

Curriculum Vitae

MICHALIS FRAGIADAKIS, PhD



Personal Information

Name: Michail
Surname: Fragiadakis
Preferred name: **Michalis Fragiadakis**
Birth date: 24 December 1976
Current position: Professor
Head of Structures Department, Director of Laboratory for Earthquake Engineering
School of Civil Engineering, National Technical University of Athens (NTUA)
Researcher IDs: ORCID: 0000-0002-0698-822X, Scopus: 6505461799
Publication metrics: h-factor: 27/32 ([Scopus/Google Scholar](#)) (10/2/2025)
citations: 2367/3941([Scopus/Google Scholar](#)) (10/2/2025)

Contact Information

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Research Interests

- Earthquake Engineering
- Structural Dynamics
- Reliability, risk and hazard assessment lifelines and infrastructure

- Numerical methods in structural analysis and design
- Signal processing
- Structural design and assessment to the Eurocodes
- Machine Learning
- Structural Optimization in structural engineering
- Smart materials

Education

- 2002 – 2006 PhD in Civil Engineering, School of Civil Engineering, National Technical University of Athens
- 2001 – 2002 MSc in Structural Analysis and Design, School of Civil Engineering, National Technical University of Athens
- 2000 – 2001 MSc in Earthquake Engineering and Structural Dynamics, Department of Civil and Environmental Engineering, Imperial College of Science Technology and Medicine, United Kingdom
- 1995 – 2000 Degree in Civil Engineering, School of Civil Engineering, National Technical University of Athens
- 1995 High-school education.

Affiliations

- 28/8/2024 – today **National Technical University of Athens**
School of Civil Engineering, Professor
- 1/2/2021 – today **Nireas International Water Research Center**
University of Cyprus, Dept. Civil Engineering, Affiliated Member
- 1/10/2020 – today **Hellenic Open University, Teaching Staff** (external)

Academic Appointments

- 28/8/2024 – *today* **National Technical University of Athens**
School of Civil Engineering, Professor
- 1/9/2023 – *today* **National Technical University of Athens**
School of Civil Engineering, Head of Structures Department
- 1/12/2022 – *today* **National Technical University of Athens**
School of Civil Engineering, Director of Lab of Earthquake Engineering

- 1/1/2021 – 29/8/2024 **National Technical University of Athens**
School of Civil Engineering, Associate Professor
- 1/1/2021 – 31/12/2023 **Université Gustave Eiffel**
MAST/EMGCU Laboratory, Visiting Professor
(“FUTURE-iSites” project)
- 1/9/2020 – 10/10/2020 **Université Paris-Est**
Département études doctorales - EMGCU/IFSTTAR, Visiting Professor
- 10/5/2016 – 30/12/2020 **National Technical University of Athens**
School of Civil Engineering, Assistant Professor
- 20/4/2017 – 30/9/2017 **Institute Mécanique des Fluides Toulouse (IMFT)**
Toulouse, France, Visiting Professor
- 27/12/2013 - 10/5/2016 **National Technical University of Athens**
School of Civil Engineering, Lecturer
- 1/9/2012 – *today* **School of Corps of Engineers of the Hellenic Army (SCEHA)**
Adjunct Lecturer
- 3/5/2010 – 31/12/2013 **University of Cyprus**
Department of Civil & Environmental Engineering, Post-doctoral researcher
- 1/3/2007 – 31/8/2011 **University of Thessaly**
Department of Civil Engineering, Adjunct Lecturer
- 1/5/2007 – 31/1/2009 **University of Pavia**
Department of Structural Mechanics, Post-doctoral researcher

Foreign languages

- English (C2 level, fluent) (Cambridge Proficiency in English, May 1997)
- French (B2 level), (Diplôme d'études en langue française DELF, May 2022)
- German (B1 level) (Deutsch Fremdsprache für Ausländer, June 1992).

Teaching

Current teaching duties:

School of Civil Engineering, National Technical University of Athens:

- Nonlinear finite element modeling of frame structures (graduate course, since 2007)
- Signal processing and Structural Health Monitoring (graduate course, since 2018)
- Data driven models in Engineering (graduate course, since 2021)
- Structural Intervention on Cultural Heritage Structures (graduate course, since 2024)
- Earthquake Engineering 1 & 2

Bridge Engineering

Reliability analysis

Capstone project

School of Corps of Engineers of the Hellenic Army (SCEHA):

Seismic Design of Structures 1 & 2

Hellenic Open University:

MSc on Construction Methods in Engineering

Past teaching duties:

School of Civil Engineering, National Technical University of Athens:

Reliability analysis

Laboratory on Structural Modeling

Engineering solution methods using computers (3 Semesters, 2015-2017)

Structural Analysis V: Elasto-plastic analysis of structures (Teaching Assistant)

School of Corps of Engineers of the Hellenic Army (SCEHA):

Analysis and Design of Bridges I (2012-2020)

Analysis and Design of Bridges II (2012-2020)

Reinforced Concrete II (1 Semester, 2012-2013)

Department of Civil Engineering, University of Thessaly:

Analysis and design of Surface Structures (5 Semesters, 2006-2011)

Structural Analysis II (2 Semesters, 2008-2009 & 2010-2011)

Structural Analysis I (1 Semester, 2009-2010)

Structural Dynamics (1 Semester, 2007-2008)

Department of Structural Engineering, TEI of Heraklion, Crete:

Structural Calculations (2 Semesters, 2005-2006)

Structural Analysis II (2 Semesters, 2005-2006)

Academic Advising (Principal Advisor or Co-Advisor)

Postdoctoral researchers collaboration with 3 postdoctoral researchers:

PDoc3. S. Diamantopoulos (research projects: ESDA, SURE, RESISTANT)

PDoc2. M. Geogrioudakis (research projects: SCIENCE)

PDoc1. S. Stefanidou (research projects: RESISTANT)

Ph.D. Level advised (or co-advised) 9 PhD students:

- P10. Stamou A.: Artificial Intelligence methods for solving inverse problems and Digital Twin updating.
- P9. Magkanaris P.: Methods for the structural assessment of bridges using Artificial Intelligence
- P8. Papoudos S.: Seismic isolation of structures using EPS Geofoam.
- P7. Prentzas I: Artificial Intelligence Techniques and Big Data in Structural Reliability Analysis
- P6. Gianni H.: Nonlinear Stochastic Dynamics methods for structural assessment against natural hazards.
- P5. Achmet Z.: Use of Machine Learning methods for structural health assessment against natural hazards.
- P4. Giouva I.: The framework for civil protection in Greece and Europe.
- P3. Diamantopoulos S. (Mar 2022): Dynamic response of non-structural components and building contents to seismic loading.
- P2. Bakalis K. (Feb 2018): Vulnerability assessment of steel structures of the chemical industry (in collaboration with D. Vamvatsikos).
- P1. Zacharenaki A. (Oct 2014): Optimum design of steel structures under seismic loading (in collaboration with M. Papadrakakis).

Member of the **three-member advisory board** of 25 PhD students

Member of the **examination committee** of 18 PhD students

M.Sc. Level advised (or co-advised) 44 postgraduate students:

Vlachos N. (2024), Alexandridis T. (2024), Smyrniotis N. (2024), Palmos I. (2024) Koutoulas K. (2023), Kalogerakou B. (2023) Spyriiotis T. (2022), Sofianos M. (2022), Anagnostou A. (2022), Repousis (2022), Gianni H (2022), Prentzas (2022), Kanakis A. (Feb 2022), Filippatos L. (Feb 2021), Padiaditi E. (Feb 2021), Giannopoulou O. (Feb 2021), Stylianakis S. (Feb 2020), Basel A (July 2019), Achmet Z. (Feb 2019), Panagi S (Feb 2019), Torou ED (Feb 2019), Lada M (Feb 2019), Kolokytha M. (July 2018), Palkanoglou M. (Feb 2018), Chamosfakidis G (Feb 2018), Karachaliou D. (Feb 2018), Mpampatzeliou D. (Feb 2018), Ghanem A (Feb 2018), Saber M. (Feb 2018), Mantelos, M (January 2017), Diamantopoulos S (January 2017), Balokas G (July 2016), Tolis A (Oct 2011), Kakkari D (Oct 2011), Papageorgopoulou A (Oct 2010), Mitseas I (Oct 2009), Tsitsias V (July 2008), Zacharenaki A (Oct 2007), Vizirgianakis V & P (Oct 2006), Rizou V (March 2005), Tzineurakis S (July 2004).

Undergraduate Level 44 undergraduate student in their Diploma Thesis:

Xenakis B. (2024), Michailidis A. (2023), Pantelakis (2022), Kaselouri (2022), Papapoulou E. (2022), Kalogerakou V (2022), Stamou, T (2022), Drosos N (2022), Varberis S (Feb 2021), Liatsos

Ch (Sept 2020), Lekkas A (Feb 2020), Zanni A (Feb 2020), Vlachos N (Sept 2019), Kourogiorgas E (Sept 2019), Georgakis P (Feb 2019), Perloretzos M (Sept 2018), Venizelos A (Feb 2019), Repousis N. (Feb 2019), Giannakou A (Sept 2018), Markesinis A (Sept 2018), Aggelou I (July 2018), Koutoulas K (July 2018), Astitha A (Feb 2018), Kremyda E (Feb 2018), Manouselis (Feb 2017), Michail E, (Sept 2018), Soulis S (Sept 2017), Staurakantonakis Y (Sept 2017), Feliou A (Feb 2017), Kolokytha M (July 2016), Charalampous A-T (Sept 2016), Theofilatos G-E (Sept 2016), Fountas (Sept 2014), Pternea M (Feb 2014), Spachis A (Feb 2014), Strataki A (Feb 2014), Boltsi A (Univ. of Thessaly Sept 2010), Mousafeiropoulos G (Univ. of Thessaly, Sept 2011), Tolis A (Univ. of Thessaly, Oct 2009), Mitseas I (Univ. of Thessaly, Oct 2008), Ioannidi D (July 2006), Giovanis D (Oct 2005), Papaionannou I (March 2005), Rizou V (Oct 2003).

Students from international exchange programs

Keryan Trevarin (Erasmus Internship, *ENSICAEN - École nationale supérieure d'ingénieurs de Caen, 2024*), Paul Gros (Erasmus Internship, *École Centrale de Marseille, 2024*), Massad Abdelgadir Osman (MSc student, *University of Naples, 2024*), Akane Harada (Doctoral student, *Osaka University, 2023*), Gianluca Quinci (Doctoral student, *ERASMUS, Roma Tre, 2022*), Forgione Roberto (*ERASMUS, Università Degli Studi Del Sannio, 2021*), Anastasios Koulogiannis (*double-diplôme, ENPC France, 2021*, Emanuele Mastrangelo (*University of Basilicata, July 2017*), Sebastien Maitenaz (ENPC France, July 2015: *Seismic reliability assessment of articulated systems subjected to near-fault motions*), Sami Siraj-Dine (ENPC France, July 2014: *Seismic reliability assessment of articulated systems subjected to near-fault motions (in collaboration with I. Psycharis)*).

Hellenic Open University advised 7 students:

Kalli K. (2023), Tsourapas I. (2022), Anastasopoulou Th. (2022), Giakoumakis Ch. (2022), Kougoumtzis E (2021), Arifakos T (2021), Kapagiannis M (Sept 2013).

Administrative Experience (National Technical University of Athens)

- Member of the Deanery of the School of Civil Engineering, NTUA (since Sep. 2022)
- Director of the Structural Engineering Department (since Sep. 2022)
- Director of the Laboratory for Earthquake Engineering (since Dec. 2022)
- Alternate member of the Board of Directors of the National Technical University of Athens – Asset Management and Development Corporation” (NTUA-AMDC)
- University: Deputy member of the Senate Committee for Fundamental Research (~20 members)

- Academic Responsible for three ERASMUS collaboration (Universite Gustave Eiffel, Roma Tre, University of Sannio)
- Member of the Board of the Management of the property of NTUA
- Member of the Committee for International Collaborations and ERASMUS project of the School of Civil Engineering
- Committee for the Selection of Doctoral Students (~3 members)
- School of Civil Engineering: member of the Committee for Computers and Networks (~5 members)
- Structural Engineering Division: member of the General Assembly (~20 members)
- School of Civil Engineering: member of the General Assembly (~60 members)
- Past duty: School of Civil Engineering: member of the Committee for Equipment and Consumables (3 members)

Society memberships

- Delegate of Greece to the International Association for Earthquake Engineering (IAEE) (November 2019 – today)
- Hellenic Society for Earthquake Engineering (HSEE) (Treasurer 2016 – 2022, Board member 2016 – today)
- Earthquake Engineering Research Institute (EERI)
- American Society of Civil Engineers (ASCE)
- Greek Association of Computational Mechanics (GRACM)
- Hellenic Society for Theoretical & Applied Mechanics (HSTAM)
- Technical Chamber of Greece (TEE).

