

PERSONAL INFORMATION

Prof. Roberta Massabò



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Sex Female | Nationality Italy

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

2016 - present

Professor of Solid and Structural Mechanics

Department of Civil, Chemical and Environmental Engineering, University of Genova

- Coordinator of the Ph.D Program in Civil, Chemical and Environmental Engineering (2018 – present)
- Member of the Doctorate Committee, University of Genova (2019 – present)
- Vice Director, Department of Civil, Chemical and Environmental Engineering (2016 – 2018)

2000 - 2015

Associate Professor of Solid and Structural Mechanics

Department of Civil, Chemical and Environmental Engineering, University of Genova

- Vice Director, Department of Civil, Chemical and Environmental Engineering (2013 – 2015)
- Coordinator of the Ph.D Program in Structural and Geotechnical Engineering (2013 – 2017)

2001 - 2003

Associate Professor of Structural Engineering (tenure track)

Department of Civil and Environmental Engineering, Northwestern University, IL, USA (2001 – 2003).

- Member of Northwestern University Graduate School (2002-2003); Adjunct Professor (2003 – 2005)

1992 - 2000

Assistant Professor of Solid and Structural Mechanics

Department of Structural and Geotechnical Engineering, University of Genova

EDUCATION AND TRAINING

1990 - 1994

Ph. D. in Structural Mechanics

Politecnico di Torino, Italy

1985 - 1990

Laurea Degree in Civil Engineering

Magna Cum Laude and "Dignità di stampa" award, University of Genova, Italy

HONOURS

Invited General Lecturer

Int. Workshop on Multiscale, Multiphysics, and Multidisciplinary Research on Materials and Structures, m3MS, Sept. 24-26, 2025, Singapore; ICSS-13, Int. Conf. Sandwich Structures, Knoxville, 2023; XXXV AIMETA Conf. (Italian Ass. Theor. & Appl. Mechanics), Palermo, 2022; 2nd NewFrac Workshop, Lucca, 2022; ECCOMAS Thematic Conference, Composites 2021, Gothenburg, 2021; Int. Symp. on Dynamic Response & Failure of Comp.Mater., DRaF 2014, Ischia, 2014; 17th Eur. Conf. of Fracture, ECF17, Brno, 2008; Minisymposium on Cohesive Zone Models Int. Conf. of Theor. & Applied Mechanics, ICTAM 2008, Adelaide, 2008.

Others

MTS chair for visiting professors in Geomechanics, Univ. of Minnesota, USA (2009); Fellow, Searle Center for Teaching Excellence, Northwestern Univ (2002); Fulbright Visiting Scholar, UCSB, CA and

Occasional Lecturer Program Award, 1995; Dignità di Stampa Award, Univ. Genova, 1990.

