

**ALLEGATO B**

Curriculum Vitae

Giammaria Gabbianelli

INFORMAZIONI PERSONALI Giammaria Gabbianelli



Sesso | Data di nascita 1988 | Nazionalità

**POSIZIONE PER LA QUALE SI CONCORRE**  
**POSIZIONE RICOPERTA**  
**OCCUPAZIONE DESIDERATA**  
**TITOLO DI STUDIO PER LA QUALE SI CONCORRE**

Incarico individuale di lavoro autonomo occasionale avente per oggetto “Supporto tecnico-scientifico per l’applicazione delle linee guida del Consiglio Superiore dei Lavori Pubblici per la classificazione e gestione del rischio di ponti esistenti”

**ESPERIENZA PROFESSIONALE**

Gennaio 2022 – ad oggi	<b>Ricercatore a tempo determinato rtdA</b>  Dipartimento di Ingegneria Civile ed Architettura, Università degli studi di Pavia, Via A. Ferrata 3, 27100, Pavia  Modellazione strutturale avanzata e implementazione di approcci agli elementi discreti in software di calcolo. Vulnerabilità sismica di strutture e elementi non strutturali. Mitigazione del rischio sismico attraverso la valutazione ottimale delle tecniche di intervento. Progettazione di strutture in acciaio e valutazione delle prestazioni.
Aprile 2019 – Dicembre 2021	<b>Assegnista di ricerca</b>  Scuola Universitaria Superiore IUSS Pavia, Piazza della Vittoria 15, 27100, Pavia  Valutazione della domanda sismica su elementi non strutturali. Stima della vulnerabilità sismica di edifici esistenti in cemento armato e valutazione delle migliori strategie di intervento.
Giugno 2018 – Marzo 2019	<b>Assegnista di ricerca</b>  Dipartimento di Ingegneria Civile ed Architettura, Università degli studi di Pavia, Via A. Ferrata 3, 27100, Pavia  Vulnerabilità sismica di strutture industriali prefabbricate, infrastrutture aeroportuali e serbatoi in acciaio. Sviluppo di curve di fragilità attraverso analisi dinamiche non lineari.
Gennaio 2017 – Maggio 2018	<b>Ricercatore</b>  Fondazione Eucentre, Via A. Ferrata 1, 27100, Pavia  Valutazione della vulnerabilità sismica di strutture prefabbricate: metodi ingegneristici per la valutazione della fragilità di strutture complesse. Analisi non-lineari e modellazione numerica avanzata di strutture 3D per individuare la domanda sismica.

**ISTRUZIONE E FORMAZIONE**Novembre 2013 – Dicembre 2016 **Dottorato di ricerca in ingegneria civile**

Università degli studi di Pavia

- Tesi di dottorato: Numerical model for framed structures with thin-walled cross-section members
- Studio del comportamento statico e sismico delle scaffalature industriali in acciaio porta-pallet, nonché sviluppo di un software ad elementi finiti per tenere in conto degli effetti dell’ingobbamento.

Ottobre 2011 – Luglio 2013 **Laurea Magistrale in ingegneria civile**

Ottobre 2007 – Luglio 2011

Università degli studi di Pavia

- Tesi: Comportamento sismico di sistemi intelaiati in acciaio per lo stoccaggio delle merci
- Voto di laurea: 110/110 e lode

**Laurea Triennale in ingegneria civile**

Università Politecnica delle Marche

- Tesi: Analisi del comportamento statico e sismico di edifici in muratura
- Voto di laurea: 100/110

**COMPETENZE PERSONALI**

Lingua madre Italiano

Altre lingue	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	C1	C2	C1	C1	C2

Livelli: A1/2 Livello base - B1/2 Livello intermedio - C1/2 Livello avanzato

Quadro Comune Europeo di Riferimento delle Lingue

**Competenze comunicative** Possiedo ottime competenze comunicative acquisite durante le mie esperienze di didattica dei corsi di Teoria e progetto di strutture in acciaio – Laurea magistrale in Ingegneria Civile dell’Università di Pavia Fundamentals of Seismic Design – Corso di dottorato e laurea magistrale in Ingegneria Civile della Scuola IUSS e Università di Pavia; Integrated assessment and retrofitting of existing buildings – Corso di dottorato della Scuola IUSS Pavia.