Honors, scholarships and distinctions

- Delegate of Greece in the Young Investigator Committee (YIC) of ECCOMAS (European Community on Computational Methods in Applied Sciences), 2011-2014.
- Young researcher fellowship award for exemplary research in Computational Mechanics, Second M.I.T. Conference on Computational Fluid and Solid Mechanics, Cambridge, MA, USA, June 17, 2003.
- Scholarship of the Secretariat of the Research Committee of the National Technical University of Athens for PhD studies.
- University admittance exams (1994): Chemistry 157/160, Physics 152/160, Mathematics 156/160 (upper 5% nationally).

Participation in National Committees

- Member of the Permanent Scientific Committee on Anti-Seismic Constructions and Technical Seismology of the Earthquake Planning and Protection Organization (EPPO)
- Member of the Permanent Special Scientific Committee for the Assessment of Seismic Risk and Reduction of Seismic Hazard (Representative of NTUA)

Participation in International Committees

- European Association for Earthquake Engineering, Work Group 13: “Seismic assessment, design and resilience of industrial facilities.”
- ATC-76 (Task Order 6): Applicability of Nonlinear Multiple-Degree-of-Freedom Modelling for Design, U.S. Department of Commerce, National Institute of Standards and Technology (NIST), 2009-2010.

Research Projects

Principal Investigator (PI) and/or Team Leader:

FOURIER	“Innovative Artificial Intelligence methodologies for monitoring and maintaining large scale complex infrastructures and obtaining greener, more Resilient and smart societies”, MSCA, European Union 2024. (role: PI, project budget: 240,098.40€)
ERROR	“Seismic behavior of degraded nuclear power plant columns due to corrosion (ERROR)”, User Project under the OFFERR project of HORIZON-EURATOM-2021-NRT-01 funded by the European Commission-Euratom Programme. (role: PI of User Team, project budget: 208,952€)
BEALIVE	“Bioinspired Electroactive Aeronautical Live skin”, H2020-SMS project in the recently granted HORIZON-2023-PATHFINDER-Project No 101129952. (role: Team leader, Team budget: 150,000€)
RESISTANT	“Multiple hazard fragility assessment of deteriorated RC bridges using Structural Health Monitoring”, HFRI Hellenic Foundation for Research & Innovation 2022. (role: PI, project budget: 187,355€)
SURE	“Sustainable Structured Environment with the Use of Smart Technologies”, GSRT National Research Program, part of project MIS 5130744 (role: PI, project budget: 25,000€)

- ESDA “Efficient nonlinear stochastic dynamics approaches for complex structural systems subject to natural hazards”, HFRI Hellenic Foundation for Research & Innovation 2020. (role: PI, project budget: 185,470 €)
- SCIENCE SpaCeborne SAR Interferometry as a Noninvasive tool to assess the vulnerability over Cultural hEritage sites, Greece-China: GSRT National Research Program, 2003-2005) (role: Team Leader, co-PI– project budget: 340.000€, team budget 75,000€)
- SERA/SPIF Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe”, INFRAIA-01-2016-2017 Research Infrastructure for Earthquake Hazard. Transnational access for the proposal: "A risk-informed decision making analysis for nuclear (NPP) and special risk (SIP) facilities in seismic areas", hosted in EUCENTER, Pavia, Italy. (role: Team member, estimated project budget: 60.000€)
- ARCHYTAS “Archetypal telemetry and decision support system for the Protection of monumental structures”, GSRT-ESPA. (role: Team Leader, project budget: 743.000€, team budget: 30.000€)
- SERA/SEREME Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe”, INFRAIA-01-2016-2017 Research Infrastructure for Earthquake Hazard. Transnational access for the proposal: "SE.RE.M.E.: SEismic RESilience of Museum contEnts", hosted in CEA Paris (role: Team Leader – PI, estimated project budget: 70.000 €)
- Thalis “Fragility assessment and seismic risk assessment for the protection of industrial structures”, GSRT-ESPA, 2007-2013. (project budget: 540.000 €, role: co-PI, fee received: 30.000€)
- ACE Hellas “Optimum Seismic Design of Reinforced Concrete buildings with elastic and inelastic response”, Software development for American Computers for Engineers (ACE Hellas) Ltd, 2006-2008 (project budget: 41.000€, role: co-PI, fee received: 1.462€)

Principal Researcher:

ABAKAS: “Sustainable design of Structures”, GSRT-ESPA, 2013.

NIREAS- Principal Researcher: “Seismic assessment of Kouris earth-dam”. NEA YPODOMI

IWRC: / STRATI / 0308 /09 , Co-funded by the European Regional Development Fund and the Republic of Cyprus through the Cyprus Research Promotion Foundation, 2013-2015. (project budget: 2.000.000€, fee received: 27.000€)

Cariplo Founda- “Innovative Materials for Structural Rehabilitation in a zone of high seismic risk: De-
tion: velopment of models for the interpretation of the behavior of structures reinforced with FRP”. In collaboration with the University of Pavia, 2007-2009. (project budget: 300.000€, fee received: 58.000€)

PENED 2001: “Detailed modeling and analysis with finite elements of RC buildings under static and dynamic loading”, GSRT National Research Program, 2003-2005. (project budget: 88,000€, fee received: 30.000€)

Researcher with contract:

MASTER “Mastering the computational challenges in numerical modelling and optimum design of CNT reinforced composites”, ERC-2011-ADG_20110209, 2014. (project budget: 2,500,000€, fee received: 30.000€)

Thalis: “Solving complex analysis problems for the towers of new generation wind turbines”, GSRT-ESPA, April 2012. (project budget: 540.000€, fee received: 1.000€)

DARE: “Soil-foundation structure systems beyond conventional seismic “failure” thresholds: application to new or existing structures and monuments”, 1/12/2008-31/10/2013. (project budget: 2.400.000€, fee received: 2.000€)

ADERS “Analysis and Design of Earthquake Resistant Structures”, FP7-People-2010-IRSES, 2011-2012. (project budget: 1.400.000€, fee received: 8.400€)

Reviewer of research projects

HFRI “Hellenic Foundation for Research & Innovation”, November 2021 & April 2024.

EPANET “Research and Innovation”. Greek Ministry of Education and Religious Affairs, Sept. 2019

GSRT “Set up and support innovative spin-off and spin-out companies”. GSRT-67KAIN2010Δ, Sept. 2013

IKY National Scholarship Foundation for PhD studies (since 2018).

GSRT Reviewer for 5 national research projects since 2016.

Editor of International Journals

- Heylion Engineering (Elsevier)

Editorial Board of International Journals

- Engineering Structures (Elsevier)
- Associate Editor, Frontiers in Built Environment: Computational Methods in Structural Engineering
- GeoHazards (MDPI)
- Journal of Structural Integrity and Maintenance (Taylor and Francis)
- International Journal of Earthquake and Impact Engineering (Interscience publishers)
- Frontiers in Built Environment: Bridge Engineering
- International Journal of Earthquake Engineering and Hazard Mitigation (IREHM)

Referee and Review Activities

Peer reviewed papers of more than **250** papers for more than **50** International Journals. Indicative journal titles are provided below (the publisher is shown in parenthesis):

Elsevier: Computer Methods in Applied Mechanics and Engineering, Computer and Structures, Structural Safety, Journal of Thin Wall Structures, Engineering Structures, Probabilistic Engineering Mechanics, Journal of Fluids and Structures, International Journal of Mechanical Sciences, Advances in Engineering software, Advances in Structural Engineering, Journal of Cultural Heritage, Soft Computing, International Journal of Disaster Risk Reduction, Mechanical Systems and Signal Processing.

Wiley: Earthquake Engineering and Structural Dynamics (EESD), International Journal of Sustainable Engineering, Asian Journal of Control

Springer: Bulletin of Earthquake Engineering, Computational Mechanics, Structural & Multidisciplinary Optimization, Earthquake Engineering and Engineering Vibration, Materials and Structures Water Resources Management, Soft Computing, Natural Hazards

Taylor & Francis: Journal of Earthquake Engineering, Engineering Optimization, Structure and Infrastructure Engineering, Ships and Offshore Structures

ASCE: Journal of Structural Engineering, Engineering Mechanics, Journal of Pipeline Systems, Journal of Computing in Civil Engineering

EERI: Earthquake Spectra

ICE: Structures, Structures & Buildings

ASME: Journal of Pressure Vessel Technology

TechnoPress: Earthquakes and Structures, Steel and Composite Structures

Hindawi: Modelling and Simulation in Engineering

Other publishers: International Journal of Computational Methods (World Scientific Publishing), Scientia Iranica, Journal of Civil Engineering and Construction Practice, The Open Construction and Building Technology Journal, International Journal of Physical Sciences, Korean Society of Civil Engineering, Journal of Civil Engineering, British Journal of Applied Science and Technology (Sciencedomain), Frontiers in Built Environment (Frontiers), NED University Journal of Research, Journal of Civil Engineering IABSE Structural Engineering International.

Short Courses & Invited lectures

- 18-23 Nov. 2024 “Passive isolation application to buildings and bridges” in “Semaine Amortisseurs, Vibrations des structures du génie civil”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.
- 24 Oct. 2024 “Seismic behavior and reliability assessment of cultural heritage structures”, Jiaotong University, Beijing, China.
- 20 Oct. 2024 “The 3rd International Symposium on Cultural Heritage Seismic-Protection Technology (3rd ISCHSPT)”, in Chengdu, Sichuan Province, China.
- 22 Nov. 2023 “Passive isolation application to buildings and bridges” in “Semaine Amortisseurs, Vibrations des structures du génie civil”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.
- 23-26 May 2023 “Reliability and health assessment of energy infrastructure”, *22nd European Regional Seminar on Induced Seismicity Effects on the Built Environment, Energy Production, Transportation and Storage*, Zernike Campus, Groningen, Netherlands
- 1 Dec 2022 “Reliability and health assessment of structures: past work and future perspectives”, *Ecole Centrale Nantes*, Nantes, France.
- 14 – 18 Nov 2022 “Passive isolation application to buildings and bridges” in “Semaine Amortisseurs, Vibrations des structures du génie civil”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.
- 18 Oct 2022 “Webinaire ISAS: Nos grands instruments au service du Patrimoine”, Commissariat Atomique Energie C.E.A., France.
- 17 Feb - 10 Mar 2022 “Computational Nonlinear Response Assessment of Structures”, Doctoral Course, 6 sessions of 3 hours, *Université Gustave Eiffel*, Marne-la-Vallée, Paris, France.
- 15 – 19 Nov 2021 “Passive isolation application to buildings and bridges” in “Semaine Amortisseurs, Vibrations des structures du génie civil”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.

- 31 March 2021 “Experimental seismic assessment and protection of museum artefacts”, *University of Cyprus*, Nicosia, Cyprus.
- 19 – 20 Nov 2020 “Passive isolation application to buildings and bridges” in “Semaine Amortisseurs, Vibrations des structures du génie civil”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.
- 1 Sept – 10 Oct 2020 6-week doctoral course on “Reliability and risk assessment of structures and systems”, *Université Paris-Est & Université Gustave Eiffel*, Paris, France. [course webpage](#)
- 17 December 2019 “Seismic reliability and resilience assessment of pipe networks”, Workshop: “Resilience of pipeline networks to seismic hazards”, *University of Bristol*, Bristol, UK.
- 23 July 2019 “Properties and applications of Shape Memory Alloys”, *CIRIMAT - Centre Inter-universitaire de Recherche et d’Ingenierie des Materiaux*, Toulouse, France.
- 29 May 2018 “Seismic risk and resilience assessment of critical infrastructure”, *Ecole Nationale des Pontes et Chaussées*, Paris, France.
- 18-25 Sept 2017 1-week seminar doctoral course on “Computational methods for the seismic assessment of structures”, *Roma Tre University*, Rome, Italy.
- 13-17 March 2017 “Performance-based risk assessment of critical structures and systems”, *Complex Decision Making under Emergency Conditions, Organized by Politecnico di Milano, Politecnico di Torino*, Loano, Italy.
- 1 June 2016 “Nonlinear stochastic analysis of structures with spatially variable system properties”, *DeGrieLab Workshop: Structural health monitoring for resilient Infrastructure*, Chalkidi, Greece.
- 22 September 2015 “Seismic reliability assessment of structures, monuments and infrastructure”, *University College London*, London, UK.
- 13 March 2013 “Reliability Assessment of urban water distribution networks under seismic loads”, *University of Cyprus*, Nicosia, Cyprus.
- 20 November 2011 “Static pushover versus nonlinear dynamic analysis: qualitative/quantitative comparison and seismic risk assessment”, *Universidad Autonoma Metropolitana*, Azcapotzalco, Mexico City, Mexico.
- 14 November 2008 “Performance-based design and reliability assessment of seismically excited structures”, *University of Cyprus*, Nicosia, Cyprus.

