ROSALBA FERRARI

CURRICULUM VITAE

PERSONAL DATA

Born in Bergamo, Italy
Italian Citizenship

Addresses – Office

University of Bergamo
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Google Scholar

CURRENT POSITION

2022, Dec — Associate Professor
Mechanics of Solids and Structures
University of Bergamo, Dept. of Engineering and Applied Sciences (Dalmine)

RESEARCH INTERESTS

- Structural Health Monitoring, identification and model updating
- Signal Processing
- Heterogeneous data fusion techniques
- Evolutive elastoplastic structural analysis
- Limit analysis of (large scale) structures
- Structural analysis through graphical-analytical methods
- Structural analysis and FEM modelling of historic constructions
- Static and dynamic FEM analyses
- Model Order Reduction methods for modal analysis of structures

DEGREES

2003, Jul 5 — High School Diploma, Technical School, Building Speciality, Bergamo, 100/100.

2006, Dec 21 — Degree in Building Engineering, First Level Degree, University of Bergamo, Faculty of Engineering, Dalmine. Laurea Thesis: *Sulla concezione strutturale ottocentesca del ponte in ferro di Paderno d'Adda secondo la teoria dell'ellisse d'elasticità (On nineteenth-century structural conception of the Paderno d'Adda iron bridge according to the theory of the ellipse of elasticity)*, Advisor: Prof. Egidio Rizzi, 100/100 e Lode.

2009, Sep 24	Degree in Building Engineering, Second Level Degree, University of Bergamo, Faculty of Engineering, Dalmine. Laurea Thesis: *Analisi strutturale degli elementi portanti del ponte di Paderno d'Adda (Structural analysis of the bearing elements of Paderno d'Adda bridge)*, Advisor: Prof. Egidio Rizzi, 100/100 e Lode.
2011, Mar 1	State Exam for the habilitation to exercise the Engineering Profession, University of Bergamo, II Session 2010.
2013, Apr 15	Doctoral Degree in Machatronics, Information Technology, New Technologies and Mathematical Methods, XXV Cycle (three years Doctoral Programme), University of Bergamo, Dalmine. Doctoral Thesis: *An Elastoplastic Finite Element Formulation for the Structural Analysis of Truss Frames with Application to a Historical Iron Arch Bridge*, Advisor: Prof. Egidio Rizzi, Co-advisor: Prof. Giuseppe Cocchetti.

RESEARCH EXPERIENCES

2009, Oct – Dec	Scientific responsible of the research contract: *Structural analysis of a historical and monumental iron bridge (Analisi strutturale di ponte ad arco in ferro di interesse storico e monumentale)*, funded by the University of Bergamo, Faculty of Engineering (Dalmine), Dept. of Design and Technologies.
2010, Jun – 2011, May	Appointed as Research Assistant ("Assegnista di Ricerca") at the Dept. of Design and Technologies, University of Bergamo, Faculty of Engineering (Dalmine). Research topic: *Structural analysis of the Paderno d'Adda iron bridge (Analisi strutturale del ponte in ferro di Paderno d'Adda)*. Advisor: Prof. Egidio Rizzi.
2012, Feb – 2013, Jan	Appointed as Research Assistant ("Assegnista di Ricerca") at the Dept. of Design and Technologies, University of Bergamo, Faculty of Engineering (Dalmine). Research topic: *Elastoplastic analysis of an iron bridge of historical and monumental interest (Analisi elastoplastica di ponte in ferro di interesse storico e monumentale)*. Advisor: Prof. Egidio Rizzi.
2014, Jun – 2015, May	Appointed as Research Assistant ("Assegnista di Ricerca") at the Dept. of Engineering (Dalmine), in collaboration with the Institute of Structural Engineering (IBK), ETH Zürich, ref. Prof. Eleni Chatzi. Research topic: *Comprehensive diagnostic Structural Health Monitoring campaign for local strategic bridges*. Research grant awarded within the project ITALYR (Italian TALented Young Researchers) 2014 – University of Bergamo. Advisor: Prof. Egidio Rizzi.
2015, Oct – 2017, Nov	Appointed as Research Assistant ("Assegnista di Ricerca") at the Dept. of Engineering (Dalmine), in collaboration with the Institute of Strucutral Engineering (IBK), ETH Zürich, ref. Prof. Eleni Chatzi. Research topic: *Heterogeneous sensor fusion for reducing uncertainty in structural assessment and model updating*. Advisor: Prof. Egidio Rizzi.
2017, Dec – 2020, Nov	Appointed as Research Assistant ("Ricercatore a Tempo Determinato RTD-A") at the University of Bergamo, Dept. of Engineering and Applied Sciences (Dalmine).
2021, Jan – 2022, Nov	Appointed as Research Assistant ("Ricercatore a Tempo Determinato RTD-B") at the University of Bergamo, Dept. of Engineering and Applied Sciences (Dalmine).
2020, Jan – *present*	Scientific referent for the industry research contract "Valutazione dello stato di conservazione del ponte in ferro di Paderno d'Adda (1889) – Fase esecutiva *(Assessment of the state of conservation of the Paderno d'Adda bridge (1889) – execution phase)*", funding partner Rete Ferroviaria Italiana S.p.A.

