PERSONAL INFORMATION

Maria Giovanna Masciotta

Sex Female | Nationality Italian

https://www.scopus.com/authid/detail.uri?authorId=53866842200

www.researchgate.net/profile/Maria_Masciotta

DOMAIN AND RESEARCH INTERESTS

Scientific Research in Structural Engineering

- Inspection & Diagnosis applied to historical masonry constructions
- Operational and experimental modal analyses
- Structural Health Monitoring and damage identification
- Maintenance and preventive conservation of cultural heritage
- Structural assessment and seismic vulnerability

PROFESSIONAL EXPERIENCE

01/08/2019 – Present

Fixed-Term Researcher (RTD a)

Department of Engineering and Geology, University "G. d'Annunzio" of Chieti-Pescara – Italy
S.C. 08/B3 S.S.D. ICAR/09
Research: Seismic retrofitting of built cultural heritage

16/09/2019 – Present

Research Associate

Mechanics of Materials and Structures Laboratory, Institute of Information Science and Technologies "A.Faedo" (ISTI-CNR), Pisa, Italy
Research: Numerical and experimental methods for modal analysis of masonry structures

05/10/2016 – 31/08/2019

Postdoctoral Researcher

ISISE, Department of Civil Engineering, University of Minho, Guimarães, Portugal
Project: HeritageCARE – Monitoring and preventive conservation of the historic and cultural heritage (Project co-funded by the European Regional Development Fund within the Interreg-SUDOE program – SOE1/P5/P0258) **1.686.282,82 €**

01/08/2015 – 31/07/2016

Postdoctoral Researcher

ISISE, Department of Civil Engineering, University of Minho, Guimarães, Portugal
Project: Getty Seismic Retrofitting Project (International project in collaboration with the Getty Conservation Institute - ID 100000000001975) **214.800 $**

21/09/2015 – 23/12-2015

Short Term Scientific Mission – COST Action TU1402

ISISE, Department of Civil Engineering, University of Minho, Guimarães, Portugal
Project: The Value of SHM for the Structural Behaviour of Masonry Structures under Varying Environmental Effects

EDUCATION

2012 – 2015

PhD in Civil Engineering (Cotutelle)

Level 8 EQF

School of Engineering, University of Minho, Guimarães – Portugal

PhD Thesis: Damage identification of structures based on spectral output signals
Supervisors: Prof. Dr. Paulo B. Lourenço, Prof. Dr. Luís F. Ramos
Date: 24 April 2015

2012 – 2015 PhD in Design and Engineering of the Soil and of the Built Environment (Cotutelle) Level 8 EQF

School of Advanced Studies "G. d'Annunzio" of Chieti-Pescara – Italy

PhD Thesis: Damage identification of structures based on spectral output signals
Supervisor: Prof. Dr. Marcello Vasta
Date: 24 April 2015

2005 – 2010 Master's Degree in Architecture (4/S) **Full marks with honours** Level 7 EQF

University "G. d'Annunzio" of Chieti-Pescara – Italy

Master's Thesis: Methodologies for seismic damage identification of non-conventional masonry structures: the case study of Saint Mary Church in Fossanova
Supervisor: Prof. Dr. Marcello Vasta
Date: 10 November 2010

TEACHING EXPERIENCE

Advanced Masters

Coordinator and lecturer of the course "Inspection and Diagnosis"
Advanced Master in Structural Analysis of Monuments and Historical Constructions (SAHC)
University of Minho, Guimarães, Portugal
- a.y. 2018-2019
- a.y. 2019-2020
- a.y. 2020-2021

Lecturer of "Modal Testing and Dynamic Identification"
Course of "Inspection and Diagnosis", Advanced Master in Structural Analysis of Monuments and Historical Constructions (SAHC), University of Minho, Guimarães, Portugal
- a.y. 2016-2017
- a.y. 2017-2018

Lecturer of "Inspection and Diagnosis applied to Historical Structures"
Course of "Inspection and Diagnosis", Advanced Master in Structural Analysis of Monuments and Historical Constructions (SAHC), University of Minho, Guimarães, Portugal
- a.y. 2017-2018

Lecturer of "Monitoring and Structural Assessment"
Course of "Inspection and Diagnosis", Advanced Master in Structural Analysis of Monuments and Historical Constructions (SAHC), University of Minho, Guimarães, Portugal
- a.y. 2017-2018

