. Allaria, M. Coreno, I. Cudin, H. Dacasa, M.B. Danailov, A. Demidovich, S. Di Mitri, B. Diviacco, E. Ferrari, P. Finetti, P. Frassetto, D. Garzella, S. Künzel, V. Leroux, B. Mahieu, N. Mahne, M. Meyer, T. Mazza, P. Miotti, G. Penco, L. Raimondi, P.R. Ribic, R. Richter, E. Roussel, S. Schulz, L. Sturari, C. Svetina, M. Trovò, P.A. Walker, M. Zangrando, C. Callegari, M. Fajardo, L. Poletto, P. Zeitoun, L. Giannessi, G. De Ninno,
 “Chirped pulse amplification in an extreme-ultraviolet free-electron laser”,
Nature Communications **7** (2016), 13688;
109. M. Dell’Angela, F. Hieke, M. Malvestuto, L. Sturari, S. Bajt, I. V. Kozhevnikov, J. Ratanapreechachai, A. Caretta, B. Casarin, F. Glerean, A. M. Kalashnikova, R. V. Pisarev, Y.-D. Chuang, G. Manzoni, F. Cilento, R. Mincigrucci, A. Simoncig, E. Principi, C.

- Masciovecchio, L. Raimondi, N. Mahne, C. Svetina, M. Zangrando, R. Passuello, G. Gaio, M. Prica, M. Scarzia, G. Kourousias, R. Borghes, L. Giannessi, W. Wurth, F. Parmigiani,
 “Extreme ultraviolet resonant inelastic X-ray scattering (RIXS) at a seeded free-electron laser”,
Scientific Reports **6** (2016), 38796;
110. L. Raimondi, N. Mahne, M. Manfredda, C. Svetina, D. Cocco, F. Capotondi, E. Pedersoli, M. Kiskinova, M. Zangrando,
 “Wavefront sensor based diagnostic of FERMI FEL photon beam”,
Proceedings SPIE **9965** (2016), 99650F;
- 2017 -----
111. E. Roussel, E. Allaria, C. Callegari, M. Coreno, R. Cucini, S. Di Mitri, B. Diviacco, E. Ferrari, P. Finetti, D. Gauthier, G. Penco, L. Raimondi, C. Svetina, M. Zangrando, A. Beckmann, L. Glaser, G. Hartmann, F. Scholz, J. Seltmann, I. Shevchuk, J. Viefhaus, L. Giannessi,
 “Polarization Characterization of Soft X-Ray Radiation at FERMI FEL-2”,
Photonics **4** (2017), 29;
112. F. Vidal, L. Lounis, C. Spezzani, E. Ferrari, R. Delaunay, A. Ciavardini, H. Popescu, M. Eddrief, Y. Zheng, F. Capotondi, E. Pedersoli, C. Svetina, L. Raimondi, M. Zangrando, R. Ivanov, I. Nikolov, A. Demidovich, M. B. Danailov, G. De Ninno, E. Allaria, M. Kiskinova, M. Sacchi,
 “Dynamics of the MnAs α/β -Striped Microstructure and of the Fe Magnetization Reversal in Fe/MnAs/GaAs(001): An Optical-Laser Pump–Free-Electron-Laser Probe Scattering Experiment”,
Photonics **4** (2017), 21;
113. E. Ferrari, C. Spezzani, F. Fortuna, R. Delaunay, F. Vidal, I. Nikolov, P. Cinquegrana, B. Diviacco, D. Gauthier, G. Penco, P. Rebernik Ribič, E. Roussel, M. Trovò, J.-B. Moussy, T. Pincelli, L. Lounis, C. Svetina, M. Zangrando, N. Mahne, L. Raimondi, M. Manfredda, E. Pedersoli, F. Capotondi, A. Demidovich, L. Giannessi, M. Kiskinova, G. De Ninno, M.B. Danailov, E. Allaria, M. Sacchi,
 “Element Selective Probe of the Ultra-Fast Magnetic Response to an Element Selective Excitation in Fe-Ni Compounds Using a Two-Color FEL Source”,
Photonics **4** (2017), 6;
114. P. Finetti, H. Höppner, E. Allaria, C. Callegari, F. Capotondi, P. Cinquegrana, M. Coreno, R. Cucini, M. B. Danailov, A. Demidovich, G. De Ninno, M. Di Fraia, R. Feifel, E. Ferrari, L. Fröhlich, D. Gauthier, T. Golz, C. Grazioli, Y. Kai, G. Kurdi, N. Mahne, M. Manfredda, N. Medvedev, I. P. Nikolov, E. Pedersoli, G. Penco, O. Plekan, M. J. Prandolini, K. C. Prince, L. Raimondi, P. Rebernik, R. Riedel, E. Roussel, P. Sigalotti, R. Squibb, N. Stojanovic, S. Stranges, C. Svetina, T. Tanikawa, U. Teubner, V. Tkachenko, S. Toleikis, M. Zangrando, B. Ziaja, F. Tavella, L. Giannessi,
