

Giammaria Gabbianelli

Curriculum Vitae



PERSONAL INFORMATION

Name Giammaria Gabbianelli
E-mail giammaria.gabbianelli@unipv.it

EDUCATION AND TRAINING

November 2013 – December 2016 **Philosophy Doctor** in Civil Engineering and Architecture (XXIX cycle)

Institution University of Pavia, Italy
Thesis title Numerical model for framed structures with thin-walled cross-section members
Supervisor Prof. Armando Gobetti

October 2011 – July 2013 **Master degree** (Laurea Magistrale) in Civil Engineering

Institution University of Pavia, Italy
Thesis title Comportamento sismico di sistemi intelaiati in acciaio per lo stoccaggio delle merci – Seismic behaviour of steel framed storage systems
Supervisors Prof. Armando Gobetti
Prof. Claudio Bernuzzi
Grade 110/110 cum laude

October 2007 – July 2011 **Bachelor degree** (Laurea Triennale) in Civil Engineering

Institution Marche Polytechnic University, Italy
Thesis title Analisi del comportamento statico e sismico di edifici in muratura – Analysis of static and seismic behaviour of masonry buildings
Supervisor Prof. Fabrizio Davì
Grade 100/110

RESEARCH EXPERIENCE

January 2022 – Current **Research associate (rtd-a)** at University of Pavia, Italy

Advanced structural modelling and implementation using finite and discrete element approaches; seismic vulnerability assessment of structures and non-structural components; mitigation of seismic risk through structural intervention; design of steel structures and assessment of structures subjected to seismic action.

April 2019 – December 2021 **Post doctoral researcher** at University School for Advanced Studies IUSS Pavia, Italy

Evaluation of seismic demand on non-structural elements. Seismic vulnerability assessment of existing reinforced concrete structures and evaluation of optimum retrofitting interventions.

June 2018 –
March 2019

Post doctoral researcher at University of Pavia, Italy

Seismic vulnerability of industrial precast structures, airport infrastructures and steel storage tanks. Evaluation of fragility curves by means of nonlinear time history analyses.

January 2017 –
May 2018

Researcher at EUCENTRE, Pavia, Italy

Seismic vulnerability assessment of precast structures: engineering methods for fragility evaluation of complex structures. Nonlinear analyses and advanced modelling of 3D structures aiming at obtaining the seismic demand.

June 2016 –
October 2016

Visiting PhD student at Faculty John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, United States

Numerical analyses aimed at assessing the nonlinear response of materials and structures. Development and implementation of numerical Python algorithms to randomly apply defects and geometrical imperfections to truss-lattice materials.

Supervisor: Prof. Katia Bertoldi

RESEARCH ACTIVITY

Development of Finite Element software with warping effects

Development of a finite element program, capable of considering warping torsion, flexural-torsional buckling and lateral-torsional buckling in beam elements with general cross-sections. The program has been developed in a Visual Studio environment with a graphic interface, adopting C# language program. The software has been completed, and it performs static, modal, buckling, pushover and nonlinear dynamic analyses. Different scientific articles have been produced adopting this software.

Study of steel storage racks

Evaluation of the load capacity of steel storage racks in both static and dynamic fields. Assessment of the warping torsion influence in static, dynamic and buckling analysis. Studies and improvement of the design method. Pushover analyses via experimental and numerical studies. Derivation of floor acceleration spectra on pallets stored in racks. Assessment of nonlinear dynamic behaviour. Studies on cold-formed thin-walled open cross-sections.

Study of industrial structures

Assessment of seismic behaviour and evaluation of seismic vulnerability by means of fragility curves for steel storage tanks, precast structures, steel braced frames and moment-resisting frames.

Development of AEM software

Study of the Applied Element Method (AEM) formulation, in order to simulate the progressive collapse of buildings and to assess the risk of failure. Development of software that adopts the AEM formulation and comparison the results with examples available in the literature and in other

commercial software. The development of the software, adopting C# language program, is in progress.

Seismic demand on non-structural elements

Investigation of the assessment and approaches for deriving the seismic demand on non-structural elements, mainly through floor acceleration and displacement spectra.

