

# MICHELINA MONACO

## CURRICULUM VITAE

### GENERAL INFORMATION

Address	Department of Architecture and Industrial Design DADI - University of Campania "Luigi Vanvitelli" Monastero di San Lorenzo ad Septimum, Via San Lorenzo 1, 81031 Aversa (CE), Italia
e-mail	<a href="mailto:michela.monaco@unicampania.it">michela.monaco@unicampania.it</a> ; <a href="mailto:michelina.monaco@ingpec.eu">michelina.monaco@ingpec.eu</a> (pec)
Nationality	Italian
Web page	<a href="http://www.architettura.unicampania.it/dipartimento/docenti?MATRI COLA=058459">http://www.architettura.unicampania.it/dipartimento/docenti?MATRI COLA=058459</a>
Languages	Italian, English, French



### ACTUAL POSITION

Assistant professor, s.s.d. ICAR/08-Structural and Continuum Mechanics, University of Campania "Luigi Vanvitelli" since 23/12/2002.

### EDUCATION

1988	Master of Science (5 year Degree) cum laude in Civil Engineering - University of Pisa.
1992-1995	Ph.D in Structural Engineering, VII Cycle, University of Naples "Federico II". Final Dissertation on "Constitutive models for masonry. An approach with internal variables"
1995	Fellowship C.N.R. as Research Assistant on "Intervention methodologies on Cultural Heritage" at IRIS-CNR Bari
1997-1998	Postdoctorate student with scholarship in Structural Engineering at University of Naples "Federico II"

### TEACHING ACTIVITIES IN ITALY

1998-2002	Lecturer in <i>Experimental mechanics</i> at Faculty of Architecture, Second University of Naples
2002-today	Assistant professor teaching <i>Statics, Structural Mechanics, Experimental Mechanics, Structural Engineering, Laboratory Assessment of Materials and Structures, Scientific Basis of Constructions, Structure Design (in English), Assessment of Structures and Materials</i> at Faculty of Architecture. Lecturer in PhD Courses. Teacher in professional specialization course for Architects and Engineers. Supervisor for Master's Degree and PhD theses.

### TEACHING ACTIVITIES ABROAD

2007	<i>Safeguard of Cultural Heritage</i> , Escuela Politecnica Superior, Universidad San Pablo CEU, Madrid
2008	<i>On the assessment of masonry arch bridges</i> , University of Minho, Guimarães, Portugal
2009	<i>Assessment of masonry arch bridges: from empirical formulae to finite element methods</i> , Universitat Politecnica de Catalunya, Barcelona, Spain
2017	<i>Masonry buildings: key aspects for the seismic assessment</i> , NTUA - National Technical University of Athens, Greece
2019	<i>Seismic assessment of masonry buildings. Experiences from recent Italian earthquakes</i> , Aristotle University of Thessaloniki, Thessaloniki, Greece

### ACADEMIC ACTIVITY

2003-2009	Member of the Teaching Board of the Doctorate Course in "Seismic strengthening and retrofit of structures".
2008-2009	Erasmus Commission Member- R.D. n. 110/2008 and n. 84/2009
2008-2018	Member of the International Relations Committee - Department of Architecture and Industrial Design DADI - University of Campania "Luigi Vanvitelli"
2008	Member of the Selection Board for an Assistant Professor in Structural Mechanics at Faculty of Architecture - Sapienza University of Rome (R. D. n. 1207/2008)
2009-2014	Delegate of Assistant Professors in the Faculty Board - Faculty of Architecture SUN
2009-	Member of the Teaching Board of the Doctorate Course in "Representation, safety of structures and environment" Second University of Naples since 2009
2013	Referee for the FIRB - Future in Research Program by MIUR - Italian Ministry for University and Education

2015-2016 Head of the evaluation panel for the Small Grant Scheme of Polish-Norwegian Research Programme 2103 by NCBR Poland - National Center for Research and Development