 “Pulse Duration of Seeded Free-Electron Lasers”,
Phys. Rev. X **7** (2017), 021043;
115. B. Rösner, F. Döring, P.R. Ribič, D. Gauthier, E. Principi, C. Masciovecchio, M. Zangrando, J. Vila-Comamala, G. De Ninno, C. David,
 “High resolution beam profiling of X-ray free electron laser radiation by polymer imprint development”,
Optics Express **25** (2017), 30686-30695;
116. A. Simoncig, R. Mincigrucchi, E. Principi, F. Bencivenga, A. Calvi, L. Foglia, G. Kurdi, L. Raimondi, M. Manfredda, N. Mahne, R. Gobessi, S. Gerusina, C. Fava, M. Zangrando, A. Matruglio, S. Dal Zilio, V. Masciotti, C. Masciovecchio,
 “The EIS beamline at the seeded free-electron laser FERMI”,
Proceedings SPIE **10243** (2017), 102430L;
117. L. Foglia, F. Bencivenga, R. Mincigrucchi, A. Simoncig, A. Calvi, R. Cucini, E. Principi, M. Zangrando, N. Mahne, M. Manfredda, L. Raimondi, E. Pedersoli, F. Capotondi, M. Kiskinova, C. Masciovecchio,
 “Four-wave-mixing experiments and beyond: the TIMER/mini-TIMER setups at FERMI”,
Proceedings SPIE **10237** (2017), 102370C;

118. R. Mincigrucci, F. Bencivenga, E. Principi, F. Capotondi, L. Foglia, D. Naumenko, A. Simoncig, S. Dal Zilio, A. Gessini, G. Kurdi, N. Mahne, M. Manfredda, A. Matruglio, I. Nikolov, E. Pedersoli, L. Raimondi, R. Sergo, M. Zangrando, C. Masciovecchio, "Timing methodologies and studies at the FERMI free-electron laser", *J. Synchr. Rad.* **25** (2018), 44-51;
119. D. Cocco, S. Moeller, E. Ploenjes, M. Zangrando, "PhotonDiag2017 workshop: introductory overview", *J. Synchr. Rad.* **25** (2018), 1-2;
120. M. Schneider, C.M. Günther, B. Pfau, F. Capotondi, M. Manfredda, M. Zangrando, N. Mahne, L. Raimondi, E. Pedersoli, D. Naumenko, S. Eisebitt, "In situ single-shot diffractive fluence mapping for X-ray free-electron laser pulses", *Nature Communications* **9** (2018), 214;
121. M. Ilchen, G. Hartmann, E. V. Gryzlova, A. Achner, E. Allaria, A. Beckmann, M. Braune, J. Buck, C. Callegari, R. N. Coffee, R. Cucini, M. Danailov, A. De Fanis, A. Demidovich, E. Ferrari, P. Finetti, L. Glaser, A. Knie, A. O. Lindahl, O. Plekan, N. Mahne, T. Mazza, L. Raimondi, E. Roussel, F. Scholz, J. Seltmann, I. Shevchuk, C. Svetina, P. Walter, M. Zangrando, J. Viefhaus, A. N. Grum-Grzhimailo, M. Meyer, "Symmetry breakdown of electron emission in extreme ultraviolet photoionization of argon", *Nature Communications* **9** (2018), 4659;
122. H. Moreno Fernandez, M. Zangrando, G. Sauthier, A. R. Goñi, Vi. Carlino, E. Pellegrin "Towards chemically neutral carbon cleaning processes: plasma cleaning of Ni, Rh and Al reflective optical coatings and thin Al filters for free-electron lasers and synchrotron beamline applications", *J. Synchr. Rad.* **25** (2018), 1642-1649;
123. L. Foglia, F. Capotondi, R. Mincigrucci, D. Naumenko, E. Pedersoli, A. Simoncig, G. Kurdi, A. Calvi, M. Manfredda, L. Raimondi, N. Mahne, M. Zangrando, C. Masciovecchio, and F. Bencivenga, "First Evidence of Purely Extreme-Ultraviolet Four-Wave Mixing", *Phys. Rev. Lett.* **120** (2018), 263901;