Lectures to practicing engineers

- 11 Sept 2023 “Modern Technologies for the Design and Monitoring of the Structural Integrity of Constructions”, *Egaleo is Smart*, Egaleo, Athens, Greece.
- 6 Sept 2023 “Lessons from the Earthquake in Arkalochori and Contemporary Developments in the Seismic Design of Structures”. *Technical Chamber of Greece (Eastern Crete branch)*, Heraklion Crete.
- 1 Dec 2012 Colloquium for new KANEPE design code for the seismic upgrade and assessment of RC structures, Kos Island November 30th, 2012 - Kalymnos Island, Greece.
- July 2012 Lecture Series: “Application of the new KANEPE design code for the seismic upgrade and assessment of RC structures”, Engineering Intelligence, Athens, Greece.
- May 2009 Lecture Series: “Application of novel technologies for the analysis and design of earthquake-resistant structures”. Technical Chamber of Greece, Athens, Greece.
- 2008 Lecture Title: “Contemporary computational tools for the analysis and design of buildings”, National Center for Public Administration and Local Government, Thessaloniki, Greece.

Chairman of International Conferences

- COMPDYN 2025, “10th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, June 2025, Rhodes, Greece.
- COMPDYN 2023, “9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 12-14 June 2023, Athens, Greece.
- COMPDYN 2021, “8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 21-23 June 2021, streamed from Athens, Greece.
- EURODDYN 2020, “11th International Conference on Structural Dynamics”, 23-25 November 2020, Athens, Greece.
- COMPDYN 2019, “7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 24-26 June 2019, Hersonissos Crete, Greece.
- COMPDYN 2017, “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 15-17 May, Rhodes, Greece.
- COMPDYN 2011, “3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 26-28 May, Corfu, Greece.
- COMPDYN 2009, “2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 22-24 June 2009, Island of Rhodes, Greece.

Organising/Steering Committee of International Conferences

- “5th National Conference for Earthquake Engineering and Engineering Seismology”, 20–22 October 2022, Athens, Greece.
- “4th National Conference for Earthquake Engineering and Engineering Seismology”, 5–7 September 2019, Athens, Greece.
- “16th European Conference on Earthquake Engineering”, 16ECEE, 18–21 June 2018, Thessaloniki, Greece.
- “European Congress on Computational Methods in Applied Sciences and Engineering”, ECCOMAS Congress 2016, 5–10 June, Crete Island, Greece.
- “5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2015, 25–27 May, Crete Island, Greece.
- “4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2013, 12–14 June, Kos Island, Greece.
- “7th GRACM International Congress on Computational Mechanics”, Greek Association of Computational Mechanics, 30 June - 2 July 2011, Athens, Greece.

Editorial and/or Scientific Board of International Conferences

- “Resilience Multi-risk Assessment and Monitoring (ICONREM 2026)”, Florence, Italy 16–19, 2026.
- “Evolutionary and Deterministic Methods for Design, Optimization and Control (EUROGEN 2025)”, Lahti, Finland on September 16–18, 2025
- “16th International Conference on Vibration Problems (ICOVP-2025) & 11th International Conference on Wave Mechanics and Vibrations (WMVC-2025)”, Lisbon, Portugal, September 2–5, 2025.
- EURODYN 2026, “13th International Conference on Structural Dynamics”, 27th September - 1st October 2026, Hanover, Germany.
- “5th International Conference PROHITECH – Protection of Historical Constructions”, Naples 26 –28 March, 2025.
- EVACES 2025 “Experimental Vibration Analysis for Civil Engineering Structures”, Porto, Portugal, 2–4 July 2025.
- SeismiCOM 2024 “5th International Conference on Seismic Design and Analysis of Structures and Foundations”, 20–21 June 2024 (online).
- ICONREM 2024, “3rd International Conference on Resilience, Earthquake Engineering and Structural Health Monitoring”, 24–27 June 2024.
- “16th International Conference on Vibration Problems (ICOVP 2023)”, Doha, Qatar, 5–9 February 2023.

- “15th International Conference on Vibration Problems (ICOVP 2021)”, Doha, Qatar, 14-17 November 2021.
- “Evolutionary and Deterministic Methods for Design, Optimization and Control (EUROGEN 2021)”, Athens, Greece, 17-19 May 2021.
- “The Sixteenth International Conference on Civil, Structural & Environmental Engineering Computing”, Riva del Garda, near Lake Garda, Italy, 16-19 September 2019.
- “14th International Conference on Vibration Problems (ICOVP 2019)”, Crete, Greece, 1-4 September 2019.
- “ECT2018 The Tenth International Conference on Engineering Computational Technology”, Sitges, Barcelona, Spain, 4-6 September 2018.
- “16th European Conference on Earthquake Engineering”, 16ECEE, 18-21 June 2018, Thessaloniki, Greece.
- “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2017, 15-17 June, Rhodes, Greece.
- “The Fourth International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, CIVIL-SOFT-COMP 2015, Prague, Czech Republic, 1-4 September 2015.
- “2nd ECCOMAS Young Investigators Conference (YIC)”, Bordeaux, France, 2-6 September 2013.
- “The Third International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, Cagliari, Sardinia, Italy, 3-6 September 2013.
- “The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, Chania, Crete, 6-9 September 2011.

Organiser of Special Sessions (Mini Symposia) in International Conferences

- “Seismic retrofit of existing buildings”, M. Fragiadakis, A. Sextos, H. Varum, *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy.
- “Machine learning and AI methods for risk analysis of major hazard process facilities”, F. Paolacci, O. Bursi, M. Fragiadakis, *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy.
- “Digital Bridge Monitoring: Integration of NDTs and Visualisation Tools for Structural and durability Assessment”, M. Rasol, F. Schmidt, I. Brilakis, M. Fragiadakis, in *2nd Conference of the European Association on Quality Control of Bridges and Structures – EUROSTRUCT2023*, 27-29 September Vienna, Austria.

- “Optimization methods and applications in Structural Engineering”, Lavan, O., **Fragiadakis, M.**, “15th International Conference on Evolutionary and Deterministic Methods for Design, Optimization and Control”, 1-3 June 2023, Chania, Crete, Greece.
- “Mini-symposium on Artificial Intelligence techniques in Seismic Engineering”, Paolacci, F., Quinci, G., **Fragiadakis, M.**, *9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2023, Athens, Greece.
- “Recent advances in ground motion selection and scaling techniques”, Shaghayegh Karimzadeh, Georgioudakis, M. **Fragiadakis, M.**, *9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2023, Athens, Greece.
- “Recent Advances in Structural Dynamics and Earthquake Engineering”. **Fragiadakis, M.**, Tsiatas, G., Tsopeles, P. , *13th HSTAM International Congress on Mechanics*, Patras, 24-27. August 2022.
- “Seismic protection of non-structural components: recent developments and future challenges”, DiSarno, L., **Fragiadakis, M.**, in *8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2021, 27-30 June, Athens, Greece.
- “Experimental Earthquake Engineering”, Mouzakis, H. **Fragiadakis, M.** in *EURODYN 2020: 11th International Conference on Structural Dynamics*, 23-25 November 2020, Athens, Greece.
- “Seismic Resilience of Museum Contents”, **Fragiadakis, M.**, DiSarno, L., in *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2019, 24-26 June, Crete, Greece.
- “Special Session: “Dynamics and Seismic Response of Rocking and Self-Centering Structures”, Dimitrakopoulos, E., Vassiliou, M., DeJong, M., **Fragiadakis, M.** in the *16th European Conference on Earthquake Engineering*, 16ECE, 18-21 June 2018, Thessaloniki, Greece.
- “Dynamic and Seismic Response of Rocking and Self-Centering Structures”, Dimitrakopoulos, E., **Fragiadakis, M.**, Vassiliou, M. in the *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2017, 15-17 June, Rhodes Island, Greece.
- “Seismic resilience of critical infrastructure and infrastructure”, Vanzi, I, Sextos, A., **Fragiadakis, M.**, Karamanos, S. in the *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2017, 15-17 June, Rhodes Island, Greece.
- “Dynamics and Seismic Response of Rocking and Self-centering Structures”, DeJong, M., Dimitrakopoulos, E., **Fragiadakis, M.** in the *European Congress on Computational Methods*

in Applied Sciences and Engineering, ECCOMAS Congress 2016, 5-10 June, Crete Island, Greece.

- “Stochastic dynamics tools for performance-based engineering”, co-organised by G. Stefanou and **M. Fragiadakis** in the *5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2015, 25-27 May, Crete Island, Greece.
- “Optimization Algorithms in Earthquake Engineering”, co-organised by **M. Fragiadakis** in the *Conference on Engineering and Applied Sciences Optimization (OPTI 2014)*, 4-6 June, Kos Island, Greece.
- “Seismic Analysis and Design of Industrial Facilities and Pipelines”, co-organised by S. Karamanos, P. Dakoulas, V. Papadopoulos and **M. Fragiadakis** in the *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN 2013, 12-14 June, Kos Island, Greece
- “Aseismic Design of Structures and Lifelines” organized by M. Papadrakakis and **M. Fragiadakis**, in the EURODDYN 2011, *8th International Conference on Structural Dynamics*, Lueven, Belgium, July 4-6, 2011.
- “Seismic Performance Evaluation under Uncertainty” organized by D. Vamvatsikos and **M. Fragiadakis**, in the *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011.
- “Nonlinear stochastic dynamics of structures with uncertain mechanical and geometric properties” organized by George Stefanou, **Michalis Fragiadakis** and Manolis Papadrakakis in the *10th International Conference on Structural Safety and Reliability*, Osaka, Japan, September 13-17, 2009.
- “Seismic Structural Optimization” organized by M. Papadrakakis, N. Lagaros and **M. Fragiadakis**, in the *14th World Conference on Earthquake Engineering (14WCEE)*, Beijing, China, October 14-17, 2008.
- “Innovative Approaches for Seismic Design using Nonlinear Analysis Methods” organized by **Michalis Fragiadakis**, Christopher M. Foley and Yiannis Tsompanakis, in the *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN2007, Rethymno, Crete, Greece, June 13-16, 2007.

Software development

- **M. Fragiadakis**, M. Georgioudakis and P. Georgakis (2021). SeismoLEE: An online tool for ground motion record processing, *Laboratory for Earthquake Engineering*, School of Civil Engineering, National Technical University of Athens (NTUA), www.seismolee.eu.

Lecture notes

- **M. Fragiadakis**, Lecture notes of the post-graduate course: “Nonlinear Finite Element Modeling of RC and Steel member”, School of Civil Engineering, National Technical University of Athens, October 2015. Course page: [course web page](#), [download notes](#).

Publications

The research work consists of **4** books (**2** edited), **55** journal papers (International journal, peer reviewed), **19** book chapters in edited books, **140** conference papers (International conferences, peer-reviewed), **4** technical reports and **4** theses/dissertations.

Books

- B4. **Fragiadakis M.** “Nonlinear analysis of frame structures under seismic loading”, Springer International publishing (contract No 57747, July 2016), to be delivered.
- B3. S. Christodoulou, **Fragiadakis M.**, A. Agathokleous, S. Xanthos. “Urban Water Distribution Networks: Assessing Systems Vulnerabilities, Failures, and Risks”, Elsevier (2017). [web page](#)
- B2. “Computational Methods in Earthquake Engineering – Vol. 2”, edited by M. Papadrakakis, **Fragiadakis M.**, V. Plevris (Eds.), Springer-Verlag, Berlin (2013). (112000 downloads on 07/04/2024). [web page](#)
- B1. “Computational Methods in Earthquake Engineering”, edited by M. Papadrakakis, **M. Fragiadakis**, N.D. Lagaros (Eds.), Springer-Verlag, Berlin (2011) (56000 downloads on 07/04/2024). [web page](#)

Journal Papers

- J55. Yanni, H., **Fragiadakis, M.**, Mitseas, I. (2025). Wavelet-based stochastic model for the generation of fully non-stationary bidirectional seismic accelerograms. *Earthquake Engineering & Str Dynamics*, doi: 10.1002/eqe.4315.
- J54. Yanni, H., **Fragiadakis, M.**, Mitseas, I. P. (2024). Novel Method for the Stochastic Generation of Hazard-Consistent Artificial Accelerograms: A practical application. *Technical Annals*, 1(6). <https://doi.org/10.12681/ta.36879>
- J53. Diamantopoulos, S., **Fragiadakis, M.** (2024). Risk Assessment of Ancient Columns and Colonnades. *Technical Annals*, 1(6). <https://doi.org/10.12681/ta.36874>
- J52. Quinci, G., Paolacci, F., **Fragiadakis, M.**, Bursi, O.S. (2025). A machine learning framework for seismic risk assessment of industrial equipment, *Reliability Engineering & System Safety* doi: 10.1016/j.ress.2024.110606). [download](#).

