

# Curriculum Vitæ Tommaso Pincelli

## Personal information

*Name:* Tommaso

*Family Name:* Pincelli

*Date of birth:*

*Place of birth:*

*Nationality/citizenship:*

*Gender:*

*Address:*

## Current Position

From May 2022 – *Tenure-track research scientist*  
Technische Universität Berlin

## Previous Positions

Feb. 2022 – May 2022 - *Postdoctoral Research Fellow*  
Fritz Haber Institute of the Max Planck Society

Feb. 2020 – Jan. 2022 - *Alexander von Humboldt Research Fellow*.  
Hosting institute: Fritz Haber Institute of the Max Planck Society.  
**Research theme:** Momentum-resolved spin texture and spin transport in 2D heterostructures.

Sept. 2018 – Jan. 2020 - *Postdoctoral Research Fellow*  
Fritz Haber Institute of the Max Planck Society  
**Research theme:** Momentum-resolved dynamics of relaxation processes and control of spins and pseudospins in TMDC-based spintronic heterostructures.

Nov. 2017 - Sep. 2018 - C.N.R. - *Postdoctoral Research Fellow*  
Consiglio Nazionale delle Ricerche - Istituto Officina dei Materiali  
**Research theme:** Analysis of the electronic and magnetic properties of highly correlated systems and their interfaces (ferromagnetic films and epitaxial oxides) based on the measure of photoelectron spin polarisation via Mott scattering experiments and Hard X-ray Photoemission (HAXPES) experiments.

## Education

**PhD in Physics, Astrophysics and Applied Physics.** Dec. 2017.  
Università degli studi di Milano, Milan. PhD school in Physics, Astrophysics and Applied Physics, XXX Cycle.  
**Thesis title:** Probing electron correlation dynamics: a multi-technique study applied to the half-metallic oxide  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ .  
*Supervisor:* Prof. Giorgio Rossi.  
*Committee:* Prof. G. Ghiringhelli, Prof. M. Nisoli.

**Master of Science in Physics**, summa cum laude. July 2014

Università degli Studi di Modena e Reggio Emilia, Modena.

**Thesis title:** Towards Spin-resolved/Time-resolved Photoelectron Spectroscopy at the femtosecond time scale: construction and commissioning of the ULTRASPIN apparatus.

*Supervisor:* Prof. Sergio Valeri.

**Bachelor of Science in Physics**, summa cum laude. October 2011

Università degli Studi di Modena e Reggio Emilia, Modena.

**Thesis title:** Experimental study of the interface between a diluted magnetic semiconductor and an ultrathin ferromagnet: polarized soft X-rays spectroscopy of Fe:Ga(Mn)As

*Supervisor:* Prof. Giorgio Rossi.

## Schools and higher formation

1 March - 1 April 2015. Higher European Research Course for Users of Large Scale Experimental Systems.

## Fellowships and awards

1. 2020-2022 **Alexander von Humboldt research Fellowship**, hosted by the group of Prof. R. Ernstorfer at the Fritz Haber institute of the Max Planck society.
2. 2014 - 2017 **PhD National Fellowship** ("Borsa Ministeriale di Dottorato di Ricerca") in Applied Physics at the PhD school in Physics, Astrophysics and Applied Physics, Università degli Studi di Milano.
3. 2015 **Bursaries for young scientists** at X-FEL User's Meeting.
4. 2009-2012 **Piano Lauree Scientifiche**. Merit-based scholarship renewable for three years. National competition, prize awarded to the top 20 students.

## Grants

1. Investigator in a proposal of the DFG Priority program 2244 "2D Materials – Physics of van der Waals [hetero]structures", awarded funding for 2024-2027.