Evaluation of optimum retrofit intervention

Implementation of various methodologies, such as the multi-criteria evaluation method, to comparatively assess retrofitting options for existing reinforced concrete (RC) buildings, considering different aspects, such as environmental impacts, seismic and energetic performance, weighted according to their deemed importance.

RESEARCH PROJECTS

- | | |
|---------------------------------|--|
| January 2021 –
Current | ReLUIIS WP4.3 Project " Experimental tests on structural and special components – Prestressed concrete systems"
<i>Role: Research collaborator</i> |
| January 2021 –
Current | ReLUIIS WP4.2 Project "Experimental tests on structural and special components – Support devices"
<i>Role: Research collaborator</i> |
| April 2019 –
December 2021 | ReLUIIS WP5 Project "Rapid and integrated retrofit interventions with a low impact"
<i>Role: Research collaborator</i> |
| April 2019 –
December 2021 | ReLUIIS WP17 Project "Contributions to standard for non-structural elements"
<i>Role: Research collaborator</i> |
| April 2019 –
December 2021 | Dipartimenti di Eccellenza (Departments of Excellence) Project "Revision of Seismic Action and Design"
<i>Role: Research collaborator</i> |
| January 2018 –
December 2021 | Italian Department of Civil Protection (DPC) Project 12 "Web-GIS platform for seismic hazard and damage risk scenarios in industrial chemical plants"
<i>Role: Research collaborator</i> |
| January 2018 –
December 2018 | Italian Department of Civil Protection (DPC) Project 17 "Activities for assessment and classification of non-structural elements in airport infrastructures"
<i>Role: Research collaborator</i> |
| January 2017 –
May 2018 | NAM project "Study of the vulnerability of masonry buildings in Groningen"
<i>Role: Research collaborator</i> |
| January 2017 –
May 2018 | Hilti project "Study of the vulnerability of non-structural elements through experimental and numerical analyses"
<i>Role: Research collaborator</i> |

- January 2017 –
December 2017 Italian Department of Civil Protection (DPC) Project 13 "Development of a post-seismic survey form and local vulnerability of airport structures"
Role: Research collaborator
- January 2017 –
December 2017 Italian Department of Civil Protection (DPC) Project 5 "Web-GIS platform for seismic hazard and damage scenarios in infrastructure system (traffic, port, airport)"
Role: Research collaborator

TEACHING EXPERIENCE

- 8 November – 12
November 2021 Co-Lecturer, with Prof. Monteiro, for the course (15 hour) "**Seismic design of building structures**", at Stellenbosch University, South Africa.
- a.y. 2018 – 2019
a.y. 2017 – 2018 Teaching assistant of "**Shells and tanks**" M.Eng. course at University of Pavia, held by Eng. R. Nascimbene
- a.y. 2018 – 2019
a.y. 2017 – 2018
a.y. 2016 – 2017 Teaching assistant of "**Theory and design of steel structures**" M.Eng. course at University of Pavia, held by Eng. R. Nascimbene
- a.y. 2017 – 2018
a.y. 2016 – 2017 Lecturer at Fondazione Pavia Città della Formazione, Istituto Tecnico Superiore (ITS) – Area CSR: Costruzioni, Strutture e Risanamento.
- a.y. 2015 – 2016
a.y. 2014 – 2015
a.y. 2013 – 2014 Teaching assistant of "**Dynamic of structures and computational mechanics**" M.Eng. course at University of Pavia, held by Prof. A. Gobetti

FURTHER ACADEMIC EXPERIENCE

- July 2021 Committee member for the assignment of a research grant on the theme: "Integrated evaluation of the seismic and energetic performance and environmental impact of existing buildings" University School for Advanced Studies IUSS Pavia
- May 2020 Committee member for the assignment of a research grant on the theme: "Development of fragility curves of non-structural elements used as suspended ceilings" University School for Advanced Studies IUSS Pavia

PHD'S THESIS TUTORING

- Co-supervisor of 1 PhD's thesis at University of Pavia.
- a.y. 2019 – 2022 Further development and implementation of the Applied Element Method. Calò M.
Advisor: Prof. R. Pinho
Co-Advisors: Giammaria Gabbianelli and Daniele Malomo
Institute: University of Pavia

MASTER'S THESIS TUTORING

Co-supervisor of 16 Master's theses at University of Pavia and 5 Master's theses at Politecnico di Milano.