- J51. Prentzas, I., **Fragiadakis, M.** (2024). Quantified single and multiple active learning Kriging models for structural reliability analysis, *Probabilistic Engineering Mechanics*, Vol.78, 103699, doi: 10.1016/j.probengmech.2024.103699. [download](#).
- J50. Yanni, H., **Fragiadakis, M.**, Mitseas, I (2024). Probabilistic generation of hazard-consistent suites of fully non-stationary seismic records *Earthquake Engineering & Str Dynamics*, Vol. 53, pp. 3140—3164. [download](#).
- J49. Diamantopoulos, S., Achmet, Z., Stefanidou, S., Markogiannaki, O., **Fragiadakis, M.** (2024). “Fragility assessment and risk-targeted design of RC buildings considering the effect of aging.” *Structures*, Vol. 62, p. 106277. <https://doi.org/10.1016/j.istruc.2024.106277> [download](#).
- J48. Diamantopoulos, S., Achmet, Z., Stefanidou, S., Markogiannaki, O., **Fragiadakis, M.** (2024). “Seismic Fragility Curves of RC Buildings Subjected to Aging.” *GeoHazards*, Vol. 5(1), pp. 192—208. <https://doi.org/10.3390/geohazards5010010>. [download](#).
- J47. Diamantopoulos, S., **Fragiadakis, M.** (2024). “Seismic response and fragility assessment of freestanding objects with random geometry.” *Soil Dynamics and Earthquake Engineering*, Vol. 181, p. 108649). <https://doi.org/10.1016/j.soildyn.2024.108649> [download](#).
- J46. Stefanidou, S., Markogiannaki, O., Mikes, I., **Fragiadakis, M.** (2023). “Fragility analysis framework for bridges subjected to successive Natural Hazards.” *Structural Engineering International*, Vol. 34(1), pp. 45—54. <https://doi.org/10.1080/10168664.2023.2273464> [download](#).
- J45. Berto, L., Di Sarno, L., **Fragiadakis, M.**, Rocca, I., Saetta, A. (2023). “Seismic assessment of free standing artifacts: Full-scale tests on large shake table.” *Earthquake Engineering & Structural Dynamics* Vol. 52(9), pp. 2708—2730. [download](#).
- J44. Achmet, Z, Diamantopoulos, S., **Fragiadakis, M.**, (2024). “Rapid seismic response prediction of rocking blocks using Machine Learning”, *Bulletin of Earthquake Engineering*, Vol, 22, pp. 3471–3489. [download](#).
- J43. Diamantopoulos, S., **Fragiadakis, M.**, (2023). “Modeling, fragility and risk assessment of ancient freestanding columns and colonnades”, *Engineering Structures*. Vol. 275B(15) 115273, 2023. <https://doi.org/10.1016/j.engstruct.2022.115273>. [download](#)
- J42. Diamantopoulos, S., **Fragiadakis, M.**, (2022). “Modeling of rocking frames under seismic loading”, *Earthquake Engineering and Structural Dynamics*, Vol. 51(1), pp. 108-128. doi: 10.1002/eqe.3558 [download](#)
- J41. Dimakopoulou, V., **Fragiadakis, M**, Taflampas, I. (2022). “A wavelet-based approach for truncating pulse-like records”, *Bulletin of Earthquake Engineering*, Vol. 20, pp. 1—24. doi: 10.1007/s10518-021-01224-8 [download](#)

- J40. Simiriotis, N., **Fragiadakis, M.**, Rouchon, J.F., Braza, M. (2021). “An efficient algorithm for the shape control of aeronautical configurations using shape memory alloy actuators”, *Computers & Structures*, Vol. 244:106434, doi: 10.1016/j.compstruc.2020.106434 [download](#)
- J39. Balokas, G. **Fragiadakis, M.**, (2020). “Stochastic assessment of frame structures under seismic loading with flexibility-based fiber elements”, *Structure and Infrastructure Engineering*, Vol. 17(3), pp. 413—424. doi: 10.1080/15732479.2020.1757728. [download](#)
- J38. **Fragiadakis, M.**, Diamantopoulos, S. (2020). “Fragility and risk assessment of freestanding building contents”, *Earthquake Engineering and Structural Dynamics*, Vol. 49(10), pp: 1028-1048, doi: 10.1002/eqe.3276. [download](#)
- J37. Georgioudakis, M., **Fragiadakis, M.**, (2020). “Selection and Scaling of Ground Motions Using Multi-Criteria Optimization”, *Journal of Structural Engineering (ASCE)*, Vol. 146(11), pp: 04020241-1-13, doi:10.1061/(ASCE)ST.1943-541X.0002811. [download](#)
- J36. Diamantopoulos, S., **Fragiadakis, M.**, (2019). “Seismic response assessment of rocking blocks and systems using simple beam elements”, *Earthquake Engineering and Structural Dynamics*, Vol. 48, pp. 689-708. doi: 10.1002/eqe.3157. [download](#)
- J35. Bakalis, K., Kazantzi, A., Vamvatsikos, D., **Fragiadakis, M.** (2018). “Seismic performance evaluation of liquid storage tanks using nonlinear static procedures”, *Journal of Pressure Vessel Technology*, Vol. 141(1), pp. 010902. doi: 10.1115/1.4039634. [download](#)
- J34. Bakalis, K., Vamvatsikos D., **Fragiadakis, M.**, (2017). “Seismic Risk Assessment of Liquid Storage Tanks via a Nonlinear Surrogate Model”, *Earthquake Engineering and Structural Dynamics*, Vol. 46(15), pp. 2851-2868, doi: 10.1002/eqe.2939. [download](#)
- J33. Bakalis, K., **Fragiadakis, M.**, Vamvatsikos D. (2017). “Surrogate Modelling for the Seismic Performance Assessment of Liquid Storage Tanks”, *Journal of Structural Engineering*, Vol. 143(4), pp. 04016199-1:13, doi:10.1061/(ASCE)ST.1943-541X.0001667. [download](#)
- J32. Tsiatas, G.C., **Fragiadakis, M.** (2016). “Dynamic analysis and seismic response of circular arches with variable cross-section”, *Journal of Earthquake Engineering*, Vol. 22(2), pp. 191-210. doi: 10.1080/13632469.2016.1217805. [download](#)
- J31. Cimellaro, G., Tinebra, A., Renschler, C. and **Fragiadakis, M.** (2016). "New Resilience Index for Urban Water Distribution Networks." *Journal of Structural Engineering*, Vol. 142(8), pp. C4015014:1-13, doi: 10.1061/(ASCE)ST.1943-541X.0001433. [download](#)
- J30. Giovanis, D., **Fragiadakis, M.**, Papadopoulos, V. (2016). “Quick assessment of epistemic uncertainty using Incremental Dynamic Analysis and Neural Networks”, *Bulletin of Earthquake Engineering*, Vol. 14, pp. 529-547. doi: 10.1007/s10518-015-9838-7 [download](#)
- J29. Xanthos, S., **Fragiadakis, M.**, Christodoulou, S. (2015). “Generating a seismic reliability assessment for an urban water distribution network”, *Water Asset Management International*

- (*WAMI*), Vol. 11(2), pp. 17-20. [download](#)
- J28. **Fragiadakis, M.**, Vamvatsikos D., Karlaftis M., Lagaros N., Papadrakakis M. (2015). “Seismic assessment of structures and lifelines”, *Journal of Sound and Vibration*, Vol. 334, pp. 29-56. doi: 10.1016/j.jsv.2013.12.031 [download](#)
- J27. Christodoulou, S., **Fragiadakis, M.** (2014). “Vulnerability Assessment of Water Distribution Networks Considering Performance Data”, *ASCE Journal of Infrastructure Systems*, Vol. 21(2), pp. 1812-1819. doi: 10.1061/(ASCE)IS.1943-555X.0000224 [download](#)
- J26. Zacharenaki, A., **Fragiadakis, M.**, Assimaki, D., Papadrakakis, M. (2014). “Bias assessment in Incremental Dynamic Analysis due to record scaling”, *Soil Dynamics and Earthquake Engineering*, Vol. 67, pp. 158-168. doi: 10.1016/j.soildyn.2014.09.007 [download](#)
- J25. **Fragiadakis, M.**, Vamvatsikos, D., Aschheim, M. (2014). “Application of Nonlinear Static Procedures for Seismic Assessment of Regular RC Moment Frame Buildings”, *Earthquake Spectra*, Vol. 30(2): 767-794. doi: 10.1193/111511EQS281M [download](#)
- J24. **Fragiadakis, M.**, Christodoulou, S. (2014). “Seismic reliability assessment of urban water networks”, *Earthquake Engineering and Structural Dynamics*, Vol. 43(3), pp. 357-374. doi: 10.1002/eqe.2348 [download](#)
- J23. Christodoulou, S., Gagatsis, A., Xanthos, S., Kranioti, S., Agathokleous, A. and **Fragiadakis, M.** (2013). “Entropy-Based Sensor Placement Optimization for Waterloss Detection in Water Distribution Networks”, *Journal of Water Resources Management*, Vol. 27(13), pp. 4443-4468. doi: 10.1007/s11269-013-0419-8 [download](#)
- J22. Psycharis, I., **Fragiadakis, M.**, Stefanou, I. (2013). “Seismic reliability assessment of classical columns subjected to near source ground motions”, *Earthquake Engineering and Structural Dynamics*, Vol. 42(14), pp. 2061-2079. doi: 10.1002/eqe.2312 [download](#)
- J21. **Fragiadakis, M.**, Christodoulou, S., Vamvatsikos, D. (2013). “Reliability assessment of urban water distribution networks under seismic loads”, *Journal of Water Resources Management*, Vol. 27(10), pp. 3729-3764. doi: 10.1007/s11269-013-0378-0 [download](#)
- J20. Dimakopoulou, V., **Fragiadakis, M.**, Spyrakos, C. (2013). “Influence of modelling parameters on the response of degrading systems to near-field ground motions”, *Engineering Structures*, Vol. 53, pp. 10-24. doi: 10.1016/j.engstruct.2013.03.008 [download](#)
- J19. Zacharenaki, A., **Fragiadakis, M.**, Papadrakakis, M. (2013). “Reliability-based optimum seismic design of structures using simplified performance estimation methods”, *Engineering Structures*, Vol. 52, pp. 707-717. doi: 10.1016/j.engstruct.2013.03.007 [download](#)
- J18. Assimaki, D., Li, W., **Fragiadakis, M.** (2012). “Site effects in structural response predictions of inelastic SDOF oscillators”, *Earthquake Spectra*, Vol. 28(3), pp. 859-88. doi: 10.1193/1.4000056 [download](#)