#### EDITORIAL ACTIVITY

2002-oggi Reviewer for the international journals: *International Journal of Architectural Heritage, Journal of Computing in Civil Engineering – ASCE, International Scholarly Research Notices, Journal of Sound and Vibration*

2017 Sacco E., Monaco M. (eds.) (2017) *Mechanics of Masonry Construction*, Edizioni Università di Cassino, ISBN 978-88-8317-155-0

2019 Sacco, E., Monaco, M. (Eds) (2019). *An Italian Contribution to the Analysis of Masonry Structures*, Journal of Masonry Research and Innovation, vol.4, n.1/2

2019 Trovalusci, P., Monaco, M., Reccia, E., Portioli, F. (Eds) (2019) *Recent Advances in Computational Strategies for Fracture and Damage Detection in Masonry Structures*, International Journal of Fracture and Structural Integrity (in press)

#### SCIENTIFIC ACTIVITY

1995-2004 Fellow BMS - British Masonry Society

1995 and 2017- today Fellow A.I.M.E.T.A.

1995 Invited at RILEM Committee 127MS Padua

1998 Fellow Italian Group Computational Mechanics - GIMC

1999 Fellow Italian Association for restoration of Built Heritage (ARCo)  
 Research Programs joined as Research Team Member:

- PRIN 2006 (Italian Ministry of University and Research) *Smooth diagnosis and intervention techniques for the seismic rehabilitation and enhancement of timber structures in historic buildings.*
- CNR (National Research Council) research program *Seismic protection of art objects.*
- CNR (National Research Council) research program *Intervention techniques of structural engineering for restoration and safeguard of archaeological sites*
- CNR-GNDT (National Research Council - National Group on Earthquake Protection) research program on *Structural conception, building methodologies and intervention techniques for restoration and conservation of monumental architecture of XIX century.*
- CNR (National Research Council) research program *Vulnerability and intervention techniques for restoration and conservation of archaeological sites*

1998-today

- MURST (Italian Ministry of University and Scientific and Technological Research) research program on *Science and technique of monumental masonry structures of XIX century in Southern Italy.*
- MURST (Italian Ministry of University and Scientific and Technological Research) research program on *Methodological strategies for identification, design and realization of traditional techniques for the conservation of historic masonry buildings.*
- Research contract with Cultural Heritage Ministry on *Building materials and constructive technologies in Campania with particular reference to volcanic materials.*
- Research contract with Cultural Heritage Ministry on *Strategic criteria for interventions on the Coliseum.*
- MIUR (Italian Ministry of University and Research) research program on *Diagnosis and intervention techniques on timber structure for seismic retrofitting of historical buildings*

Solid Mechanics

- Elastoplastic constitutive models with internal variables
- Strength of quasi-fragile materials

Mechanics of Materials and Fracture

- Damage Mechanics
- Homogenization Techniques

Dynamics

- Nonlinear dynamics
- Dynamics of rigid objects

Assessment and safeguard of Cultural Heritage

- Numerical techniques for the analysis of masonry structures
- Constitutive models for masonry
- Structural modelling of masonry arch and vaults
- Out of plane behaviour of masonry walls
- Behaviour of timber structures
- Vulnerability of museum contents and archaeological areas

Experimental Mechanics

- Mechanical characterization of materials
- Development of test methodologies for traditional materials
- Laboratory and in-situ tests for masonry structures
- Identification of masonry structures
- Dynamics of rigid objects

Historical development of structural mechanics

- Evolution of structural modelling
- Structural analysis of traditional building technologies

Research activity is testified by more than 80 papers, several of them published on international journals, scientific monographs and proceedings of national and international conferences as well as by participation and/or organization of international conferences and scientific meetings

Aversa, May 18<sup>th</sup> 2019



(M. Housheer, Morocco)

