

## CURRICULUM VITAE ET STUDIORUM



**Massimiliano Ferraioli** is Professor of Structural Engineering at the University of Campania “Luigi Vanvitelli” Department of Engineering, Aversa (CE), Italy.  
He received his Laurea (*magna cum laude*) in Civil (Structural) Engineering and a Ph.D. in “Seismic design of buildings: analysis and strengthening of structures” at the University of Salerno.

E-mail: [massimiliano.ferraioli@unicampania.it](mailto:massimiliano.ferraioli@unicampania.it)  
[www.ingegneria.unicampania.it](http://www.ingegneria.unicampania.it)

### Education

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| 1995-1997 | <b>Ph.D.</b> in “Seismic design of buildings: analysis and strengthening of structures” at the University of Salerno.<br><br>Thesis: “Identification, modelling and seismic analysis of base isolated structures with high damping rubber bearings” |
| 1988-1994 | <b>Laurea</b> (grade 110/110 <i>cum laude</i> ) in Civil (Structural) Engineering, University of Salerno.<br>Thesis Title: “Unified formulation of seismic response of multiply connected primary-secondary systems”                                |
| 1982-1987 | High School Diploma (grade 60/60), Scientific Lyceum Leonardo Da Vinci, Salerno.  |

### University positions

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| 2018-      | Professor of Structural Engineering<br>University of Campania “Luigi Vanvitelli”, IT.   |
| 2001-2018  | Assistant Professor in Earthquake Engineering<br>University of Campania “Luigi Vanvitelli” (Second University of Naples), IT. |
| 1994- 1998 | Research Assistant, University of Salerno, IT.  |

### Scholarships & fellowships

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| 2003 | On line Course “MEQUAM: Metrology for quality and environment”, Polytechnic of Milano.  |
| 2000 | 1-year grant for the research project “Assessment of safety at serviceability limit state and ultimate limit state of reinforced concrete buildings designed with Eurocode 8”, Second University of Naples. |
| 1999 | 1-year grant for the research “Seismic protection of constructions: monitoring and retrofit of buildings”, Second University of Naples.   |
| 1998 | 1-year grant “Giuseppe e Leonilde Bovio”: for the research entitled “Dynamic and seismic response of base isolated structures”, Second University of Naples.  |
| 1997 | 1-year grant at University of Rome “Tor Vergata”, following national competition of National Research Council CNR, Italy.   |

## Experiences in research projects

- 2023-2024 PRIN National Project: "PC-RACKS Progressive Collapse of steel pallet RACKS" Coordinator prof. E. Nastri. Local Unit of the University of Campania "Luigi Vanvitelli" Resp. prof. M. Ferraioli.
- 2019-2023 RELUIS National Project, DPC-ReLUIS National Project. WP5: Low-impact and integrated interventions. Coordinators: A. Prota & F. Da Porto. WP12: Guidelines for steel and composite steel-concrete civil and industrial constructions. R. Landolfo & R. Zandonini.
- 2010-2018 RELUIS National Project, Line 5 "Steel and composite steel-concrete structures". Task 2 "Behaviour factors for steel frame buildings", Coordinators: R. Landolfo & R. Zandonini.
- 2015-2020 National Project PON 2015-2020, ARIA - Active Responsive Intelligent Aerodynamics" ARS01\_00882.
- 2007-2013 National Project PON 2007-2013, Lab RENEW\_MEL "Laboratorio pubblico privato per la ricerca e lo sviluppo di sistemi e tecnologie innovative per le energie rinnovabili" issued by European Union.
- 2007-2013 National Project PON 2007-2013, CERVIA "Metodi di Certificazione e Verifica Innovativi ed Avanzati" issued by European Union.
- 2007-2013 National Project POR Campania FESR 2007/2013, DEWO "Design Environment for WorkPlace Optimization".
- 2007-2013 National Project PON 2007-2013, ASIA "Architetture strutturali e processi innovativi dell'ala".
- 2003-2006 Second University of Naples, Workpackage WP1 "Overview of existing techniques" in the Project "Earthquake Protection of Historical Buildings by Reversible Mixed Technologies - PROHITECH" issued by European Union within the Sixth Framework FP6, Coordinator prof. F.M. Mazzolani.
- 2005-2007 Second University of Naples, PRIN National Project "Innovative metal materials for seismic retrofit of masonry structures", Coordinator Prof. F.M. Mazzolani. Local Unit of the Second University of Naples, "Protection of historical masonry structures by reversible mixed techniques", Resp. prof. A Mandara.
- 2005-2007 Second University of Naples, RELUIS National Project, Line 5 "Development of innovative approaches for design of steel and composite steel-concrete structures", Coordinators prof. F.M. Mazzolani and prof. R. Zandonini. Local Unit of the Second University of Naples, "Design criteria of framed steel structures and methods of non linear analysis", Resp. prof. A Mandara.
- 2002-2003 Second University of Naples, MURST National Project "Innovative steel structures for seismic protection of buildings", Coordinator Prof.F.M. Mazzolani.
- 2000 Second University of Naples, CIPE-MURST National Project "Protection from seismic risk: Vulnerability, analysis and rehabilitation of physical and build environment through innovative techniques", Coordinator prof. P. Malangone.
- 1999-2000 Second University of Naples, MURST National Project "Seismic safety of RC structures designed with Eurocode 8", Coordinator prof. A. Castellani. Local Unit of the Second University of Naples, "Analytical measure of safety of regular frame dimensioned with the capacity design of Eurocode 8", Resp. prof. P. Malangone.