124. R. Mincigrucci, L. Foglia, D. Naumenko, E. Pedersoli, A. Simoncig, R. Cucini, A. Gessini, M. Kiskinova, G. Kurdi, N. Mahne, M. Manfredda, I.P. Nikolov, E. Principi, L. Raimondi, M. Zangrando, C. Masciovecchio, F. Capotondi, F. Bencivenga, "Advances in instrumentation for FEL-based four-wave-mixing experiments", *Nucl. Instrum. and Meth. A* **907** (2018), 132-148;
125. D. Cocco, M. Idir, D. Morton, L. Raimondi, M. Zangrando, "Advances in X-ray optics: From metrology characterization to wavefront sensing-based optimization of active optics", *Nucl. Instrum. and Meth. A* **907** (2018), 105-115;

126. M. Manfredda, L. Raimondi, N. Mahne, M. Zangrando "Focal shifts induced by source displacements and optical figure errors" *J. Synchr. Rad.* **26** (2019), 1503-1513;
127. L. Raimondi, M. Manfredda, N. Mahne, D. Cocco, F. Capotondi, E. Pedersoli, M. Kiskinova, M. Zangrando "Kirkpatrick-Baez Active Optics System at FERMI: system performance analysis", *J. Synchr. Rad.* **26** (2019), 1462-1472;
128. M. Kuhlmann, M. Brachmanski, B. Faatz, B. Keitel, M. Ruis-Lopez, J. Roensch-Schulenburg, H. Schulte-Schrepping, L. Raimondi, M. Manfredda, N. Mahne, M. Zangrando, T. Burian, T. Wodzinski, R. Treusch, E. Plönjes "The Variable Micro-Focus Free-Electron Laser Beamline FLASH2 FL24", *J. Synchr. Rad.* (2019), submitted;
129. P. Rebernik Ribič, A. Abrami, L. Badano, M. Bossi, H.-Heinrich Braun, N. Bruchon, F. Capotondi, D. Castronovo, M. Cautero, P. Cinquegrana, M. Coreno, M. E. Couprie, I. Cudin, M. B. Danailov, G. De Ninno, A. Demidovich, S. Di Mitri, B. Diviacco, W. M.

- Fawley, C. Feng, M. Ferianis, E. Ferrari, L. Foglia, F. Frassetto, G. Gaio, D. Garzella, A. Ghaith, F. Giacuzzo, L. Giannessi, V. Grattoni, S. Grulja, E. Hemsing, F. Iazzourene, G. Kurdi, M. Lonza, N. Mahne, M. Malvestuto, M. Manfreda, C. Masciovecchio, P. Miotti, N. S. Mirian, I. P. Nikolov, G. M. Penco, G. Penn, L. Poletto, M. Pop, E. Prat, E. Principi, L. Raimondi, S. Reiche, E. Roussel, R. Sauro, C. Scafuri, P. Sigalotti, S. Spampinati, C. Spezzani, L. Sturari, M. Svandrlík, T. Tanikawa, M. Trovò, M. Veronese, D. Vivoda, D. Xiang, M. Zaccaria, D. Zangrando, M. Zangrando, E. M. Allaria,
 “Coherent soft x-ray pulses from an echo-enabled harmonic generation free-electron laser”,
Nature Photonics **13** (2019), 555-561;
130. E. Ferrari, E. Roussel, J. Buck, C. Callegari, R. Cucini, G. De Ninno, B. Diviacco, D. Gauthier, L. Giannessi, L. Glaser, G. Hartmann, G. Penco, f. Scholz, J. Seltsmann, I. Shevchuk, J. Viefhaus, M. Zangrando, E. M. Allaria,
 “Free Electron Laser Polarization Control with Interfering Crossed Polarized Fields”,
Phys. Rev. Accel. and Beams **22** (2019), 080701;
131. F. Bencivenga, R. Mincigrucci, F. Capotondi, L. Foglia, D. Naumenko, A. A. Maznev, E. Pedersoli, A. Simoncig, F. Caporaletti, V. Chiloyan, R. Cucini, F. Dallari, R. A. Duncan, T. D. Frazer, G. Gaio, A. Gessini, L. Giannessi, S. Huberman, H. Kapteyn, J. Knobloch, G. Kurdi, N. Mahne, M. Manfreda, A. Martinelli, M. Murnane, E. Principi, L. Raimondi, S. Spampinati, C. Spezzani, M. Trovò, M. Zangrando, G. Chen, G. Monaco, K. A. Nelson, C. Masciovecchio,
 “Nanoscale transient gratings excited and probed by extreme ultraviolet femtosecond pulses”,
Science Advances **26** (2019), eaaw5805;