Master's Degree

Professor of "Structural Design of NZEB buildings"
Master's Degree in Building Engineering (LM24)
University "G. d'Annunzio" of Chieti-Pescara, Italy
- a.y. 2021-2022

Bachelor's Degree

Professor of "Elements of Structural Engineering"
Bachelor's Degree in Building Engineering (L23)
University "G. d'Annunzio" of Chieti-Pescara, Italy
- a.y. 2019-2020
- a.y. 2020-2021

Tutorships

Mechanics of Structures
Master's Degree in Architecture (4/S) and Bachelor's Degree in Building Engineering (L23)
University "G. d'Annunzio" of Chieti-Pescara, Italy
- a.y. 2010-2011
- a.y. 2011-2012
- a.y. 2014-2015

Inspection and Diagnosis, Modal Analysis and SHM
SAHC Master, University of Minho, Portugal
- a.y. 2017-2018
- a.y. 2018-2019
- a.y. 2019-2020
- a.y. 2020-2021

Theses Co-Supervision

A proposal of damage identification and quantification for unreinforced and reinforced masonry structures (defended on 02/03/2021)
- *PhD student*: Ersilia Giordano. Doctoral Program in Engineering Sciences – XXXIII cycle, Polytechnic University of Marche, Ancona, Italy
- *Supervisors*: Prof. Stefano Lenci, Prof. Francesco Clementi, Prof. José Adam, Dr. Maria Giovanna Masciotta

Bio-inspired algorithms for structural health monitoring of civil engineering systems (defended on 04/06/2021)
- *PhD student*: Alberto Barontini. Doctoral Program in Civil Engineering, University of Minho, Guimaraes, Portugal
- *Supervisors*: Prof. Luis Ramos, Prof. Paulo Amado-Mendes, Dr. Maria Giovanna Masciotta

An Innovative SHM Solution for Earthquake-Induced Damage Identification in Historic Masonry Structures (defended on 21/04/2020)
- *PhD student*: Alban Kita. Doctoral Program in Civil and Environmental Engineering – XXXII cycle, Universities of Florence and Perugia, Italy (Cotutelle with University of Minho, Portugal)
- *Supervisors*: Prof. Filippo Ubertini, Prof. Paulo B. Lourenço, Dr. Nicola Cavalagli, Dr. Maria Giovanna Masciotta

Time-dependent dynamic identification: a new approach for structural health monitoring through vibration measurements (ongoing)
- *PhD student*: Manuel Andrés Hormazábal Fuentes. Doctoral Program in Civil Engineering, University of Minho, Portugal
- *Supervisors*: Prof. Daniel V. Oliveira, Dr. Maria Giovanna Masciotta

Title to be decided (ongoing)
- *PhD student*: Giorgia Cianchino. Doctoral Program in Earth Systems and Built Environments – XXXV cycle, University "G. d'Annunzio" of Chieti-Pescara, Italy
- *Supervisors*: Prof. Giuseppe Brando, Dr. Maria Giovanna Masciotta

Vibration-based dynamic characterization and model updating of the Civic Tower of Ostra, Italy
- *MSc student*: Francesca Turchetti. Master's degree in Building and Architectural Engineering, Polytechnic University of Marche, Ancona, Italy.
- Supervisors: Prof. Stefano Lenci; Correlatori: Dr. Francesco Clementi, Dr. Maria Giovanna Masciotta

ADDITIONAL INFORMATION

Funded International Projects

Title: **OPHERA: OPening cultural HERitage to communities during the central-italy post-earthquAke long-term restoration process: digital technologies and new competencies for cultural professionals**
Period: 10/2019 – 06//2022
Funded by: CREATIVE EUROPE – Culture sub-programme 2014-2020
Role: WP appointed collaborator

Main International Collaborations

- University of Minho, Portugal
- University of Coimbra, Portugal
- University of Salamanca, Spain
- Polytechnic University of Madrid, Spain
- University of Nottingham, United Kingdom