1997	Second University of Naples, CNR SP3 National Project “Material properties and technical solutions to mitigate the effects of earthquakes and natural disasters”, Coordinator Prof. A. Di Tommaso.
1995-1996	University of Salerno, MURST National Project “Modelling, Testing and identification in structural dynamics”, Coordinator prof. C. Davini. Local Unit of the Second University of Naples, “Analytical measure of safety of regular frame dimensioned with the capacity design of Eurocode 8”, Resp. prof. P. Malangone.

## Scientific reviewer

Scientific Reviewer for the following International Journals:

- Advances in Civil Engineering. ISSN: 1687-8086.
- Advances in Structural Engineering, Sage. ISSN: 1369-4332.
- Advances in Materials Science and Engineering. Hindawi. ISSN: 16878442.
- Ain Shams Engineering Journal, Elsevier. ISSN: ISSN: 2090-4479.
- Applied Sciences. MDPI. ISSN: 2076-3417.
- Buildings. MDPI. ISSN: 2471-3112.
- Bulletin of Earthquake Engineering, Springer. ISSN: 1573-1456.
- Case Studies in Construction Materials. ISSN: 2214-5095.
- Civil Engineering Infrastructures Journal. ISSN: 2322-2093.
- Cogent Engineering. Taylor & Francis. ISSN: 2331-1916.
- Composite Structures. ISSN: 02638223.
- Cultural Heritage and Science. ISSN: 2757-9050.
- Earthquakes and Structures. ISSN: 2092-7614.
- Earthquake Engineering and Engineering Vibration. ISSN: 1671-3664.
- Engineering Failure Analysis. Elsevier. ISSN: 1350-6307.
- Engineering Structures. Elsevier. ISSN: 0141-0296.
- Frontiers in Built Environment. Frontiers. ISSN: 2297-3362.
- Frontiers of Structural and Civil Engineering. Springer. ISSN: 2095-2430.
- Heritage Science. Springer. ISSN: 2050-7445.
- Ingegneria Sismica - International Journal of Earthquake Engineering. ISSN 0393-1420.
- International Journal of Steel Structures, Springer Netherlands. ISSN: 2093-6311.
- International Jornal of Civil Engineering, Springer Netherlands. ISSN: ISSN: 1735-0522.
- Journal of Asian Architecture and Building Engineering. Taylor & Francis. ISSN: 13467581.
- Journal on Computing and Cultural Heritage. ISSN: 1556-4673.
- Journal of Constructional Steel Research, Elsevier. ISSN: 0143-974X.
- Mathematical Methods in the Applied Sciences. ISSN: 0170-4214.
- Mechanics of Advanced Materials and Structures. Taylor & Francis. ISSN: 1521-0596.
- Shock and vibration. Hindawi. ISSN: 1070-9622.
- Soil Dynamics and Earthquake Engineering. Elsevier. ISSN: 0267-7261.
- Steel and Composite Structures, an International Journal. ISSN: 1598-6233.
- Structural Engineering International (IABSE). ISSN: 1016-8664.
- Steel Construction. ISSN: 1867-0520.
- Structural Engineering and Mechanics. Techno-Press. ISSN: 1225-4568.
- Structures, Elsevier. ISSN: 2352-0124.
- Sustainability. MDPI. ISSN 2071-1050.
- The Open Construction & Building Technology Journal. ISSN: 1874-8368.