# MICHELINA MONACO

## LIST OF PUBLICATIONS

### PAPERS IN REFEREED JOURNALS

- Gesualdo, A., Iannuzzo, A., Penta, F., Monaco, M. (2019) *Nonlinear dynamics of a wind turbine tower*, *Frontiers of Mechanical Engineering*, vol. 14, n. 3, 342-350, doi: 10.1007/s11465-019-0524-3
- Gesualdo, A., Calderoni, B., Sandoli, A., Monaco, M. (2019). *Minimum energy approach for the in-plane shear resistance of masonry panels*, *Ingegneria Sismica*, vol. 36, n. 1, 42-53.
- Monaco, M., Bergamasco, I., Betti, M. (2018) *A no-tension analysis for a brick masonry vault with lunette*, *Journal of Mechanics of Materials and Structures*, vol. 13, n. 5, 2018, 703-714, doi: 10.2140/jomms.2018.13.703
- Gesualdo, A., Iannuzzo, A., Minutolo, V., Monaco, M., (2018) *Rocking of freestanding objects: theoretical and experimental comparisons*, *Journal of Theoretical and Applied Mechanics*, vol. 56, n. 4, p. 977-991, doi: 10.15632/jtam-pl.56.4.977
- Gesualdo, A., Iannuzzo, A., Monaco, M., Penta, F. (2018) *Rocking of a rigid block freestanding on a flat pedestal*, *Journal of Zhejiang University-SCIENCE A*, vol. 19, n. 5, p. 331-345, doi: 10.1631/jzus.A1700061
- Bergamasco, I., Gesualdo, A., Iannuzzo, A., Monaco, M. (2018) *An integrated approach to the conservation of the roofing structures in the Pompeian domus*, *Journal of Cultural Heritage*, vol. 31, p. 141-151, doi: 10.1016/j.culher.2017.12.006.
- Penta, F., Monaco, M., Pucillo, G.P., Gesualdo, A. (2017) *Periodic beam-like structures homogenization by transfer matrix eigen-analysis: a direct approach*, *Mechanics Research Communications*, vol. 85, p. 81-88, doi: 10.1016/j.mechrescom.2017.08.007
- Cennamo, C., Gesualdo, A., Monaco, M. (2017) *Shear plastic constitutive behaviour for near-fault ground motion*, *Journal of Engineering Mechanics-ASCE*, vol. 143 n. 9, 04017086, doi: 10.1061/(ASCE)EM.1943-7889.0001300
- Gesualdo, A., Cennamo, C., Fortunato, A., Frunzio, G., Monaco, M., Angelillo, M. (2017) *Equilibrium formulation of masonry helical stairs*, *Meccanica*, vol. 52 n. 8, p. 1963-1974. doi:10.1007/s11012-016-0533-9
- Cennamo, C., Gesualdo, A., Monaco, M. (2016) *Seismic behaviour of structures with plastic shear effects*, *Meccanica dei materiali e delle strutture*, vol. VI, n. I, p. 171-178.
- Buonocore, G., Gesualdo, A., Iannuzzo, A., Modano, M., Monaco, M. Savino M.T. (2016) *M-N interaction effect on the frames failure mechanisms*, *Applied Mechanics and Materials*, vol. 847, p. 248-256, doi:10.4028/www.scientific.net/AMM.847.248
- Gesualdo, A., Iannuzzo, A., Guadagnuolo, M., Guerriero, A., Monaco, M. Savino M.T. (2016) *Numerical analysis of rigid body behaviour*, *Applied Mechanics and Materials*, vol. 847, p. 240-247, doi:10.4028/www.scientific.net/AMM.847.240
- Gesualdo, A., Monaco, M. (2015) *Constitutive behaviour of quasi-brittle materials with anisotropic friction*, *Latin American Journal of Solids and Structures*, vol. 12, n. 4, p. 695-710. doi: 10.1590/1679-78251345
- Monaco, M., Guadagnuolo, M., Gesualdo, A. (2014) *The role of friction in the seismic risk mitigation of freestanding art objects*. *Natural Hazards*, vol. 73, n. 2, p. 389-402. doi: 10.1007/s11069-014-1076-9
- Gesualdo, A., Monaco, M. (2011). *Seismic retrofitting techniques for existing masonry buildings*. *Journal of Civil Engineering and Architecture*, vol. 5, n. 11, p. 1011-1018.
- Frunzio, G., Gesualdo, A., Monaco, M. (2000) *Failure behaviour of brick masonry*, *Masonry International*, vol. 14, n. 2, p. 41-45, ISSN: 0950-2289.