Departmental and Institutional Responsibilities

- 2021 – present: Committee Member for the draw of the Commissioner candidates of the competition procedures of the Department of Engineering and Geology, University "G. d'Annunzio" of Chieti-Pescara, Italy.
- 2021 – present: Teachers Board Member for the Master's degree course in Building Engineering (LM24), University "G. d'Annunzio" of Chieti-Pescara, Italy.
- 2021 – present: Member of the Orientation & Placement Working Group (L23 – LM24).
- 2019 – present: Group Member for the Cyclic Review Report and Quality Assurance of the Bachelor's degree in Building Engineering (L23), University "G. d'Annunzio" of Chieti-Pescara, Italy.
- 2019 – present: Member of the Erasmus Working Group (L23 – LM24)
- 2019 – present: Committee Member for the attribution of research grants, occasional professional services or tutorship grants, Department of Engineering and Geology, University "G. d'Annunzio" of Chieti-Pescara, Italy.
- 2019 – 2021: Teachers Board Member for the Bachelor's degree course in Building Engineering (L23), University "G. d'Annunzio" of Chieti-Pescara, Italy.

Honours and Awards

- Grant for Young Mobility ISTI-GYM 2019 awarded from the Institute of Information Science and Technologies "A.Faedo" (ISTI-CNR), Pisa, Italy.
- Training School grant awarded by the Management Committee of the COST Action TU1402 (COST-TS-ECOST-TRAINING_SCHOOL-TU1402-210817-087312).
- Certificate of Outstanding Contribution in Reviewing, Mechanical Systems and Signal Processing, 2016.
- Short Term Scientific Mission grant awarded by the Management Committee of the COST Action TU1402 (COST-STSM-ECOST-STSM-TU1402-210915-067729).
- *Doctor Europaeus* mention from the School of Advanced Studies "G. d'Annunzio" of Chieti-Pescara (Italy) and the University of Minho (Portugal).
- Appointment as Domain Expert in Mechanics of Structures at the Department of Engineering and Geology, University "G. d'Annunzio" of Chieti-Pescara, Italy, a.y. 2014-2015 (Protocollo n. 216 of 30/01/2015).
- PhD grant (01/01/2012-31/12/2014) from the Italian Ministry of Education, Universities and Research (MIUR).

Memberships

- 2018 – 2019: Member of International Masonry Society (IMS)
- 2016 – 2019: Integrated member of ISISE (Institute for Sustainability and Innovation in Structural Engineering)
- 2015 – 2019: Member of COST Action TU1402 – *Quantifying the Value of Structural Health Monitoring*
- 2012 – 2019: Member of Historical and Masonry Structures (HMS) group
- 2012 – present: Effective member of Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori (OAPPC) – Province of Chieti (Italy), division A no.1106

OTHER SCIENTIFIC ACTIVITIES

Speaker in International and National Conferences and Workshops

1. Speaker at the educational workshop **"Traditional and Innovative Methods for Structural Monitoring and Safety Assessment of Built Cultural Heritage"** 28 June - 1 July 2021, Guimarães, Portugal. *Presentations:* (1) Dynamic identification and structural monitoring of built cultural heritage; (2) A digital-based multi-level system for the conservation of the built heritage.
2. Speaker at **12th International Conference on Structural Analysis of Historical Constructions (SAHC 2020)**, 29 September - 1 October 2021, online. *Presentation:* Digitization of Cultural Heritage buildings for preventive conservation purposes.
3. Speaker at the **9th International Conference on Arch Bridges (ARCH 2019)**, 2-4 October 2019, Porto, Portugal. *Presentation:* Experimental and numerical investigations of a segmental masonry arch subjected to horizontal settlements.
4. Speaker at the **16th International Conference on Civil, Structural and Environmental Engineering Computing (CIVIL-COMP)**, 16-19 September 2019, Riva del Garda, Italy. *Presentation:* Sensitivity based versus optimization-based model updating of heritage structures: lessons learned from the application to a real case study in Ostra, Italy.

