



## Daniela Di Martino

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**Associate Professor** in Physics Education and History of Physics (Applied Physics disciplinary group) at the University of Milano-Bicocca, within the Physics Department and the INFN MIB Section

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### University, Associate Professor

University of Milano-Bicocca  
Since 1st Oct 2024  
Milano, Italy

**Experience in the field of Physics Education (FIS/08)**: pathways in preschools, primary and secondary schools mainly in STEM fields, with a focus on gender issues.

- Since 2014 I am involved in STEM (Science, Technology, Engineering and Maths) actions addressed to primary and secondary schools, both in formal and informal teaching interventions. I recently conceived and coordinated (together with a multidisciplinary UNIMIB team) the project SVELAMI-B: "Conducting Experiments in the laboratories of Milano Bicocca", to carry out STEM activities in primary and secondary schools (funded by the Department for Equal Opportunities). Since 2022 I am the responsible for the Science Ambassador activities at the University of Milano-Bicocca.

**Experience in the field of experimental physics applied to cultural heritage (FIS/07)**: neutron characterizations of metallic and ceramic materials (mainly of artistic interest, with vibrational spectroscopy of glassy, amorphous and gemological samples).

- I have a wide expertise in physics applications in cultural heritage. I have acquired experience in Raman as well as luminescence and IR spectroscopies and Electron Paramagnetic Resonance technique during my studies. Since January 2014 I joined the group headed by Prof. G. Gorini, tackling many archaeological issues through neutron-based techniques. I have designed and carried out experiments at large scale facilities, to test new methodologies, protocols and non-destructive investigations. In the period 2014-2024, I had more than 20 accepted beamtime requests as Principal Investigator at European large scale facilities (ISIS-UK, PSI-CH, BNC-H, ANSTO-AUS, IPERION CH), and national heritage science networks (E-RIHS.it).

- 2019-present I am Principal Investigator of a project to study vitreous gems in collaboration with Dr. Elisabetta Galletti, Prof. Maria Pia Riccardi (University of Pavia) and the National Archaeological Museum of Aquileia.

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### Education and training

**PhD in Physics**  
University of Pavia  
Pavia Italy (1999)

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**Master (Perfezionamento in “La scienza per la conservazione dei beni culturali” - one year Master in “Science for conservation of cultural heritage”)**

University of Florence  
Florence Italy (1996)

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**Degree in Physics**

University of Milan  
Milan Italy (1995)

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**Academic/working positions**

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**Previous positions**

- 2021-present: **RTDB researcher** in Applied Physics (02/D1 and FIS/08) at the Physics Department, University of Milano-Bicocca, Italy
  - 2017-2020: **RTDA researcher** in Experimental Physics (FIS/01) at the Physics Department, University of Milano-Bicocca, Italy
  - 2014-2017: **Post-Doctoral Fellow** in Physical Sciences at the Physics Department, University of Milano-Bicocca, Italy
  - 2011-2013: **Post-Doctoral Fellow** in Physical Sciences at the Department of Materials Science, University of Milano-Bicocca, Italy
  - 2008-2011: **High School teacher in Physics**, permanent position
  - 2002–2007: **Post-Doctoral Fellow** in Physical Sciences at the Department of Materials Science, University of Milano-Bicocca, Italy
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**International Experiences**

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- 2004 (2 months): **NATO-CNR fellowship** at the Academy of Sciences in Prague;
  - 2001-2002 (23 months): **Marie Curie Individual Fellowship** at INESC, Lisboa (Portugal), financially supported by the European Commission;
  - 2000 (6 months): **Postdoctoral Fellowship** at the Instituto Superior Técnico, Lisboa (Portugal)
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**Teaching activities**

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University of Milano-Bicocca, Italy:

- 2021- present: **Professor of Physics – Physics and Physics Education, M.Sc. Primary Teacher Education**
- 2017- present: **Professor of Physics - Exercises of Physics II, B.Sc. Physical Sciences**
- 2017-2020: **Professor of Physics – Laboratory of Plasma Physics II, M.Sc. Physical Sciences**
- 2013-2014: **Contract Lecturer – Exercise of Physics, B.Sc. Biotechnology**