### PAPERS IN CONFERENCE PROCEEDINGS

#### International Conferences

- Gesualdo, A., Iannuzzo, A., Monaco, M. (2018) *Rocking behaviour of freestanding objects*, *Proc. International Conference on Mathematical Modelling in Physical Sciences*, IOP Conf. Series, *Journal of Physics: Conf. Series*, vol. 1141, 012091, doi:10.1088/1742-6596/1141/1/012091
- Monaco, M., Calderoni, B., Iannuzzo, A., Gesualdo, A. (2018) *Behaviour of in-plane loaded masonry panels*, *Procedia Structural Integrity*, vol. 11, 388-393, doi: 10.1016/j.prostr.2018.11.050
- De Angelis, F., Gesualdo, A., Iannuzzo, A., Monaco, M. (2017) *Rigid body collapse of structures* *Proc. XV International Forum "Le vie dei mercanti"*, Napoli - Capri, Italia, 15-17 giugno, La Scuola di Pitagora Editrice, Napoli 978-88-6542-582-4
- Gesualdo, A., De Angelis, F., Iannuzzo, A., Monaco, M. (2016) *Constitutive behavior of composites with anisotropic friction*, *Proc. 19th International Conference on Composite Structures (ICCS19)*, 5-8 September, Porto, Portugal, Esculapio Editrice, Bologna (Italy), ISBN 978-88-748-8977-8, doi: 10.15651/978-88-748-8977-8
- Gesualdo, A., De Angelis, F., Iannuzzo, A., Monaco, M. (2016) *An anisotropic yield criterion for composites*, *Proc. 19th International Conference on Composite Structures (ICCS19)*, 5-8 September, Porto, Portugal, Esculapio Editrice, Bologna (Italy), ISBN 978-88-748-8977-8, doi: 10.15651/978-88-748-8977-8
- Gesualdo, A., Iannuzzo, A., Monaco, M. (2016) *Isolation of freestanding art objects*, *Proc. 11<sup>th</sup> HSTAM International Congress on Mechanics*, 27 - 30 May, Athens, Greece
- Gesualdo, A., Iannuzzo, A., Monaco, M. (2016) *Anisotropic yield behaviour of adobe masonry*, *Proc. 11<sup>th</sup> HSTAM International Congress on Mechanics*, 27 - 30 May, Athens, Greece
- Gesualdo, A., Fabbrocino, F., Iannuzzo, A., Modano, M., Monaco, M. (2016) *Seismic collapse analysis of stone arch bridges*, *Proc. XIV International Forum "Le vie dei mercanti"*, Napoli - Capri, Italia, 16-18 giugno, La Scuola di Pitagora Editrice, Napoli, ISBN 978-88-6542-257-1
- Bergamasco, I., Gesualdo, A., Guerriero, A., Iannuzzo, A., Monaco, M. (2016) *Roofing interventions in the Pompeii Tragic Poet House*, *Proc. XIV International Forum "Le vie dei mercanti"*, Napoli - Capri, Italia, 16-18 giugno, La Scuola di Pitagora Editrice, Napoli, ISBN 978-88-6542-257-1, p.