- J17. **Fragiadakis, M.**, Lagaros, N.D. (2011). “An overview to structural seismic design optimisation frameworks”, *Computers and Structures*, Vol. 89(11-12), pp. 1155-1165. doi: 10.1016/j.compstruc.2010.10.021 [download](#)
- J16. Lagaros, N.D., **Fragiadakis, M.** (2011). “Evaluation of ASCE-41, ATC-40 and N2 static pushover methods based on optimally designed buildings”, *Soil Dynamics and Earthquake Engineering*, Vol. 31(1), pp. 77-90. doi: 10.1016/j.soildyn.2010.08.007 [download](#)
- J15. Papachristidis, A., **Fragiadakis, M.** and Papadrakakis, M. (2010). “A 3D fibre beam-column element with shear modelling for the inelastic analysis of steel structures”, *Computational Mechanics*, Vol. 45, pp. 553-572. doi: 10.1007/s00466-010-0470-8 [download](#)
- J14. **Fragiadakis, M.**, Vamvatsikos, D. (2010). “Fast performance uncertainty estimation via pushover and approximate IDA”, *Earthquake Engineering and Structural Dynamics*, Vol. 39(6), pp. 683-703. doi: 10.1002/eqe.965 [download](#)
- J13. Vamvatsikos, D., **Fragiadakis, M.** (2010). “Incremental Dynamic Analysis for estimating seismic performance sensitivity and uncertainty”, *Earthquake Engineering and Structural Dynamics*, Vol. 39(2), pp. 141-163. doi: 10.1002/eqe.935 [download](#)
- J12. Stefanou, G., **Fragiadakis, M.** (2009). “Nonlinear dynamic analysis of frames with stochastic non-Gaussian material properties”, *Engineering Structures*, Vol. 31(8), pp. 1841-1850. doi: 10.1016/j.engstruct.2009.02.020 [download](#)
- J11. **Fragiadakis, M.**, Papadrakakis, M. (2008). “Modeling, analysis and reliability of seismically excited structures: Computational issues”, *International Journal of Computational Methods*, Vol. 5(4), pp. 483-511. doi: 10.1142/S0219876208001674 [download](#)
- J10. **Fragiadakis, M.**, Papadrakakis, M. (2008). “Performance-based optimum seismic design of reinforced concrete structures”, *Earthquake Engineering and Structural Dynamics*, Vol. 37(6), pp. 825-844. doi: 10.1002/eqe.786 [download](#)
- J9. Lagaros, N.D., **Fragiadakis, M.** (2007). “Fragility assessment of steel frames using Neural Networks”, *Earthquake Spectra*, Vol. 23(4), pp. 735-752. doi: 10.1193/1.2798241 [download](#)
- J8. Lagaros, N.D., Papadrakakis, M., **Fragiadakis, M.**, Stefanou, G. and Tsompanakis, Y. (2007). “Neural network aided stochastic computations and earthquake engineering”, *Computer Assisted Mechanics and Engineering Sciences (CAMES)*, Vol. 14(2), pp. 251-275. [download](#)
- J7. Lagaros, N.D., **Fragiadakis, M.** (2007). “Robust performance-based design optimization of steel moment resisting frames”, *Journal of Earthquake Engineering*, Vol. 11(5), pp. 752-772. doi: 10.1080/13632460601087229 [download](#)
- J6. Lagaros, N.D., **Fragiadakis, M.**, Papadrakakis, M. and Tsompanakis, Y. (2006). “Structural optimization: a tool for evaluating seismic design procedures”, *Engineering Structures*, Vol.

- 28(12), pp. 1623-1633. doi:10.1016/j.engstruct.2006.02.014 [download](#)
- J5. **Fragiadakis, M.**, Vamvatsikos, D. and Papadrakakis, M. (2006). “Evaluation of the influence of vertical irregularities on the seismic performance of a nine-storey steel frame”, *Earthquake Engineering and Structural Dynamics*, Vol. 35(12), pp. 1489-1509. doi: 10.1002/eqe.591 [download](#)
- J4. **Fragiadakis, M.**, Lagaros, N.D. and Papadrakakis, M. (2006). “Performance-based earthquake engineering using structural optimization tools”, *International Journal of Reliability and Safety*, Vol. 1(1/2), pp. 59-75. [download](#)
- J3. **Fragiadakis, M.**, Lagaros, N.D. and Papadrakakis, M. (2006). “Performance-based multiobjective optimum design of steel structures considering life cycle cost”, *Structural and Multidisciplinary Optimization*, Vol. 32(1), pp. 1-11. doi: 10.1007/s00158-006-0009-y [download](#)
- J2. Papadrakakis, M., Tsompanakis, Y., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of steel frames under seismic loading conditions using evolutionary computation”, *Journal of Theoretical and Applied Mechanics on Computational Intelligence in Mechanics*, Vol. 42(3), pp. 585-608. [download](#)
- J1. Lagaros, N.D., **Fragiadakis, M.** and Papadrakakis, M. (2004). “Optimum design of shell structures with stiffening beams”, *AIAA Journal*, Vol. 42(1), pp. 175-184. Nikolaos D. Lagaros, Michalis Fragiadakis, and Manolis Papadrakakis. "Optimum Design of Shell Structures with Stiffening Beams", *AIAA Journal*, Vol. 42(1) (2004), pp. 175-184. doi:10.2514/1.9041 [download](#)

Book chapters

- BC19. Achmet, Z., **Fragiadakis, M.** (2023) Machine Learning Applications for Vibration-Based Structural Health Monitoring. In *Advances in Civil and Industrial Engineering* (pp. 46–72). IGI Global. <https://doi.org/10.4018/978-1-6684-5643-9.ch003>. [download](#)
- BC18. Simiriots, N., **Fragiadakis, M.**, Rouchon, J.F., Braza, M. (2022). “Structural modelling of the sRS with embedded SMA (Shape Memory Alloys)”. in M. Braza, J-F Rouchon, G. Tzabiras, F. Auteri, P. Flaszynski (Eds), *Smart Morphing and Sensing for Aeronautical Configurations Prototypes, Experimental and Numerical Findings from the H2020 N° 723402 SMS EU Project*, Springer. [download](#)
- BC17. **Fragiadakis, M.**, Stefanou, I., Psycharis, I. (2016). “Vulnerability assessment of damaged classical multidrum columns”, in *Computational modeling of masonry structures using the discrete element method*, V. Sarhosis, K. Bagi, J.V. Lemos, G. Milani (Eds)., IGI Global. [download](#)

- BC16. **Fragiadakis, M.**, Xanthos, S., Eliades GD., Gagatsis, A., Christodoulou, S.E. (2016), “Graph-based Hydraulic Vulnerability Assessment of Water Distribution Networks”. CRITIS 2014, LNCS 8985, pp. 81–87, Springer-Verlag, Berlin. [download](#)
- BC15. Stefanou, I., **Fragiadakis, M.**, Psycharis, I. (2015). “Seismic reliability assessment of classical columns subjected to near source ground motions”, in *Seismic assessment, behavior and retrofit of heritage buildings and monuments*, I. Psycharis, S.V. Pantazopoulou and M. Papadrakakis (Eds.), Springer-Verlag, Berlin. [download](#)
- BC14. **Fragiadakis, M.** (2014). “Response spectrum analysis of structures subjected to seismic actions”, in *Encyclopedia in Earthquake Engineering*, Beer, M., Kougiumtzoglou, I.A., Patelli, E., Au, I.S.-K., (Eds.), Springer-Verlag, Berlin. [download](#)
- BC13. Papadopoulos, V., **Fragiadakis, M.** (2014). “Plastic hinge and plastic zone seismic analysis”, in *Encyclopedia in Earthquake Engineering*, Beer, M., Kougiumtzoglou, I.A., Patelli, E., Au, I.S.-K., (Eds.), Springer-Verlag, Berlin. [download](#)
- BC12. **Fragiadakis, M.**, Lagaros, N.D. (2014). “Design of structures using optimization algorithms”, A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (Eds) in *Advances in Civil Engineering Research*, Civil Engineering Department, Thessaly, Greece. [download](#)
- BC11. **Fragiadakis, M.** (2013), “Performance-based seismic design of buildings using optimized structural designs”, in *New Trends in Seismic Design of Structures*, N.D. Lagaros, Y. Tsompanakis and M. Papadrakakis, (Eds.), Saxe-Coburg, UK, ISBN 978-1-874672-37-1. [download](#)
- BC10. **Fragiadakis, M.**, Vamvatsikos, D., Aschheim, M. (2011). “Static versus dynamic methods of analysis for estimating seismic performance”, *Protection of built environment against earthquakes*, M. Dolsek (Eds.), Springer-Verlag, Berlin. [download](#)
- BC9. Papachristidis, A., **Fragiadakis, M.**, Papadrakakis, M. (2010). “Inelastic analysis of frames under combined bending, shear and torsion”, *Computational Methods in Earthquake Engineering*, M. Papadrakakis, M. Fragiadakis, N.D. Lagaros (Eds.), Springer-Verlag, Berlin. [download](#)
- BC8. Stefanou, G., **Fragiadakis, M.** (2010), “Nonlinear Dynamic Response Variability and Reliability of Frames with Stochastic Non-Gaussian Parameter Uncertainty”, in *Computational Methods in Stochastic Dynamics*, M. Papadrakakis, G. Stefanou, V. Papadopoulos (Eds.), Springer-Verlag, Berlin. [download](#)
- BC7. Papadrakakis, M., Lagaros, N.D., **Fragiadakis, M.** (2010). “Neural Networks: Some Successful Applications in Computational Mechanics”, in *Waszczyszyn, Z. (Ed.): Advances of Soft Computing Engineering*, CISM Courses and Lectures W, Vol. 512, Springer Verlag. [download](#)

- BC6. Lagaros, N.D., **Fragiadakis, M.** (2009). “Implementation of Soft Computing in Earthquake Engineering”, in *Soft Computing in Civil and Structural Engineering*, B.H.V. Topping and Y. Tsompanakis, (Eds.), Saxe-Coburg Publications, Stirlingshire, Scotland, UK. [download](#)
- BC5. **Fragiadakis, M.**, Pinho, R. and Antoniou, S. (2008). “Modelling inelastic buckling of reinforcing bars under earthquake loading”, in *Progress in Computational Dynamics and Earthquake Engineering*, M. Papadrakakis, D.C. Charmpis, N.D. Lagaros and Y. Tsompanakis (Eds.), A.A. Balkema Publishers – Taylor & Francis. [download](#)
- BC4. Lagaros N.D, Tsompanakis, Y, **Fragiadakis, M.**, Plevris, V. and Papadrakakis, M. (2007). “Metamodel-based computing techniques for solving structural optimization problems considering uncertainties”, in *Structural optimization under uncertainties*, Y. Tsompanakis, N.D. Lagaros and M. Papadrakakis (Eds.), A.A. Balkema Publishers – Taylor & Francis. [download](#)
- BC3. Papadrakakis, M., **Fragiadakis, M.** and Lagaros, N.D. (2006). “Optimum performance-based reliability design of structures.”in *NATO-ARW conference: Extreme Man-Made and Natural Hazards in Dynamics of Structures*, Opatija, Croatia, May 28 - June 1 2006. [download](#)
- BC2. **Fragiadakis, M.**, Lagaros, N.D., Tsompanakis, Y. and Papadrakakis, M. (2006). “Improved seismic design procedures and evolutionary tools”, in *Intelligent Computational Paradigms in Earthquake Engineering*, N.D. Lagaros and Y. Tsompanakis (Eds.), Idea Group Publishing. [download](#)
- BC1. Lagaros, N.D., Tsompanakis, Y., **Fragiadakis, M.** and Papadrakakis, M. (2006). “Soft computing techniques in probabilistic seismic analysis of structures”, in *Intelligent Computational Paradigms in Earthquake Engineering*, N.D. Lagaros and Y. Tsompanakis (Eds.), Idea Group Publishing, Inc. [download](#)

Other publications (Technical Reports, Short Articles, not reviewed)

- TR4. C. Repapis, O. Ktenidou, C. Giarlelis, **M. Fragiadakis**, A. Papachristidis, Z. Cekinmez, G. Kampas, M. Kalogerakis, G. Lambrakis, A. Lyrantzakis, O. Markogiannaki, K. Belivanis, N. Pnevmatikos, A. Sextos, S. Stefanidou, J. Tsompanakis, N. Chronakis, P. Psaropoulos, “The earthquake Arkalochori earthquake of 27 September 2021”, Report of the Hellenic Association for Earthquake Engineering, Athens, Greece. (in Greek) [download](#)
- TR3. **M. Fragiadakis**, L. DiSarno, A. Saetta, M.G. Castellano, I. Rocca, S. Diamantopoulos, L. Berto, V. Crozet, I. Politopoulos, T. Chaudat, S. Vasic, I.E. Bal, E. Smyrou (2022)

- Experimental Seismic Response Assessment of Museum Contents, *SPONSE Newsletter*, March 2022. [download](#)
- TR2. Sextos, A. G., Lekkas, E., Stefanidou, S.P., Baltzopoulos, G., **Fragiadakis, M.**, Giarlelis, C., Lombardi, L., Markogiannaki, O., Mavroulis, S., Plaka, A., Pnevmatikos, N., Tsiatas, G., Tsopelas, P. C. (2020). Albania earthquake of November 26 , 2019 Report on Structural and Geotechnical Damage, Hellenic Association for Earthquake Engineering, *Technical Report*, Athens. (Issue November). <https://doi.org/10.13140/RG.2.2.16153.24167>
[download](#)
- TR1. S. Christodoulou and **M. Fragiadakis** (2013) “Reliability Assessment of Urban Water Distribution Networks Under Seismic Loads”, NIREAS-IWRC/D5.14.7, *NIREAS International Water Research Center EUPALINOS - Construction Eng. & Water Networks Management Laboratory*, Nicosia, Cyprus. [download](#)

Conference papers (“*” indicates the presenting author)