PARTICIPATION IN INTERNATIONAL AND NATIONAL RESEARCH PROJECTS

- Member of Research Unit in national research project PRIN 2017. Principal Investigator: Prof. Marco Savoia; Title of the project: "Life-long optimized structural assessment and proactive maintenance with pervasive sensing techniques"; Main ERC field: PE – Physical Sciences and Engineering; Resp. Research Unit University of Bergamo (Unit 2): Prof. Paolo Riva. Project admitted for financing (13 March 2019).

INTERNATIONAL RESEARCH EXPERIENCES

2012, Jun 8 – Dec 8	Visiting PhD at the **Dept. of Civil Engineering and Engineering Mechanics, Columbia University**, New York, USA, ref. Prof. Raimondo Betti and Prof. Andrew W. Smyth.
2015, Jan 11 – Feb 28 2016, Jan 23 – Mar 25	Research stay at the **Dept. of Civil, Environmental and Geomatic Engineering, Institute of Structural Engineering (IBK), ETH Zürich**, ref. Prof. Eleni Chatzi.
2018, Apr 25 – May 3	Research stay at the **Institute of Sound and Vibration Research, Faculty of Engineering and Physical Sciences, University of Southampton**, England, ref. Prof. Maryam Ghandchi Tehrani.
2018, Jun 25 – 29	Research stay at the **Dept. of Mechanical Engineering, ORT Braude College**, Karmiel, Israel, within the call Erasmus+ Higher Education Staff Mobility – Key Action 107 outgoing teaching mobility, Academic Year 2017/18.
2018, Nov 15 – 19	Visiting at the **Dept. of Structural Mechanics, Faculty of Civil Engineering, Technical University of Cluj-Napoca**, Romania, within the call Erasmus+ Higher Education Mobility – Key Action 1 outgoing teaching mobility, Academic Year 2018/19.
2023, Oct 16 – 18	Visiting at the **Riga Technical University (RTU)**, Latvia, within the 2023 Italian Language Week (event organised by the Embassy of Italy in Latvia, in collaboration with the Riga Technical University and the Art Academy of Latvia).