## Teaching activities

1. From May 2022 – Staff teacher at Technische Universität Berlin. Courses: Laboratory of Physics, Optics, Advanced laboratory of Physics.
2. December 2019 – Lecturer for the Advanced Training Module on Time-resolved photoelectron spectroscopy of the International Max Planck Research School.
3. July 2018 - Lecturer at the 2nd NFFA-Europe Summer School on Time-resolved spectroscopies.
4. October 2016 - Lecturer for the Laurea Magistrale course "Fisica delle Superfici 2" (Surface Physics). X-ray absorption spectroscopies (Extended X-ray Absorption Fine Structure and Near Edge X-ray Absorption Fine Structure). Professor in charge of the course: Prof. G. Rossi.

## Conferences and workshops

1. Invited – FAIR and Open Data in NFFA-Europe Pilot and Beyond, 26 Sept. 2023, Garching bei München, Germany.

2. CMD30 – FisMat 2023 symposium “Advanced photoemission studies of 2D and quantum materials” 4-8 Sept. 2023, Milan, Italy
3. New Generation in Strongly Correlated Electron Systems 2023, 27 Aug. - 01 Sept. 2023, Lido di Fermo, Italy
4. DPG-Frühjahrstagung 2023, 26-31 March 2023, Dresden, Germany
5. Invited – Satellite meeting of the european XFEL User’s Meeting, 23–27 January 2023, Hamburg, Germany
6. Invited – Plasmons and Vibrational Dynamics in Nanomaterials, 11-13 October 2022, Poznan, Poland
7. New Generation in Strongly Correlated Electron Systems 2022, 5-9 Sept. 2022, Iseo, Italy
8. Dielectrics 2022, April 27-29, 2022, London
9. Invited – BiGmax Summer School 2021, September 13 - 17 2021, Online
10. SPIE Photonics Europe - Advances in Ultrafast Condensed Phase Physics II, 31 March – 1 April 2020, Strasbourg, France
11. Gordon research conference - Ultrafast Phenomena in Cooperative Systems, 2-6 February 2020, Lucca, Italy
12. Physical Chemistry department workshop 2019, 16 June – 19 June, Seeon-Seebruck, Bayern, Germany
13. DPG-Frühjahrstagung 2019, 31 March - 05 April 2019, Regensburg, Bayern, Germany
14. 13th European XFEL User’s Meeting, 23–25 January 2019, Hamburg, Germany
15. 3rd Ultrafast Magnetism Conference (UMC 2017), 9-13 October, 2017, Kaiserslautern, Rheinland-Pfalz, Germany
16. 7th International Conference on Hard X-Ray Photoelectron Spectroscopy (HAXPES 2017), 11-15 September, 2017, Berkeley, California, U.S
17. Time-resolved Photoelectron Spectroscopy from tabletop UV and HHG laser sources, Synchrotrons and FELs: experiments and challenges, 25-27 January, 2017, Padriciano, Italy
18. American Vacuum Society 63rd International symposium and exhibition, 6-11 November, 2016, Nashville, Tennessee, U.S.
19. Ettore Majorana Foundation and centre for scientific culture international school of solid state physics 68th Workshop: The free electron Laser for Ultrafast Imaging at the Nanoscale, June 5-10, Erice, Italy
20. 4th Italian Conference on Magnetism, 17-19 February, 2015, Bologna, Italy
21. European XFEL Users’ Meeting and Satellite Meetings, 28-30 January, 2015, Hamburg, Germany
22. Ultrafast Magnetism Conference 2013

## Experience in international facilities

1. **Leader** of the large international collaboration: “Energy Materials” for photoemission experiments at the European XFEL.
2. **Investigator** at FLASH X-FEL Beamline PG2 (Proposal no. 11008847a, 11008847b), SPring-8 Beamline BL19XU (5 beamtimes) (Proposal no. 2019A1560, 2018A1278, 2017A1323, 2016A1289, 2015B1162), Diamond Beamline I09 (Proposal no. si12673-3, si12673-1), SACLA X-FEL Beamline BL3 (Proposal no. 2016A8057), Soleil Beamline Tempo (Proposal no. 20150993), FERMI Beamline DiProI (Proposal no. 20134046), APE beamline at Elettra.