132. F. Bonfigli on behalf of F. Capotondi, A. Cricenti, L. Giannessi, M. Kiskinova, M. Luce, N. Mahne, M. Manfreda, R. M. Montecchi, E. Nichelatti, E. Pedersoli, L. Raimondi, M. A. Vincenti, M. Zangrando,
 “Imaging detectors based on photoluminescence of radiation-induced defects in lithium fluoride for XFEL beam monitoring”,
Il Nuovo Cimento **42 C** (2019), 237;
133. E. Allaria, A. Abrami, L. Badano, M. Bossi, N. Bruchon, F. Capotondi, D. Castronovo, M. Cautero, P. Cinquegrana, M. Coreno, I. Cudin, M.B. Danailov, G. De Ninno, A.A. Demidovich, S. Di Mitri, B. Diviacco, W.M. Fawley, M. Ferianis, L. Foglia, G. Gaio, F. Giacuzzo, L. Giannessi, S. Grulja, F. Iazzourene, G. Kurdi, M. Lonza, N. Mahne, M. Malvestuto, M. Manfreda, C. Masciovecchio, N.S. Mirian, I. Nikolov, G. Penco, E. Principi, L. Raimondi, P. Rebernik Ribič, R. Sauro, C. Scafuri, P. Sigalotti, S. Spampinati, C. Spezzani, L. Sturari, M. Svandrlík, M. Trovò, M. Veronese, D. Vivoda, M. Zaccaria, D. Zangrando, M. Zangrando, H.-H. Braun, E. Ferrari, E. Prat, S. Reiche, N. Bruchon, M. Coreno, M.-E. Couprie, A. Ghaith, G. De Ninno, C. Feng, F. Frassetto, L.P. Poletto, D. Garzella, V. Grattoni, E. Hemsing, P. Miotti, G. Penn, M.A. Pop, E. Roussel, T. Tanikawa, D. Xiang,
 “First lasing of a free electron laser in the soft X-ray spectral range with echo enabled harmonic generation”,
Proceedings of the 39th International Free-Electron Laser Conference, FEL 2019 (2019), 7-10;
134. L. Giannessi, E. Allaria, L. Badano, S. Bassanese, F. Bencivenga, C. Callegari, F. Capotondi, D. Castronovo, F. Cilento, P. Cinquegrana, M. Coreno, I. Cudin, G. D’Auria, M.B. Danailov, R. De Monte, G. De Ninno, P. Delgiusto, A.A. Demidovich, M. Di Fraia, S. Di Mitri, B. Diviacco, A. Fabris, R. Fabris, W.M. Fawley, M. Ferianis, L. Foglia, P. Furlan Radivo, G. Gaio, F. Gelmetti, F. Iazzourene, S. Krecic, G. Kurdi, M. Lonza, N. Mahne, M. Malvestuto, M. Manfreda, C. Masciovecchio, M. Milloch, R. Mincigrucci, N.S. Mirian, I. Nikolov, F.H. O’Shea, G. Penco, A. Perucchi, O. Plekan, M. Predonzani, K.C. Prince, E. Principi, L. Raimondi, P. Rebernik Ribič, F. Rossi, L. Rumiz, C. Scafuri, C. Serpico, N. Shafqat, P. Sigalotti, A. Simoncig, S. Spampinati, C. Spezzani, M. Svandrlík, M. Trovò, A. Vascotto, M. Veronese, R. Visintini, D. Zangrando, M. Zangrando,
 “Status and perspectives of the Fermi Fel facility”,
Proceedings of the 39th International Free-Electron Laser Conference, FEL 2019 (2019), 742-745;

135. G. De Ninno, J. Wätzel, P. Rebernik Ribič, E. Allaria, M. Coreno, M. B. Danailov, C. David, A. Demidovich, M. Di Fraia, L. Giannessi, K. Hansen, Š. Krušič, M. Manfreda, M. Meyer, A. Mihelič, N. Mirian, O. Plekan, B. Ressel, B. Rösner, A. Simoncig, S. Spampinati, M. Stupar, M. Žitnik, M. Zangrando, C. Callegari, J. Berakdar, “Photoelectric effect with a twist” *Nature Photonics* **14** (2020), 554-558;
136. B. Platier, R. Limpens, A.C. Lassise, T. T. J. Oosterholt, M.A.W. van Nihuijs, K. A. Daamen, T.J.A. Staps, M. Zangrando, O. J. Luiten, W.L. IJzerman, J. Beckers, “Magnetic field-enhanced beam monitor for ionizing radiation”, *Rev. Sci. Instrum.* **91** (2020), 063503;