At the University of Milano Bicocca, Italy I supervised the thesis of several students (**PS**: Physical Sciences, **PTE**: Primary Teacher Education):

2021-present 5 Bachelor students of PS, 3 Master student of PS, 9 Master students of PTE, 1 PhD student of PS

2019-2020 4 Bachelor students of PS, 1 Master student of PS

2016-2018 1 co-supervision PhD student of PS

2013 1 Bachelor student of PS

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## Organisation of scientific conferences

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### Main roles in recent conferences/events

- 2024: invited seminar (as part of the 8th Research Seminar "Dialogues on Gender. ABCD Research Seminars"), entitled "Educational and Guidance Projects in STEM: SVELAMIB and Science Ambassadors."
  - 2023: chair (together with Prof. Alberto Bravin) of the international conference IMAGING, Varenna September 26-29, 2023.
  - 2023: member of the scientific organizing committee of the international conference Art23, held in Brescia, Italy, November 28-30, 2023.
  - 2022: co-chair of Section VII (Didactics and History of Physics) for the 108th SIF conference (Milan, September 12-16, 2022).
  - 2019: member of the local organizing committee (LOC) of the international congress "46th Conference on Plasma Physics (EPS2019), held at the University of Milano-Bicocca, from July 7 to 12. The event was attended by about 900 participants.
  - 2017: Member of the LOC and the scientific secretariat for the "International Workshop on Imaging", held at Villa Monastero, Varenna, Italy (September 4-8).
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## Academic responsibilities

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- 2021 – present, referent for the research infrastructures of the Physics Department, University of Milano Bicocca;
  - 2020 – present, contact person for communication at UNIMIB section, within INFN CHNet (Nuclear Physics National Institute, Cultural Heritage Network);
  - 2018 – present, member of the Communication and Orientation Commission, Physics Department, University of Milano Bicocca;
  - 2018 – present, member of the study commission on cultural heritage, at the Italian Association of Non-Destructive Testing Monitoring Diagnostics (AIPnD).
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## Funding ID records

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- PARTICIPANT/LOCAL Responsible for the Milano-Bicocca Unity PRIN (national project): development of a Phase-contrast x-ray Imaging setup with a Talbot interferometer and a liquid anode source for Cultural Heritage applications (PITCH), 2 year, **48keuro** (2023-2025)
- PRINCIPAL INVESTIGATOR CHNet\_BRONZE (INFN national project, with the participation of 3 sections: MIB, TO, FI), for neutron applications in the Cultural Heritage field, **~90keuro** (2023-2025)

- Co-PRINCIPAL INVESTIGATOR (University Competitive Fund), following the positive evaluations received for the project submitted to the national PRIN/MUR 2021 call 4D-TAlbot X-ray Interferometry for Cultural Heritage and Medical Applications (4D-TAXI), 24 months, co-proponent of the local Bicocca unit, **20k€**.(2022)
- Co-PRINCIPAL INVESTIGATOR National Funding (Department for Equal Opportunities-STEM2020 project) SVELAMI-B, for carrying out Experiments in Milan Bicocca Labs, 3 months, STEM activities in primary and secondary schools, co-proponent, **15k€** (2021)
- PARTICIPANT European Project H2020 HighNESS (2020): Development of High Intensity Neutron Source at the European Spallation Source, 36 months, participant of the local unit of Bicocca.
- PARTICIPANT University fund (2019), following the evaluations received for the call GRIN-XCT: GRating INterferometry X-ray Computed Tomography MIUR-PRIN 2017, 24 months, participant of the local unit of Bicocca.
- PARTICIPANT CHNET projects (group V INFN): TANDEM (2017-2019) and NICHE (2020-2021) participant of the local unit of Bicocca (PI Massimiliano Clemenza).
- PARTICIPANT (with a research fellowship, cofinancing the project): 2 years project funded by CARIPLO Foundation (Italian philanthropic organization). Project title: "Structural and optical properties of self-organized nano- and mesoscopic materials" (2006).
- PARTICIPANT (with a research fellowship, cofinancing the project): 2 years project, funded by MIUR-Italian Research Ministry (PRIN 2002-National contest). Project title: "Dopants and defects dispersion and aggregation in amorphous silica: scientific and applicative issues" (2002).
- PROPONENT: 2 years project funded by European Commission (contract number: HPMF-CT-1999-00145, Marie Curie Individual Fellowship). Project title: "Germanate anomaly and the structure of alkali germanate glasses" ~**100keuro** (2000)