TEACHING EXPERIENCE & SEMINARS

AY 2008/2009 – AY 2017/2018	Teaching Assistant of the course "Mechanics of Materials and Structures" ("Scienza delle Costruzioni"), for students enrolled in the third year of the First Level Engineering Degree in Building Engineering, **University of Bergamo**.
Since AY 2008/2009	Teaching Assistant of Tutoring + Elearning "Mechanics of Materials and Structures" ("Scienza delle Costruzioni"), **University of Bergamo, School of Engineering (Dalmine)**.
Since AY 2013/2014	Teaching Assistant of the course "Complements of Mechanics of Materials and Structures" ("Complementi di Scienza delle Costruzioni"), for students enrolled in the first year of the Second Level Engineering Degree in Building Engineering, **University of Bergamo**.
AY 2011/2012	Teaching Assistant of the course "Architectural Design" ("Composizione Architettonica"), for students enrolled in the third year of the First Level Engineering Degree in Building Engineering, **University of Bergamo**.
2011, Feb 1	Lecturer on "Equilibrium conditions of a tensegrity structures" ("Determinazione dell'equilibrio nelle strutture tensegrali"), within the course "Architectural Design", ref. Prof. Attilio Pizzigoni, **University of Bergamo, Faculty of Engineering (Dalmine)**.
2016, Mar 3	Lecturer on "Heterogeneous sensor fusion for modal dynamic identification of a historic reinforced concrete bridge", **Dept. of Civil, Environmental and Geomatic Engineering, Institute of Structural Engineering (IBK), ETH Zürich**.

2018, May 1	Lecturer on "FEM model updating and Limit Analysis of structures: A coupled approach toward Structural Health Monitoring", **Institute of Sound and Vibration Research, Faculty of Engineering and Physical Sciences, University of Southampton**, England.
2018, Jun 26	Lecturer on "FEM model updating and Limit Analysis of structures: A coupled approach toward Structural Health Monitoring", **Department of Mechanical Engineering, ORT Braude College**, Karmiel, Israel.
2018, Jun 25 – 29	Lecturer of the course "Computational Structural Mechanics" (16 hours), **Department of Mechanical Engineering, ORT Braude College**, Karmiel, Israel, within the call Erasmus+ Higher Education Staff Mobility – Key Action 107 outgoing teaching mobility, Academic Year 2017/18.
2018, Nov 15 – 19	Lecturer on "Introduction to the Computational Mechanics of Solids and Structures" (8 hours of teaching), **Dept. of Structural Mechanics, Faculty of Civil Engineering, Technical University of Cluj-Napoca**, Romania, within the call Erasmus+ Higher Education Mobility – Key Action 1 outgoing teaching mobility, Academic Year 2018/19.
AY 2018/2019	Teacher of the course "Meccanica Computazionale dei Solidi e delle Strutture" ("Computational Mechanics of Solids and Structures"), for students in Building Engineering, **University of Bergamo**.
Since AY 2019/2020	Teacher of the course "Computational Mechanics of Solids and Structures", for students in Building Engineering and in Mechanical Engineering, **University of Bergamo**.
Since AY 2019/2020	Teacher of the doctoral course "Structural Health Monitoring, System Indentification and Model Updating", Doctoral School Engineering and Applied Sciences, **University of Bergamo**.
Since AY 2019/2020	Teacher of the course "Structural Monitoring", for students in Mechatronics and Smart Technology Engineering and in Buinding Engineering, **University of Bergamo**.
2023, Oct 17	Lecturer on "FEM Model Updating and Limit Analysis of structures: a coupled approach toward Structural Health Monitoring", **Riga Technical University (RTU)**, Latvia, within the 64th International Scientific Conference of Riga Technical University.

MISCELLANEA

- Since 2018, member of the Italian Society of Mechanics of Material and Structures (Società Italiana di Scienza delle Costruzioni (SISCo)).
- Since 2019, member EUROMECH, European Mechanics Society.
- Since 2019, member AIMETA, Associazione Italiana di Meccanica Teorica e Applicata, Gruppo Italiano di Meccanica Computazionale - GIMC.
- Since January 2021, **Assistant Editor for the international Journal *Meccanica***, Springer. https://www.springer.com/journal/11012
- Since July 2022, member of the Council of the Order of Engineers of the Province of Bergamo – *Consiglio dell'Ordine degli Ingegneri della Provincia di Bergamo*.
- Reviewer for the following international scientific journals:
  Bulletin of Earthquake Engineering, Electronics, Engineering Structures, Journal of Optimization Theory and Applications, Journal of Sound and Vibration, Measurements, Meccanica, Mechanical Systems and Signal Processing, Sensors.