137. D. Cocco, J. Grünert, E. Ploenjes, K. Tiedtke, M. Zangrando, “Foreword to the special virtual issue dedicated to the proceedings of the PhotonDiag2018 workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design” *J. Synchr. Rad.* **27** (2020), 250-253;
138. B. Rösner, B. Vodungbo, V. Chardonnet, F. Döring, V. A. Guzenko, M. Hennes, A. Kleibert, M. Lebugle, J. Lüning, N. Mahne, A. Merhe, D. Naumenko, I. P. Nikolov, I. Lopez-Quintas, E. Pedersoli, P. R. Ribič, T. Savchenko, B. Watts, M. Zangrando, F. Capotondi, C. David, E. Jal, “Simultaneous two-color snapshot view on ultrafast charge and spin dynamics in a Fe-Cu-Ni tri-layer” *Structural Dynamics* **7** (2020), 054302;
139. M. Manfreda, A. Hafner, S. Gerusina, N. Mahne, A. Simoncig, M. Zangrando, L. Raimondi, “WISER wavefront propagation simulation code: advances and applications”, *Proceedings SPIE* **11493** (2020), 114930B;

• **Talks:**

- 2000 -----
1. M. Zangrando, M. Finazzi, F. Parmigiani, G. Paolucci, D. Cocco, "Optical layout of BACH: a Beamline for Advanced diCHroism at ELETTRA", SPIE's 45th Annual Meeting, Soft X-Ray and EUV Imaging Systems Conference, San Diego (USA), 2000
- 2001 -----
2. M. Zangrando, M. Finazzi, M. Zacchigna, E.M. Di Fabrizio, D. Cocco, R. Rochow-Carbone, M. Kiskinova, B. Kaulich, R. Menk, F. Parmigiani, "Multipurpose experimental station for soft x-ray microscopy on BACH beamline at ELETTRA", SPIE's 46th Annual Meeting, Soft X-Ray and EUV Imaging Systems II Conference, San Diego (USA), 2001
- 2002 -----
3. M. Zangrando, "Soft x-ray optics and soft x-ray spectrometer for a circularly polarised radiation source at ELETTRA", PhD Thesis defense, Czech Technical University, Prague (Czech Republic), 2002
- 2003 -----
4. M. Zangrando, "BACH - Beamline for Advanced diCHroism", Z.X. Shen's Group Meeting, Advanced Light Source, Berkeley (USA), 2003
 5. M. Zangrando, M. Zacchigna, F. Bondino, M. Finazzi, T. Pardini, M. Platè, R. Rochow, D. Cocco, F. Parmigiani, "Performances and first experimental results of BACH, the beamline for dichroism and scattering experiments at ELETTRA", SRI2003, 8th Synchrotron Radiation Instrumentation Conference, San Francisco (USA), 2003
 6. M. Zangrando, F. Parmigiani, "BACH – Beamline for Advanced diCHroism", Scientific Advisory Committee, Elettra, Trieste (Italy), 2003
- 2005 -----
7. M. Zangrando, "Transition metal monosilicides: recent experimental evidences and future perspectives", Science with Synchrotron Radiation at TASC, Trieste (Italy), 2005
- 2007 -----
8. M. Zangrando, "Synchrotron radiation: what is it, what is it for, how do you manipulate it?", Liceo scientifico A. Einstein, Udine (Italy), 2007 – **INVITED**
- 2008 -----
9. M. Zangrando, "FERMI@Elettra Photon Beam Transport Systems: what, how, where, when...", BACH vs. T-Rex Meeting, Trieste (Italy), 2008
 10. M. Zangrando, "Sub-ps X-ray Streak Camera: present and future at the Elettra laboratory", 1st Internal Elettra Workshop on Time-Resolved Experiments, Trieste (Italy), 2008
 11. M. Zangrando, A. Abrami, D. Bacescu, D. Cocco, I. Cudin, C. Fava, D. Giuressi, F. Parmigiani, L. Rumiz, R. Sergo, C. Svetina, "The FERMI@Elettra beamlines: From diagnostics to microfocusing", ACTOP08, 2nd Workshop on X-ray and XUV Active Optics, Trieste (Italy), 2008 – **INVITED**