## Editorial board membership

Member of the Editorial Board of the following International Journals:

- Advances in Civil Engineering, Hindawi Publishing. ISSN Print: 1687-8086. ISSN Online:1687-8094.
- Civil Engineering Journal (CEJ). ISSN Print: 2676-6957. ISSN Online: 2476-3055.
- CivilEng - MDPI Open Access Journals. ISSN: 2673-4109.
- Current Trends in Civil & Structural Engineering (CTCSE), Iris Publisher. ISSN: 2643-6876.
- Earth Science, Science Publishing Group, ISSN Print: 2328-5974. ISSN Online: 2328-5982.
- Engineering Technology Open Access Journal (ETOJA), Juniper Publishing. ISSN: 2641-8185.
- International Journal of Civil Engineering and Technology (IJCIET), ISSN: 0976-6308.
- Mathematical Problems in Engineering, Hindawi Publishing. ISSN Print: 1024-123X. ISSN Online: 1563-5147.
- Mapta Journal of Architecture, Urbanism and Civil Engineering (MJAUCE). ISSN: 2631-3243.
- Open Journal of Civil Engineering (OJCE), Scientific Research Publishing. ISSN Print: 2164-3164. ISSN Online: 2164-3172.
- The Open Construction & Building Technology Journal, Bentham Open. ISSN: 1874-8368.
- The Open Civil Engineering Journal, Bentham Open. ISSN: 1874-1495.

## Research Topics

### **Analytical Modeling and Design**

- Modal methods in the dynamics of multiply coupled primary-secondary systems.
- Modal analysis of non-linear and non-classically damped systems.
- Effects of irregularity on the inelastic torsion response of buildings.
- Seismic isolation and passive energy dissipation for civil buildings
- Earthquake resistant design of R.C. buildings.
- Earthquake resistant design of steel buildings
- Modeling of the inelastic behavior of R.C. structures.
- Non-linear analysis and seismic vulnerability assessment of R.C. buildings.
- Strengthening using externally bonded Fiber Reinforced Polymers.
- Performance-based retrofit strategies for existing reinforced concrete buildings.
- Performance-based retrofit of R.C. buildings with dissipative steel braces.
- Non-linear analysis and seismic vulnerability assessment of masonry buildings.
- Non-linear analysis and seismic vulnerability assessment of steel structures.
- Seismic assessment of masonry bell towers.
- Seismic performance assessment of buckling restrained braced frame structures.
- Modelling and analysis of old iron railway bridges.
- Non-linear static procedures for the evaluation of the seismic response of structures.
- Progressive collapse analysis of multistory frame buildings.
- Seismic retrofit using aluminum shear panels.

### **Experimental and case studies**

- Dynamic testing of three ancient iron railway bridges in Italy.
- Ambient vibration tests of an asymmetric-plan hospital building in Avezzano, IT.
- Ambient vibration tests of an asymmetric-plan school building in Caserta, IT.
- Ambient vibration test on a masonry bell tower in Aversa, IT.

- Ambient vibration test on a masonry bell tower in Capua, IT.
- Ambient vibration test on a masonry bell tower in Santa Maria a Vico, IT.
- Dynamic testing of a masonry bell tower in Torre Orsaia, IT.
- Base isolation seismic retrofit of a hospital building in Italy.
- Seismic retrofit of a school building using metallic yielding dampers in Vibo Valentia, IT.
- Seismic retrofit of a residential building using buckling restrained braces in Pisa, IT.