- a.y. 2018 – 2019 Classificazione e fragilità sismica pre- e post- intervento di strutture adibite alla logistica industriale. Piazzai A.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Valutazione di vulnerabilità sismica di serbatoi industriali: comparazione fra metodologie di analisi e verifica. Trabatti A.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Trattamento delle incertezze epistemiche nella valutazione della vulnerabilità sismica di un edificio ospedaliero. Pellegrino I.
Advisor: Prof. P. Venini
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Curve di fragilità di strutture metalliche porta-pallet con trattamento delle incertezze epistemiche. Ciliberto S.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Influenza delle connessioni nella valutazione della vulnerabilità sismica di strutture in acciaio. Montafia A.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Analisi della risposta dinamica non lineare di una struttura industriale in acciaio al variare della direzione dell'input sismico. Alassi K.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2018 – 2019 Stima delle perdite economiche di un edificio soggetto ad azione sismica. Intorcia M.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2017 – 2018 Valutazione della vulnerabilità sismica e curve di fragilità di sistemi intelaiati industriali in acciaio. Almadori G.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2017 – 2018 Valutazione degli spettri di piano per scaffalature metalliche. Scovenna G.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2017 – 2018 Ottimizzazione strutturale della risposta sismica di telai in acciaio: minimizzazione della norma- H_{∞} . Contessa M.
Advisor: Prof. P. Venini
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
- a.y. 2017 – 2018 Derivazione di spettri di piano in accelerazione per un serbatoio inserito in una struttura industriale. Carazzato G.
Advisor: Eng. R. Nascimbene

- a.y. 2016 – 2017
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia
Caratterizzazione numerico-sperimentale di scaffalature industriali automatizzate. Caredda L.
Advisor: Eng. R. Nascimbene
Co-Advisor: Giammaria Gabbianelli
- a.y. 2015 – 2016
Institute: University of Pavia
Caratterizzazione numerico sperimentale in regime dinamico di profili aperti in parete sottile con sistemi regolari di forature. Ferrari C.
Advisor: Prof. A. Gobetti
Co-Advisor: Giammaria Gabbianelli
- a.y. 2015 – 2016
Institute: University of Pavia
Stima delle prestazioni di scaffalature metalliche in zona sismica. Belli G.
Advisor: Prof. C. Bernuzzi
Co-Advisor: Giammaria Gabbianelli
- a.y. 2015 – 2016
Institute: Politecnico di Milano
Un approccio innovativo per la progettazione di scaffalature metalliche in zona sismica. Pasut E.
Advisor: Prof. C. Bernuzzi
Co-Advisor: Giammaria Gabbianelli
- a.y. 2014 – 2015
Institute: Politecnico di Milano
Analisi numerica di profilati sagomati a freddo e dotati di sistemi regolari di forature. Albani E.
Advisor: Prof. A. Gobetti
Co-Advisor: Giammaria Gabbianelli
- a.y. 2014 – 2015
Institute: University of Pavia
Evaluation of the efficiency of a low-cost retrofitting technique on steel storage pallet racks. Ciantia M.
Advisor: Prof. C. Bernuzzi
Co-Advisor: Giammaria Gabbianelli
- a.y. 2014 – 2015
Institute: Politecnico di Milano
Seismic performance of industrial storage pallet racks. Tomescu S.
Advisor: Prof. C. Bernuzzi
Co-Advisor: Giammaria Gabbianelli
- a.y. 2014 – 2015
Institute: Politecnico di Milano
Analisi di Pushover su scaffalature metalliche di tipo porta-pallet. Cognini F.
Advisor: Prof. C. Bernuzzi
Co-Advisor: Giammaria Gabbianelli
- a.y. 2013 – 2014
Institute: Politecnico di Milano
Sistemi industriali per lo stoccaggio delle merci: risposta ad azioni sismiche. Generelli G.
Advisor: Prof. A. Gobetti
Co-Advisor: Giammaria Gabbianelli
- a.y. 2013 – 2014
Institute: University of Pavia
Analisi comportamentale di strutture industriali per l’immagazzinamento delle merci. Rosti A.
Advisor: Prof. A. Gobetti
Co-Advisor: Giammaria Gabbianelli
Institute: University of Pavia