12. M. Zangrando, "X-ray emission spectroscopy on the BACH beamline using the Andor DO436 CCD", Workshop on CCD for imaging and spectroscopy, Trieste (Italy), 2008 – **INVITED**
- 2009 -----
13. M. Zangrando, "ELETTRA: the synchrotron radiation source in Trieste", Lega Navale Italiana - Sez. di Trieste, Trieste (Italy), 2009 – **INVITED**
14. M. Zangrando, I. Cudin, C. Fava, R. Godnig, M. Kiskinova, C. Masciovecchio, F. Parmigiani, L. Rumiz, C. Svetina, A. Turchet, D. Cocco, "The FERMI@Elettra FEL Photon Transport System", SRI2009, 10th Synchrotron Radiation Instrumentation Conference, Melbourne (Australia), 2009
15. M. Zangrando, "Photon Beam Transport and Diagnostics", IRUVX-PP WP3 Intermediate Progress Report Meeting, Hamburg (Germany), 2009
16. M. Zangrando, "Report EG: Photon Transport Systems", IRUVX-PP WP3 Metrology EG Meeting, Berlin (Germany), 2009
17. M. Zangrando, "FERMI@Elettra Photon Beam Transport Systems: what, how, where, when...", BACH vs. T-Rex Meeting, Trieste (Italy), 2009
- 2010 -----
18. M. Zangrando, "Updated Status of WP3 Expert Group 5: Photons and Diagnostics", IRUVX-PP WP3 EG4-EG5 Combined Meeting, PSI, Villigen (Switzerland), 2010
19. M. Zangrando, "FERMI@Elettra Status Report", IRUVX-PP WP3-WP7 Combined Meeting, PSI, Villigen (Switzerland), 2010
20. M. Zangrando, "Non-Invasive Diagnostics on FEL Photon Beams: General Remarks and the Case of FERMI@Elettra", FEL2010, 32nd International Free Electron Laser Conference, Malmoe (Sweden), 2010 – **INVITED**
21. M. Zangrando, "Photon beamlines overview", HHGII, 2nd Workshop on High Harmonic Seeding for present and future short wavelength Free Electron Lasers (FELs), Lund (Sweden), 2010 – **INVITED**
22. M. Zangrando, "ELETTRA / FERMI@Elettra status", IRUVX-PP WP7 Meeting, 2nd Annual Meeting, Doellnsee Hotel/Berlin (Germany), 2010
23. M. Zangrando, "FERMI@Elettra needs of Multilayer Optics", IRUVX WP3 EG5 Activity 1.9 Kick-off Meeting, Trieste (Italy), 2010
24. M. Zangrando, L. Piazza, "Present status and recent achievements of the sub-ps x-ray streak camera project", T-Rex Group Meeting, Trieste (Italy), 2010
- 2011 -----
25. M. Zangrando, "First Results from the Commissioning of the FERMI@Elettra Free Electron Laser by means of the Photon Analysis Delivery and Reduction System (PADReS)", IV T-Rex-BACH-ELPHOS Group Meeting, Trieste (Italy), 2011
26. M. Zangrando, "Photon Transport and Beamlines Update", Scientific Advisory Council, Elettra, Trieste (Italy), 2011
27. M. Zangrando, "Photon Transport and Beamlines Update", Machine Advisory Committee, Elettra, Trieste (Italy), 2011
28. M. Zangrando, I. Cudin, C. Fava, S. Gerusina, R. Gobessi, R. Godnig, L. Rumiz, C. Svetina, F. Parmigiani, D. Cocco, "First Results from the Commissioning of the FERMI@Elettra Free Electron Laser by means of the Photon Analysis Delivery and Reduction System (PADReS)", SPIE Optics and Optoelectronics 2011, Advances in X-Ray Free Electron Lasers: Radiation Schemes, X-Ray Optics and Instrumentation, Prague (Czech Republic), 2011
29. M. Zangrando, "First Results from the Commissioning of the FERMI@Elettra Free Electron Laser by means of the Photon Analysis Delivery and Reduction System (PADReS)", DESY Internal Meeting, DESY, Hamburg (Germany), 2011 – **INVITED**