## Outreach Activity

Speaker at lectures for diffusion of scientific knowledge about synchrotron lightsources and accelerator science held at high schools and at the municipal planetary of Modena.

I am the leading person in the development of a platform to involve the photoemission community in the development of a common data structure for the realization of multidimensional photoemission experiments. I have been instrumental to the development of parts of the data management system “NOMAD Oasis” publicly funded and open source, in particular developing the workflow dedicated to photoemission data.

## Relevant skills

I am capable of using independently measurement apparatuses to realize both standard characterization and advanced analysis of solid surfaces. I have made use of X-ray Photoelectron Spectroscopy (XPS), Hard X-ray Photoelectron Spectroscopy, Circular Dichroism in Photoemission, Near-Edge X-ray Absorption Fine Structure Spectroscopy (NEXAFS), X-ray magnetic Circular Dichroism (XMCD), Spin-resolved secondary electron spectroscopy, Low Energy Electron Diffraction (LEED), Magneto-Optical Kerr Effect (MOKE). I acquired these skills both during my PhD work, master thesis and during previous education steps, such as my bachelor thesis internship and university projects.

I am deeply involved with the implementation and use of pump-probe techniques to realise time-resolved analysis of out-of equilibrium dynamics. I have used techniques such as Time-resolved magneto-optical Kerr Effect (TR-MOKE), Time resolved resonant photoelectron spectroscopy (TR-RESPES) Time-resolved Hard X-ray Photoelectron spectroscopy (TR-HAXPES) and Time-resolved angle resolved photoemission spectroscopy (TR-ARPES).

I have participated to the successful design and operation of a laser-based high harmonics generation XUV beamline. I have thus participated in designing, setting up and operating several laser optical assemblies, together with the UHV optics for the XUV laser.

I have particularly good command of the techniques and instrumentation for electron spin polarimetry with detectors based on Mott scattering, as I have participated in the development of a state-of-the-art instrument of this kind. I was involved in the realization of the innovative readout electronics chain, the design of the electron optics system and the testing and routine operation of the instrument.

I have good knowledge of experimental data analysis methods (including photoelectron spectroscopy peak-fitting). In particular, during my post-doctoral work at the Fritz Haber Institute, I have learned to deal with data structures in high dimensionality (3 or more), using Python based analysis.

I have a strong commitment to develop and learn new ways to visualise data. I am passionate about reaching a synthesis between elegance, clarity and scientific rigour in the visual communication of science.

I have experience in organising and leading work under tight time constraints, as achieved during both in-house and external beamtimes. I believe in achieving team coordination and productivity by valuing each member's ideas and skills, as well as by creating a positive and cooperative environment.

## Programming languages

Matlab, C++, Latex, Mathematica, LabView, Pyhton

## Software applications

Microsoft Word, Excel, PowerPoint; Adobe Photoshop, Acrobat, Illustrator, Lightroom; SolidWorks, PTC Creo; IgorPro, Origin, IDL.

## Languages

Italian: native speaker.

English: fluent (TOEFL certificate, C1 level).

German: limited.

## References

Dr. Giancarlo Panaccione  
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## Complete list of publications of Tommaso Pincelli

### Relevant publications without peer review:

1. Website of the Fairmat NeXus proposal: <https://fairmat-experimental.github.io/nexus-fairmat-proposal/09ae1f0a196d55f8b51847cd2647cded359ac1c4/index.html>
2. Zenodo records: <https://zenodo.org/records/7573825>, <https://zenodo.org/records/4067968>, <https://zenodo.org/records/6369728>, <https://zenodo.org/records/5541490>, <https://zenodo.org/records/4632481>, <https://zenodo.org/records/4023970>, <https://zenodo.org/records/7767568>, <https://zenodo.org/records/3987304>, <https://zenodo.org/records/8210835>, <https://zenodo.org/records/5581210>.