INTRA–UNIBG ACTIVITIES

- Representative of the graduate students during the doctorate (three years Doctoral Programme, XXV Cycle).
- Commitee member (aggregate member) of the Selection Board of the State Exam for the habilitation to exercise the Engineering Profession, University of Bergamo, I and II Session 2016, I Session 2017.
- Promoter of a framework agreement ("Accordo Quadro") between University of Bergamo and National Railway Company "Rete Ferroviaria Italiana S.p.A.". Agreement approved on 10 July 2017 by the Academic Senate of the University of Bergamo.
- AY 2018/2019 – AY 2020/2021, responsible of the orienting activities for the Laurea Courses in Building Engineering.
- Member of the Board of Teachers of the Doctoral Programme in Engineering and Applied Sciences, University of Bergamo, 2019 – present.
- Referent for Frame Agreement between Univerity of Bergamo and Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia, Oct 2019 – present.
- Advisor of 15 Laurea Theses.
- Co-Advisor of the Doctoral Student Gabriele Ravizza, XXXIII Cycle (2017 – 2020) *Modal dynamic identification of civil structures via inverse analysis based on Heterogeneous Data Fusion and post-processing*, Doctoral School in Engineering and Applied Sciences, University of Bergamo, Department of Engineering and Applied Sciences, 17 May 2021, Advisor E. Rizzi.

PRESENTATIONS TO INTERNATIONAL CONFERENCES

- *2nd Italian Workshop on Shell and Spatial Structures (IWSS), Thematic Session "Monumental buildings and historical case studies: retrofitting and restoration", Turin, Italy, 26-28 June 2023*.
- *25th International Congress of Theoretical and Applied Mechanics (25th ICTAM), ICTAM Milano 2020+1*, Italy, 22-27 August 2021.
- *Third International Online Scientific and Practical Conference "Reconstruction and Restoration of Architectural Heritage" (RRAH 2021)*, Italy, 24-27 March 2021.
- *XXIV Conference of the Italian Association of Theoretical and Applied Mechanics* – AIMETA 2019, Rome, Italy, 15th-19th September 2019. Title of the presentation: *New computational Limit Analysis approaches for structural optimization problems*, Book of Abstracts, Category: MS06–Shell and spatial structures, Available online at http://www.aimeta2019.it, p. 213.
- *9th International Conference on Computational Methods* – ICCM2018, Rome, Italy, 6th-10th August 2018.
- *1st ECCOMAS Thematic Conference on International Conference on Uncertainty Quantification in Computational Sciences and Engineering* – UNCECOMP 2015, Crete Island, Greece, 25-27 May 2015.
- *5th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering* – COMPDYN 2015, Crete Island, Greece, 25-27 May 2015.
- *Structural Engineering World Congress* – SEWC 2011, Como, Italy, 4-6 April 2011.
- *7th International Conference on Structural Analysis of Historic Construction* – SAHC10, Shanghai, China, 6-8 October 2010.
- *34th International Symposium on Bridge and Structural Engineering, Venice, 2010* – IABSE2010, Venice, 22-24 September 2010
- *6th International Conference on Structural Analysis of Historic Construction* – SAHC08, Bath, UK, 2-4 July 2008.

PUBLICATIONS

Contributions are classified as follows: Articles in Refereed International Journals; Book Chapters; Articles in Proceedings of International Conferences; Theses; Technical Reports.