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- 30. M. Zangrando, "Photon Transport and Beamlines Update", Machine Advisory Committee, Elettra, Trieste (Italy), 2012
- 31. M. Zangrando, "Latest Results from the Commissioning of the FERMI@Elettra Photon Beam Transport and Diagnostics", European XFEL User Meeting: Satellite Meeting on Photon Beam Diagnostics, DESY, Hamburg (Germany), 2012 – **INVITED**
- 32. M. Zangrando, "Photon Transport and Beamlines Update", Scientific Advisory Council, Elettra, Trieste (Italy), 2012
- 33. M. Zangrando, "Most Recent Results from the Commissioning of the FERMI@Elettra FEL", SPIE's 2012 Optics + Photonics, X-Ray Free Electron Lasers: Beam Diagnostics, Beamline, Instrumentation, and Applications Conference, San Diego (USA), 2012
- 34. M. Zangrando, "Most Recent Results from the Commissioning of the FERMI@Elettra FEL", Photon Science Seminar – SLAC, Menlo Park (USA), 2012 – **INVITED**
- 35. M. Zangrando, "Most Recent Results from the Commissioning of the FERMI@Elettra FEL and its Photon Analysis Delivery and Reduction System", NGLS Accelerator Seminar – LBNL, Berkeley (USA), 2012 – **INVITED**
- 36. M. Zangrando, "PADReS FEL-1 and FEL-2 Status and Beamline Update", Machine Advisory Committee, Elettra, Trieste (Italy), 2012

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- 37. M. Zangrando, "FERMI@Elettra", Photon Pulse Length Measurements Kick-off Meeting, DESY, Hamburg (Germany), 2013;
- 38. M. Zangrando, "PADReS Status and Beamline Update", Machine Advisory Committee, Elettra, Trieste (Italy), 2013
- 39. M. Zangrando, "Jitter-free time resolved CDI experiments", FEL2013, 35th International Free Electron Laser Conference, New York (USA), 2013
- 40. M. Zangrando, "Photon Transport and Beamlines Update", Scientific Advisory Council, Elettra, Trieste (Italy), 2013

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- 41. M. Zangrando, "FERMI@Elettra, the Italian seeded Free Electron Laser user facility in Trieste: basic principles, status, and first results", Dipartimento di Fisica - Università di Perugia, Perugia (Italy), 2014 – **INVITED**
- 42. M. Zangrando, "From Galilei to Elettra: how and why", Liceo scientifico G. Galilei, Trieste (Italy), 2014 – **INVITED**
- 43. M. Zangrando, "FERMI: the two-stage seeded soft-X-ray free-electron laser at Elettra", ICXRL2014, 14th International Conference on X-Ray Lasers, Fort Collins (USA), 2014 – **INVITED**
- 44. M. Zangrando, "Selected results from the first three FEL-1 user runs and commissioning of the double cascade FEL-2 at FERMI@Elettra", Mechanical Engineering and Operations Division, SLAC, Menlo Park (USA), 2014 – **INVITED**
- 45. M. Zangrando, "The experience of the FERMI@Elettra photon beam transport and diagnostics system (PADReS) during three years of continuous support of machine and user experiments: achievements, lessons learned, and future upgrades", SPIE's 2014 Optics + Photonics, X-Ray Free Electron Lasers: Beam Diagnostics, Beamline, Instrumentation, and Applications II Conference, San Diego (USA), 2014
- 46. M. Zangrando, "MagneDyn: the future beamline for ultrafast magnetodynamical studies at FERMI", SPIE's 2014 Optics + Photonics, Advances in X-Ray/EUV Optics and Components IX, San Diego (USA), 2014