## Teaching

2004-2023	Full responsibility of the course “Seismic Design of Structures”, Master Degree, Second University of Naples.
2008-2010	Full responsibility of the course “Rehabilitation of Structures”, Master Degree, Second University of Naples.
2006-2007	Full responsibility of the course “Seismic Design of Structures / Theory and Design of Steel Constructions”, Master Degree, Second University of Naples.
2002-2007	Full responsibility of the course “Fundamentals of Seismic Design”, Bachelor Degree, Second University of Naples.
2001-2004	Full responsibility of the course “Seismic Design of Structures / Structural Rehabilitation”, Master Degree, Second University of Naples.
2003-2004	Full responsibility of the course “Dynamics of Structures”, Master Degree, Second University of Naples.
2002-2004	Full responsibility of the course “Design of Structures / Automatic Calculation of Structures”, Master Degree, Second University of Naples.
2004	Ph.D course “Non-linear static procedures for the assessment of seismic response of r.c. structures”, Second University of Naples.
2002	Ph.D course “Seismic design of structures: an introduction to Eurocode 8”, Second University of Naples.

## Student supervision

1994-2023	Primary Supervisor or Co-supervisor of more than 70 Master and Bachelor theses discussed at the University of Salerno and at the Second University of Naples.
2000-2007	Supervisor of 5 Ph.D. students in “Strengthening and retrofit of structures”, Second University of Naples.

## University Services and Administrative Roles

Active developer of the Structural Laboratory: development of testing set-up for quasi-static monotonic or cyclic tests on structural systems; implementation of on-site forced and ambient vibration tests.

Member of the Committee of the Department of Civil Engineering (2005-2015), Second University of Naples.

Secretary of the Studies Committee (2006-2007) of Civil and Environmental Engineering, Second University of Naples.

## Consulting activities

### **Chartered Professional Engineer (Italy) since 1995.**

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| 2015-2018 | Consultant expert in seismic vulnerability assessment and retrofit of existing highway bridges in Campania, Province of Caserta, IT. |
| 2010      | Consultant expert in seismic design retrofit using base isolation of the hospital buildings in Avellino, IT.                         |
| 2008      | Consultant expert in seismic vulnerability assessment of the hospital buildings in Massa and Carrara, IT.                            |
| 2008      | Consultant expert in seismic vulnerability assessment of the hospital buildings in Avezzano, IT.                                     |
| 2001-2007 | Consultant expert, on behalf of the Campania Region, in control of submitted structural calculations.                                |

Consultant and expert, on behalf of the University of Campania “Luigi Vanvitelli” (Second University of Naples), in Research and Development projects related to structural/seismic engineering.

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| 2013      | Experimental and analytical study on the masonry bell tower in Torre Orsaia, IT.   |
| 2001-2004 | Consulting study about “Modeling, characterization and dynamic testing on old iron railway bridges” commissioned by the Italian Railway Society. |
| 2009      | Seismic vulnerability assessment of the school building “Tiberio” in Arzano, IT.   |

## **List of the most recent and important publications**

Author or co-author of nearly 120 papers and articles, including book chapters, scientific journals, international and national conferences. The most recent and important publications are listed here:

### **Scientific Journals:**

- 1) Ferraioli M, Laurena B, Lavino A, Frattolillo C, De Matteis G. (2023). Seismic retrofit of a steel reinforced concrete hospital building using continuous energy dissipative steel columns, STEEL AND COMPOSITE STRUCTURES. 47(4), p. 467-488, ISSN: 12299367, DOI: 10.12989/scs.2023.47.4.467.
- 2) Ferraioli, M., Lavino, A., De Matteis, G. (2023). A design method for seismic retrofit of reinforced concrete frame buildings using aluminum shear panels, ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING, 23(2), 106. ISSN: 16449665. doi: 10.1007/s43452-023-00639-1
- 3) Ferraioli, M., Concilio, A., Molitierno, C. (2022). Seismic performance of a reinforced concrete building retrofitted with self-centering shape memory alloy braces, EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION, 21(3), p. 785–809. ISSN: 16713664. doi: 10.1007/s11803-022-2113-4.
- 4) Ferraioli, M., Lavino, A., Mandara, A. (2022). Progressive Collapse Assessment and Retrofit of a Multistory Steel Braced Office Building. INTERNATIONAL JOURNAL OF STEEL STRUCTURES, ISSN: 15982351. doi: 10.1007/s13296-022-00626-x.