- Chierchiello, G. Gesualdo, A., Iannuzzo, A., Monaco, M. Savino, M.T. (2015) *Structural modeling and conservation of single columns in archaeological areas*. Proc. XIII International Forum "Le vie dei mercanti", Aversa- Capri, Italia, 11-13 giugno, La Scuola di Pitagora Editrice, Napoli, ISBN 978-88-6542-416-2, p. 2012-2020.
- Cennamo, C., Monaco, M., Savino, M.T., Sorbo, S. (2014) *Durability of reinforced concrete and cultural heritage: the pompeian domus as emblematic cases*, Proc. XII International Forum "Le vie dei mercanti", Aversa- Capri, Italia, 12-14 giugno, La Scuola di Pitagora Editore, Napoli, ISBN 978-88-6542-347-9, p. 1406-1414.
- Gesualdo, A., Monaco, M., Modano, A., Iannuzzo, A. (2014) *Nonlinear Analysis and Retrofitting of Historical Arch Bridges*, Proc. of International CAE Conference, Pacengo del Garda Italy, October 27-28
- Guadagnuolo, M., Landolfi, M., Monaco, M. (2006) *An experimental analysis on the seismic safeguard of art objects*, Proc. of 1<sup>st</sup> ECEES, First European Conference on Earthquake Engineering, Geneva, Switzerland, 3-8 September, ISBN 978 2 8399 0190 1.
- Frunzio, G., Gesualdo, A., Monaco, M. (2001) *Geometrical safety degree of masonry arch bridges*, Proceedings ARCH'01, Third International Conference on Arch Bridges, Paris, 19-21 September, pp. 385-390, editor: C. Abdunur, Presses de l'école nationale des Ponts et Chaussée, Paris, ISBN 2 85978 347 4.
- Frunzio, G., Gesualdo, A., Monaco, M. Russo, G. (1999) *Shear Properties of masonry*, Proceedings CMEM99, 4<sup>th</sup> International Conference on Computational Methods and Experimental Measurements, WIT Press, Southampton, U.K.
- Frunzio, G., Monaco, M. (1998) *Elastic properties of tuff masonry columns*, Proceedings of the 5<sup>th</sup> International Masonry Conference, London, U.K, October, 12-14, publ. Stoke -on-Trent, U.K, pp. 342-344.
- Frunzio, G., Gesualdo, A., Monaco, M. (1998) *Structural modelling of a stone masonry arch bridge*, Proceedings of the 8<sup>th</sup> Canadian Masonry Symposium, Jasper, Alberta, Canada, May 31, June 3.
- Frunzio, G., Monaco, M. (1997) *Historical treatises, science and technology in the restoration of monuments by metallic tie rods*, Proceedings of EGIQUAKE2, Second Egyptian Conference on Earthquake Engineering, Aswan, Egypt, november 1-3.
- D' Onofrio, C., Frunzio, G., Monaco, M. (1995) *Elastic properties of tuff specimens. An experimental investigation*, Proceedings of the 4<sup>th</sup> International Masonry Conference, London, U.K, October, 23-25, publ. Stoke -on-Trent, U.K, pp. 46-48.
- Frunzio, G., D'Onofrio, C., Monaco, M. (1995) *Compressive strength of tuff bricks in different test conditions. Final results*, Proceedings of the 7<sup>th</sup> Canadian Masonry Symposium, Hamilton, Ontario, Canada, June, 4-7, pp. 1164-1169.
- Frunzio, G., Mallardo, V., Monaco, M. (1995) *Reliability of diagonal test* Proceedings of the 7<sup>th</sup> Canadian Masonry Symposium, Hamilton, Ontario, Canada, June, 4-7, pp. 310-315.
- Marotti de Sciarra, F., Monaco, M. (1995) *A constitutive model for masonry with internal variables*, Proceedings of the 7<sup>th</sup> Canadian Masonry Symposium, Hamilton, Ontario, Canada, June, 4-7, pp. 317-327.
- Frunzio, G., D'Onofrio, C., Monaco, M. (1994) *Influence of test conditions on mechanical properties of yellow tuff specimens*, Proceedings of the 10<sup>th</sup> International Brick/Block Masonry Conference, Calgary, Alberta, Canada, July, 5-7, pp. 1287-1293.
- D' Onofrio, C., Frunzio, G., Monaco, M., Voiello, G. (1993) *Mechanical characteristics of pozzolanic mortars. Experimental results*, Proceedings of the 6<sup>th</sup> North American Masonry Conference, Philadelphia, Pennsylvania, U.S.A. June, 6-9, pp. 311-322.
- Frunzio, G., D'Onofrio, C., Monaco, M. (1992) *Compressive strength of tuff bricks in different test conditions. Some experimental results*, Proceedings of the 3<sup>rd</sup> International Masonry Conference, London, U.K., October, 26-28, Stoke -on-Trent, U.K., 1992, pp.4-9.