EDITORIAL EXPERIENCE

Co-editor of the Proceedings of the "Fourth International Workshop on Seismic Performance of Non-Structural Elements (SPONSE)", May 2019, Pavia, Italy.

Component of the Editorial Board for the following scientific journals:

- Structural.

Component of the Reviewer Board for the following scientific journals:

- Frontiers in Built Environment;
- Applied Sciences;
- Buildings.

Peer reviewer for the following scientific journals:

- International Journal of Structural Stability and Dynamics;
- Advances in Civil Engineering;
- Structures;
- KSCE Journal of Civil Engineering;
- Engineering Structures;
- Bulletin of Earthquake Engineering;
- Steel and Composite Structures;
- Natural Hazards;
- Metals;
- Journal of Earthquake Engineering;
- Materials.

Peer reviewer for the following scientific conferences:

- ANIDIS;
- 12th National Conference on Earthquake Engineering (12NCEE), Earthquake Engineering Research Institute (EERI).

PROFESSIONAL EXPERIENCE

September 2021	Lecturer for the professional course "SeismoTANK – Tool for the seismic evaluation of tanks", September 21st 2021, Mosayk s.r.l, Pavia, Italy.
September 2021	Lecturer for the professional course "Industrial steel storage racks: standard; structural analysis and design", September 17th 2021, Ordine degli Ingegneri della Provincia di Pavia, Italy.
2019 – Current	Development of the software SeismoTank for the seismic analysis of tanks. In collaboration with Mosayk s.r.l.
2019 – Current	Implementation and development of new features in the Finite Element software SeismoStruct. In collaboration with SeismoSoft.
2017 – Current	Seismic vulnerability assessment of existing steel storage tanks (more than 35); the tanks are placed in industrial facilities in different locations in Italy.
2018 – 2021	Verification of top beam systems for lifting and handling of different rack compositions for E.T.A. S.p.A.
2018	Seismic vulnerability evaluation of two docks (one of them 208 meters long) for oil tanker ships. The docks owner is ENI S.p.A. Modelling of the structures with prestressed beams, foundation piles and soils with three-dimensional solid elements. The docks performance was studied with nonlinear static analyses, considering the soil interaction. Compilation of reports containing performed analyses, adopted models, and detected vulnerabilities.

- December 2018 Lecturer for the professional course "Static and seismic analysis and design of industrial storage racks", December 14th 2018, Ordine degli Ingegneri della Provincia di Brescia, Italy.
- June 2018 Lecturer for the professional course "Industrial steel storage racks: static and seismic standard, analysis and design", June 8th 2018, Ordine degli Ingegneri della Provincia di Pavia, Italy.
- March 2017 Detection of damages and compilation of surveys forms of buildings and churches in the post-seismic emergency in central Italy after the earthquake of August 2016 and January 2017.
- December 2016 Registration at the "Ordine degli Ingegneri della Provincia di Ancona", n°4040, Civil and Ambiental sector.
- October 2015 Lecturer for the professional course "Analysis and design of steel members with non bi-symmetric cross-sections", October 20th 2015, Ordine degli ingegneri della provincia di Milano, Italy.
- June - July 2015 Lecturer for the professional course "Design methods of steel frame systems", June 22nd, June 29th, July 6th 2015, Ordine degli Ingegneri della Provincia di Milano, Italy.
- February - March 2015 Lecturer for the professional course "Design methods of steel frame systems", February 25th, March 4th, March 11st 2015, Ordine degli Ingegneri della Provincia di Milano, Italy.