### Scientific peer-reviewed publications:

1. S. Dong, S. Beaulieu, M. Selig, P. Rosenzweig, D. Christiansen, **T. Pincelli**, M. Dendzik, J. D Ziegler, J. Maklar, R. P. Xian, A. Neef, A. Mohammed, A. Schulz, M. Stadler, M. Jetter, P. Michler, T. Taniguchi, K. Watanabe, H. Takagi, U. Starke, A. Chernikov, M. Wolf, H. Nakamura, A. Knorr, L. Rettig, R. Ernstorfer. *Observation of ultrafast interfacial Meitner-Auger energy transfer in a van der Waals heterostructure*  
Nature Communications 14 (1), 5057 (2023).
2. A. Neef, S. Beaulieu, S. Hammer, S. Dong, J. Maklar, **T. Pincelli**, R. P. Xian, M. Wolf, L. Rettig, J. Pflaum, R. Ernstorfer *Orbital-resolved observation of singlet fission*.  
Nature 616 (7956), 275-279 (2023).
3. **T. Pincelli**, T. Vasileiadis, S. Dong, S. Beaulieu, M. Dendzik, D. Zahn, S.-E. Lee, H. Seiler, Y. Qi, R. P. Xian, J. Maklar, E. Coy, N. S. Mueller, Y. Okamura, S. Reich, M. Wolf, L. Rettig, R. Ernstorfer *Observation of Multi-Directional Energy Transfer in a Hybrid Plasmonic–Excitonic Nanostructure*  
Advanced Materials 35 (9), 2209100 (2023).
4. H. Zhang, **T. Pincelli**, C. Jozwiak, T. Kondo, R. Ernstorfer, T. Sato, S. Zhou *Angle-resolved photoemission spectroscopy*  
Nature Reviews Methods Primers 2 (1), 54 (2022).
5. J. Maklar, R. Stühler, M. Dendzik, **T. Pincelli**, S. Dong, S. Beaulieu, A. Neef, G. Li, M. Wolf, R. Ernstorfer, R. Claessen, L. Rettig *Ultrafast momentum-resolved hot electron dynamics in the two-dimensional topological insulator bismuthene*  
Nano Letters 22 (13), 5420-5426 (2022).
6. J. Maklar, S. Dong, J. Sarkar, Y.A. Gerasimenko, **T. Pincelli**, S. Beaulieu, P.S. Kirchmann, J.A. Sobota, S.-L. Yang, D. Leuenberger, R.G. Moore, Z.-X. Shen, M. Wolf, D. Mihailovic, R. Ernstorfer, L. Rettig *Coherent light control of a metastable hidden phase*  
arXiv:2206.03788 (accepted for publication in Science Advances)
7. M. Schüler, T. Pincelli, S. Dong, T. P. Devereaux, M. Wolf, L. Rettig, R. Ernstorfer, S. Beaulieu *Polarization-modulated angle-resolved photoemission spectroscopy: Toward circular dichroism without circular photons and Bloch wave-function reconstruction*  
Physical Review X 12 (1), 011019