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## Qualifications/Awards

- National scientific qualification as university associate professor for the field: 02/B1 Experimental Physics of Matter (11/12/2013-11/12/2024), valid for macrofields 02/B and 02/D.
- Qualified to teach Physics for upper secondary schools (through qualifying competition announced in 1999).
- Oral communication titled, "DEVELOPING EXPERIMENTS IN THE Milano-Bicocca Laboratories (SVELAMI-B): Physics Laboratories at a Distance" was selected by the Scientific Committee for the Best Communications of Section 7 (Didactics and History of Physics, 107th SIF conference, 2021) and will be published in a special issue of Il Nuovo Cimento (online publication in 'open access').
- The poster titled "Thermally stimulated luminescence properties of BaY2F8:Ce crystals" by A. Vedda, M. Martini, D. Di Martino, E. Sani, A. Tondelli and M. Tonelli, was awarded as the best paper by a young researcher at the congress "9th Europhysical conference on Defects in Insulating Materials," Wroclaw, Poland, July 1-5, 2002.
- The poster titled "Towards a development of suitable glass-ceramic systems for the best osteointegration and osteoinduction of bone" by A. Tinti, P. Taddei, C. B. Azzoni, D. Di Martino, A. Krajewski, M. Mazzocchi, and A. Ravaglioli, was ranked third as the best work by a young researcher at the sixth congress "Ceramics, Cells and Tissue: Drug Delivery Systems," Faenza, March 8-11, 2000.

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## Conferences

### Recent Conferences I have attended (in person or virtually)

- EDULEARN24, 16th annual International Conference on Education and New Learning Technologies, Palma 1-3 July 2024 (virtual participation), two communications: "Draw a scientist: gender representations and stereotypes in children of a second year of an Italian primary school" and "STEM education and orientation projects: Science Ambassadors".
- International Symposium on Archaeometry, ISA2024, Melbourne, virtual mode, poster presentation "Looking at the manufacturing technique of a tiny golden filigree from the Chiaravalle Cross", 27-31 May, 2024.
- Convegno Tematico AIAR Dat@MI – It's all a matter of time, Milano, 7-9 February 2024, as coauthor.
- Art'23, 14th International Conference on non-destructive investigations and microanalysis for the diagnostics and conservation of cultural and environmental heritage, Brescia, 28-30 November 2023, oral communications: "Glass-gems Exploration by Multidisciplinary Methods, Analyses and Experiments: the GEMMAE project".
- International workshop on IMAGING, Villa Monastero, Varenna, September 26 – 29, 2023 (chair).
- 108° national congress Società Italiana di Fisica, Milano, 12-16 September 2022 (chair).
- ISA2020/2022, International Symposium on Archaeometry, IST Lisboa, 16-20 May 2022, virtual mode, with two posters: "Looking for new insights in the composition of tin based historical organ pipes by nuclear and Raman

techniques" and "The GLASSGEM project: a PIXE/PIGE campaign to disclose composition of glass-gem samples from the National Archaeological Museum in Aquileia".