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47. M. Zangrando, "Photon Diagnostic capabilities @ FERMI",
ELI Beamlines @Elettra, Elettra, Trieste (Italy), 2015
48. M. Zangrando, "X-Ray Optics & Photon Diagnostic capabilities @ FERMI",
ELI ALPS @Elettra, Elettra, Trieste (Italy), 2015
49. M. Zangrando, "Standard and advanced optics for the online energy spectrometer and the
active refocusing systems at the FERMI free electron laser",
Second Swedish-German Workshop on X-Ray Optics, HZB, Berlin (D), 2015 – **INVITED**
50. M. Zangrando, "Results and applications from the recent upgrade of the online energy
spectrometer at the FERMI free electron laser",
International Workshop on X-ray Mirrors and Metrology, LBNL, Berkeley (USA), 2015
51. M. Zangrando, "Instrumentation at synchrotron radiation beamlines",
XIII School on Synchrotron Radiation: Fundamentals, Methods and Applications, Grado
(Italy), 2015 – **INVITED**
52. M. Zangrando, "Scientific opportunities at FERMI",
Warsaw School on Science with FELs , Warsaw, (Poland), 2015 – **INVITED**
53. M. Zangrando, "Status of and expectations from PUCCA",
EUCALL Kick-off Meeting , CFEL, Hamburg, (Germany), 2015
54. M. Zangrando, "FERMI, the first seeded FEL user facility in the world",
Univ. of Nova Gorica Research Center, Ajdovščina, (Slovenia), 2015 – **INVITED**
- 2016 -----
55. M. Zangrando, "Photon Pulse Characterization at FERMI Free Electron Laser",
ICFDT2016, 4th International Conference Frontiers in Diagnostic Technologies, LNF,
Frascati (Italy), 2016 – **INVITED**
56. M. Zangrando, "Photon beam transport and diagnostics at synchrotron and FEL facilities",
HERCULES European School, Elettra, Trieste (Italy), 2016
57. M. Zangrando, "A typical experiment at the FERMI seeded FEL: requirements, preparation
and execution",
EUCALL Annual Meeting, HZDR, Dresden (Germany), 2016 – **INVITED**
- 2017 -----
58. M. Zangrando, "ELETTRA (FERMI, actually...) activity Status Report",
EUCALL Annual Meeting - WP7 , ESRF, Grenoble, (France), 2017 – **INVITED**
59. M. Zangrando, "Photon beam transport and diagnostics systems at an EUV FEL facility:
general considerations, and specific challenges, solutions and developments at the
FERMI seeded FEL", FEL2017, 38th International Free Electron Laser Conference, Santa
Fe (USA), 2017 – **INVITED**
- 2018 -----
60. M. Zangrando, "EUCALL – Status in final year",
FELs of Europe Steering Committee Meeting, Elettra, Trieste, (Italy), 2018
61. M. Zangrando, "FEL Radiation: Transport, Diagnostics and Schemes for Standard, Multicolor
and Time-Resolved experiments [general considerations and FERMI experience]",
School on Synchrotron and Free-Electron-Laser Methods for Multidisciplinary
Applications, Trieste (Italy) 2018 – **INVITED**
62. M. Zangrando, "Elettroni subluminali e lampi di luce: dalla scienza stellare al cinema
atomico... in Carso",
Pint of Science 2018, Trieste, (Italy), 2018 – **INVITED**
- 2019 -----
63. M. Zangrando, "Status of the FERMI free-electron laser and contamination/damage of
(optical) elements along the photon transport system and in the endstations",
SPIE's 2014 Optics + Optoelectronics, Optics Damage and Materials Processing by
EUV/X-ray Radiation (XDam7), Prague (CZ), 2019 – **INVITED**