Curriculum Vitae Prof. Roberta Massabò

Dr. Roberta Massabò
Professor of Solid and Structural Mechanics
Coordinator PhD Program in Civil, Chemical and Environmental Engineering
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Education:		1994	Ph.D., Structural Mechanics, Politecnico Torino, Italy (with A. Carpinteri)
		1990	Laurea magna cum laude (BS-MS), Civil Engrg., Univ. of Genova, Italy
Academic Experience:	2016-	Present	Professor of Structural Mechanics, University of Genova
	2003-	2015	Associate Professor of Structural Mechanics, University of Genova
	2003-	2005	Adjunct Professor of Struct. Engineering Northwestern University, USA.
	2001-	2003	Associate Professor of Structural Engineering (tenure track), Department of Civil and Environmental Engineering, Northwestern University, USA
	2000-	2001	Associate Professor of Structural Mechanics, University of Genova
	1995-	2000	Asst Professor of Structural Mechanics (with tenure), University of Genova
	1992-	1995	Asst. Prof. of Structural Mechanics & Engineering, University of Genova
Research interests:	Mechanics of Materials/Structures; Mechanics of Fracture and delamination; Advanced composites; computational mechanics; biomechanics.		
Honours:	2008-	present	General lecturer at international conferences: Plenary Lecturer, Composites 2021, ECCOMAS Thematic Conference, Sweden, 2021; International Symposium on Dynamic Response and Failure of Composite Materials, DRaF 2014, Ischia (2014); 17th European Conference of Fracture, ECF17, Brno, Czech Republic, 2008; Introductory Lecturer at the minisymposium on Cohesive Zone Models at the International Conference of Theoretical and Applied Mechanics, ICTAM 2008, Adelaide, Australia, 2008.
		2009	MTS chair for visiting professors in Geomechanics, University of Minnesota, Minneapolis, USA
		2002	Fellow of the Searle Center for Teaching Excellence, Northwestern Univ.
		1995	Fulbright Visiting Scholar, UCSB, California, USA.; Fulbright Occasional Lecturer Program Award, 1995.
		1990	"Dignità di Stampa" award for the final thesis of the Civil Engrg. Degree
Extended Visiting Appointments:	Univ. of Minnesota (2009); Northwestern Univ. (2004, 2001-03); Russian Academy of Sciences (2002); Cornell Univ., NY (2001); Cambridge Univ., UK (1999); Rockwell Science Center, CA (1995; 1997; 1998; 2000); UCSB, CA (1995; 1999).		
Professional Service:	2018	present	Coordinator PhD Program in Civil, Chemical and Env. Engrg. UNIGE
	2013-	2018	Coordinator PhD Program in Structural and Geotecnical Enrg., UNIGE
	2013-	2015	Coordinator Executive Committee Mechanics of Materials Division of the Italian Ass. of Theor. and Applied Mech., AIMETA (member since 2005)
	2013-	2018	Vice- Director Dept. of Civil, Chemical and Environmental Engrg, UNIGE
	2015-	2018	Department Delegate for International Mobility, UNIGE.
	2007-	present	Editorial Adv. Board of the *Journal of Composite Materials,* Sage
		2015	Guest Editor, special Issue in *Meccanica* on Advances in Mech. of Composite and Sandwich Structures.
	2011-	present	Member of Scientific Committees int. conferences: Int. Conf. Fracture

		ICF15, Atlanta, 2021; Int. Conf. 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 and Failure of Composite Materials, DRaF 2014, 2016; I Int. Conf. on Mech. of Nano, Micro and Macro Composite Structures, Torino (2012);
1999-	present	Organizer of mini-simposia at 11 international conferences
2001-	present	Member of the ASCE Eng. Mech. Division Elasticity Committee.
1999-	2005	Member of the ASCE Eng. Mech. Division Properties of Materials Comm. Member of a Review Panel for the National Science Foundation, USA.
1998-	Present	Reviewer for >30 Int. Journals, ISI.

Invited seminars: Denmark Tech. University DTU (2018); Università di Pisa (‘10), University of Minnesota (’09), University of Illinois Urbana Champaign (‘04), Politecnico di Torino (‘04), Massachusetts Institute of Technology (‘03), Northwestern Medical School (’03), Northwestern University (’01), Cornell University (’00), Politecnico di Milano (’99), Russian Academy of Sciences, Moscow (’02), Univ. of California Santa Barbara (‘95), Technical Univ. of Catalonia (’94, ’97), Case Western Reserve Univ. (’95), Univ. of Colorado at Boulder (’95).

Grants and research support: Support by: Italian MIUR; U.S. DoD, U.S. ONR, U.S. DoT, NATO; Rockwell Science Center/Teledyne, USA.

Publications: Author/co-author of more than 150 research publications in International Journals and Conference Proceedings. Author of 10 book chapters.

Metrics: H-Index (Scopus): 18; Citation Count (Scopus): 1018.

Selected Publications:

- Ustinov, K., Massabò, R., Lisovenko, D. Orthotropic strip with central semi-infininite crack under arbitrary loads applied far apart from the crack tip. Analytical solution, *Engineering Failure Analysis*, 110 (104410), 2020.
- Massabò, R., Darban, H., Mode II dominant fracture of layered composite beams and wide-plates: a homogenized structural approach, (2019) *Engineering Fracture Mechanics*, 213, pp. 280-301.
- Massabò, R., Propagation of Rayleigh-Lamb waves in multilayered plates through a multiscale structural model, Int. *Journal of Solids and Structures*, 124, 2017, 108-124.
- Darban H., R. Massabò, Thermo-elastic solutions for wide plates and beams with interfacial imperfection through the transfer matrix method, *Meccanica*, 2017, 1-19, DOI 10.1007/s11012-017-0657-6.
- Massabò, R., and Campi, F., Assessment and correction of theories for multilayered plates with imperfect interfaces, *Meccanica* (2015), DOI 10.1007/s11012-014-9994-x.
- Massabò, R., and Campi, F., An efficient approach for multilayered beams and wide plates with imperfect interfaces and delaminations, *Compos Struct* 116 (2014) 311-324.
- Massabò, R., and Cavicchi, A., Interaction effects of multiple damage mechanisms in composite sandwich beams subjected to time dependent loading, *Int. Journal of Solids and Structures*, 49, 2012, 720-738.
- Andrews, M.G., Massabò, R., (2007) The effects of shear and near tip deformations on energy release rate and mode mixity of edge-cracked orthotropic layers, *Eng. Fracture Mechanics*, 74, 2700-2720.
- Andrews, M.G., Massabò, R., and Cox, B.N., (2006) Elastic interaction of multiple delaminations in plates subject to cylindrical bending, *International Journal of Solids and Structures*, 43(5), 855-886.
- Gambarotta, L., Massabò, R., Morbiducci, R., Raposio, G., and Santi, P., (2005), In vivo experimental testing and model identification of human scalp skin, *Journal of Biomechanics*, ***38***, *2237-2247*.
- Massabò, R., and B.N. Cox (2002), Unusual characteristics of mixed mode delamination fracture in the presence of large scale bridging, *Mechanics of Composite Materials and Structures*, **8**(1), 61-80.
- Rugg, K.L., Cox, B.N. and Massabò, R. (2002), Mixed mode delamination of polymer composite laminates reinforced through the thickness by z-fibers, *Composites, part A*, 33/2, 177-190.
- Massabò, R., and Cox, B.N., (1999), Concepts for bridged mode II delamination cracks, *Journal of the Mechanics and Physics of Solids*, **47**(6), 1265-1300.