#### National Conferences

- Bergamasco, I., Fortunato, A., Gesualdo, A., Iannuzzo, A., Monaco, M. (2017) *A no-tension model for the analysis of combined masonry vaults*, Atti del XXIII Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Salerno, Italy, September 4-7.
- Esposito, L., Gesualdo, A., Iannuzzo, A., Monaco, M., Penta, F. (2017) *Vierendeel girder homogenization into a polar beam*, Atti del XXIII Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Salerno, Italy, September 4-7.
- Gesualdo, A., Iannuzzo, A., Modano, M., Monaco, M. (2017) *Dynamic behaviour of two stacked rigid blocks*, Atti del XXIII Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Salerno, Italy, September 4-7.
- Angelillo, M., Cennamo, C. Fortunato, A., Frunzio, G., Gesualdo, A., Monaco, M. (2015) *Equilibrium of masonry vaults and open stairs*, Atti del XXII Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Genova, Italy, September 14-17.
- Bergamasco, I., Gesualdo, A., Monaco, M., Savino, M.T. (2014) *Modellazione strutturale e prove sperimentali tra conservazione e sicurezza: l'area archeologica di Pompei*, Atti Workshop SAFE MONUMENTS. Conservation vs Safety of Monuments and Historical Constructions, Collegio degli Ingegneri della Toscana Srl editore, Firenze.
- Frunzio, G., Gargiulo, M.R., Monaco, M. (2012) *3D constitutive models for wood materials*, Proc. WONDERMasonry3, Workshop on Design for Rehabilitation of Masonry Structures, Lacco Ameno, 9-11 October, Edizioni Polistampa, Firenze, ISBN 978 88 596 1141 7, pp. 678-687
- Monaco, M., Gargiulo, M.R. (2012) *Empirical methods for the proportioning of masonry arches*, Proc. WONDERMasonry3, Workshop on Design for Rehabilitation of Masonry Structures, Lacco Ameno, 9-11 October, Edizioni Polistampa, Firenze, ISBN 978 88 596 1141 7, pp. 415-421.
- Frunzio, G., Monaco, M. (2009) *Legno antico: prove e modellazione numerica*, in: La diagnostica per il restauro del patrimonio culturale, Atti del Convegno Nazionale DIACOMAST 2008', San Leucio (Caserta), 21-22 febbraio, Cuzzolin editore, Napoli, ISBN 978 88 87998 99 3, pp 477-490.
- Frunzio, G., Monaco, M. Visconte, G. (2008) *Vulnerabilità sismica di edifici in c.a. non standard*, Atti del Convegno "RELUIS-Vulnerabilità sismica di edifici esistenti in c.a.", Roma, 28-30 maggio, Polimetrica International Scientific Publisher, Monza, ISBN 978 88 7699 129 5, pp. 323-330.
- Monaco, M. (2007) *Modified mechanism method for the assessment of masonry arch bridge*, Proc. WONDERMasonry2, Workshop on Design for Rehabilitation of Masonry Structures, Lacco Ameno, 11-12 October, Edizioni Polistampa, Firenze, ISBN 978 88 596 0535 5, pp.267-275.
- Frunzio, G., Gazzillo, G., Monaco, M. (2007) *Protezione sismica dei piccoli oggetti*, Atti del X Congresso Nazionale ANIDIS "L'ingegneria sismica in Italia", Pisa, 10-14 giugno 2007, ISBN 978 88 8492 458 2, pp. 6.