- C137. G. Quinci*, F. Paolacci, **M. Fragiadakis**, H. N. Phan, V. M. Nguyen. “Proposal of an -based framework for the quick seismic risk assessment of major-hazard industrial plant” *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy. [download](#)
- C136. Hendrik Wijaya, Achilleas Anagnostou, Pathmanathan Rajeev*, **Michalis Fragiadakis** (2024). “Multiple-Hazard Assessment of Offshore Wind Turbines Subjected to Sea Wave and Seismic Load” *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy. [download](#)
- C135. Ioannis A. Prentzas, Spyridon Diamantopoulos, **Michalis Fragiadakis*** (2024). “Multi-Hazard Fragility Updating Using Structural Health Monitoring, *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy. [download](#)
- C134. Diamantopoulos S., Achmet Z., **Fragiadakis M.** (2024). Structural capacity assessment of deteriorated rc bridges using calibrated material models, *WCEE2024, 18th World Conference on Earthquake Engineering*, 30 June -5 July 2024, Milan, Italy. [download](#)
- C133. **Fragiadakis, M***, Simiriotis, N., Rouchon, J.F. Braza, M. (2024). “Airfoil shape control using SMA actuators”. *The 9th European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS Congress 2024*, 3 – 7 June 2024, Lisbon, Portugal. [download](#)
- C132. Ioannis A. Prentzas*, Michalis M. Fragiadakis (2024). Quantified active learning Kriging-based Bayesian updating for high-dimensional models using convolutional autoencoders. *The 9th European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS Congress 2024*, 3 – 7 June 2024, Lisbon, Portugal. [download](#)

- C131. Gianluca Quinci, Fabrizio Paolacci*, **Michalis Fragiadakis** (2024). “eismic Risk Assessment of Non-structural Components in Hazardous Facilities Through a Novel ANN-Based Technique”. *Pressure Vessels & Piping Conference ASME PVP2024*, July 29-August2, 2024, Bellevue, Washington. [download](#)
- C130. Sotiria Stefanidou*, Olga Markogiannaki, Ioannis Mikes, **Michalis Fragiadakis** (2023). “IMultiple hazard assessment of bridges considering interdependencies”, *EUROSTRUCT 2023 , 2nd Conference of the European Association on Quality Control of Bridges and Structures*, 25-29 September 2023 Vienna, Austria. [download](#)
- C129. **Fragiadakis M.***, Prentzas I., Georgioudakis M., Diamantopoulos S., Markogiannaki O., Stefanidou S. (2023). “Integration of measured data for the seismic fragility assessment of deteriorated bridges”, *EUROSTRUCT 2023, 2nd Conference of the European Association on Quality Control of Bridges and Structures*, 25-29 September 2023, Vienna, Austria. [download](#)
- C128. Hera Yanni*, **Michalis Fragiadakis**, Ioannis Mitseas (2023). “A novel stochastic methodology for the generation of artificial seismic accelerograms”, *EURODYN 2023 XII International Conference on Structural Dynamics, 02 – 05 July 2023*, Delft, The Netherlands. [download](#)
- C127. Manolis Georgioudakis*, Shaghayegh Karimzadeh, **Michalis Fragiadakis**, Paulo B. Lourenço (2023). “Evaluation of simulated ground motions for seismic assessment of a steel frame structure using Multi-Criteria selection and Scaling approach based on Evolutionary Algorithms”. *COMPADYN 2023, 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, 12-14 June 2023, Athens, Greece. [download](#)
- C126. Hera Yanni*, **Michalis Fragiadakis**, Ioannis P. Mitseas (2023). “Stochastic generation of artificial accelerograms using the Continuous Wavelet Transform method”, *COMPADYN 2023, 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, 12-14 June 2023, Athens, Greece. [download](#)
- C125. Spyridon Diamantopoulos*, Hera Yanni, Ioannis Mitseas, **Michalis Fragiadakis** (2023). “Stochastic dynamics analysis of randomly excited rocking structures using the stochastic linerization method”, *COMPADYN 2023, 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, 12-14 June 2023, Athens, Greece. [download](#)
- C124. Ioannis Prentzas*, **Michalis Fragiadakis** (2023). “Design and assessment of Structures: a probabilistic-based adaptive refinement for reliability assessment using Kriging Metamodel” *COMPADYN 2023, 9th ECCOMAS Thematic Conference on Computational*

- Methods in Structural Dynamics and Earthquake Engineering*, 12-14 June 2023, Athens, Greece. [download](#)
- C123. Pierre Argoul*, **Michalis Fragiadakis** (2023), Algorithms for Structural Health Monitoring: application of the wavelet transform inverse analysis for modal identification and damage detection, *COMPdyn 2023, 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, 12-14 June 2023, Athens, Greece. [download](#)
- C122. Mixios Konstantinos*, Stefanidou Sotiria, Markogiannaki Olga, Argyroudis Sotirios, **Fragiadakis Michalis** (2022). Database of seismic vulnerability curves for RC buildings. (in Greek). *5th National Conference for Earthquake Engineering and Engineering Seismology*, 20-22 October, Athens, Greece. [download](#)
- C121. Yanni era*, **Fragiadakis Michalis**, Mitseas Ioannis (2022). “A novel method for the stochastic generation of artificial accelerograms”. *5th National Conference for Earthquake Engineering and Engineering Seismology*, 20-22 October, Athens, Greece. [download](#)
- C120. **M. Fragiadakis***, L. DiSarno, A. Saetta, M.G. Castellano, I. Rocca, S. Diamantopoulos, L. Berto, V. Crozet, I. Politopoulos, T. Chaudat, S. Vasic, I.E. Bal, E. Smyrou (2022). “Experimental seismic performance assessment of statues and busts”. *5th National Conference for Earthquake Engineering and Engineering Seismology*, 20-22 October, Athens, Greece. [download](#)
- C119. Mastrodimou K., **Fragiadakis M.***, Parcharidis I., Loupasakis K., Tsangaratos P., Soupios P., Gatsios Th., Tombolidis A., Grigorakou E., Kalousi G., Antoniadis N., Mytakidis K., Eleftheriou V., Christodoulou R., Michalopoulou D., Mavromatis D., Kanaki E., Krasakis P., Ilias P. (2022). “Damage assessment of classical monuments using SAR Symbolometry”. *5th National Conference for Earthquake Engineering and Engineering Seismology*, 20-22 October, Athens, Greece. [download](#)
- C118. Diamantopoulos S.*, **Fragiadakis M.**, “Risk Assessment of Ancient Columns and Colonades”, *5th National Conference for Earthquake Engineering and Engineering Seismology*, 20-22 October, Athens, Greece. [download](#)
- C117. Diamantopoulos, S.*, Yanni, H., **Fragiadakis M.**, “Modeling of museum artifacts under seismic loading as two- block rocking systems”, *13th HSTAM International Congress on Mechanics*, Patras, 24-27 August 2022. [download](#)
- C116. Quinci, G.*, Paolacci, F., **Fragiadakis M.** (2022). “An innovative framework for risk assessment of non-structural components for industrial plants”, *XIX ANIDIS Conference, Seismic Engineering in Italy*, Torino 11-15 September 2022. [download](#)

- C115. Diamantopoulos S.*, **Fragiadakis M.**, Fragility assessment of rocking colonnades, *3ECEES (The Third European Conference on Earthquake Engineering and Seismology)*, Bucharest, Romania, 2022. [download](#)
- C114. Sotiria Stefanidou*, Olga Markogiannaki, Konstantinos Mixios, Sotirios Argyroudis, **Michalis Fragiadakis**, “Database and comparative evaluation of seismic fragility curves for RC buildings”, *3ECEES (The Third European Conference on Earthquake Engineering and Seismology)*, Bucharest, Romania, 2022. [download](#)
- C113. Mitseas I.P.*, Ni P., Fragkoulis V.C., Kong F., Beer M., **Fragiadakis M.**, Stochastic nonlinear response of structural systems endowed with singular matrices subject to combined periodic and stochastic excitations, *Proceedings of the 8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2021)*, Athens, Greece, 28-30 June 2021. [download](#)
- C112. Diamantopoulos S.*, **Fragiadakis M** (2021). The effect of flexibility on the dynamic response of rocking structures, COMPDYN 2021. *8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Athens 28-30 June 2021. [download](#)
- C111. Dimakopoulou V., **Fragiadakis M***, Taflampas I. (2021). “An efficient record-truncation scheme for pulse-like records using a wavelet-based approach”. COMPDYN 2021, *8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Athens 28-30 June 2021. [download](#)
- C110. **Fragiadakis M.**, Diamantopoulos S.*, (2021). Seismic risk assessment of rocking building contents, COMPDYN 2021, *8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Athens 28-30 June 2021. [download](#)
- C109. Achmet*, Z., **Fragiadakis, M**, Taflampas, I (2021). “Building seismic damage detection in using wavelet transform methods”, *10th GRACM International Congress on Computational Mechanics*, Athens, July 5–7 2021. [download](#)
- C108. Tompolidi, A.-M.*, Parcharidis, I., Loupasakis, C., **Fragkiadakis, M.**, Soupios, P., Grigorakou, E., Achmet, Z., Kalousi, G., Eleutheriou, V., Michalopoulou, D., Christodouloupoulou, R., Kanaki, E., Mavromati, D., Sythiakaki, V., Elias, P., and Gatsios, T. (2021) “SpaCe-borne SAR Interferometry as a Noninvasive tool to assess the vulnerability over Cultural hEritage sites (SCIENCE)”, *EGU General Assembly 2021*, online, 19–30 Apr 2021, EGU21-13397, <https://doi.org/10.5194/egusphere-egu21-13397>, 2021. [download](#)
- C107. Sotiria Stefanidou*, G. Tsiatas, P. Tsopelas, G. Baltzopoulos, C. Giarlelis, O. Markogiannaki, D. Skoulidou, **M. Fragiadakis**, L. Lombardi, S. Mavroulis, A. Plaka, N. Pnev-

- matikos, E. Lekkas, A. Sextos, “Structural and Geotechnical damage due to Albania Earthquake (26.11.2019) based on Rapid Visual Screening”, *International Symposium on Durras Earthquakes and Eurocodes*, 2020-ISDEE, 9-11 April 2020 Polytechnic University of Tirana, Albania. [download](#)
- C106. S. Diamantopoulos*, **Fragiadakis M.**, Modelling planar rocking structures using simplified numerical models. *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C105. **Fragiadakis M.***, L. DiSarno, A. Saetta, M.G. Castellano, I. Politopoulos, T. Chaudat, I. Psycharis, T.C. Hutchinson, I.E. Bal, E. Smyrou, L. Berto, I. Rocca, S. Vasic, S. Diamantopoulos., Experimental seismic assessment and protection of museum artefacts, *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C104. S. Diamantopoulos*, **Fragiadakis M.**, The effect of bulding’s response on the fragility of freestanding symmetric or asymmetric contents. *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C103. Georgakis P., Georgioudakis M., **Fragiadakis M.** (2020) “A machine learning approach to nonlinear response analysis of structures” *Proceedings of the International Conference on Structural Dynamic , EURODYN*, Vol 2, pp. 3397 – 3402. [download](#)
- C102. Diamantopoulos S., **Fragiadakis M.** (2021). Modeling of monolithic ancient columns and colonnades under seismic loading, PROHITECH 2020, *4th International Conference on Protection of Historical Constructions*, 25-27 October 2021, Athens, Greece. [download](#)
- C101. Adami C-E*, Vintzileou E, **Fragiadakis M.**, Classification of monumental masonry building materials and historical constructions in Greece, *PROHITECH 2020, 4th International Conference on Protection of Historical Constructions*, T.P. Tasios, F M. Mazzolani, I. Vayas(eds.), Athens, Greece, 6–8 July 2020. [download](#)
- C100. Vamvatsikos D.*, **Fragiadakis M.**, Georgopoulos I., Koumouisis V.K., Koutsoyiannis D., Lachanas C.G., Manetas A., Melissianos V.E., Papadopoulos C., Papanikolopoulos K., and Toumpakari E., “The Archytas Intelligent Decision-Support System For The Protection Of Monumental Structures”, PROHITECH 2020, 4th International Conference on Protection of Historical Constructions, T.P. Tasios, F M. Mazzolani, I. Vayas(eds.), Athens, Greece, 6–8 July 2020. [download](#)
- C99. **Fragiadakis, M.***, Seismic protection of museum artifacts, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)