- 5) Ferraioli, M. (2021). Progressive Collapse Performance of Steel Beam-to-Column Connections: Critical Review of Experimental Results. *Open Construction and Building Technology Journal*, 15(1), p. 152–163. ISSN: 18748368. doi: 10.2174/1874836802115010152.
- 6) Ferraioli, M., Lavino, A., Moliterno, C., Di Lauro, G. (2021). Seismic retrofit of an existing reinforced concrete building with buckling-restrained braces. *OPEN CIVIL ENGINEERING JOURNAL*. 15(1), p. 203–225. ISSN: 18741495. doi:10.2174/1874149502115010203.
- 7) Ferraioli, M., Abruzzes D. (2021). Seismic Assessment of Four Historical Masonry Towers in Southern Italy. *Cultural Heritage and Scienc.* 2(2), p. 50-60. ISSN 2757-9050.
- 8) Bencivenga P, Chsari C, Dell'Aversano C, Pasquino V, Ferraioli M, Vasaturo A, De Matteis G. (2021). Dynamic monitoring of an existing reinforced concrete building in Naples port area. *OPEN CIVIL ENGINEERING JOURNAL*. 15(1), p. 226–235. ISSN: 18741495. doi: 10.2174/1874149502115010226.
- 9) Ferraioli M. (2021). Behaviour Factor of Ductile Code-Designed Reinforced Concrete Frames. *ADVANCES IN CIVIL ENGINEERING*, 2021, 6666687. ISSN: 16878086. doi: 10.1155/2021/6666687.
- 10) Ferraioli M, Lavino A. (2020). Irregularity effects of masonry infills on nonlinear seismic behaviour of RC buildings. *MATHEMATICAL PROBLEMS IN ENGINEERING*, Volume 2020, Article ID 4086320.
- 11) Ferraioli M, Lavino A, Abruzzese D, Avossa A.M. (2020). Seismic Assessment, Repair and Strengthening of a Medieval Masonry Tower in Southern Italy. *INTERNATIONAL JOURNAL OF CIVIL ENGINEERING*, 18(9), p. 967–994, ISSN: 2383-3874, doi: 10.1007/s40999-020-00515-6.
- 12) Ferraioli M, Lavino A, Mandara A. (2020). Seismic retrofit design method of RC buildings using metallic yielding dampers. *INGEGNERIA SISMICA-INTERNATIONAL JOURNAL OF EARTHQUAKE ENGINEERING*, 37(1), p. 19-32, ISSN: 0393-1420.
- 13) Ferraioli M. (2019). A modal pushdown procedure for progressive collapse analysis of steel frame structures. *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*, 156, p. 227-241, ISSN.0143974X.
- 14) Ferraioli M. (2019). Dynamic Increase Factor for Nonlinear Static Analysis of RC Frame Buildings Against Progressive Collapse. *INTERNATIONAL JOURNAL OF CIVIL ENGINEERING*, 17(3), p. 281-303, ISSN: 1735-0522.
- 15) Ferraioli M. (2019). Evaluation of dynamic increase factor in progressive collapse analysis of steel frame structures considering catenary action. *STEEL AND COMPOSITE STRUCTURES*, 30(3), p. 253-269, ISSN: 1229-9367.
- 16) Ferraioli M, Lavino A. (2018). A displacement-based design method for seismic retrofit of RC buildings using dissipative braces. *MATHEMATICAL PROBLEMS IN ENGINEERING*, 5364564, ISSN: 15635147.
- 17) Ferraioli M, Lavino A, Mandara A. (2018). Effectiveness of multi-mode pushover analysis procedure for the estimation of seismic demands of steel moment frames. *INGEGNERIA SISMICA – INTERNATIONAL JOURNAL OF EARTHQUAKE ENGINEERING*, vol. 35(2), p. 78-90, ISSN: 0393-1420.
- 18) Ferraioli M, Lavino A, Mandara A. (2018). Assessment of dynamic increase factors for progressive collapse analysis of steel frames subjected to column failure. *INGEGNERIA SISMICA – INTERNATIONAL JOURNAL OF EARTHQUAKE ENGINEERING*, vol. 35(2), p. 91-101, ISSN: 0393-1420.
- 19) Ferraioli M, Miccoli L, Abruzzese D. (2018). Dynamic characterisation of a historic bell-tower using a sensitivity-based technique for model tuning, *JOURNAL OF CIVIL STRUCTURAL HEALTH MONITORING*, ISSN: 2190-5452, doi:10.1007/s13349-018-0272-9.
- 20) Ferraioli M. (2017). Multi-mode pushover procedure for deformation demand estimates of steel moment-resisting frames. *INTERNATIONAL JOURNAL OF STEEL STRUCTURES*, vol. 17, Issue 2, p. 653-676, ISSN: 15982351, doi: 10.1007/s13296-017-6022-8.