- WCPE (World Conference on Physics Education) III 2021 Hanoi-Vietnam (on-line), 13-16 december 2021, poster presentation: "SVELAMI-B project results within primary schools";
- International Webinar GIREP [Groupe International de Recherche sur l'Enseignement de la Physique] 2021 "PHYSICS TEACHER EDUCATION – WHAT MATTERS?", Malta University, 10-12 november 2021, oral communication: "SVELAMI-B project: online Physics activities within STEM education".
- International Webinar Art'21, 13th International Conference on non-destructive investigations and microanalysis for the diagnostics and conservation of cultural and environmental heritage, Buenos Aires and Zoom platform, 3-5 november 2021, oral communication: "Gathering glassmaking, gemology and glyptic".
- 2021 IEEE International conference on metrology for archaeology and cultural heritage (Metro Archeo), Università Statale di Milano 20-22 october 2021, oral communication: "Glass-gems from the National Archaeological Museum in Aquileia: a PIXE/PIGE compositional study.
- 107° national congress Società Italiana di Fisica (webinar on-line), 13-17 september 2021, oral communication: "SVolgere Esperimenti nei Laboratori di Milano-Bicocca (SVELAMI-B): Laboratori fisici a distanza".
- 18° national congress AIPnD (Associazione italiana prove non distruttive), Rho, 23-25 october 2019, oral communication: "L'utilizzo dei neutroni nelle indagini non distruttive di beni culturali";
- 24° international conference IBA (Ion Beam Analyses), Antibes, France, 13-18 october 2019, poster presentation: "The golden filigree of the Chiaravalle Cross: further insights from a PIXE/PIGE study";
- Symposium "Cultural heritage: science, materials and technologies of the E-MRS 2019 Spring Meeting" (European Materials Research Society), Nice, France, 27-31 may 2019, oral communication: "Chiaravalle Cross: historical and scientific insights during the restoration";
- International conference SR2A (Synchrotron radiation and neutrons in art and archaeology), Portsmouth, UK, 3-7 september 2018, oral communication: "Neutron facilities for the benefit of cultural heritage: the study of unconventional samples";

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## Publications

I published more than 70 papers (1362 citations, h-factor=20 from Scopus database, ORCID ID [orcid.org/0000-0003-1541-5236](https://orcid.org/0000-0003-1541-5236)).

### Refereed journals:

1. G. Marcucci, A. Scherillo, M.P. Riccardi, C. Cucini, Q. Lemasson, **D. Di Martino**, "Mapping the elemental distribution in archaeological findings through advanced Neutron Resonance Transmission Imaging", *European Physical Journal Plus* 139, 475 (2024). DOI: 10.1140/epjp/s13360-024-05222-y
2. R. Rossini, O. Cremonesi, M. Cataldo, **D. Di Martino**, M. Laubenstein, M. Clemenza, "The role of gamma-ray spectrometry and Monte Carlo simulation in the characterisation of meteorites" *Journal of Radioanalytical and Nuclear Chemistry*, (2024). DOI: 10.1007/s10967-023-09296-3
3. N. Gelli, L. Giuntini, F. Cantini, O. Sans-Planell, M. Magalini, M. Manetti, L. Sodi, M. Massi, L. Castelli, C. Czelusniak, F. Taccetti, T.E. Bella, G. Marcucci, M. Clemenza, **D. Di Martino**, M. Morigi, M. Bettuzzi, L. Vigorelli, A. Re, A. Lo Giudice, D. Alloni, M. Prata, S. Altieri, A. Salvini, F. Grazzi, "The new INFN-CHNet neutron imaging facility" *Nuclear Inst. and Methods in Physics Research*, A 1051, 168189 (2023). DOI: 10.1016/j.nima.2023.168189
4. M. Musa, E. Galletti, M. P. Riccardi, G. Marcucci, **D. Di Martino**, "The GEMMAE project: A multidisciplinary study of Roman glass-gems" *Il Nuovo Cimento* 46 C, 158 (2023). DOI: 10.1393/ncc/i2023-23158-x
5. I. Confalonieri, M. C. Onida, **D. Di Martino**, "Experiences and teaching physics with the IBSE method in primary school" *Il Nuovo Cimento* 46 C, 185 (2023). DOI: 10.1393/ncc/i2023-23185-7
6. R. Rossini, **D. Di Martino** (corresponding), T. Agoro, M. Cataldo, G. Gorini, A. D. Hillier, M. Laubenstein, G. Marcucci, M. Musa, M. P. Riccardi, A. Scherillo and M. Clemenza, "A new multidisciplinary non-destructive protocol for the analysis of stony meteorites: gamma spectroscopy, neutron and muon techniques supported by Raman microscopy and SEM-EDS" *J. Anal. At. Spectrom.* 38, 293 (2023). DOI: 10.1039/d2ja00263a