- C98. **Fragiadakis, M.***, Reliability and resilience assessment of urban water distribution networks, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C97. Diamantopoulos S*, **Fragiadakis, M.**, Seismic fragility and risk assessment of rocking frame structures, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C96. Vlachos N*, Diamantopoulos S, **Fragiadakis, M.**, Seismic response assessment of artefacts freestanding on a solid pedestal, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C95. **Fragiadakis, M.***, DiSarno L., Saetta A., Castellano M.G., Psycharis I., Hutchinson T.C., Bal I.E., Smyrou E., Politopoulos I., Chaudat T., Berto L., Rocca I., Diamantopoulos S. (2019). Seismic response of statues and busts, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C94. Diamantopoulos S.*, **Fragiadakis, M.**, Sextos A. (2019). Dynamic Response of museum artefacts standing on a pedestal, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C93. Diamantopoulos S.*, **Fragiadakis, M.** (2019). “Modelling of rocking frames using simplified Finite Element Models”, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C92. **Fragiadakis, M.***, Diamantopoulos S. (2019). “Fragility and risk assessment of rocking building contents hosted in a four-story RC building”, *4th International Workshop on the Seismic Performance of Non-Structural Elements (SPONSE)*, *SPONSE 2019*, Pavia, Italy, 22-23 May 2019. [download](#)
- C91. **Fragiadakis, M.*** Diamantopoulos, S. (2018). “Risk assessment of rocking contents in multistorey Buildings”, *16th European Conference on Earthquake Engineering (16ECEE)*, 18-21 June 2018, Thessaloniki, Greece. [download](#)
- C90. Diamantopoulos S.*, Koutoulas K., **Fragiadakis, M.** (2018). “Seismic Response estimation of Rigid and flexible rocking frames using Simple finite element models”, *9th GRACM International Congress on Computational Mechanics*, Chania, 4-6 June 2018. [download](#)
- C89. **Fragiadakis, M.***, Palkanoglou, E., Simiriotis, N., Jodin, G., Rouchon, J.F., Braza, M. (2018). “Camber control of structures using Shape Memory Alloys”. *9th GRACM International Congress on Computational Mechanics*, Chania, 4-6 June 2018. [download](#)

- C88. Georgioudakis, M., **Fragiadakis, M.***, Papadrakakis, M. (2017). “Hazard-consistent multi-criteria selection and scaling of ground motion records using Evolutionary Algorithms”, *X International Conference on Structural Dynamics, EUROODYN-2018*, Rome, Italy, 10-13 September 2017. [download](#)
- C87. **Fragiadakis, M.***, Kolokytha M.-E., Diamantopoulos, S. (2017). “Seismic risk assessment of rocking building contents in multistorey buildings”, *X International Conference on Structural Dynamics, EUROODYN-2018*, Rome, Italy, 10-13 September 2017. [download](#)
- C86. Giouvanidis, A.I.*, **Fragiadakis, M.**, Dimitrakopoulos, E.G. (2017). “Vulnerability Assessment of Flag-Shaped Hysteretic Rocking Bridge Bents”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017. [download](#)
- C85. Diamantopoulos, S.*, **Fragiadakis, M.** (2017). “Simple Models for the Seismic Response of Rigid or Flexible Blocks”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017. [download](#)
- C84. Georgioudakis, M., **Fragiadakis, M.*** (2017). “Ground Motion Record Selection as a multi-objective Optimization Problem”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017 (abstract only). [download](#)
- C83. **Fragiadakis, M.***, Kolokytha M.-E., Diamantopoulos, S. (2017). “Loss assessment of rocking non-structural components of buildings”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017 (abstract only). [download](#)
- C82. Stewart, J.P.*, Lanzo, G., Alexander, N., Aversa, S., Bozzoni, F., Castiglia, M., Chiabrando, F., Chiaradonna, A., D’Onofrio, A., Dashti, S., De Risi, R., De Silva, F., Di Pietra, V., Di Sarno, L., Durante, M.G., Falcucci, E., Foti, S., **Fragiadakis, M.**, Franke, K., Galadini, F., Giallini, S., Gori, S., Grasso, N., Katsiveli, E., Kayen, R.E., Kishida, T., Mucciacciaro, M., Mylonakis, G., Pagliaroli, A., Penna, A., Psycharis, I., Reimschiessel, B., Santucci de Magistris, F., Scasserra, G., Sextos, A., Sica, S., Silvestri, F., Simonelli, A.L., Tommasi, P., Vintzilaiou, E., Zimmaro, P. (2017). "Engineering Reconnaissance following the August 24, 2016 M6.0 Central Italy Earthquake", *16th World Conference on Earthquake (16WCEE)*, 9-13 January 2017, Santiago Chile. [download](#)
- C81. Balokas G.* **Fragiadakis, M.** (2016). “Seismic Reliability Assessment of Frame Structures with Flexibility-Based Stochastic Beam-Column Elements”, *ECCOMAS Congress 2016: VII European Congress on Computational Methods in Applied Sciences and Engi-*

- neering*, Crete Island, Greece, 5–10 June 2016. [download](#)
- C80. **Fragiadakis, M.***, Psycharis, I., Mavroeides, G.P. (2016). “Parametric Investigation of The Dynamic Response of Rigid Blocks Subjected to Synthetic Near-Source Ground Motion Records”, *ECCOMAS Congress 2016: VII European Congress on Computational Methods in Applied Sciences and Engineering*, Crete Island, Greece, 5–10 June 2016. [download](#)
- C79. Georgioudakis M.*, **Fragiadakis, M.** (2016). “Optimum Selection and Scaling of Ground Motion Records for The Seismic Assessment of Structures Using the Differential Evolution Algorithm”, *11th HSTAM International Congress on Mechanics Athens*, 27-30 May, Greece. [download](#)
- C78. Balokas G. **Fragiadakis, M.*** (2016). “Fragility assessment of an RC bridge with Stochastic System Properties”, *11th HSTAM International Congress on Mechanics*, Athens, 27-30 May, Greece. [download](#)
- C77. Tsiatas, G.C.*, **Fragiadakis, M.** (2015). “Seismic response and design of arched structures”, *8th GRACM International Congress on Computational Mechanics*, Volos, July 12-15 2015. [download](#)
- C76. Skandalos, K., **Fragiadakis, M***, Sextos, A. (2015). “Reliability Assessment Of Water Networks Considering Spatially Variable Seismic Ground Motion”, *SECED 2015 Conference: Earthquake Risk and Engineering Towards a Resilient World*, 9-10 July 2015, Cambridge UK. [download](#)
- C75. **Fragiadakis, M.***, Giovanis, D., Papadopoulos, V. (2015). “Assessment of Epistemic Uncertainty using trained Neural Networks and IDA”, *SECED 2015 Conference: Earthquake Risk and Engineering Towards a Resilient World*, 9-10 July 2015, Cambridge UK. [download](#)
- C74. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.** (2015). “Seismic Fragility Assessment of Steel Liquid Storage Tanks”, *Proceedings of the ASME 2015 Pressure Vessels & Piping Conference*, Boston, Massachusetts, USA. [download](#)
- C73. Bakalis, K*, **Fragiadakis, M.**, Vamvatsikos, D. (2015). “Surrogate Modelling of Liquid Storage Tanks for Seismic Performance Design and Assessment”, *Proceedings of the 5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Crete Island, Greece. [download](#)
- C72. **Fragiadakis, M.***, Giovanis, D., Papadopoulos, V. (2015). “Quick seismic reliability assessment of liquid storage tanks using neural networks”, *Proceedings of the 5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Crete Island, Greece. [download](#)

- C71. **Fragiadakis, M.**, Xanthos, S., Gagatsis, A. and Christodoulou, S* (2014). “Assessing the overall reliability of water distribution networks under seismic conditions”, *Proceedings 2014 Intelligent Distribution for Efficient and Affordable Supplies (Water IDEAS 2014)*, Bologna, Italy, Oct. 22-24, 2014. [download](#)
- C70. Christodoulou, S., **Fragiadakis, M.*** (2014). “Seismic reliability assessment of water distribution networks Extending the ALA guidelines”, *Proceedings of 2014 IWA World Water Congress*, Lisbon, Portugal, Sep. 21-26, 2014. [download](#)
- C69. Christodoulou, S.*, **Fragiadakis, M.** (2014). “Seismic Reliability Assessment of Lifeline Systems”, *Proceedings of the Fourteenth International Conference on Computing in Civil and Building Engineering (ICCCBE2014)*, Orlando, Florida, Jun. 23-25, 2014. [download](#)
- C68. Papageorgiou, A.*, **Fragiadakis, M.**, Vamvatsikos, D. (2014). “Life-cycle cost assessment of steel structures”, *Proceedings of the 8th National Conference on Steel Structures*, Tripoli, Greece, 2-4 October 2014. [download](#)
- C67. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.**, (2014). “Surrogate Modelling and Sensitivity Analysis of Steel Liquid Storage Tanks”, *Proceedings of the 8th National Conference on Steel Structures*, Tripoli, Greece, 2-4 October 2014. [download](#)
- C66. **Fragiadakis, M.***, Christodoulou, S. (2014). “Vulnerability assessment of water distribution networks using survival analysis”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C65. **Fragiadakis, M.***, Loukidis, D., Papanastasiou, P. “Seismic Capacity assessment of Kouris Earth Dam”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C64. Stefanou, I.*, **Fragiadakis, M.**, Psycharis, I.N. (2014). “Vulnerability assessment of classical columns with dislocated drums”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C63. Papageorgiou, A.V.*, **Fragiadakis, M.**, Vamvatsikos, D. (2014). “Seismic loss and sustainability assesment of reinforced concrete structures”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C62. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.** (2014). “Reliability assessment of liquid storage tanks”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C61. Christodoulou, S.*, **Fragiadakis, M.** (2013). “Reliability assessment of urban water distribution networks under seismic loads”, *Proceedings EWRA’s Eighth International Conference*, Jun. 26-29, Porto, Portugal. [download](#)

- C60. **Fragiadakis, M.***, Christodoulou, S. (2013). “Reliability Assessment of Pipe Networks under Seismic Loads”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)
- C59. Psycharis I., **Fragiadakis, M.**, Stefanou, I.* (2013). “Seismic reliability assessment of classical columns subjected to near source ground motions”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)
- C58. Zacharenaki, A.E.*, **Fragiadakis, M.**, Papadrakakis, M. (2013). “Measuring bias in Incremental Dynamic Analysis using bootstrap”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)
- C57. **Fragiadakis, M.***, Vamvatsikos, D., Christodoulou, S. (2012). “Reliability assessment of urban water networks”, *15th World Conference on Earthquake Engineering*, September 24-28, Lisbon, Portugal. [download](#)
- C56. **Fragiadakis, M.***, Stefanou, G. (2012). “Seismic risk assessment of frame structures with stochastic properties”, *15th World Conference on Earthquake Engineering*, September 24-28, Lisbon, Portugal. [download](#)
- C55. **Fragiadakis, M.***, Vamvatsikos, D. (2011). “Qualitative comparison of Static Pushover versus Incremental Dynamic Analysis capacity curves”, *Proceedings of the 7th National Conference on Steel Structures*, Volos, Sept 29th – Oct 1st. [download](#)
- C54. **Fragiadakis, M.***, Lagaros, N.D. (2011). “Performance-Based Seismic Design Frameworks Using Structural Optimization”, *7th GRACM International Congress on Computational Mechanics*, 30 June - 2 July 2011, Athens, Greece. [download](#)
- C53. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011). “Optimal seismic design of structures using approximate methods”, *7th GRACM International Congress on Computational Mechanics*, 30 June - 2 July 2011, Athens, Greece. [download](#)
- C52. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011), “Optimal seismic design of steel structures using approximate methods”, *11th International Conference on Applications of Statistics and Probability in Civil Engineering*, August 1-4, 2011, Zurich, Switzerland. [download](#)
- C51. Stefanou, G.*, **Fragiadakis, M.** (2011), “Seismic Reliability Of Frame Structures With Non-Gaussian System Properties”, *11th International Conference on Applications of Statistics and Probability in Civil Engineering*, August 1-4, 2011, ETH Zurich, Switzerland. [download](#)