5. Co-organizer and speaker at the final **workshop "Preventive Conservation of Cultural Heritage"**, 11 July 2019, Higher Polytechnic School of Avila, Avila, Spain. *Presentation:* Classification criteria and inspection protocol for Service Level 1.
6. Co-organizer and speaker at the educational **workshop "Conservação preventiva do património histórico e cultural"**, 28 February - 2 March 2019, Guimarães, Portugal. *Presentation:* A metodologia HeritageCare e ferramentas para o Nível de Serviço 1; A metodologia HeritageCare e ferramentas para o Nível de Serviço 2.
7. Co-organizer and speaker at the **seminar "Conservação preventiva do património cultural construído: novas ferramentas para avaliação e gestão"**, 8 February 2019, Porto, Portugal. *Presentation:* A metodologia HeritageCare e ferramentas.
8. Speaker at the **10th International Masonry Conference (IMC 2018)**, 9-11 July 2018, Milan, Italy. *Presentation:* Application of a bio-inspired anomaly detection algorithm for unsupervised SHM of a historic masonry church.
9. Invited speaker at the **seminar "European projects on Cultural and Natural Heritage: Present and Future"**, 21 June 2018, Lamego, Portugal. *Presentation:* An integrated tool for the preventive conservation of built cultural heritage: the HeritageCare project.
10. Invited speaker at the **1st International Workshop on Traditional and Innovative Approaches in Seismic Design (TIASD 2016)**, Technical University of Munich (TUM), 31 March - 3 April 2016, Munich, Germany. *Presentation:* Damage Identification of Structures based on Spectral Output Signals.
11. Speaker at the **3rd COST TU1402 Workshop**, Escola Tecnica Superior d'Enginyers de Camins, Canals i Ports, 15-16 March 2016, Barcelona, Spain. *Presentation:* The value of Structural Health Monitoring for the structural behaviour of masonry structures under varying environmental effects.
12. Speaker at the **8th European Workshop on Structural Health Monitoring (EWSHM 2016)**, 5-8 July 2016, Bilbao, Spain. *Presentation:* Development of Key Performance Indicators for the Structural Assessment of Heritage Buildings.
13. Speaker at the **9th International Masonry Conference (IMC 2014)**, 7-9 July 2014, Guimarães, Portugal. *Presentation:* Spectral based damage identification technique on an earthen mock-up construction tested on a shaking table.
14. Speaker at the **9th International Conference on Structural Dynamics (EURODYN 2014)**, 30 June - 2 July 2014, Porto, Portugal. *Presentation:* Structural Monitoring and Damage Identification on a Masonry Chimney by a Spectral-based Identification Technique.

International Workshops and Special Sessions Organization

OPHERA Workshop 2, Guimaraes, Portugal, 2021
Co-organizer of the Workshop **"Traditional and Innovative Methods for Structural Monitoring and Safety Assessment of Built Cultural Heritage"** within the European Project OPHERA (607601-CREA-1-2019-1-IT-CULT-COOP1) with Prof. Daniel Oliveira.

16th CIVIL-COMP, Riva del Garda, Italy, 2019
Co-organizer of the Special Session **"Structural Health Monitoring and Model Updating of Heritage Structures"** with Prof. Paulo B. Lourenço, Dr. Maria Girardi e Dr. Daniele Pellegrini.

10th International Masonry Conference, Milan, Italy, 2018
Co-organizer of the Mini-Symposium "**Dynamic Testing and Structural Health Monitoring of Historic Masonry Structures**" with Prof. Carmelo Gentile and Prof. Antonella Saisi.

3rd TIASD, Guimaraes, Portugal, 2018
Co-organizer of the **"3rd International Workshop on Traditional and Innovative Approaches in Seismic Design"** with Prof. Daniel Oliveira and Dr. Elisa Poletti from University of Minho (Portugal), Dr. Linda Geresini from University of Pisa (Italy) and Dr. Francesca Taddei from Technical University of Munich (Germany). The workshop was funded by the DAAD in the framework of the program "Hochschul dialog mit Südeuropa 2018".

Editorial Board Membership

Editor for Cogent Engineering (Taylor & Francis Group)
Guest Editor for Applied Sciences (MDPI) - Special Issue "Advanced Seismic Evaluation of Relevant Architectures"

Evaluator of Research Proposals

Evaluator of proposals submitted under the RESTART 2016-2020 Programmes for Research, Technological Development and Innovation. Cyprus Research Promotion Foundation (RPF).