- **Articles in Refereed International Journals**

1. Cornaggia A., Ferrari R., Zola M., Rizzi E., Gentile C. (2022) *Signal processing methodology of response data from a historical arch bridge toward reliable modal identification*. **Infrastructures**, Special Issue "Structural Health Monitoring of Civil Infrastructures", Accepted: 16 May 2022, Published: 23 May 2022, 7(5, 74):1–28, doi:10.3390/infrastructures7050074, ISSN: 2412-3811, MDPI, Basel, Switzerland. https://www.mdpi.com/2412-3811/7/5/74

2. Lorenzi S., Cabrini M., Coppola L., Ferrari C., Ferrari R., Rizzi E., Pastore T., Spirolazzi G., Pisanelli G., Cioffi C., Lizzori E. (2021) *Studio dei fenomeni di corrosione in fessura di ponti chiodati di valenza storica – Pack rust corrosion evaluation on historical riveted steel bridges* (in Italian). **Metallurgia Italiana** – International Journal of the Italian Association for Metallurgy, 113(3):39–36, March 2021, ISSN: 0026-0843, Associazione Italiana di Metallurgia (AIM), Milano, Italy.

3. Ravizza G., Ferrari R., Rizzi E., Dertimanis V. (2021) *On the denoising of structural vibration response records from low-cost sensors: a critical comparison and assessment*. **Journal of Civil Structural Health Monitoring**, Accepted: 18 June 2021, Published: 09 July 2021, 11(5, November 2021):1201–1224, doi:10.1007/s13349-021-00502-y, ISSN: 2190-5452, Springer-Verlag GmbH Germany, part of Springer Nature.

4. Ferrari R., Baldi E. (2021) *Il viadotto di Paderno sull'Adda*. **Atti dell'Ateneo di Scienze, Lettere ed Arti di Bergamo**, Vol. 83, 14 pages. http://hdl.handle.net/10446/208628

5. Chiorean C.G., Passera D., Ferrari R., Rizzi E. (2020) *An implementation for 2nd-order M-N coupling and geometric stiffness adaptation in tapered beam-column elements*. **Engineering Structures**, Accepted: 17 August 2020, Available online: 16 September 2020, Volume 225, 15 December 2020, 111241 (20 pages), doi:10.1016/j.engstruct.2020.111241, ISSN: 0141-0296, Elsevier B.V., Amsterdam, NL.

6. Pastore T., Cabrini M., Lorenzi S., Rizzi E., Ferrari R., Coppola L., Spirolazzi G., Pisanelli G., Cioffi C., Lizzori E. (2020) *Corrosion phenomena of historic metallic infrastructures [Fenomeni di corrosione delle infrastrutture metalliche di rilevanza storica]*. **Metallurgia Italiana** – International Journal of the Italian Association for Metallurgy, 112(4):43–48, April 2020, ISSN: 0026-0843, Associazione Italiana di Metallurgia (AIM), Milano, Italy.

7. Froio D., Verzeroli L., Ferrari R., Rizzi E. (2020) *On the numerical modelization of moving load beam problems by a dedicated parallel computing FEM implementation*. **Archives of Computational Methods in Engineering**, Accepted 18 June 2020, Published online: 18 August 2020 (62 pages), https://doi.org/10.1007/s11831-020-09459-5, Springer.

8. Ferrari R., Cocchetti G., Rizzi E. (2020) *Evolutive and kinematic Limit Analysis algorithms for large-scale 3D truss-frame structures: comparison application to historic iron bridge arch*. **International Journal of Computational Methods**, First published online: 5 November 2019, 17(5, 1 May 2020):1940020 (18 pages), doi:10.1142/S0219876219400206, ISSN: 0219-8762, World Scientific Publishing Company, Singapore.

9. Ferrari R., Cocchetti G., Rizzi E. (2020) *Reference structural investigation on a 19th-century arch iron bridge loyal to design-stage conditions*. **International Journal of Architectural Heritage**, Accepted 23 Apr 2019, Published online: 05 Jul 2019, 14(10):1425–1455, https://doi.org/10.1080/15583058.2019.1613453, Taylor & Francis.