- Cennamo, C., Frunzio, G., Gazzillo, G., Monaco, M. (2007) *Il Mediterraneo. "Rappresentazioni" della meccanica strutturale*, Atti del Forum internazionale di Studi "Le vie dei mercanti", Capri, Italia, 4-7 giugno, La Scuola di Pitagora Editore, Napoli, ISBN 978 88 89579 53 4, pp. 485-493.
- Frunzio, G., Gesualdo, A., Monaco, M. (2003) *Sui modelli di calcolo per ponti ad arco in muratura*, Atti del XVI Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Ferrara, 9-12 settembre.
- Frunzio, G., Gesualdo, A., Monaco, M. (2003) *Il comportamento del calcestruzzo per effetto della trazione di un ancorante metallico*, Atti del Convegno Nazionale A.I.A.S., Salerno, Italy, September 3-6.
- Frunzio, G., Gesualdo, A., Monaco, M. (2003) *Sui modelli di calcolo per ponti ad arco in muratura*, Atti XIV Congresso Nazionale A.I.M.E.T.A., Ferrara, Italy, September.
- Benedetti, A., Cennamo, C., Monaco, M. (1999) *Evoluzione del concetto di consolidamento delle strutture murarie attraverso le innovazioni tecnologiche*, Atti del III Convegno Nazionale ARCo, "Manutenzione e recupero della città storica", Roma, 7-8 maggio, pp.165-174.
- Gesualdo, A., Monaco, M. (1998) *Sulla convessità dei domini di resistenza per solidi anisotropi*, Atti GIMC98, XI Convegno Italiano di Meccanica Computazionale, Trento, Italia, 13-15 luglio 1998, pp. 105-108.
- Frunzio, G., Monaco, M. (1997) *Catene metalliche: interventi di restauro e di presidio*, Atti delle Giornate di Studio 'Materiali e tecniche per il restauro', Cassino, Italia, 3-4 ottobre, pp. 283-291.
- Frunzio, G., Gesualdo, A., Monaco, M. (1997) *Stati limite di resistenza per materiali fragili con attrito anisotropo*, Atti del XIII Congresso dell'Associazione Italiana di Meccanica Teorica ed Applicata, Siena, 29 settembre-4 ottobre, pp. 275-280.
- Frunzio, G., Monaco, M. (1995) *Lo sviluppo storico della concezione strutturale nei manuali a partire dal 1700*, Atti del I Congresso Internazionale "Scienza e Tecnologia per la Salvaguardia del Patrimonio Culturale nel Bacino del Mediterraneo", Catania, Siracusa, Italia, 27 novembre-2 dicembre, pp. 57-60.
- Frunzio, G., Monaco, M. (1995) *Salvaguardia sismica degli oggetti d'arte*, Atti del I Congresso Internazionale "Scienza e Tecnologia per la Salvaguardia del Patrimonio Culturale nel Bacino del Mediterraneo", Catania-Siracusa, Italia, 27 novembre-2 dicembre, pp. 1705-1707.
- D' Onofrio, C., Frunzio, G., Monaco, M. (1993) *Le malte da restauro: analisi sperimentale di malte pozzolaniche*, Atti del Convegno Internazionale di studi "Il recupero degli edifici antichi", Napoli, Italia, 29-30 ottobre, pp. 548-552.
- Esposito, G., Frunzio, G., Monaco, M. (1993) *Il tufo giallo napoletano. Caratteristiche meccaniche*. Atti del Convegno Internazionale "Le pietre da costruzione: il tufo calcareo e la pietra leccese", Bari, Italia, 26-28 maggio, pp. 705-713.