8. Crystallization kinetics of atomic crystals revealed by a single-shot and single-particle X-ray diffraction experiment A Niozu, Y Kumagai, TN Hiraki, H Fukuzawa, K Motomura, M Bucher, *Proceedings of the National Academy of Sciences* 118 (51), e2111747118
9. Unveiling the orbital texture of 1T-TiTe<sub>2</sub> using intrinsic linear dichroism in multidimensional photoemission spectroscopy. S Beaulieu, M Schöler, J Schusser, S Dong, T Pincelli, J Maklar, A Neef, *npj quantum materials* 6 (1), 93
10. F. Offi, K. Yamauchi, S. Picozzi, V. Lollobrigida, A. Verna, C. Schlueter, T.-L. Lee, A. Regoutz, D.J. Payne, A. Petrov, G. Vinai, G.M. Pierantozzi, **T. Pincelli**, G. Panaccione, F. Borgatti. *Identification of hidden orbital contributions in the La<sub>0.65</sub>Sr<sub>0.35</sub>MnO<sub>3</sub> valence band*. *Physical Review Materials* – 5, 10, 104403 (2021).
11. G. M. Pierantozzi, G. Vinai, A. Y. Petrov, A. De Vita, F. Motti, V. Polewczyk, D. Mondal, **T. Pincelli**, R. Cucini, C. Bigi, I. Vobornik, J. Fujii, P. Torelli, F. Offi, G. Rossi, G. Panaccione, F. Borgatti. *Evidence of Robust Half-Metallicity in Strained Manganite Films*. *The Journal of Physical Chemistry C* – 125, 26, 14430 (2021).
12. S. Dong, M. Puppini, **T. Pincelli**, S. Beaulieu, D. Christiansen, H. Hübener, C. W. Nicholson, R. P. Xian, M. Dendzik, Y. Deng, Y. W. Windsor, M. Selig, E. Malic, A. Rubio, A. Knorr, M. Wolf, L. Rettig, R. Ernstorfer. *Direct measurement of key exciton properties: Energy, dynamics, and spatial distribution of the wave function*. *Natural Sciences* – e10010 (2021).
13. S. Beaulieu, S. Dong, N. Tancogne-Dejean, M. Dendzik, **T. Pincelli**, J. Maklar, R. P. Xian, M. A. Sentef, M. Wolf, A. Rubio, L. Rettig, R. Ernstorfer. *Ultrafast Light-Induced Lifshitz Transition*. *Science Advances* – 7, 17, eabd9275 (2021).
14. J. Maklar, S. Dong, S. Beaulieu, **T. Pincelli**, M. Dendzik, Y.W. Windsor, R.P. Xian, M. Wolf, R. Ernstorfer, L. Rettig. *A quantitative comparison of time-of-flight momentum microscopes and hemispherical analyzers for time-resolved ARPES experiments*. *Review of Scientific Instruments* – **91**, 123112 (2020).
15. S. Beaulieu, J. Schusser, S. Dong, **T. Pincelli**, M. Dendzik, J. Maklar, A. Neef, H. Ebert, K. Hricovini, M. Wolf, J. Braun, L. Rettig, J. Minár, R. Ernstorfer. *Signature of Hidden Orbital-Texture in Photoemission Time-Reversal Dichroism*. *Physical Review Letters* – **125**, 216404 (2020).
16. R. P. Xian, Y. Acremann, S. Y. Agustsson, M. Dendzik, K. Bühlmann, D. Curcio, D. Kutnyakhov, F. Pressacco, M. Heber, S. Dong, **T. Pincelli**, J. Demsar, W. Wurth, P. Hofmann, M. Wolf, M. Scheidgen, L. Rettig, R. Ernstorfer. *An open-source, end-to-end workflow for multidimensional photoemission spectroscopy*. *Scientific Data* – **7**, 442 (2020).
17. M. Dendzik, R. P. Xian, E. Perfetto, D. Sangalli, D. Kutnyakhov, S. Dong, S. Beaulieu, **T. Pincelli**, F. Pressacco, D. Curcio, S. Y. Agustsson, M. Heber, J. Hauer, W. Wurth, G. Brenner, Y. Acremann, P. Hofmann, M. Wolf, A. Marini, G. Stefanucci, L. Rettig, R. Ernstorfer. *Observation of an excitonic Mott transition through ultrafast core-cum-conduction photoemission spectroscopy*. *Physical Review Letters* – **125**, 096401 (2020) – Editor's Suggestion.
18. A. Niozu, Y. Kumagai, T. Nishiyama, H. Fukuzawa, K. Motomura, M. Bucher, K. Asa, Y. Sato, Y. Ito, T. Takanashi, D. You, T. Ono, Y. Li, E. Kukk, C. Miron, L. Neagu, C. Callegari, M. Di Fraia, G. Rossi, D. E.