- 21) Ferraioli M, Miccoli L, Abruzzese D, Mandara A. (2017). Dynamic characterisation and seismic assessment of medieval masonry towers. *NATURAL HAZARDS*, p.1-27, ISSN: 0921-030X, doi: 10.1007/s11069-016-2519-2.
- 22) Ferraioli M, Mandara A. (2017). Base Isolation for Seismic Retrofitting of a Multiple Building Structure: Design, Construction, and Assessment. *MATHEMATICAL PROBLEMS IN ENGINEERING*, vol. 2017, p. 1-24, ISSN: 1024-123X, doi: 10.1155/2017/4645834.
- 23) Ferraioli M, Mandara A. (2016). Base Isolation for Seismic Retrofitting of a Multiple Building Structure: Evaluation of Equivalent Linearization Method. *MATHEMATICAL PROBLEMS IN ENGINEERING*, vol. 2016, p. 1-17, ISSN: 1024-123X, doi: 10.1155/2016/8934196.
- 24) Ferraioli M. (2016). Dynamic increase factor for pushdown analysis of seismically designed steel moment-resisting frames. *INTERNATIONAL JOURNAL O STEEL STRUCTURES*, vol. 16, p. 857-875, ISSN: 1598-2351, doi: 10.1007/s13296-015-0056-6.
- 25) Ferraioli M, Lavino A, Mandara A. (2016). An adaptive capacity spectrum method for estimating seismic response of steel moment-resisting frames. *INGEGNERIA SISMICA – INTERNATIONAL JOURNAL OF EARTHQUAKE ENGINEERING*, vol. 1.2, p. 47-61, ISSN: 0393-1420.
- 26) Ferraioli M. (2015). Case study of seismic performance assessment of irregular RC buildings: hospital structure of Avezzano (L'Aquila, Italy). *EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION*, vol. 14, p. 141-156, ISSN: 1671-3664, doi: 10.1007/s11803-015-0012-7.
- 27) Ferraioli M, Lavino A, Mandara A, (2014). Behaviour factor of code-designed steel moment-resisting frames. *INTERNATIONAL JOURNAL OF STEEL STRUCTURES*, vol. 14(2), p. 243-254, ISSN: 1598-2351, doi: 10.1007/s13296-014-2005-1.
- 28) Ferraioli M, Avossa A.M, Lavino A., Mandara A. (2014). Accuracy of Advanced Methods for Nonlinear Static Analysis of Steel Moment-Resisting Frames. *THE OPEN CONSTRUCTION & BUILDING TECHNOLOGY JOURNAL*, vol. 8, p. 310-323, ISSN: 1874-8368, doi: 10.2174/1874836801408010310.
- 29) Ferraioli M, Avossa A.M, Mandara A. (2014). Assessment of Progressive Collapse Capacity of Earthquake-Resistant Steel Moment Frames Using Pushdown Analysis. *THE OPEN CONSTRUCTION & BUILDING TECHNOLOGY JOURNAL*, vol.8, p. 324-336, ISSN: 1874-8368, doi: 10.2174 /1874836801408010324.
- 30) Ferraioli M., Avossa A.M. (2012). Base Isolation Seismic Retrofit of a Hospital Building in Italy. *JOURNAL OF CIVIL ENGINEERING AND ARCHITECTURE*, vol. 6, p. 308-321, ISSN: 1934-7359.
- 31) Ferraioli M, Costanzo R, Avossa A.M, Formato F. (2010). Adeguamento sismico di un ospedale esistente mediante isolamento alla base. *PROGETTAZIONE SISMICA*, vol. III, p. 31-50, ISSN: 1973-7432.
- 32) Ferraioli M., Di Lauro G. (2009). Valutazione prestazionale sotto sisma di un edificio in muratura e c.a. rinforzato mediante frp. *INGEGNERIA SISMICA – INTERNATIONAL JOURNAL OF EARTHQUAKE ENGINEERING*, vol. 1, p. 7-22, ISSN: 0393-1420.
- 33) Ferraioli M, Malangone P. (2003). Modal methods in the dynamics of multiply coupled primary-secondary systems. *EUROPEAN EARTHQUAKE ENGINEERING*, vol. 2, p. 3-13, ISSN: 0394-5103.
- 34) Ferraioli M. (2002). Risposta sismica di edifici in c.a. progettati con gli Eurocodici: sicurezza al limite elastico e a collasso. *INGEGNERIA SISMICA*, vol. 3, p. 43-52, ISSN: 0393-1420.
- 35) Ferraioli M. (2003). Risposta sismica di edifici in c.a. progettati con gli Eurocodici: comportamento inelastico e danneggiamento strutturale. *INGEGNERIA SISMICA*, vol. 1, p. 54-70, ISSN: 0393-1420.
- 36) Ferraioli M. (1998). Definizione di un modello isteretico per isolatori sismici di tipo elastomerico. *INGEGNERIA SISMICA*, vol. 3, p. 82-90, ISSN: 0393-1420.
- 37) Malangone P, Ferraioli M. (1998). A Modal Procedure for Seismic Analysis of Non-linear Base-Isolated Multistorey Structures. *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*, vol. 27, p. 397-412, ISSN: 0098-8847.