7. R. Rossini, M. Clemenza, **D. Di Martino**, M. Laubenstein, A. Scherillo, M. Musa, M. P. Riccardi, G. Gorini, "Low-background gamma spectrometry and neutron diffraction in the study of stony meteorites" *Applied Radiation and Isotopes* 193, 110653 (2023).
8. G. Marcucci, A. Scherillo, R. I. Smith, and **D. Di Martino**, "Time-of-flight neutron diffraction applied to the identification of crystalline phases in historical mosaic glasses" *Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B* 64, 52-56 (2023). DOI: 10.13036/17533562.64.2.21
9. G. Marcucci, A. Scherillo, M.P. Riccardi, C. Cucini, M. Tizzoni, **D. Di Martino**, "An innovative neutron spectroscopic imaging technique: Mapping the elements distribution inside the bulk of archaeological artefacts" *Proceedings IMEKO TC4 International Conference on Metrology for Archaeology and Cultural Heritage, Roma 2023*, 699-703. ISBN 978-171388834-5 (2023).
10. **D. Di Martino**, L. D'Alfonso, N. Malaspina, S. Penati, "SVELAMI-B Project: Online Physics Activities Within STEM Education" nel libro "Physics Education: More About What Matters", editors Joan Borg Marks, Pauline Galea, Book series "Challenges in Physics Education" Volume Part F1979, 199-208 (2023) ISSN 26628422 DOI: 10.1007/978-3-031-44312-1\_15
11. **D. Di Martino**, L. D'Alfonso and S. Penati, "SVELAMI-B project: Remote physics laboratories at Milan-Bicocca University" *Il Nuovo Cimento* 45 C 221 (2022). DOI: 10.1393/ncc/i2022-22221-6
12. M. Musa, R. Rossini, **D. Di Martino** (corresponding), M.P. Riccardi, M. Clemenza, G. Gorini, "Combining micro-Raman Spectroscopy and Scanning Electron Microscopy mapping: A stony meteorite study" *Materials* 14(24), 7585 (2021). DOI: 10.3390/ma14247585
13. G. Marcucci, A. Scherillo, C. Cazzaniga, Q. Lemasson, R. Lorenzi, M. Clemenza, M.P. Riccardi, **D. Di Martino** (corresponding), "Historical glass mosaic tesserae: a multi-analytical approach for their characterization" *European Physical Journal Plus* 136(7), 738 (2021). DOI: 10.1140/epjp/s13360-021-01696-2
14. M. Marini, M. Bouzin, L. Sironi, L. D'Alfonso, R. Colombo, **D. Di Martino**, G. Gorini, M. Collini, G. Chirico, "A novel method for spatially-resolved thermal conductivity measurement by super-resolution photo-activated infrared imaging". *Materials Today Physics* 18, 100375 (2021). DOI: 10.1016/j.mtphys.2021.100375
15. L. Giuntini, L. Castelli, M. Massi, M. Fedi, C. Czelusniak, N. Gelli, L. Liccioli, F. Giambi, C. Ruberto, A. Mazzinghi, S. Barone, F. Marchegiani, S. Nisi, C. Lubritto, S. Altieri, L. Tortora, P. Branchini, A. Fabbri, V. Graziani, S. Barcellos Lins, L. Guidorzi, A. Lo Giudice, A. Re, L. Sottili, A. Balerna, M. Cestelli Guidi, L. Pronti, M. Romani, F. Albertin, M. Bettuzzi, R. Brancaccio, M.P. Morigi, D. Alloni, A. Salvini, B. Smilgys, M. Prata, S. Altieri, M. Bonesini, **D. Di Martino**, M. Clemenza, M. Carpinelli, P. Oliva, V. Sipala, A.M. Gueli, S. Pasquale, G. Stella, G. Pepponi, F. Grazi, F. Taccetti, "Detectors and Cultural Heritage: The INFN-CHNet Experience", *Applied Sciences* (review) 11, 3462 (2021). DOI: 10.3390/app11083462
16. **D. Di Martino**, G. Benati, R. Alberti, S. Baroni, C. Bertelli, F. Blumer, L. Caselli, R. Cattaneo, C. Cucini, F. D'Amico, T. Frizzi, E. Galletti, M. Girona, L. Greggio, L. Lazzarini, M. Musa, E. Perelli Cippo, M. Riccardi, G. Gorini, "The Chiaravalle Cross: Results of a Multidisciplinary Study". *Heritage*, 2(3), 2555-2572 (2019). DOI: 10.3390/heritage2030157
17. **D. Di Martino**, E. Perelli Cippo, A. Scherillo, Z. Kasztovszky, I. Harsányi, I. Kovács, Z. Szőkefalvi-Nagy, R. Cattaneo, G. Gorini, "An Archaeometallurgical Investigation on Metal Samples from the Chiaravalle Cross". *Heritage*, 2(1), 836-847 (2019). DOI: 10.3390/heritage2010055
18. **D. Di Martino**, E. Perelli Cippo, W. Kockelmann, A. Scherillo, T. Minniti, R. Lorenzi, M. Malagodi, C. Merlo, T. Rovetta, G. Fichera, M. Albano, Z. Kasztovszky, I. Harsányi, G. Gorini, "A multidisciplinary non-destructive study of historical pipe organ fragments". *Materials Characterization*, 148, 317-322 (2019). DOI: 10.1016/j.matchar.2018.12.028
19. **D. Di Martino**, E. Perelli Cippo, G. Gorini, "From tiny gold filigrees to majestic iron tie rods: Neutron facilities for the benefit of cultural heritage". *The European Physical Journal Plus*, 133(9) (2018). DOI: 10.1140/epjp/i2018-12232-6