- Galli, **T. Pincelli**, A. Colombo, S. Owada, K. Tono, T. Kameshima, Y. Joti, T. Katayama, T. Togashi, M. Yabashi, K. Matsuda, K. Nagaya, C. Bostedt, and K. Ueda. *Characterizing crystalline defects in single nanoparticles from angular correlations of single-shot diffracted X-rays*. IUCr Journal – Physics and Free Electron Lasers – **7**, 276 (2020).
19. C. Bigi, Z. Tang, G. M. Pierantozzi, P. Orgiani, P. K. Das, J. Fujii, I. Vobornik, **T. Pincelli**, A. Trogia, T.-L. Lee, R. Ciancio, G. Drazic, A. Verdini, A. Regoutz, P. D. C. King, D. Biswas, G. Rossi, G. Panaccione, and A. Selloni. *Distinct behavior of localized and delocalized carriers in anatase  $\text{TiO}_2(001)$  during reaction with  $\text{O}_2$* . Phys. Rev. Materials **4**, 025801 (2020).
  20. R. Cucini, **T. Pincelli**, G. Panaccione, D. Kopic, F. Frassetto, P. Miotti, G. M. Pierantozzi, S. Peli, A. Fondacaro, A. De Luisa, A. De Vita, D. Krizmancic, D. Payne, F. Salvador, A. Sterzi, L. Poletto, F. Parmigiani, G. Rossi, and F. Cilento. *Coherent narrowband light source for ultrafast photoelectron spectroscopy in the 17–31 eV photon energy range*. Structural Dynamics **7**, 014303 (2020).
  21. T. Nishiyama, Y. Kumagai, A. Niozu, H. Fukuzawa, K. Motomura, M. Bucher, Y. Ito, T. Takanashi, K. Asa, Y. Sato, D. You, Y. Li, T. Ono, E. Kukk, C. Miron, L. Neagu, C. Callegari, M. Di Fraia, G. Rossi, D. E. Galli, **T. Pincelli**, A. Colombo, T. Kameshima, Y. Joti, T. Hatsui, S. Owada, T. Katayama, T. Togashi, K. Tono, M. Yabashi, K. Matsuda, C. Bostedt, K. Nagaya, and K. Ueda. *Ultrafast structural dynamics of nanoparticles in intense laser fields*. Physical Review Letters **123**, 123201 (2019).
  22. **T. Pincelli**, R. Cucini, A. Verna, F. Borgatti, M. Oura, K. Tamasaku, H. Osawa, T.-L. Lee, C. Schlueter, S. Günther, C.H. Back, M. Dell'Angela, R. Ciprian, P. Orgiani, A. Petrov, F. Sirotti, V. A. Dediu, I. Bergenti, P. Graziosi, F. Miletto Granozio, Y. Tanaka, M. Taguchi, H. Daimon, J. Fujii, G. Rossi and G. Panaccione, *Transient quantum isolation and critical behavior in the magnetization dynamics of half-metallic manganites*. Physical Review B **100**, 045118 (2019).
  23. A. Regoutz, A. M. Ganose, L. Blumenthal, C. Schlueter, T.-L. Lee, G. Kieslich, A. K. Cheetham, G. Kerherve, Y.-S. Huang, R.-S. Chen, G. M. Vinai, **T. Pincelli**, G. Panaccione, K. H.L. Zhang, R. G. Egddell, J. Lischner, David O. Scanlon, and D. J. Payne. *Insights into the Electronic Structure of  $\text{OsO}_2$  using Soft and Hard X-ray Photoelectron Spectroscopy in Combination with Density Functional Theory*, Physical Review Materials **3**, 025001 (2019).
  24. M. Oura, H. Osawa, K. Tamasaku, K. Tanaka, **T. Pincelli**, J. Fujii, G. Panaccione and Y. Tanaka. *Picosecond Time-Resolved Hard X-ray Photoelectron Spectroscopy System at the 27-m-long Undulator Beamline BL19LXU of SPring-8*, Synchrotron radiation news, 31, 4, 36 (2018).
  25. P. Miotti, F. Cilento, R. Cucini, A. De Luisa, A. Fondacaro, F. Frassetto, D. Kopic, D. Payne, A. Sterzi, **T. Pincelli**, G. Panaccione, F. Parmigiani, G. Rossi, and L. Poletto. *A Novel High Order Harmonic Source for Time- and Angle- Resolved Photoemission Experiments, High-Brightness Sources and Light-driven Interactions*, OSA Technical Digest (online), paper EW2B.5, (2018).
  26. **T. Pincelli**, *Probing electron correlation dynamics: a multi-technique study applied to the half-metallic oxide  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$* . Doctoral dissertation. Reviewers: Prof. P. Postorino and Prof. D. Pescia. Published on the research archive of the University of Milan, DOI: 10.13130/pincelli-tommaso\_phd2017-12-19 (2018).