Peer-Review Activity

- Bulletin of Earthquake Engineering
- Journal of Structural Health Monitoring
- Advances in Engineering Software
- Automation and Construction
- Journal of Civil Structural Health Monitoring
- International Journal of Architectural Heritage
- Journal of Cultural Heritage
- Mechanical Systems and Signal Processing
- Shock and Vibration
- Journal of Materials in Civil Engineering
- Journal of Risk and Uncertainty in Engineering Systems (ASCE-ASME)

PUBLICATIONS

For the full up-to-date publication list, please refer to my Google Scholar and Scopus profiles:

Google Scholar: https://scholar.google.it/citations?user=c0PhA4MAAAAJ&hl=en
Scopus: https://www.scopus.com/authid/detail.uri?authorId=53866842200

Journal papers

1. Barontini A., Masciotta M.G., Amado-Mendes P., Ramos L.F., Lourenço P.B. **Reducing the Training Samples for Damage Detection of Existing Buildings Through Self-Space Approximation Techniques**, *Sensors* 2021, 21, 7155, doi: 10.3390/s21217155.
2. Funari M.F., Hajjat A.E., Masciotta M.G., Oliveira D.V., Lourenço P.B. **A Parametric Scan-to-FEM Framework for the Digital Twin Generation of Historic Masonry Structures**, *Sustainability* 2021, 13, 11088, doi: 10.3390/su131911088.
3. Standoli G., Salachoris G.P., Masciotta M.G., Clementi F. **Modal-based FE model updating via Genetic Algorithms: exploiting artificial intelligence to build realistic numerical models of historical structures**, *Construction and Building Materials*, 303 (2021), 124393, doi: 10.1016/j.conbuildmat.2021.124393.
4. Barontini A., Alarcon C., Sousa H.S., Oliveira D.V., Masciotta M.G., Azenha M. **Development and Demonstration of a HBIM Framework for the Preventive Conservation of Cultural Heritage**, *International Journal of Architectural Heritage*, doi: 10.1080/15583058.2021.1894502.
5. Masciotta M.G., Morais M.J., Ramos L.F., Oliveira D.V., Sánchez-Aparicio L., Gonzalez-Aguilera D. **A digital-based integrated methodology for the preventive conservation of cultural heritage: the experience of HeritageCare project**, *International Journal of Architectural Heritage*, 15:6 (2021), 844-863, doi: 10.1080/15583058.2019.1668985.
6. Barontini A., Masciotta M.G., Amado-Mendes P., Ramos L.F., Lourenço P.B. **Negative selection algorithm based methodology for online structural health monitoring**, Engineering Structures, 229(2021) 111662, doi: 10.1016/j.engstruct.2020.111662.
7. Barontini A., Masciotta M.G., Amado-Mendes P., Ramos L.F. **Performance assessment of a bio-inspired anomaly detection algorithm for unsupervised SHM: application to a Manueline masonry church**, *International Journal of Masonry Research and Innovation*, 5(4), pp. 468-496 (2020), doi: 10.1504/IJMRI.2020.111798.
8. Giordano P.F., Ubertini, F., Cavalagli N., Kita A., Masciotta M.G. **Four years of Structural Health Monitoring of the San Pietro Bell Tower in Perugia, Italy: two years before the earthquake versus two years after**, *International Journal of Masonry Research and Innovation*, 5(4), pp. 445-467 (2020), doi: 10.1504/IJMRI.2020.111797.
9. Giordano E., Mendes N., Masciotta M.G., Clementi F., Sadeghi H.N., Silva R.A., Oliveira D.V. **Expeditious damage index for arched structures based on dynamic identification testing**, *Construction and Building Materials*, 265 (2020) 120236, doi: 10.1016/j.conbuildmat.2020.120236
10. Sánchez-Aparicio L., Masciotta M.G., García-Alvarez J., Ramos L.F., Oliveira D.V., Martín-Jiménez J.A., González-Aguilera D.A. Monteiro P. **Web-GIS approach to preventive conservation of heritage buildings**, *Automation in Construction*, 118 (2020) 103304, doi: 10.1016/j.autcon.2020.103304.
11. Kita A., Cavalagli N., Masciotta M.G., Lourenço P.B., Ubertini F., **Rapid post-earthquake damage localization and quantification in masonry structures through multidimensional non-linear seismic IDA,** *Engineering Structures*, 219 (2020) 110841, doi: 10.1016/j.engstruct.2020.110841.

12. Masciotta M.G., Pellegrini D., Brigante D., Barontini A., Lourenço P.B., Girardi M., Padovani C., Fabbrocino G. **Dynamic characterization of progressively damaged segmental masonry arches with one settled support: experimental and numerical analyses**, *Frattura ed Integrità Strutturale*, 51, pp. 423-441 (2020), doi: 10.3221/IGF-ESIS.51.31.