10. Ferrari R., Froio D., Rizzi E., Gentile C., Chatzi E.N. (2019) *Model updating of a historic concrete bridge by sensitivity- and global optimization-based Latin Hypercube Sampling*. **Engineering Structures**, 179(15 January 2019):139–160, doi:10.1016/j.engstruct.2018.08.004, ISSN: 0141-0296, Elsevier B.V., Amsterdam, NL.

11. Ferrari R., Cocchetti G., Rizzi E. (2018) *Effective iterative algorithm for the Limit Analysis of truss-frame structures by a kinematic approach*. **Computers and Structures**, Final version published online: 19 December 2017, 197(15 February 2018):28–41, doi:10.1016/j.compstruc.2017.11.018, ISSN: 0045-7949, Elsevier B.V., Amsterdam, NL.

12. Ferrari R., Cocchetti G., Rizzi E. (2018) *Computational elastoplastic Limit Analysis of the Paderno d'Adda bridge (Italy, 1889)*. **Archives of Civil and Mechanical Engineering**, 18(1):291–310, Final article available online: 30 August 2017, doi:10.1016/j.acme.2017.05.002, ISSN: 1644-9665, Politechnika Wrocławska, Published by Elsevier Sp. z o.o., Wroclaw, Poland.

13. Ravizza G., Ferrari R., Rizzi E., Chatzi E.N. (2018) *Effective Heterogeneous Data Fusion procedure via Kalman filtering*. **Smart Structures and Systems**, 22(5):631–641, doi:10.12989/sss.2018.22.5.631, ISSN: 1738-1584 (Print), 1738-1991 (Online), Techno-Press, Ltd., Yuseong, Daejeon 305-600 Korea.

14. Pioldi F., Ferrari R., Rizzi E. (2017) *Seismic FDD modal identification and monitoring of building properties from real strong-motion structural response signals*. **Structural Control and Health Monitoring**, First Online: 9 February 2017 (20 pages), doi:10.1002/stc.1982, Print ISSN: 1545-2255, Online ISSN: 1545-2263, John Wiley & Sons, Inc., Chichester, West Sussex, UK.

15. Pioldi F., Ferrari R., Rizzi E. (2017) *Earthquake structural modal estimates of multi-storey frames by a refined Frequency Domain Decomposition algorithm*. **Journal of Vibration and Control**, First published online: 8 October 2015 (27 pages), 23(13):2037–2063, doi:10.1177/1077546315608557, Print ISSN: 1077-5463, Online ISSN: 1741-2986, jvc.sagepub.com, SAGE Publications, London, UK.

16. Ferrari R., Pioldi F., Rizzi E., Gentile C., Chatzi E.N., Serantoni E., Wieser A. (2016) *Fusion of Wireless and Non-Contact Technologies for the Dynamic Testing of a Historic RC Bridge*. **Measurement Science and Technology**, Special Feature on "Dense Sensor Networks for Mesoscale SHM: Innovations in Sensing Technologies and Signal Processing", 27(12), 26 October 2016, Article number 124014 (15 pages), doi:10.1088/0957-0233/-27/12/124014, Online ISSN: 1361-6501, Print ISSN: 0957-0233, Institute of Physics, IOP Publishing Ltd., Bristol, UK.

17. Ferrari R., Cocchetti G., Rizzi E. (2016) *Limit Analysis of a historical iron arch bridge. Formulation and computational implementation*. **Computers and Structures**, Final version published online: 20 August 2016, 175(15 October 2016):184–196, doi:10.1016/j.compstruc.2016.05.007, ISSN: 0045-7949, Elsevier B.V., Amsterdam, NL.

18. Pioldi F., Ferrari R., Rizzi E. (2016) *Output-only modal dynamic identification of frames by a refined FDD algorithm at seismic input and high damping*. **Mechanical Systems and Signal Processing**, First available online: 5 September 2015, Final version published online: 10 November 2015, 68-69(February 2016):265–291, doi:10.1016/j.ymssp.2015.07.004, Online ISSN: 0888-3270, Elsevier B.V., Amsterdam, NL.