27. **T. Pincelli**, V. Lollobrigida, F. Borgatti, A. Regoutz, B. Gobaut, C. Schlueter, T.-L. Lee, D.J. Payne, M. Oura, K. Tamasaku, A.Y. Petrov, P. Graziosi, F. Miletto Granozio, M. Cavallini, G. Vinai, R. Ciprian, C.H. Back, G. Rossi, M. Taguchi, H. Daimon, G. van der Laan & G. Panaccione. *Quantifying the critical thickness of electron hybridization in spintronics materials*, Nature Communications, **8**, 16051, (2017).
28. R. Costantini, **T. Pincelli**, A. Cossaro, A. Verdini, A. Goldoni, S. Cichon, M. Caputo, M. Pedio, G. Panaccione, M.G. Silly, F. Sirotti, A. Morgante & M. Dell'Angela. *Time resolved resonant photoemission study of energy level alignment at donor/acceptor interfaces*, Chemical Physics Letters, **683**, 135–139 (2017).
29. E. Ferrari, C. Spezzani, F. Fortuna, R. Delaunay, F. Vidal, I. Nikolov, P. Cinquegrana, B. Diviacco, D. Gauthier, G. Penco, P. R. Ribic, 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. Boyanov 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**, 6 (2017).
30. **T. Pincelli**, F. Grasselli, V. N. Petrov, P. Torelli & G. Rossi. *Performance of photoelectron spin polarimeters with continuous and pulsed sources: from storage rings to free electron lasers*, Journal of Synchrotron Radiation, **24**, 175 (2017).
31. R. Ciprian, P. Torelli, A. Giglia, B. Gobaut, B. Ressel, G. Vinai, M. Stupar, A. Caretta, G. De Ninno, **T. Pincelli**, B. Casarina, G. Adhikary, G. Sberveglieri, C. Baratto & M. Malvestuto. *New strategy for magnetic gas sensing*, Royal Society of Chemistry Advances, **6**, 83399 (2016).
32. **T. Pincelli**, V. N. Petrov, G. Brajnik, R. Ciprian, V. Lollobrigida, P. Torelli, D. Krizmancic, F. Salvador, A. De Luisa, R. Sergo, A. Gubertini, G. Cautero, S. Carrato, G. Rossi & G. Panaccione. *Design and optimization of a modular setup for measurements of three-dimensional spin polarization with ultrafast pulsed sources*. Review of Scientific Instruments, **87**, 035111 (2016).
33. E. Ferrari, C. Spezzani, F. Fortuna, R. Delaunay, F. Vidal, I. Nikolov, P. Cinquegrana, B. Diviacco, D. Gauthier, G. Penco, P. R. Ribic, 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. Boyanov Danailov, E. Allaria & M. Sacchi. *Widely tunable two-colour seeded free-electron laser source for resonant-pump resonant-probe magnetic scattering*, Nature Communications, **7**, 10343 (2016).