**Competenze organizzative e gestionali** Tutoring come correlatore di tesi di laurea magistrale per più di 20 studenti e di una tesi di dottorato

**Competenze professionali** Svolta attività professionale principalmente in ambito di vulnerabilità sismica di scaffalature industriali in acciaio, serbatoi in acciaio, strutture esistenti in acciaio e cemento armato, pontili. Inoltre, ho svolto, in qualità di relatore, diversi seminari e corsi di aggiornamento inerenti alla progettazione statica e sismica delle scaffalature in acciaio.

**Competenze informatiche** Sviluppo di programmi ad elementi finiti e tools per l’ingegneria. Conoscenza dei seguenti linguaggi di programmazione: C#, Visual Basic, Fortran, Python, Matlab.

Patente di guida Patente B e A

**ULTERIORI INFORMAZIONI**

Pubblicazioni

- **Gabbianelli G.**, Milanesi R., Gandelli E., Dubini P., Nascimbene R. (2023) Seismic vulnerability assessment of steel storage tanks protected through sliding isolators, Earthquake Engineering and Structural Dynamics, <https://doi.org/10.1002/eqe.3885>
- Clemett N., Carofilis W., **Gabbianelli G.**, O'Reilly G., Monteiro R. (2023) Optimal combined seismic and energy efficiency retrofitting for existing buildings, Journal of Structural Engineering, 149(1). [https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0003500](https://doi.org/10.1061/(ASCE)ST.1943-541X.0003500)
- Carofilis W., Clemett N., **Gabbianelli G.**, O'Reilly G., Monteiro R., (2022) Seismic resilience assessment for optimal integrated retrofitting of existing school buildings in Italy, Buildings, 12(6), 845, <https://doi.org/10.3390/buildings12060845>
- Carofilis W., Clemett N., **Gabbianelli G.**, O'Reilly G., Monteiro R., (2022) Influence of parameter uncertainty in multi-criteria decision-making when identifying optimal retrofitting strategies for RC buildings, Journal of Earthquake Engineering. <https://doi.org/10.1080/13632469.2022.2087794>
- Merino R., **Gabbianelli G.**, Perrone D., Filiatrault A., Calibrated Equivalent Viscous Damping for Direct Displacement Based Seismic Design of Pallet-Type Steel Storage Racks, Journal of Earthquake Engineering. <https://doi.org/10.1080/13632469.2022.2033362>
- Clemett N., Carofilis W., O'Reilly G., **Gabbianelli G.**, Monteiro R., Optimal seismic retrofitting of

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- existing buildings considering environmental impact, Engineering Structures 250, 113391.  
<https://doi.org/10.1016/j.engstruct.2021.113391>
- **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>
  - 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>
  - **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>
  - 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>
  - **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>
  - **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.
  - 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>
  - 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>
  - **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.
  - 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>
  - 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>
  - 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, 11, Article number 04015037.  
[https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0001278](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001278)
  - 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)
  - 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>
  - 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>
  - 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>
- Conferenze
- **Gabbianelli G.**, Simoncelli M. (2022) Modellazione di un dispositivo dissipativo per scaffalature metalliche – Dissipative device modelling for steel storage pallet racks, Costruzioni Metalliche, XXVIII Congresso dei Tecnici dell'Acciaio - C.T.A., September 29th – October 1st 2022, Francavilla al Mare, Italy.
  - Calò M., Mucedero G., Nicoletti V., **Gabbianelli G.** (2022) Wooden infills influence on the seismic performance of steel structures, 5th International Workshop on the Seismic Performance of Non-Structural Elements (SPONSE), December 8th-9th 2022, Palo Alto, California, USA.
  - **Gabbianelli G.**, Perrone D., Brunesi E., Monteiro R. (2022) Seismic vulnerability assessment of existing RC building considering infill and material uncertainties, 6th Workshop of New Boundaries of

Structural Concrete, NBSC 2022, September 8th - 9th 2022, Lecce, Italy.

- Gandelli E., **Gabbianelli G.**, Milanesi R., Dubini P., Nascimbene R., Pavese A. (2022) Refined numerical modelling of steel storage tanks implementing sliding isolators, 2nd Eurasian conference on OpenSees, OpenSees Days, July 7th-8th 2022, Turin, Italy. [https://dx.doi.org/10.1007/978-3-031-30125-4\\_15](https://dx.doi.org/10.1007/978-3-031-30125-4_15)
- **Gabbianelli G.**, Perrone D., Nascimbene R., Paolacci F. (2022) Seismic vulnerability assessment and fragility functions derivations for steel storage legged tanks, Proc. of the ASME 2022, Pressure Vessels & Piping Conference, PVP2022, July 17th - 22nd 2022, Las Vegas, Nevada, USA.
- **Gabbianelli G.**, Perrone D., Brunesi E., Monteiro R. (2022) Seismic fragility assessment of steel industrial storage tanks, Proc. of the ASME 2022, Pressure Vessels & Piping Conference, PVP2022, July 17th - 22nd 2022, Las Vegas, Nevada, USA.
- **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.
- **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>
- 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>
- 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.
- 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.
- **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).
- **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.
- 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.