13. Barontini A., Perera R., Masciotta M.G., Amado-Mendes P., Ramos L.F., Lourenço P.B. **Deterministically generated negative selection algorithm for damage detection in civil engineering systems**, *Engineering Structures*, 197, 109444 (2019), doi: 10.1016/j.engstruct.2019.109444.

14. Masciotta M.G., Barontini A., Ramos L.F., Amado-Mendes P., Lourenço P.B. **An Overview on Structural Health Monitoring: From the Current State-of-the-Art to New Bio-inspired Sensing Paradigms**, *International Journal of Bio-Inspired Computation*, 14(1), pp. 1-26 (2019), doi: 10.1504/IJBIC.2019.101179.

15. Pellegrini D., Girardi M., Lourenço P.B., Masciotta M.G., Mendes N, Padovani C., Ramos L.F. **Modal analysis of historical masonry structures: linear perturbation and software benchmarking**, *Construction and Building Materials*, 189, pp. 1232-1250 (2018), doi: 10.1016/j.conbuildmat.2018.09.034.

16. Masciotta M.G., Ramos L.F., Lourenço P.B., Vasta M. **Spectral algorithm for non-destructive damage localisation: Application to an ancient masonry arch model**, *Mechanical Systems and Signal Processing*, 84 (Part A), pp. 286-30 (2017), doi: 10.1016/j.ymssp.2016.06.034.

17. Masciotta M.G., Ramos L.F., Lourenço, P.B. **The importance of structural monitoring as a diagnosis and control tool in the restoration process of heritage structures: a case-study in Portugal**, *Journal of Cultural Heritage*, 27, pp. 36-47 (2017), doi: 10.1016/j.culher.2017.04.003.

18. Masciotta M.G., Ramos L.F., Lourenço P.B., Vasta M. **Damage identification and seismic vulnerability assessment of a historic masonry chimney**, *Annals of Geophysics*, 60(4), S0442, pp. 1-19 (2017), doi: 10.4401/ag-7126.

19. Masciotta M.G., Roque J.C.A., Ramos L.F., Lourenço P.B. **A multidisciplinary approach to assess the health state of heritage structures: The case study of the Church of Monastery of Jerónimos in Lisbon**, *Construction and Building Materials*, 116, pp. 169-187 (2016), doi: 10.1016/j.conbuildmat.2016.04.146.

20. Masciotta M.G., Ramos L.F., Lourenço P.B., Vasta M., De Roeck G. **A Spectrum-driven Damage Identification Technique: Application and Validation through the Numerical Simulation of the Z24 Bridge**, *Mechanical Systems and Signal Processing*, 70-71, pp. 578-600 (2016), doi: 10.1016/j.ymssp.2015.08.027.

Book Chapters

21. Masciotta M.G., Brigante D., Barontini A., et al. **Experimental and numerical investigations of a segmental masonry arch subjected to horizontal settlements**, in: Arêde A., Costa C. (eds) Proceedings of ARCH 2019. ARCH 2019. Structural Integrity, vol 11, pp. 413-421, Springer, Cham (2020), ISSN: 2522560X, doi: 10.1007/978-3-030-29227-0_43

22. Brigante D., Masciotta M.G., Rainieri C., Fabbrocino G., Lourenço P.B., **Vibration-based damage identification with application to a scaled masonry arch**, in: Braga F., Dall'Asta A., Gara, F. (eds) *Atti del XVIII Convegno ANIDIS L'ingegneria Sismica in Italia: Ascoli Piceno, 15-19 settembre 2019*, Pisa University Press, ISBN: 9788833392561, doi: 10.1400/271040.

23. Giordano E., Clementi F., Barontini A., Masciotta M.G., Chatzi E., Ramos L.F., Amado-Mendes P., **Damage detection and optimal sensor placement in health monitoring of "Collegiata di Santa Maria" in Visso (Central Italy)**, in: Braga F., Dall'Asta A., Gara, F. (eds) *Atti del XVIII Convegno ANIDIS L'ingegneria Sismica in Italia: Ascoli Piceno, 15-19 settembre 2019*, Pisa University Press, ISBN: 9788833392561, doi: 10.1400/271207.

