

CURRICULUM VITAE

PERSONAL INFORMATION

Name **FRANCESCO PETRINI**

E-mail

Web

EDUCATION AND QUALIFICATIONS

- Degree **National Scientific Qualification** (ASN) to the academic role of University Full Professor (“I Fascia”), with regard to the academic sector (“settore concorsuale”) structural analysis and design (“08/B3 Tecnica delle Costruzioni”) Engineering (Structural)
Obtained on September 20th 2018, Valid until September 20th 2027.
- Major **National Scientific Qualification** (ASN) to the academic role of University Associate Professor (“II Fascia”), with regard to the academic sector (“settore concorsuale”) structural analysis and design (“08/B3 Tecnica delle Costruzioni”) Engineering (Structural)
- Date Obtained on March 31st 2017, Valid until March 31st 2026.
- Degree **Ph.D. Degree**
Structural Engineering
Sapienza University of Rome
Franco Bontempi and Giuliano Augusti
April 2009
- Major A probabilistic approach to Performance-Based wind engineering (PBWE)
- University **Italian Professional Engineering** (Engineering Chamber of Rome) License No 26144
Engineering (Civil and Environmental, Industrial)
- Advisor June 2005
- Date **Laurea Degree** (5-year program, Master degree equivalent)
Civil Engineering (Structural specialist)
Sapienza University of Rome
October 2004
- Degree “Computational methods for aerodynamic characterization of suspension bridges deck sections” (in Italian: “Metodi computazionali per la valutazione delle caratteristiche aerodinamiche delle sezioni di ponti sospesi”)
- Major
- University
- Date
- Dissertation **High school**
Surveyor
July 1996
- Degree
- Major
- Date

WORK EXPERIENCE

(ACADEMIC AND SPIN-OFF)

- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- Dec 2nd 2020- Ongoing
Sapienza University of Rome – Rome, Italy
Scientific Research
Assistant Professor (Ricercatore a tempo determinato tipo B)
Research and teaching activity in Structural analysis and design (SSD ICAR09)
- Apr 1st 2015- Dec 1st 2019 (4 years and 8 months)
Sapienza University of Rome – Rome, Italy
Scientific Research
Post-doctoral Fellow (Assegnista di ricerca)
Research activity on Performance-Based Design of Structures under multiple hazards
- November 6th 2012- 28th March 2017 (4 years and 4 months)
STRONGER (research spin-off company) – Rome, Italy
Research and development/Entrepreneurship
Co-founder and **Director**
R&D and technical consultant in the Civil Engineering Industry
- April 1st 2009- March 31st 2011 (2 years)
Sapienza University of Rome – Rome, Italy
Scientific Research
Post-doctoral Fellow (Assegnista di ricerca)
Research activity on Performance-Based Design of Structures under different threats
- November 1st 2005- October 30th 2008 (3 years)
Sapienza University of Rome – Rome, Italy
Scientific Research
Ph.D. Student
Study and research on Structural engineering
- May 1st 2005- February 28th 2006 (10 months)
Sapienza University of Rome – Rome, Italy
Scientific Research
Consultant
Title: System reliability of long-span suspension bridges with particular regards with Fluid-Structure Interaction (FSI) problems
- January 1st 2005- April 30th 2005 (4 months)
Sapienza University of Rome – Rome, Italy
Scientific Research
Consultant
Title: Procedures for wind actions evaluation in long span suspension bridges

RESEARCH PERIODS ABROAD

(OTHER THAN THE ABOVE)

- Visiting Researcher

- Visiting Researcher (post-doc)

April 2012 - May 2012

Department of Structural Engineering, Metal Structures Laboratory (Prof. Charis Gantes), **National Technical University of Athens**, Athens, Greece

July 2009 - August 2009

Civil and Environmental Engineering Department (Prof. Michele Barbato), **Louisiana State University (LSU)**, Baton Rouge, Louisiana, USA

INVITED LECTURES

- Date 19 April 2016
- Location **AKTII** (Civil Engineering Firm), London (UK)
- Title "Performance-Based Design of structures for wind and application to high-rise buildings"

- Date 26 May 2014
- Location School of Engineering, **University of Edinburgh** (UK)
- Title "Current Research and Future in Performance-Based Design of Structures"

- Date 14 May 2014
- Location Department of Civil Engineering, **University of Bristol** (UK)
- Title "Performance-Based Design of Structures"

- Date 28 March 2014
- Location Department of Civil Engineering, **University of Nottingham** (UK)
- Title "Performances, Energy harvesting, Environmental sustainability and Resilience in Structures (PEER Structures)"