19. Ferrari R., Cocchetti G., Rizzi E. (2013) *Elastoplastic structural analysis of the Paderno d'Adda bridge (Italy, 1889) based on Limit Analysis*. **Wiadomości Konserwatorskie - Journal of Heritage Conservation**, Nr. 34/-2013, pp. 28–35, ISSN: 0860-2395, Stowarzyszenie Konserwatorów Zabytków - Association of Monument Conservators, Poland, https://suw.biblos.pk.edu.pl/downloadResource&mId=929436.

- **Book Chapters**

1. Cocchetti G., Liu R., Cornaggia A., Ferrari R., Rizzi E. (2023), *Elastic-plastic optimisation of a cable-rib satellite antenna*. Springer Book on **DIRECT METHODS for Limit States of Structures and Materials (DM2022)**, Eds. Giovanni Garcea and Dieter Weichert, contribution earlier presented at DM2022 Workshop, University of Calabria, Arcavacata di Rende, Italy, 28 June 2022, 27 pages, Springer Nature.

- **Articles in Proceedings of International Conferences**

1. Cornaggia A., Cocchetti G., Ferrari R., Abu-Salih S.,Rizzi E. (2023) *Computational elastoplastic structural analysis of carbon nanotubes*. Abstracts of the **NanoInnovation 2023 Conference**, Roma, Italy, September 18-22, 2023, Eds. (Organizing Committee) Rossi M., Asinari P., Bersani M., Crescenzi M., Morandi V., Paolino D., Pirri C.F., Porcari A., Tosi G., Università degli Studi di Roma "La Sapienza".

2. Ferrari R., Cocchetti G., Rizzi E. (2023) *Effective Limit Analysis Computational Approaches for the Structural Characterization of Nervi's Palazzetto dello Sport*. In Proc. of **2nd Italian Workshop on Shell and Spatial Structures – IWSS 2023**, Torino, Italy, June 26–28, 2023, Eds. Gabriele S., Bertetto A.M., Marmo F., Micheletti A., p. 827–836, Springer. https://doi.org/10.1007/978-3-031-44328-2_87

3. Cocchetti G., Cornaggia A., Ferrari R., Rizzi E. (2023) *Consistent Complementarity Problem Formulation for the Mechanical Modellisation of Spatial Cable–Rib Structures*. In Proc. of **2nd Italian Workshop on Shell and Spatial Structures – IWSS 2023**, Torino, Italy, June 26–28, 2023, Eds. Gabriele S., Bertetto A.M., Marmo F., Micheletti A., p. 672–682, Springer. https://doi.org/10.1007/978-3-031-44328-2_70

4. Cornaggia A., Garbowski T., Cocchetti G., Ferrari R., Rizzi E. (2023), *Optimised structural modelling for inverse analysis parameter identification relying on dynamic measurements*. In Proc. of **9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2023)**, Athens, Greece, June 12–14, 2023, Eds. Papadrakakis M., Fragiadakis M., ISBN (set) 978-618-5827-01-4, ISBN (vol. II) 978-618-5827-00-7, pp. 4234–4248, Institute of Structural Analysis and Antiseismic Research School of Civil Engineering National Technical University of Athens (NTUA), Greece. http://dx.doi.org/10.7712/120123.10715.20669

5. Garbowski T., Cocchetti G., Cornaggia A., Ferrari R., Rizzi E. (2023), *Inverse analysis investigation by Gaussian processes optimisation of a historical concrete bridge relying on dynamic modal measurements*. In Proc. of **9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2023)**, Athens, Greece, June 12–14, 2023, Eds. Papadrakakis M., Fragiadakis M., ISBN (set) 978-618-5827-01-4, ISBN (vol. II) 978-618-5827-00-7, pp. 4249–4264, Institute of Structural Analysis and Antiseismic Research School of Civil Engineering National Technical University of Athens (NTUA), Greece. http://dx.doi.org/10.7712/120123.10716.21212