20. G. Festa, T. Minniti, L. Arcidiacono, M. Borla, **D. Di Martino**, F. Facchetti, E. Ferraris, V. Turina, W. Kockelmann, J. Kelleher, R. Senesi, C. Greco, C. Andreani, "Egyptian grave goods of Kha and Merit studied by neutron and gamma techniques". *Angewandte Chemie* (2018) DOI: 10.1002/anie.201713043 and 10.1002/ange.201713043
21. D. Micieli, **D. Di Martino** (corresponding), M. Musa, L. Gori, A. Kaestner, A. Bravin, A. Mittone, R. Navone, G. Gorini, "Characterizing pearls structures using X-ray phase-contrast and neutron imaging: a pilot study". *Scientific Reports* 8(1), 1-9 (2018) DOI: 10.1038/s41598-018-30545-z
22. G. Vitucci, T. Minniti, **D. Di Martino**, M. Musa, L. Gori, D. Micieli, W. Kockelmann, K. Watanabe, A.S. Tremsin, G. Gorini, "Energy-resolved neutron tomography of an unconventional cultured pearl at a pulsed spallation source using a microchannel plate camera". *Microchemical Journal* 137, 473-479 (2018), DOI: 10.1016/j.microc.2017.12.002
23. **D. Di Martino**, M. Bellanova, E. Cippo, R. Felicetti, A. Scherillo, J. Kelleher, Z. Kis, G. Gorini, "A neutron diffraction and imaging study of ancient iron tie rods". *Journal of Instrumentation*, 13(5) (2018). DOI: 10.1088/1748-0221/13/05/C05009
24. **D. Di Martino**, E. Perelli Cippo, I. Uda, M. P. Riccardi, R. Lorenzi, A. Scherillo, M. Morgano, C. Cucini, G. Gorini, "Disclosing mineralogical phases in medioeval iron nails by non-destructive neutron techniques", *Archaeological and Anthropological Sciences* 9, 515-522 (2017). DOI: 10.1007/s12520-016-0384-2
25. C. Andreani, F. Aliotta, L. Arcidiacono, M. Borla, **D. Di Martino**, F. Facchetti, E. Ferraris, G. Festa, G. Gorini, W. Kockelmann, J. Kelleher, D. Malfitana, D. Micieli, T. Minniti, E. Perelli Cippo, R. Ponterio, G. Salvato, R. Senesi, V. Turina, C. Vasi e C. Greco, "A neutron study of sealed pottery from the grave-goods of Kha and Merit", *Journal of Analytical Atomic Spectrometry* 32, 1342-1347 (2017). The Royal Society of Chemistry, ISSN 1364-5544.
26. G. Festa, E. Perelli Cippo, **D. Di Martino** (corresponding), R. Cattaneo, R. Senesi, C. Andreani, E. Schooneveld, W. Kockelmann, N. Rhodes, A. Scherillo, P. Kudejova, K. Biro, K. Duzs, Z. Hajnal, G. Gorini, "Neutron Resonance Transmission Imaging for 3D elemental mapping at the ISIS spallation neutron source", *Journal of Analytical Atomic Spectrometry* 30, 745-750 (2015). The Royal Society of Chemistry, ISSN 1364-5544.
