

# Gabriele La Valle

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## Address

Place of Birth  
Date of Birth  
Nationality

## Mobile Phone

Email gablavallo@unime.it  
ORCID ID  
Gender

## Education

- 2020-now** Doctorate Degree in Engineering and Chemistry of Materials and Structures  
University of Messina, Messina (ME), Italy  
Advisor: Prof. Eng. Giovanni Falsone  
Dissertation: Stochastic analysis of new generalized continua
- 2021** Italian national licence to practice as a Civil Engineer  
50/50
- 2018-2020** Master's degree in Civil Engineering  
University of Messina, Messina, Italy  
Advisor: Prof. Eng. Giovanni Falsone  
Thesis: On the micropolar elasticity theory  
Summa cum laude
- 2014-2018** Bachelor's degree in Civil and Building Systems Engineering  
University of Messina, Messina, Italy  
Advisor: Prof. Eng. Giovanni Falsone  
Thesis: Static analysis of Functionally Graded Beams and a short study on non-local theories  
Cum laude
- 2014** High school Scientific Diploma  
Liceo Scientifico Statale Archimede, Messina, Italy  
Cum laude

## Publications

- G. La Valle, A. Ciallella, G. Falsone, *The effect of local random defects on the response of pantographic sheets*, Mathematics and Mechanics of Solids, (2022), DOI: 10.1177/10812865221103482
- G. La Valle, *A new deformation measure for the nonlinear micropolar continuum*, Zeitschrift für angewandte Mathematik und Physik, v.73 (2022), DOI: 10.1007/s00033-022-01715-x
- G. La Valle, R. Laudani, G. Falsone, *Response probability density function for non-bijective transformations*, Communications in Nonlinear Science and Numerical Simulation, v.107, DOI: 10.1016/j.cnsns.2021.106190
- S Massoumi, G La Valle, *Static analysis of 2D micropolar model for describing granular media by considering relative rotations*, Mechanics Research Communications, v.119 (2022), DOI: 10.1016/j.mechrescom.2021.103812
- G La Valle, S Massoumi, *A new deformation measure for micropolar plates subjected to in-plane loads*, Continuum Mechanics and Thermodynamics, v.34 (2022), DOI:10.1007/s00161-021-01055-7
- G Falsone, G La Valle, *Dynamic buckling of functionally graded beams based on a homogenized theory*, Research on Engineering Structures & Materials, (2021), DOI:10.17515/resm2021.259st0216
- G Falsone, G La Valle, *A homogenized theory for functionally graded Euler–Bernoulli and Timoshenko beams*, Acta Mechanica, v.230 (2019), DOI:10.1007/s00707-019-02493-w

## I have been a speaker at:

<b>Sep 2022</b>	<b>AIMETA 2022</b> International Conference on Theoretical and Applied Mechanics	Palermo, Sicily, Italy
<b>Jun 2022</b>	<b>ICoNSoM 2022</b> International Conference on Nonlinear Solid Mechanics	Alghero, Sardinia, Italy
<b>May 2022</b>	<b>Workshop up-comech 2022</b> Design and Analysis of Non-classical Architected Materials	Frejus, France
<b>Sep 2021</b>	<b>M&amp;MoCS Workshop</b> Structural Mechanics	Arpino, Italy

## International research activities

<b>21-26 Nov 2021</b>	<b>3D experimental measures on pantographic structures</b> in collaboration with M&MoCS	École normale supérieure Paris-Saclay
<b>24 Oct- 4 Nov 2021</b>	<b>3D printing of pantographic structures</b> in collaboration with M&MoCS	Warsaw University of Technology

## International courses

<b>5 May- 18 Jun 2021</b>	<b>An introduction to Digital Image Correlation and Parameter Calibration</b> (24 hours) by François Hild (Laboratory of Mechanics and Technology, ENS Paris-Saclay)	
<b>12-16 Jul 2021</b>	<b>Tensor Analysis with Applications in Continuum Mechanics</b> (28 hours) by Victor Eremeyev (University of Cagliari, DICAAR)	

## International training experiences

<b>Jul 2016</b>	<b>Erasmus + Youthpass</b> Youth training exchange between students from different European countries	
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## Honors and Awards

**1 Oct 2021- 30 Sep 2024** Subject expert at “Structural Mechanics” (SSD ICAR/08)  
Department of Engineering, University of Messina, Messina, Italy

**Jul 2017** School of Excellence 2017 edition organized by University of Messina  
Training course in “Brain inspired computing” by Prof. Giovanni Finocchio

## Teaching experiences

**1 Oct 2021- 30 Sep 2024** Tutoring activities for the course of “Structural Mechanics” (SSD ICAR/08)  
Theoretical and practical aspects for students of University of Messina

**Apr 2022- Dec 2022** Tutoring activities for DSA students, University of Messina  
(200 hours) Mechanics of Solids, Physics, Calculus

**Sep 2021** Tutoring activities for freshmen, University of Messina  
(9 hours) Introduction to Physics

## Software Engineering Skills

- **Software**

*COMSOL Multiphysics* - Cross-platform finite element analysis, solver and multiphysics simulation software

*SAP 2000* - Software to perform modeling, analysis, design, and reporting

*Mathematica* - Language and interface for technical computing

*Latex*

*Microsoft Office*

## Languages

- Italian: Mother tongue
- English: Very fluent

## Interests and Soft Skills

- Travelling, reading, doing sports
- Problem solving, communication and teamworking