6. Cornaggia A., Cocchetti G., Ferrari R., Rizzi E. (2022) *A novel Linear Complementarity Problem implementation for elastic-plastic structural optimisation of cable-rib satellite antennas*. In Proc. of **GIMC SIMAI YOUNG 2022 Workshop**, Eds. (Local organizing committee) Morganti S., Tamellini L., Zanotti P., Pavia, Italy, 29-30 September, 2022, MS11 - Computational Methods for Nonlinear Solid Mechanics, p. 111, Università di Pavia.

7. Ferrari R., Cocchetti G., Rizzi E. (2021) *Enriched computational Limit Analysis implementation for large-scale 3D truss-frame structures*. In Proc. of **25th International Congress of Theoretical and Applied Mechanics (25th ICTAM), ICTAM Milano 2020+1**, Italy, August 22-27, 2021, 2 pages, International Union of Theoretical and Applied Mechanics (IUTAM).

8. Ferrari R., Rizzi E., Brioschi M.S., Dertimanis V. (2021) *Design of an effective Structural Health Monitoring platform for the Paderno d'Adda bridge (1889)*. In Proc. of **Third International Online Scientific and Practical Conference "Reconstruction and Restoration of Architectural Heritage" (RRAH 2021)**, St. Petersburg, Russia, March 24-27, 2021, 6 pages, State University of Architecture and Civil Engineering (SPbGASU).

9. Ravizza G., Ferrari R., Rizzi E, Dertimanis V., Chatzi E.N. (2020) *An integrated monitoring strategy for current condition assessment of historic bridges*. In Proc. of **XI International Conference on Structural Dynamics (EURODYN 2020)**, Online Conference (postponed), November 23-25, 2020, Eds. M. Papadrakakis, M. Fragiadakis, C. Papadimitriou, Conference Proceeding ID: E20148, 12 pages.

10. Ravizza G., Ferrari R., Rizzi E, Dertimanis V., Chatzi E.N. (2019) *Denoising corrupted structural vibration response: critical comparison and assessment of related methods*. In Proc. of **7th Int. Conf. on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019)**, Hersonissos, Crete Island, Greece, June 24-26, 2019, Eds. M. Papadrakakis, M. Fragiadakis, Institute of Structural Analysis and Antiseismic Research, National Technical University of Athens (NTUA), Conference Proceeding ID: 19291, Category: RS02–ALGORITHMS FOR STRUCTURAL HEALTH MONITORING, 12 pages, https://2019.compdyn.org/proceedings/pdf/19291.pdf.

11. Ferrari R., Cocchetti G., Rizzi E. (2018) *New computational algorithms for the Limit Analysis of large-scale 3D truss-frame structures*. In Proc. of **9th Int. Conf. on Computational Methods (ICCM2018)**, Rome, Italy, 6th-10th August 2018, Eds. G.R. Liu, Patrizia Trovalusci, ScienTech Publisher LLC, USA, ISSN: 2374-3948 (online), Paper ID 3387, pp. 206–517, https://www.sci-en-tech.com/ICCM2018/PDFs/3387-11198-1-PB.pdf.

12. Ferrari R., Froio D., Chatzi E., Gentile C., Pioldi F., Rizzi E. (2015) *Experimental and numerical investigation for the structural characterization of a historic RC arch bridge*. In Proc. of **COMPDYN 2015, 5th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering**, Hersonissos, Crete Island, Greece, May 25-27, 2015, Eds. M. Papadrakakis, V. Papadopoulos, V. Plevris, Institute of Structural Analysis and Antiseismic Research, School of Civil Engineering, National Technical University of Athens (NTUA), ISBN: 978-960-99994-7-2, Vol. 1, pp. 2337–2353, doi:10.7712/120115.3542.1037.

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