24. Limongelli, M.P., Dolce M., Spina D., Guéguen P., Langlais M., Wolinieck D., Maufroy E., Karakostas C.Z., Lekidis V.A., Morfidis K., Salonikios T., Rovithis E., Makra K., Masciotta M.G., Lourenço, P.B., **S^2HM in some European countries**, in: Limongelli M.P., Celebi M. (eds) *Seismic Structural Health Monitoring*. Springer Tracts in Civil Engineering. Springer, Cham (2019), pp. 303-343, ISBN: 978-3-030-13975-9, doi: 10.1007/978-3-030-13976-6_13.

25. Sýkora M., Diamantidis D., Markova J., Masciotta M.G., **Optimising in-situ testing for historic masonry structures: a case study**, in: Ana Baricevic, Marija Jelcic Rukavina, Domagoj Damjanovic, Maurizio Guadagnini (eds.), *Proceedings of the International Conference on Sustainable Materials, Systems and Structures (SMSS2019) - Durability, Monitoring and Repair of Structures*, Rovinj, Croatia, 18-22 March 2019. Paris: RILEM Publications S.a.r.l., pp. 684-691, RILEM Proceedings PRO 128; ISBN: 978-2-35158-217-6; Vol 3 ISBN: 978-2-35158-225-1; e-ISBN: 978-2-35158-218-3.

26. Masciotta M.G., Ramos L.F., **Dynamic identification of historic masonry structures**, in: Bahman Ghiassi, Paulo B. Lourenço (eds), *Long-term performance and durability of masonry structures*, Woodhead Publishing Series in Civil and Structural Engineering, Woodhead Publishing (2019), pp. 241-264, ISBN: 9780081021101, doi: 10.1016/B978-0-08-102110-1.00008-X.
27. Masciotta M.G., Barontini A., Ramos L.F., Amado-Mendes P., Lourenço P.B., **A Bio-inspired framework for highly efficient structural health monitoring and vibration analysis**, in: *Experimental Vibration Analysis for Civil Structures. EVACES 2017. Lecture Notes in Civil Engineering*, Eds. J.P. Conte et al., vol. 5, pp. 455-468, Springer, Cham (2018), ISBN: 978-3-319-67442-1, doi: 10.1007/978-3-319-67443-8_39.
28. Ramos L.F., Masciotta M.G., Morais M.J., Azenha M., Ferreira T., Pereira E.B., Lourenço P.B., **HeritageCARE: Preventive conservation of built cultural heritage in the South-West Europe**, in: *Innovative Built Heritage Models*, Eds. van Balen, K., Vandesande, A., pp. 135-142, London: CRC Press (2018), ISBN: 9781138498617.
29. Masciotta M.G., Ramos L., Lourenço P.B., Vasta M., **Damage detection on the Z24 bridge by a spectral-based dynamic identification technique**, in: Catbas F. (eds), *Dynamics of Civil Structures. Conference Proceedings of the Society for Experimental Mechanics Series*. vol. 4, pp. 197-206, Springer, Cham (2014), ISSN: 21915644, ISBN: 978-331900776-2, doi: 10.1007/978-3-319-04546-7_23.
30. De Matteis G., Campitiello F., Masciotta M.G., Vasta M. **Damage identification of masonry structures under seismic excitation**, in: Computational Methods in Applied Sciences, Eds. Papadrakakis M. et al., vol. 26, pp. 345-356, Springer Netherland (2013), ISBN: 978-94-007-5133-0, ISSN: 1871-3033, doi: 10.1007/978-94-007-5134-7_21.

Papers in Proceedings

31. Masciotta M.G., Sánchez-Aparicio L.J., Bishara S., Oliveira D.V., González-Aguilera D., García-Alvarez J. **Digitization of Cultural Heritage buildings for preventive conservation purposes**, in: *Proceedings of the 12th International Conference on Structural Analysis of Historical Constructions (SAHC)*, 2021.
32. Hormazábal M.F., Masciotta M.G., Oliveira D.V. **Proposal for a time-dependent dynamic identification algorithm for structural health monitoring**, in: *Proceedings of the 12th International Conference on Structural Analysis of Historical Constructions (SAHC)*, 2021.
33. Standoli G., Salachoris G.P., Masciotta M.G., Clementi F. **Combining operational modal analysis and genetic algorithms to understand the actual structural behavior of historical constructions**, in: *Proceedings of the 8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN)*, Athens, Greece (2021).
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