

CURRICULUM VITAE et STUDIORUM

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<https://scholar.google.it/citations?user=nZXpWikAAAAJ&hl=it>

EDUCATION

2001	Ph.D. in Mineralogy, Petrology and Crystallography, University of Pavia, Italy
1997	Chemistry Degree (110/110 <i>summa cum laude</i>), University of Pavia, Italy

PROFESSIONAL EXPERIENCES

2022-present	Associate Professor at University of Pavia
2008-present	Associate Researcher at the Institute of Geosciences and Georesources of Italian National Research Council (CNR)
2006-2022	Researcher and Lecturer at University of Pavia
2011	Visiting Scientist (3 months) at the Bayerisches Geoinstitut, Bayreuth, Germany
2007	Invited Visiting Scientist (3 months) at the Department of Mineralogy, South Australian Museum, Adelaide, Australia
2004-2005	Post-doc, University of Pavia, Italy
2003-2004	Post-doc, University of Cambridge, UK
2001-2003	Post-doc, University of Pavia, Italy
1997-2000	Ph.D., University of Pavia, Italy

AWARDS AND SCHOLARSHIPS

2008	Nardelli Prize for outstanding young crystallographer issued by the Italian Crystallographic Association (AIC)
2007	SIMP (Italian Society for Mineralogy and Petrology) grant for research activity abroad
2003	Accademia Nazionale dei Lincei - Royal Society grant
2003	CNR-NATO grant

TEACHING ACTIVITIES

2006-present	Lecturer for the Chemistry, Earth Sciences, and Professions in Preventive Healthcare B.Sc. and M.Sc. degrees. <u>Courses Taught:</u> <ul style="list-style-type: none">• Crystallography and Structural Chemistry• Crystal Chemistry• Introduction to the circularity of materials• General and Inorganic Chemistry• Mineralogy• Crystal Structure and Transformation behaviour of minerals Supervisor of undergraduate and Ph.D. students
2017	Erasmus+ Teaching Staff Mobility, University of Zagreb, Croatia

INVITED LECTURES, TALKS AND SEMINARS

2024	Invited lectures: X-TechLab Training Session, Cotonou, Benin
2023	Keynote talk: 26 th IUCr Congress and General Assembly, Melbourne, Australia
2022	Invited lecture: 3 rd LACA School, San José, Costa Rica (<i>Remote</i>)

2022	Keynote talk: SGI-SIMP 2022 - Geosciences for a sustainable future, Torino, Italy
2022	Invited lecture: Scienze e materiali mineralogici per uno sviluppo sostenibile, Accademia delle Scienze di Torino, Italy
2019	Keynote talk: IV Reunión de la Asociación Latinoamericana de Cristalografía (LACA), Bucaramanga, Colombia
2019	Invited lectures: 2 nd LACA School, Bucaramanga, Colombia
2018	Plenary talk: 26 th Croatian-Slovenian Crystallography Meeting, Poreč, Croatia
2017	Invited lectures: IUCr-UNESCO OpenLab, San José, Costa Rica
2016	Keynote talk: IV MISCA, Tenerife, Spain
2016	Invited lecture: IUCr-UNESCO OpenLab Uruguay, Montevideo, Uruguay
2016	Invited lectures: IUCr-UNESCO OpenLab Cambodia, Phnom Penh, Cambodia
2016	Invited lecture: AIC-SIMP International School, Rimini, Italy
2015	Invited seminar: University of Bari, Italy
2012	Keynote talk: European Crystallographic Meeting, ECM27, Bergen, Norway
2011	Invited lecture: AIC International School "Crystallography Beyond Diffraction", Camerino, Italy
2009	Keynote talk: XXXVIII Congresso AIC, Salerno, Italy
2008	Keynote talk: SIMP-AIC Joint Meeting, Sestri Levante, Italy

SERVICE FOR THE SCIENTIFIC COMMUNITY

2021-present	Member of IUCr Commission on Inorganic and Mineral Structures
2019-2021	Individual Members Representative elected in the Council of the European Crystallographic Association (ECA)
2018-2021	Regional Editor, The IUCr Newsletter, ISSN 1067-0696; coden IUC-NEB
2018-2020	Member elected and Coordinator of the Teaching Committee of the Italian Crystallographic Association
2015-2017	Individual Members Representative elected in the Council of the European Crystallographic Association (ECA)
2015-2017	Member elected of the Teaching Committee of the Italian Crystallographic Association
2002-present	Referee for journals of the pertinent scientific discipline

ORGANISATION OF MEETINGS AND SCHOOLS

2021	Session Convenor: "Crystallography schools to promote interdisciplinarity in science", 25 th IUCr Congress and General Assembly
2019	Chair SC, OC: AIC International School "Crystallographic Information Fiesta", Napoli, Italy
2018	SC: AIC International School "Powder Diffraction, Theory, Software and Applications", Bari, Italia
2017	Session Convenor: "In situ and in operando crystallography: getting insights into the properties of materials and their response to external stimuli", XLVI AIC meeting, Perugia, Italy
2017	OC: AIC International School "Bridging the gap between cryo-EM and crystallography", Pavia, Italy
2016	Chair SC, OC: AIC-SIMP International School "Polymorphism, stability and phase transition in crystals", Rimini, Italy. Satellite event of EMC2.
2015	OC: First European School on Crystal Growth, Bologna, Italy
2014	Chair OC, SC: 1 st European Crystallography School, "Reinforcing foundations to build the 2nd century of modern crystallography", Pavia, Italy
2013	SC: 1 st SIMP-AIC International School, Camerino, Italy
2011	SC: AIC International School "Crystallography Beyond Diffraction", Camerino, Italy
2011	SC, OC: EBSDays, Pavia, Italy
2009	Session Convenor: "Soluzioni solide di minerali: struttura, proprietà e risposta alle variazioni delle condizioni chimico-fisiche", Geoitalia 2009, Rimini, Italy
2009	OC: Workshop "Advances in crystallographic methods for the study of magnetism", Pavia, Italy

SC: Scientific Committee; OC: Organising Committee

RESEARCH FUNDING

Some recent funding managed

2026-2024	MISE 2022 “VOLT – Viability fOr circuLar manufacTuring” (Chemistry Dept Unit coordinator, € 292.725 K)
2025-2020	EU LIFE19 “Solving treatment of wastewater sewage sludge with new HTL technology to produce hydrocarbons, asphalts and fertilizers” ENV/IT/000165 (Research Unit leader, EU contribution € 238.26 K)
2023-2020	MISE 2018 “IESMAN – Internet of Enterprise Sustainable Manufacturing” (Chemistry dept Unit coordinator, € 238.50 K)
2014	Erasmus Intensive Programme (Project coordinator, € 27.50 K)

CURRENT RESEARCH TOPICS

- Alkali activation of clays and waste to design materials for structural application.
- Hydrothermal transformation of biomass sludge into secondary raw materials.
- Raw materials and supply chain risk in the ceramic industry.
- Strain and the thermosalient effect: jumping crystals.
- Biomineralization processes and the role of intramineral proteins.