- 38) Ferraioli M. (1996). Definizione di un modello bilineare equivalente per isolatori sismici ad elevato smorzamento. INGEGNERIA SISMICA, vol. 1, ISSN: 0393-1420.

**Conferences:**

- 39) Ferraioli M, Mandara A, Lavino A. (2022), A design procedure of steel dampers for seismic retrofit of reinforced concrete buildings. XXVIII Congresso C.T.A. Le Giornate Italiane della Costruzione In Acciaio, Francavilla al Mare (CH), 29 Settembre - 1 Ottobre 2022, ISBN: 9788894486612.
- 40) Ferraioli M, Mandara A. (2022), Progressive collapse behaviour of steel beam-to-column connections under a column removal scenario. XXVIII Congresso C.T.A. Le Giornate Italiane della Costruzione In Acciaio, Francavilla al Mare (CH), 29 Settembre - 1 Ottobre 2022, ISBN: 9788894486612.
- 41) Ferraioli M, Di Lauro G, Crisci P, Laezza G, Lavino A, Bellantoni C. (2022). Seismic retrofit of a RC building using metallic yielding dampers: a case study, XIX ANIDIS Conference, Seismic Engineering in Italy, Torino 11-15 Settembre 2022, Procedia Structural Integrity, 44, p. 982–989, ISSN: 2452-3216, DOI: 10.1016/j.prostr.2023.01.127.
- 42) Ferraioli M, Lavino A, Abruzzese D, Mandara A, Avossa AM. (2022). Seismic vulnerability analysis and structural rehabilitation of a historical masonry tower, XIX ANIDIS Conference, Seismic Engineering in Italy, Torino 11-15 Settembre 2022, Procedia Structural Integrity, 44, p. 1092–1099, ISSN: 2452-3216, DOI: 10.1016/j.prostr.2023.01.141.
- 43) Ferraioli M, Concilio A, Moliterno C. (2022). Seismic performance of a reinforced concrete building retrofitted with self-centering shape memory alloy braces, XIX ANIDIS Conference, Seismic Engineering in Italy, Torino 11-15 Settembre 2022. Procedia Structural Integrity, 44, p. 974–981, ISSN: 2452-3216, DOI: 10.1016/j.prostr.2023.01.126.
- 44) Ferraioli M, Lavino A, Capasso C, Mandara A. (2022). Seismic and Progressive Collapse Retrofit of a Steel Braced Frame Office Building. 10th International Conference on the Behaviour of Steel Structures in Seismic Areas, STESSA 2022, Timisoara, 25-27 Maggio 2022, Lecture Notes in Civil Engineering, 262 LNCE, p. 932–940, ISBN: 978-303103810-5, DOI: 10.1007/978-3-031-03811-2\_103.
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Prof. Massimiliano Ferraioli