- Date 03 January 2014
- Location Department of Civil Engineering, **Denmark Technical University** (DK)
- Title "Probabilistic Performance-Based and Resilience-Based Design of Structures"

- Date 14 March 2013
- Location School of Engineering & Mathematical Sciences, **City University London** (UK)
- Title "From Performance-Based to Resilience-Based Design of Structures"

- Date 20 September 2012
- Location Department of Engineering, **University of Cambridge** (UK)
- Title "Performance-Based Design of structures: applications and recent developments"

AWARDS AND COMPETITIONS

- Research Grant

Marie Skłodowska-Curie Actions for the project proposal EU project 890419, "SMART-UP" Smart Tall Buildings by using Piezoelectricity in Joints, Submitted under the Horizon 2020's Marie Skłodowska-Curie actions call H2020-MSCA-IF-2019.

European Commission

- Excellent Research Proposal

Marie Skłodowska-Curie Actions Seal of Excellence for the project proposal 795843, "SMART-UP" Smart Tall Buildings by using Piezoelectricity in Joints, Submitted under the Horizon 2020's Marie Skłodowska-Curie actions call H2020-MSCA-IF-2017 of 14 September 2017. Because the proposal "was scored as a high-quality project proposal in a highly competitive evaluation process"

European Commission

- European Expert

September 2017- Invitation to the meeting "Identification of Future Emerging Technologies in the wind power sector".

JRC (Joint Research Center), Ispra, Italy

- Transfer and commercialization of space technologies

December 2013 - Winner of the "Permanent Open Call for the transfer and commercialization of space technologies" as PI with StroNGER S.r.l.

European Space Agency Business Incubation Centre in Lazio region, Italy (ESA BIC Lazio)

- Academic position competition

January 2015 - Winner. Academic position as Research Fellow in “Research Fellow in Performance-Based Wind Engineering/Design”

Department of Civil Engineering, City University of London, UK

December 2013 -Winner. Academic position as “Research Fellow in Structural Engineering”

Department of Civil Structural and Environm. Engineering, Trinity College Dublin, Ireland

SCIENTIFIC MEMBERSHIP

- *Engineering Mechanics Institute association (EMI)*
- *International Association for Bridge Maintenance and Safety (IABMAS)*
- *The International Association for Life-Cycle Civil Engineering (IALCCE)*
- *Associazione Nazionale dell’Ingegneria del Vento (ANIV)*
- *Inter-University Research Center for Building Aerodynamics and Wind Engineering (CRIACIV)*

RESEARCH GRANTS/FUNDING

<ul style="list-style-type: none"> • Title 	<i>Multi-hazard Optimal DEsign and Reliability Analysis of sTEel buildings (MODERATE)</i>
<ul style="list-style-type: none"> • Typology 	Academic grant
<ul style="list-style-type: none"> • Role 	Principal Investigator
<ul style="list-style-type: none"> • Founding 	€ 36787
<ul style="list-style-type: none"> • Sponsored by 	<i>Sapienza University of Rome</i>
<ul style="list-style-type: none"> • Years 	<i>2022 (ongoing)</i>
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<ul style="list-style-type: none"> • Title 	<i>MUlti-hazard in STEel STRuctures ANalysis and Design (MUST-STAND)</i>
<ul style="list-style-type: none"> • Typology 	Academic grant
<ul style="list-style-type: none"> • Role 	Principal Investigator
<ul style="list-style-type: none"> • Founding 	€ 4000
<ul style="list-style-type: none"> • Sponsored by 	<i>Sapienza University of Rome</i>
<ul style="list-style-type: none"> • Years 	<i>2021 (ongoing)</i>
<hr/>	
<ul style="list-style-type: none"> • Title 	<i>SMART Tall buildings with piEzoelectric Connections for energy Harvesting purposes (SMARTECH)</i>
<ul style="list-style-type: none"> • Typology 	Academic grant
<ul style="list-style-type: none"> • Role 	Investigator
<ul style="list-style-type: none"> • Founding 	€ 4000
<ul style="list-style-type: none"> • Sponsored by 	<i>Sapienza University of Rome</i>
<ul style="list-style-type: none"> • Years 	<i>2020 (12 months)</i>
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<ul style="list-style-type: none"> • Title 	<i>Optimal performance and energy harvesting potential in wind-excited tall buildings provided with TMDIs (HARVEST-WIND)s</i>
<ul style="list-style-type: none"> • Typology 	Academic grant
<ul style="list-style-type: none"> • Role 	Investigator
<ul style="list-style-type: none"> • Founding 	€ 4000
<ul style="list-style-type: none"> • Sponsored by 	<i>Sapienza University of Rome</i>
<ul style="list-style-type: none"> • Years 	<i>2019</i>
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<ul style="list-style-type: none"> • Title 	<i>MiCHe: Mitigating the Impacts of natural hazards on Cultural Heritage sites, structures and artefacts</i>
<ul style="list-style-type: none"> • Typology 	Academic grant
<ul style="list-style-type: none"> • Role 	Investigator
<ul style="list-style-type: none"> • Founding 	€ 408 000
<ul style="list-style-type: none"> • Sponsored by 	<i>MIUR- Italian Ministry of University and Research</i>
<ul style="list-style-type: none"> • Years 	<i>2016-2019</i>