PUBLICATIONS

International peer-reviewed papers

- 20 Clemett N., Carofilis W., **Gabbianelli G.**, O'Reilly G., Monteiro R. Optimal combined seismic and energy efficiency retrofitting for existing buildings, **submitted** to *Journal of Structural Engineering*.
- 19 Merino R., **Gabbianelli G.**, Perrone D., Filiatrault A. Calibrated Equivalent Viscous Damping for Direct Displacement Based Seismic Design of Pallet-Type Steel Storage Racks, **accepted for publication** in the *Journal of Earthquake Engineering*.
- 18 Carofilis W., Clemett N., **Gabbianelli G.**, O'Reilly G., Monteiro R., Influence of parameter uncertainty in multi-criteria decision-making when identifying optimal retrofitting strategies for RC buildings, **submitted** to *Journal of Earthquake Engineering*.
- 17 Clemett N., Carofilis W., O'Reilly G., **Gabbianelli G.** Monteiro R., Optimal seismic retrofitting of existing buildings considering environmental impact, *Engineering Structures* 250, 113391. <https://doi.org/10.1016/j.engstruct.2021.113391>
- 16 **Gabbianelli G.**, Perrone D., Brunesi E., Monteiro R. (2022) Seismic acceleration demand and fragility assessment of storage tanks installed in industrial steel moment-resisting frame structures, *Soil Dynamics and*

- Earthquake Engineering* 152, 107016.
<https://doi.org/10.1016/j.soildyn.2021.107016>
- 15 Calò M., Malomo D., **Gabbianelli G.**, Pinho R. (2021) Shake-table response simulation of a URM building specimen using discrete micro-models with varying degrees of detail, *Bulletin of Earthquake Engineering*.
<https://doi.org/10.1007/s10518-021-01202-0>
- 14 **Gabbianelli G.** (2021) Applied element modelling of warping effects in thin-walled C-shaped steel sections, *Buildings*, 11(8), 328.
<https://doi.org/10.3390/buildings11080328>
- 13 Carofilis W., **Gabbianelli G.**, Monteiro R. (2021) Assessment of multi-criteria evaluation procedures for identification of optimal seismic retrofitting strategies for existing RC buildings, *Journal of Earthquake Engineering*. <https://doi.org/10.1080/13632469.2021.1878074>
- 12 **Gabbianelli G.**, Perrone D., Brunesi E., Monteiro R. (2020) Seismic acceleration and displacement demand profiles of non-structural elements in hospital buildings, *Buildings*, 10(12), 243.
<https://doi.org/10.3390/buildings10120243>
- 11 **Gabbianelli G.**, Cavalieri F., Nascimbene R., (2020) Seismic vulnerability assessment of steel storage pallet racks, *Ingegneria Sismica - International Journal of Earthquake Engineering*, 37(2), 18-40.
- 10 Bozzoni F., Ozcebe A.G., Balia A., Lai C.G., Borzi B. Nascimbene R., Khairy D., **Gabbianelli G.**, Ippoliti L., Berardi S., Trombetti M., Moroni C. (2020) Seismic ground response analyses at an international airport in northern Italy by using a stochastic-based approach, *Journal of Theoretical and Applied Mechanics*, 58(2), 499-511. <https://doi.org/10.15632/jtam-pl/119017>
- 9 Montuori R., **Gabbianelli G.**, Nastri E., Simoncelli M. (2019) Rigid plastic analysis for the seismic performance evaluation of steel storage racks, *Steel and Composite Structures*, 32(1), 1-19.
<https://doi.org/10.12989/scs.2019.32.1.001>
- 8 **Gabbianelli G.**, Kanyilmaz A., Bernuzzi C., Castiglioni C. A. (2017) A combined experimental-numerical study on unbraced pallet rack under pushover loads, *Ingegneria Sismica - International Journal of Earthquake Engineering*, 34, January-March 2017, 18-38.
- 7 Bernuzzi C., Di Gioia A., **Gabbianelli G.**, Simoncelli M. (2017) Pushover analyses of hand-loaded steel storage shelving racks, *Journal of Earthquake Engineering*, 21(8), 1256-1282.
<https://doi.org/10.1080/13632469.2016.1210063>
- 6 Bernuzzi C., **Gabbianelli G.**, Gobetti A., Rosti A. (2016) Beam design for steel storage racks, *Journal of Constructional Steel Research*, 116, Article number 4345, 156-172. <https://doi.org/10.1016/j.jcsr.2015.09.007>
- 5 Bernuzzi C., Gobetti A., **Gabbianelli G.**, Simoncelli M. (2015) Simplified approaches to design medium-rise unbraced steel storage pallet racks. II: Fundamental period estimates, *Journal of Structural Engineering (United States)*, 141(10), 10.1061/(ASCE)1098-9101(2015)141:10(1000).
[https://doi.org/10.1061/\(ASCE\)1098-9101\(2015\)141:10\(1000\)](https://doi.org/10.1061/(ASCE)1098-9101(2015)141:10(1000))