## CHAPTERS IN BOOKS

- Gesualdo, A., Iannuzzo, A., Monaco, M., Savino, M.T. (2014) *Dynamic Analysis of Freestanding Rigid Blocks*, in: Civil-Comp Proceedings: 106, B.H.V. Topping and P. Iványi eds., Civil Comp Press, Kippen, Stirlingshire, U.K., ISBN 978-1-905088-61-4, doi:10.4203/ccp.106.144
- Buonocore, G., Gesualdo, A., Monaco, M., Savino, M.T. (2014) *Improvement of Seismic Performance of Unreinforced Masonry Buildings using Steel Frames*, in: Civil-Comp Proceedings: 106, B.H.V. Topping and P. Iványi eds., Civil Comp Press, Kippen, Stirlingshire, U.K., ISBN 978-1-905088-61-4, doi: 10.4203/ccp.106.117
- Gesualdo, A., Monaco, M. (2010). *Seismic vulnerability reduction of existing masonry buildings. Modelling of retrofitting techniques*. In: Urban Habitat Construction Under Catastrophic Events. vol. 1, p. 853-858, London, New York: CRC Press, Taylor & Francis Group, ISBN: 9780415606851
- Gesualdo, A., Monaco, M. Savino M.T. (2010). *Seismic retrofitting techniques for masonry arch bridges*. In: Urban Habitat Construction under Catastrophic Events. vol. 1, p. 859-864, London, New York: CRC Press, Taylor & Francis Group, ISBN: 9780415606851
- Guadagnuolo M., Monaco, M. (2009). *Out of plane behaviour of unreinforced masonry walls*. In: Protection of Historical Buildings. vol. 2, p. 1177-1180, London, New York: CRC Press, Taylor & Francis Group, ISBN: 9780415558051
- Frunzio, G., Gargiulo, M.R., Monaco, M. (2009) *Modelli numerici per l'analisi del legno antico*, in: 'Consolidamento delle strutture in legno', a cura di M. Piazza, Hevelius Edizioni, Benevento, ISBN 978 88 86977 64 7 pp. 99-128, ISBN: 9788886977647
- Frunzio, G., Gesualdo, A., Monaco, M. (2001) *Inelastic behaviour of brick masonry interface*, in: Computer Methods for Structural Masonry, T.G. Huges and G.N. Pande eds., Computers & Geotechnics Ltd, Swansea, U.K., pp. 84-92, ISBN 0 9510380 2 8.
- Frunzio, G., Gesualdo, A., Monaco, M., (2001) *Constitutive behaviour of Masonry*, in: Historical Constructions, P.B. Lourenco and P. Roca eds., University of Minho, Multicomp Lda., Portugal, pp. 585-590, ISBN 972 8692 01 3.
- Frunzio, G., Gesualdo, A., Monaco, M. (2001) *3D F.E.M. Analysis of a Roman Arch Bridge*, in: Historical Constructions, Lourenco, P.B., Roca, P., University of Minho, Multicomp Lda., Portugal, pp. 591-597, ISBN 972 8692 01 3.
- Frunzio, G., Monaco, M. (1998) *An approach to the structural model for masonry arch bridges. Pont Saint Martin as a case study*, in: Arch Bridges. History, analysis, assesment, maintenance and repair, Anna Sinopoli editor, A.A. Balkema, Rotterdam, Brookfield, pp. 231-240, ISBN 90 5809 012 4.
- Frunzio, G., Gesualdo, A., Monaco, M. (1998) *An anisotropic failure criterion for masonry*, in: Computer Methods for Structural Masonry - 4, G.N. Pande, J. Middleton, B. Kralj eds., E & FN Spon, Routledge, London and New York, ISBN 0 419 23540 X, pp. 1-8.
- Frunzio, G., Monaco, M. (1997) *Materiali da costruzione e tecnologie costruttive nell'area campana con particolare riguardo ai materiali di origine vulcanica*, in: 'La Protezione del Patrimonio Culturale', M. Guccione and P.R. David eds., Gangemi Editore, Roma, ISBN 978 88 7448 913 8 pp. 723-739.