#### Progetti

- **Under review:** NEW-BUILT "Next generation of safe and sustainable building typologies" – PRIN 2022 PNRR; funded by MUR, project budget: €299.928,00.  
Role: **Principal Investigator**
- MITPLANT "Mitigazione della vulnerabilità sismica Per impianti industriali A rischio rilevante"; funded by INAIL, project budget: €215.650,00.  
Role: **Unit leader**
- DESRACK "Development and validation of Economic and Sustainable Retrofitting techniques for seismic risk mitigation of steel storage pallet racks" – PRIN 2022; funded by MUR, project budget: €236.984,00.  
Role: **Unit leader**
- Italian Department of Civil Protection (DPC) Project 12 "Web-GIS platform for seismic hazard and damage risk scenarios in industrial chemical plants"  
Role: Research collaborator
- Geo-INQUIRE "Geosphere Infrastructures for questions into integrated research" – Horizon-infra-2021-serv-01  
Role: Research collaborator
- ReLUIS WP4.3 Project "Experimental tests on structural and special components – Prestressed concrete systems"  
Role: Research collaborator
- ReLUIS WP4.2 Project "Experimental tests on structural and special components – Support devices"  
Role: Research collaborator
- ReLUIS WP5 Project "Rapid and integrated retrofit interventions with a low impact"

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- Role: Research collaborator
- ReLUIS WP17 Project "Contributions to standard for non-structural elements"  
Role: Research collaborator
  - Dipartimenti di Eccellenza (Departments of Excellence) Project "Revision of Seismic Action and Design"  
Role: Research collaborator
  - Italian Department of Civil Protection (DPC) Project 12 "Web-GIS platform for seismic hazard and damage risk scenarios in industrial chemical plants"  
Role: Research collaborator
  - Italian Department of Civil Protection (DPC) Project 17 "Activities for assessment and classification of non-structural elements in airport infrastructures"  
Role: Research collaborator
  - NAM project "Study of the vulnerability of masonry buildings in Groningen"  
Role: Research collaborator
  - Hilti project "Study of the vulnerability of non-structural elements through experimental and numerical analyses"  
Role: Research collaborator
  - Italian Department of Civil Protection (DPC) Project 13 "Development of a post-seismic survey form and local vulnerability of airport structures"  
Role: Research collaborator
  - 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

- Premi e riconoscimenti
- Member of the scientific committee of the 5th International Workshop on the Seismic Performance of Non-Structural Elements (SPONSE), December 5th-7th December 2022, Palo Alto, California (USA)
  - Member of ACI Italy Chapter
  - Invited speaker at the Polytechnic University of Marche, Ancona, June 24th 2022.  
Title of the seminar: "Numerical analysis and seismic vulnerability of structures".
  - Invited speaker at the Seminar "Ciclo di seminari nell'ambito del corso di Progetto di Costruzioni in Zona Sismica", University of Salento, Lecce, May 24 th-25th and June 1st 2022.  
Title of the seminar: "Scaffalature metalliche: progetto, analisi e sviluppi futuri".
  - Member of CTA (Collegio dei Tecnici dell'Acciaio).
  - 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".
  - Member of CTE (Collegio dei Tecnici della Industrializzazione Edilizia).
  - Member of AICAP (Associazione Italiana Calcestruzzo Armato e Precompresso).
  - Member of fib (Fédération internationale du béton).
  - Member of fib (Fédération internationale du béton) Italy Young Member Group.
  - 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".
  - Invited speaker at the Seminar "Valutazione e Progetto di scaffalature in zona sismica", EUCENTRE, Pavia, October 3rd 2019.  
Title of the presentation: "Inquadramento normativo".
  - Member of the International Association for the Seismic Performance Of Non-Structural Elements - SPONSE.
  - 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".
  - 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".

- Seminari e corsi professionali**
- Lecturer for the professional course "SeismoTANK – Tool for the seismic evalution of tanks", September 21st 2021, Mosayk s.r.l, Pavia, Italy.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.

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