- States*), 141, 11, Article number 04015037.
[https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0001278](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001278)
- 4 Bernuzzi C., Gobetti A., **Gabbianelli G.**, Simoncelli M. (2015) Simplified approaches to design medium-rise unbraced steel storage pallet racks. I: Elastic buckling analysis, *Journal of Structural Engineering (United States)*, 141, 11, Article number 04015036.
[https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0001271](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001271)
- 3 Bernuzzi C., Gobetti A., **Gabbianelli G.**, Simoncelli M., (2015) Unbraced pallet rack design in accordance with European practice. Part 2: essential verification checks, *Thin-walled Structures*, 86, 208-229.
<https://doi.org/10.1016/j.tws.2014.06.014>
- 2 Bernuzzi C., Gobetti A., **Gabbianelli G.**, Simoncelli M. (2015) Unbraced pallet rack design in accordance with European practice. Part 1: selection of the method of analysis, *Thin-walled Structures*, 86, 185-207.
<https://doi.org/10.1016/j.tws.2014.06.015>
- 1 Bernuzzi C., Gobetti A., **Gabbianelli G.**, Simoncelli M. (2014) Warping influence on the resistance of uprights in steel storage pallet racks, *Journal of Constructional Steel Research*, 101, 234-241.
<https://doi.org/10.1016/j.jcsr.2014.05.014>
- Conference Papers
- 8 **Gabbianelli G.**, Nicoletti V., Perrone D., Brunesi E. (2021) Influence of epistemic uncertainties on the seismic vulnerability assessment of an existing RC building, Proc. Of the 2nd fib Symposium on Concrete and Concrete Structures, Rome, Italy, November 18th -19th 2021.
- 7 **Gabbianelli G.**, Perrone D., Brunesi E. (2021) Influence of beam-to-column connections in seismic vulnerability assessment of steel structures, 8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2021, Athens, Greece, June 28th -30th 2021.
<http://dx.doi.org/10.7712/120121.8629.19176>
- 6 Carofilis W., Clemett N., **Gabbianelli G.**, O'Reilly G., Monteiro R. (2021) Selection of optimal seismic retrofitting for existing school buildings through multi-criteria decision making, 8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2021, Athens, Greece, June 28th - 30th 2021. <http://dx.doi.org/10.7712/120121.8558.19257>
- 5 Calò M., Malomo D., **Gabbianelli G.**, Pinho R. (2021) How detailed should your masonry model be?, 14th Canadian Masonry Symposium, May 16 th-19th 2021, Montreal, Canada.
- 4 Calò M., Malomo D., **Gabbianelli G.**, Pinho R. (2020) Collapse analysis of a shake-table-tested full-scale URM building specimen with chimneys, 14th World Congress in Computational Mechanics (WCCM), ECCOMAS Congress 2020, July 19th-24th 2020, Paris, France.