27. **D. Di Martino**, L. Beverina, M. Sassi, S. Brovelli, R. Tubino, F. Meinardi "Straightforward fabrication of stable white LEDs by embedding of inorganic UV-LEDs into bulk polymerized polymethyl-methacrylate doped with organic dyes", *Scientific Reports* (2014). DOI: 10.1038/srep04400
28. **D. Di Martino**, A. Galli, M. Martini "The intriguing case of silicon crystals unveiled in ancient mosaic tesserae", *Journal of Raman Spectroscopy* 43, 1824-1827 (2012). John Wiley and Sons, ISSN 0377-0486.
29. A. Vedda, N. Chiodini, M. Fasoli, A. Lauria, F. Moretti, **D. Di Martino**, A. Baraldi, E. Buffagni, R. Capelletti, M. Mazzerà, P. Bohacek, E. Mihokova, "Evidences of rare-earth nanophases embedded in silica using vibrational spectroscopy", *IEEE Transactions on Nuclear Science* 57, 1361-1369 (2010). Nuclear & Plasma Sciences Society, ISSN 0018-9499.
30. **D. Di Martino**, N. Chiodini, M. Fasoli, F. Moretti, A. Vedda, A. Baraldi, E. Buffagni, R. Capelletti, M. Mazzerà, M. Nikl, G. Angella, C.B. Azzoni, "Gd-incorporation and luminescence properties in sol-gel silica glasses", *Journal of Non-Crystalline Solids* 354, 3817-3823 (2008). Elsevier Science, ISSN 0022-3093.
31. V. Palanza, **D. Di Martino**, A. Paleari, G. Spinolo, L. Prosperi, "Micro-Raman spectroscopy applied to the study of inclusions within sapphire", *Journal of Raman Spectroscopy* 39, 1007-11 (2008). John Wiley and Sons, ISSN 0377-0486.
32. N. Chiodini, A. Paleari, M. Catti, S. Brovelli, **D. Di Martino**, A. Lauria, R. Lorenzi, G. Spinolo, "Sol-gel synthesis of Ge nanophases in silica", *Solid State Communications* 144, 429-432 (2007). Elsevier Science, ISSN 0038-1098.
33. A.C. Hannon, **D. Di Martino**, L.F. Santos, R.M. Almeida, "A model for the Ge-O coordination in germanate glasses", *Journal of Non-Crystalline Solids* 353, 1688-1694 (2007). Elsevier Science, ISSN 0022-3093.
34. A.C. Hannon, **D. Di Martino**, L.F. Santos, R.M. Almeida, "Ge-O Coordination in Caesium Germanate Glasses", *Journal of Physical Chemistry B* 111, 3342-3354 (2007). American Chemical Society, ISSN 1089-5647.

35. **D. Di Martino**, A. Vedda, C. Montanari, E. Rosetta, E. Mihokova, M. Nikl, H. Sato, A. Yoshikawa, T. Fukuda, "Rare earth doped LiCaAlF<sub>6</sub> as a new potential dosimetric material", *Optical Materials* 30, 69-71 (2007). Elsevier Science, ISSN 0925-3467.
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