LEADERSHIP ACTIVITIES, PROFESSIONAL SERVICE & GRANTS

Roles at International Scientific Associations	Italian Representative in IUTAM (International Union of Theoretical and Applied Mechanics) for AIMETA (Italian Association of Theoretical and Applied Mechanics) (Aug. 2024 – present) Accademia Ligure di Scienze e Lettere (Ligurian Academy of Sciences and Letters), Corresponding Member (Nov. 2024 – present)
Coordination Scientific Committees	Executive Committee, Mechanics of Materials Division of AIMETA (2013 – 2015). Member (2005 – 13)
Research Quality Assessment	Member of GEV 08b, VQR 2015 – 2019 (2021 – 2022) (assessment of research quality in Italy)
Editorial Advisory Boards	Journal of Composite Materials, Sage (2007 – present) Journal of Sandwich Structures and Materials, Sage (2022 - present)
Chair of International Conferences	14th Int. Conference on Sandwich Structures, ICSS 14, Genova, Italy, June 2025
Member of Scientific Committees at International Conferences	Int. Conference on Sandwich Structures, ICSS (permanent member since June 2025); 11th Int. Conf. on Arch Bridges Arch 2025, Genova, 2025; Int. Conf. Fracture ICF15, Atlanta, 2023; Int. Conf. on Composite Materials ICCM22, Australia 2019; XIV Int. Conf. on Fracture, ICF14, Rhodes, Greece, 2017; Int. Conf. on Impact Loading of Lightweight Structures, ICLLS 2015, Torino, Italy; Int. Symp. on Dynamic Response & Failure of Composite Materials, DRaF 2014, 2016; I Int. Conf. Mech. of Nano, Micro and Macro Comp. Structs. Torino, 2012
Organizer of Scientific Symposia at International Conferences	ICTAM 2024 (thematic session); Eur. Solid Mech. Conf. 2018; Int. Conf. on Fracture ICF14, 2017; Eur. Conf. on Fracture ECF16, 2016; Int. Conf. on Fracture ICF11, 2005, Torino; Mech. & Mater. Summer conf. 2001, San Diego.
Third Mission and Standardization Activities	Member of CMH 17 – Composite Materials Handbook, Sandwich Disbond Working Group; Member of ASTM International Collaboration Areas: #79464 - Mode I Dominant Fracture Toughness Fatigue Testing of Sandwich Construction, and ASTM International Collaboration Area, #79465 - Mixed Mode I-Mode II Fracture Toughness of Sandwich Constructions; Member of working group for new ASTM Standard on Mode I Dominant Facesheet-to-Core Fracture Toughness of Sandwich Constructions (WK 56166).
Recent Grants for Basic/Applied Research	- DESIGN, "Evolutions of airworthiness standards for new aircraft structure designs using materials, processes, and advanced manufacturing methods", (Consortium: DTU, UniGe, Fraunhofer IMWS, NSE Composites, Airbus Aircraft, Airbus Helicopters, Dupont, Leonardo), duration: 2025-2027. - CNMOST, European Community, NextGenerationEU, "Sustainable Mobility Center, CNMS" code CN00000023, duration 2023-2025. - ONR Global, contract no. N62909-21-1-2048 (Co-PI with C. Berggreen, DTU), Long Range BAA, Basic and Applied Scientific Research, "Mitigation of Sandwich Debond Damages under Influence of Impact and Low Temperatures for Robust Naval and Aircraft Structures", duration: 2021-2024 - U.S. Office of Naval Research, Solid Mechanics Program, contract no. N00014-14-1-0254 (PI) - Long Range BAA, Basic and Applied Scientific Research, ONR, "Mechanics-based modeling of naval composites in the design for mitigation of extreme loadings and environments", duration: 2017-2020; contract no. N00014-14-1-0254, (PI) "Survivability of marine composites and structures under impact and blast in extreme environments", duration: 2014-2016. - Other relevant Grants: U.S. ONR; U.S. DoT; U.S. DoD; Rockwell Science Center, USA; Teledyne Scientific, USA; U.S. ARO; Italian MIUR; NATO (1994 – present)

PUBLICATIONS

Metrics and Citations	Scopus ID: 6603786705. Documents: 86; Citations: 1444; H-Index: 22 (August 2025)
Recent, Selected Journal Publications	Monetto, I., Ustinov, K.B., Massabò, R., T-stresses in bimaterial isotropic strips subjected to generalized end loadings , <i>Engineering Fracture Mechanics</i> , 2025, 111473. Vozzella, S., Boni, C., Massabò, R., Royer Carfagni, G., Direct evaluation of the modification coefficient k_{mod} for the static-fatigue design of annealed glass panes under wind load , <i>J. of Mechanics of Materials and Structures</i> , 2025, 20 (3), 289-313.

Contaldi, C., Berggreen C., Legarth B.N. & Massabò, R., New solution coefficients for crack kinking at orthotropic bimaterial interfaces, *Engineering Fracture Mechanics*, 325, 2025, 111259, <https://doi.org/10.1016/j.engfracmech.2025.111259>.

Massabò, R., [The effective crack extension and its implications on the single cantilever beam test for sandwich composites](#), *J. Sandwich Struct. and Materials*, 2024.

Ustinov, K., Massabò, R., [On elastic clamping boundary conditions in plate models describing detaching bilayers](#), *Int. Journal of Solids and Structures* (2022).

Massabò, R., [Effective Modeling of Interlaminar Damage in Multilayered Composite Structures Using Zigzag Kinematic Approximations](#), chapter in *Handbook of Damage Mechanics: Nano to Macro Scale for Materials and Structures: II Ed.: Volume 1*, (2022).

Monetto I., Barbieri L., Berggreen C., Massabò, R., [Fracture mechanics solutions and operative formulae for isotropic bi-material layers with large elastic mismatch](#), *Theor. and Appl. Fracture Mechanics*, 121,103451 (2022).

Massabò, R., [Upper and lower bounds for the parameters of one-dimensional theories for sandwich fracture specimens](#) (2021) *J. Applied Mech., Trans. ASME*, 88 (3).

Ustinov, K., Massabò, R., Lisovenko, D. [Orthotropic strip with central semi-infinite crack under arbitrary loads applied far apart from the crack tip. Analytical solution](#), *Eng. Failure Analysis*, 2020.

GENOVA, 01/09/2025

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