- 3 **Gabbianelli G.**, Carofilis W., Monteiro R. (2020) Evaluation of Different Retrofit Strategies for RC School Buildings using Integrated Multi-Criteria Procedures, 17th World Conference on Earthquake Engineering, 17WCEE, September 13rd-18th 2020, Sendai, Japan (Presented on September 29th 2021).
- 2 **Gabbianelli G.**, Cavalieri F., Nascimbene R. (2019) Seismic Fragility Curves of Steel Storage Pallet Racks, 4th International Workshop on the Seismic Performance of Non-Structural Elements (SPONSE), May 22nd-23rd May 2019, Pavia.
- 1 Gobetti A., Rottenbacher C., **Gabbianelli G.**, Girello S., Simoncelli M. (2017) Caratterizzazione dinamica di sistemi leggeri per lo stoccaggio delle merci – Dynamic characterization of hand-loaded steel storage racks, Costruzioni Metalliche, XXVI Congresso dei Tecnici dell’Acciaio - C.T.A., September 28th-30th 2017, Venice, Italy.

National peer-reviewed papers

- 2 **Gabbianelli G.**, Perrone D., Brunesi E. (2021) Valutazione della domanda sismica per elementi non-strutturali in edifici ospedalieri, Structural 234, marzo/aprile 2021. <https://doi.org/10.12917/stru234.11>.
- 1 **Gabbianelli G.**, Simoncelli M. (2016) Analisi statiche e di buckling con profili non bisimmetrici - Static and buckling analysis for non-symmetric members, Costruzioni Metalliche, 3, 63-72.

AWARDS AND RECOGNITIONS

- From 2022 Member of CTA (Collegio dei Tecnici dell’Acciaio).
- November 2021 Keynote speaker at the Vebleo Webinar on Science, Engineering and Technology November 2021.
Title of the keynote: "*Challenges and developments in steel storage pallet racks assessment*".
- From 2021 Member of CTE (Collegio dei Tecnici della Industrializzazione Edilizia).
- From 2021 Member of AICAP (Associazione Italiana Calcestruzzo Armato e Precompresso).
- From 2021 Member of fib (Fédération internationale du béton).
- From 2021 Member of fib (Fédération internationale du béton) Italy Young Member Group.
- July 2021 Invited speaker at the Thematic Session "Seismic protection of non-structural components: recent developments and future challenges" of the 8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2021, Athens, Greece, June 27th-30th 2021.
Title of the presentation: "*Industrial non-structural components: experience from past earthquakes and new trends*".

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- May 2020 Invited speaker at the Seminar “Valutazione e Progetto di scaffalature in zona sismica”, EUCENTRE, Pavia, October 3rd 2019.
Title of the presentation: “*Inquadramento normativo*”.
- From 2019 Member of the International Association for the Seismic Performance Of Non-Structural Elements - SPONSE.
- November 2016 Invited speaker at the Seminar organised by the Department of Civil Engineering and Architecture, DICAr, University of Pavia, Pavia, November 9th 2016.
Title of the presentation: “*Warping influence in the behaviour of steel storage pallet racks*”.
- October 2015 Invited speaker at the Special Session of the XXV CTA conference, Salerno, October 1st–3rd 2015.
Title of the presentation: “*Design methods of steel frame systems*”.

LANGUAGES

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING	WRITING
	Listening	Reading		
English	C1	C2	C1	C1

Levels: A1/2: Basic user – B1/2: Independent user – C1/2: Proficient user
Common European Framework of Reference for Languages

Certifications IELTS – International English Language Testing System – Score: 5.5 – July 7th 2011.

COMPUTER SKILLS

Programming languages C# (advanced), Matlab (advanced), Visual Basic (advanced), Visual Basic for Applications (advanced), Tcl (advanced), Fortran (intermediate), Python (intermediate).

Finite element software OpenSees (advanced), OpenSeesPy (advanced), SAP2000 (advanced), SeismoStruct (advanced), ConSteel (advanced), Abaqus (intermediate), Midas GEN (advanced), Midas GTS (intermediate), Adina (beginner), MarcMentat (beginner), Extreme Loading for Structures (beginner).

Date Giammaria Gabbianelli

19 January 2022

In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance with art. 7 of the above mentioned decree.