- C50. Stefanou, G.*, **Fragiadakis, M.** (2011). “Stochastic Finite Element Analysis of Frame Structures Subjected to Seismic Actions”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C49. Stathi, C.*, **Fragiadakis, M.**, Papachristidis, A. and Papadrakakis, M. (2011). “Comparative assessment on modeling approaches for the seismic response of RC shear walls”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C48. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011). “Optimal performance-based seismic design of structures using approximate performance estimation methods”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C47. Dimakopoulou, V.*, **Fragiadakis, M.**, Spyrakos, C. (2011). “Seismic Response Sensitivity Of Degrading SDOF Systems due to Near-Field Ground Motions”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C46. **Fragiadakis, M.**, Vamvatsikos, D. and Aschheim, M.* (2011), “Applicability of Nonlinear Static Procedures on RC Moment-Resisting Frames”, *ASCE 2011 Structures Congress*, Green Valley Ranch, Las Vegas, April 14-16, 2011. [download](#)
- C45. **Fragiadakis, M.**, Lagaros, N.D.* (2011). “Alternative performance-based frameworks for the seismic design of buildings”, *Sixth M.I.T. Conference on Computational Fluid and Solid Mechanics-Focus: Advances in Solids & Structures*, June 15-17, 2011 Cambridge, MA, U.S.A. [download](#)
- C44. **Fragiadakis, M.***, Papachristidis, A. and Papadrakakis, M. (2010). “Fiber beam-column element formulations for the inelastic analysis of steel and reinforced concrete structures subjected to combined bending-shear and torsion”, *9th HSTAM International Congress on Mechanics*, July 12-14, 2010, Limassol, Cyprus. [download](#)
- C43. Papachristidis, A*, **Fragiadakis, M.** and Papadrakakis, M. (2009) “Modeling of the inelastic behaviour of Reinforced Concrete structures considering shear deformations”, *16th National Conference on Reinforced Concrete Structures*, Pafos, Cyprus, October 21-23 (in Greek). [download](#)
- C42. Lagaros, N.D.*, **Fragiadakis, M.**, (2009). “Implementation of Soft Computing in Earthquake Engineering”, *The First International Conference on Soft Computing Technology*

- in Civil, Structural and Environmental Engineering (CSC 2009)*, Funchal, Madeira, Portugal, 1-4 September 2009. [download](#)
- C41. **Fragiadakis, M.** and Vamvatsikos, D.* (2009), “Estimation of Uncertain Parameters using Static Pushover Methods”, *The 10th International Conference on Structural Safety and Reliability, ICOSSAR 2009*, Osaka, Japan, September 2009. [download](#)
- C40. Stefanou, G.* and **Fragiadakis, M.** (2009), Stochastic nonlinear dynamic response of frames with spatially varying non-Gaussian material properties, *The 10th International Conference on Structural Safety and Reliability, ICOSSAR 2009*, Osaka, Japan, September 2009. [download](#)
- C39. **Fragiadakis, M.***, Lanese, I., Pavese, A., Papadrakakis, M. (2009), “Experimental And Numerical Investigation of a Reinforced Concrete Building Designed For Gravity Loads Only”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C38. **Fragiadakis, M.***, Vamvatsikos, D. (2009), “Performance Uncertainty Estimation using Simplified Methods of Analysis”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C37. **Fragiadakis, M.***, Lagaros, N.D. (2009). “Structural Reliability Assessment With The Aid Of Neural Networks”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C36. Stefanou, G.* and **Fragiadakis, M.** (2009), “Nonlinear Dynamic Response Variability Of Frames With Stochastic Non-Gaussian Parameter Uncertainty”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C35. Zacharenaki, A.*, **Fragiadakis, M.**, Assimaki, D., Papadrakakis, M. (2009), “The Impact of Using Scaled Ground Motion Records for Seismic Capacity Assessment”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C34. Li, W., Assimaki, D.*, **Fragiadakis, M.** (2009), “Nonlinear Ground and Structural Response Variability due to Soil Response Modeling Uncertainty”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)

- C33. Papachristidis, A., **Fragiadakis, M.***, Papadrakakis, M. (2009), “A shear-deformable fiber beam-column element for seismic analysis of steel structures”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C32. **Fragiadakis, M.***, Vamvatsikos, D. (2008). “Approximate Seismic Performance Uncertainty Estimation using Static Pushover Methods”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C31. Li, W., Assimaki, D. and **Fragiadakis, M.*** (2008). “Site response modeling variability in “rupture-to-rafter” ground motion simulations”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C30. Vamvatsikos, D., **Fragiadakis, M.*** (2008). “Seismic performance uncertainty of a 9-story steel frame with non-deterministic beam-hinge properties”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C29. Stefanou, G.*, **Fragiadakis, M.**, (2008). “Nonlinear dynamic analysis of frame structures with Stochastic non-Gaussian system properties”, *Proceedings of the 6th International Congress on Computational Mechanics (GRACM 08)*, 19 -21 June, Thessaloniki, Greece. [download](#)
- C28. **Fragiadakis, M.***, Papachristidis, A., Papadrakakis M. (2008). “Seismic assessment of frame structures with a beam-column element based on the natural mode method”, *Proceedings of the 6th International Congress on Computational Mechanics (GRACM 08)*, 19-21 June, Thessaloniki, Greece. [download](#)
- C27. **Fragiadakis, M.***, Papadrakakis M. (2008). “Reliability-based optimization of RC structures”, *5th European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2008*, 30 June – 4 July, Venice, Italy. [download](#)
- C26. **Fragiadakis, M.***, Lagaros, N.D., Tsompanakis, Y., and Papadrakakis M. (2007). “Evaluation of seismic analysis procedures via structural optimization”, *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2007*, 13-15 June 2007, Rethymno, Greece. [download](#)
- C25. **Fragiadakis, M.***, Pinho, R. and Antoniou, S. (2007). “Modeling Inelastic Buckling of Reinforcing Bars under Earthquake Loading.”, *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2007*, 13-15 June 2007, Rethymno, Greece. [download](#)
- C24. **Fragiadakis, M.***, Ioannidou, D., and Papadrakakis, M., (2007). “Assessment of Non-linear Static Analysis Procedures in the Framework of Performance-Based Design”, *8th*

- National Congress on Mechanics (HSTAM2007)*, June 12-17, 2007, Patras, Greece. [download](#)
- C23. Tsompanakis, Y.* , Lagaros, N.D, **Fragiadakis, M.** and Papadrakakis, M., (2006). “Soft Computing Based Structural Reliability-Based Optimization of Real World Structures Under Seismic Loading Conditions”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)
- C22. Vamvatsikos D.* and **Fragiadakis, M.** (2006). “Seismic performance sensitivity of a 9-story steel frame to plastic hinge modeling uncertainties”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)
- C21. **Fragiadakis, M.***, and Papadrakakis, M. (2006). “Performance-Based Design of RC Buildings using Optimization Tools”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)
- C20. Papadrakakis, M.* , Lagaros, N.D. and **Fragiadakis, M.** (2006). “Seismic design procedures in the framework of evolutionary based structural optimization”, *III European Conference on Computational Mechanics, Solids, Structures and Coupled Problems in Engineering (ECCM-2006)*, Lisbon, Portugal, June 5-8. [download](#)
- C19. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2005). “Optimization of irregular RC buildings under earthquake loading”, *6th European Conference on Structural Dynamics (EURODYN 2005)*, Paris, France, September 4-7. [download](#)
- C18. Papadrakakis, M.* , Lagaros, N.D., **Fragiadakis, M.** and Tsompanakis, Y. (2005). “Large-scale structural reliability-based optimization of steel frames under seismic loading”, *6th European Conference on Structural Dynamics (EURODYN 2005)*, Paris, France, September 4-7. [download](#)
- C17. **Fragiadakis, M.***, Vamvatsikos, D. and Papadrakakis, M. (2005) “Evaluation of the Influence of Vertical Stiffness Irregularities on the Seismic Response of a 9-story steel frame”, *Fourth European Workshop on the Seismic Behaviour of Irregular and Complex Structures*, Thessaloniki Greece, August 26-27. [download](#)
- C16. Tsompanakis, Y.* , Lagaros, N.D., **Fragiadakis, M.** and Papadrakakis, M. (2005). “Recent Advances”In Reliability-Based Structural Optimization Under Earthquake Loading, *WCSMO6*, Rio de Janeiro, Brazil, 30th May – 3rd June 2005. [download](#)
- C15. Papadrakakis, M.* Lagaros, N.D. and **Fragiadakis, M.** (2005) “Recent developments in optimum design of structures under earthquake loading”, *8th USNCCM, US National Congress on Computational Mechanics*, Austin, USA, 24-28 July. [download](#)
- C14. Papaioannou, I.* , **Fragiadakis, M.**, and Papadrakakis, M. (2005), “Inelastic Analysis of Framed Structures using the Fiber Approach”, *Proceedings of the 5th International*

- Congress on Computational Mechanics (GRACM 05)*, Limassol, Cyprus, 29 June – 1 July. [download](#)
- C13. Tsompanakis, Y., Lagaros, N.D., **Fragiadakis, M.*** and Papadrakakis, M. (2005). “Performance-based optimum design of structures considering uncertainties”, *5th GRACM International Congress on Computational Mechanics*, Limassol, Cyprus, 29 June - 1 July. [download](#)
- C12. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2005) “Risk assessment of structures using neural networks”, *5th GRACM International Congress on Computational Mechanics*, Limassol, Cyprus, 29 June - 1 July. [download](#)
- C11. Lagaros, N.D.*, Papadrakakis, M., **Fragiadakis, M.**, Stefanou, G. and Tsompanakis, Y. (2005). “Recent developments in Neural Network-aided stochastic computations and earthquake engineering”, *International Symposium on Neural Networks and Soft Computing in Structural Engineering (NNSC 2005)*, Cracow, Poland, June 30 - July 2. [download](#)
- C10. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2004). “Optimization of steel frames considering life cycle cost using Pushover Analysis”, *6th WCCM in conjunction with APCOM’04*, Beijing, China, Sept., 5-10. [download](#)
- C9. Papadrakakis, M.*, Lagaros, N.D. and **Fragiadakis, M.** (2004). “Structural optimization procedures under seismic loading”, *The International Conference on Computational Methods (ICCM2004)*, Singapore, December 15-17. [download](#)
- C8. Papadrakakis, M.*, Tsompanakis, Y., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of structures under seismic excitation”, *4th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2004)*, Jyväskylä, Finland, July 24-28. [download](#)
- C7. Tsompanakis, Y.*, Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of steel frames under seismic loading”, *7th National Congress on Mechanics (HSTAM2004)*, June 24-26, 2004, Chania, Greece. [download](#)
- C6. Tsompanakis, Y.*, Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Optimization of steel frames subjected to seismic excitation”, *7th National Congress on Mechanics (HSTAM2004)*, June 24-26, 2004, Chania, Greece. [download](#)
- C5. Papadrakakis, M., **Fragiadakis, M.***, Lagaros, N.D. and Rizou, V. (2004). “Seismic design optimization of steel frames incorporating pushover analysis”, *ERCOFTAC Design Optimization Methods and Applications*, Athens, Greece, March 31 – April 2. [download](#)
- C4. **Fragiadakis, M.M.***, Lagaros, N.D. and Papadrakakis, M. (2003). “Structural optimization of stiffened shells using evolutionary algorithms”, *Second M.I.T. Conference on*

- Computational Fluid and Solid Mechanics*, Cambridge, MA, USA, June 17-20. [download](#)
- C3. Papadrakakis, M.*, Lagaros, N.D. and **Fragiadakis, M.** (2002). “Structural optimization of stiffened shells using evolutionary algorithms”, *1st South-American Congress on Computational Mechanics, 3rd Brazilian Congress on Computational Mechanics, 7th Argentine Congress on Computational Mechanics, Santa Fe-Parana, Argentina*, October 28-31. [download](#)
- C2. Lagaros, N.D.*, **Fragiadakis, M.M.** and Papadrakakis, M. (2002). “Automatic structural optimization of stiffened shells”, *4th GRACM Congress on Computational Mechanics*, Patras, Greece, June 27-29. [download](#)
- C1. Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.M.*** (2002). “Design code-based structural optimization of steel structures”, *4th National Conference on steel structures*, Patras, Greece, May 24-26. [download](#)

Dissertations/Theses

- O4. **Fragiadakis, M.** (2006). “Optimum Seismic Design of Structures using Nonlinear Analysis Methods”, PhD Thesis PhD in Civil Engineering (2002-2006), advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)
- O3. **Fragiadakis, M.** (2002). “Optimization of Stiffened Shells using Evolutionary Algorithms”, MSc Dissertation, advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)
- O2. **Fragiadakis, M.** (2001). “Nonlinear Material Modeling of Reinforcement Steel Bars under Transient Loading”, MSc Dissertation, advisor: R. Pinho, *Imperial College of Science Technology and Medicine, London, United Kingdom*, UK. [download](#)
- O1. **Fragiadakis, M.** (2000). “Material non-linear analysis of structures using the BEC natural beam element”, Diploma Dissertation, advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)

Skills and Qualifications

- Programming skills: Fortran, Matlab, C and Visual Basic.
- Structural analysis packages (Abaqus, SAP 2000, OpenSEES, etc)
- Microsoft Office, LaTeX.