<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>Multi-objective performance-based design of tall buildings using energy harvesting enabled tuned mass-damper-inerter (TMDI) devices</i></p> <p>Academic grant</p> <p>Investigator</p> <p>£ 250 739</p> <p><i>Engineering and Physical Sciences Research Council (EPSRC), UK</i></p> <p>2015-2017</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>Tester for the numerical finite element code Lusas: structural nonlinear analysis</i></p> <p>Industry grant (<i>annual personal License of the Numerical FEM code Lusas</i>)</p> <p>Investigator</p> <p>€ 10 000</p> <p><i>LUSAS Italia, Alhambra S.r.l.</i></p> <p>2015</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>S.I.V.E.S.: Schede Informatizzate per la valutazione speditiva della Vulnerabilità strutturale degli Edifici Storici</i></p> <p>Strategic plan for the innovation and technology transfer program 2011-2013</p> <p>Investigator</p> <p>€ 50 000</p> <p><i>Lazio Region</i></p> <p>2015</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>PiezoTsensor - self-powered piezoelectric temperature and humidity sensor</i></p> <p>Space Technology transfer grant</p> <p>Principal Investigator</p> <p>€ 50 000</p> <p><i>ESA (European Space Agency)</i></p> <p>2014- 2015</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>StroNGER (Structures of the Next Generation – Energy harvesting and Resilience)</i></p> <p>“FILAS - POR FESR LAZIO 2007/2013 - Support for the research spin-off”</p> <p>Principal Investigator</p> <p>€ 100 000</p> <p><i>FI.LA.S. Financing, innovation and research in Lazio</i></p> <p>2012- 2013</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>Affidabilità e sicurezza di turbine eoliche offshore (Reliability of offshore wind turbines)</i></p> <p>Academic grant</p> <p>Investigator</p> <p>€ 70 000</p> <p><i>Sapienza University of Rome</i></p> <p>2009- 2011</p>
<ul style="list-style-type: none"> • Title • Typology • Role • Founding • Sponsored by • Years 	<p><i>Wi-POD - Wind effects on slender structures: Performance-based Optimal Design</i></p> <p>Academic grant</p> <p>Investigator</p> <p>€ 250 000</p> <p><i>MIUR- Italian Ministry of University and Research</i></p> <p>2008- 2010</p>

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- Title *Analisi strutturale per la valutazione della capacità sismica di strutture intelaiate in acciaio e cemento armato (Structural analysis for the assessment of seismic behavior of steel and concrete frames)*
 - Typology Industry grant
 - Role Principal Investigator
 - Founding **€ 24 000**
 - Sponsored by *HSH s.r.l. – Bergamo, Italy*
 - Years 2009
-
- Title *Affidabilità dei sistemi dell'ingegneria civile: il caso delle turbine eoliche offshore (Reliability of civil engineering systems: the case of offshore wind turbines)*
 - Typology Academic grant
 - Role Investigator
 - Founding **€ 74 000**
 - Sponsored by *Sapienza University of Rome*
 - Years 2008-2009
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SCIENTIFIC COMMUNITY SERVICES

- Directive Boards

Member of the Scientific Directive Board. Associazione Nazionale dell'Ingegneria del Vento (ANIV) (Italian Association of Wind Engineering) from 16/07/2015.
- Management Boards

Member of the Management Board. Centro Interuniversitario di Aerodinamica delle Costruzioni e Ingegneria del Vento (CRIACIV) (Inter-University Research Centre on Building Aerodynamics and Wind Engineering) from 16/07/2015.
- Guest Editor

Guest Editor (together with Michele Barbato and Alessandro Palmeri). Special issue on "Performance Based Engineering: Current Advances and Applications", **Engineering Structures**, Volume 78, Pages 1-166 (1 November 2014).
- Editorial Boards

Member. *Mathematical Problems in Engineering*, Hindawi Publishing (Scientific Journal)
Associate Editor. *Bridge Engineering*, Frontiers in Civil Engineering (Scientific Journal)
Review Editor. *Earthquake Engineering*, Frontiers in Civil Engineering (Scientific Journal)
Review Editor. *Wind Engineering and Science*, Frontiers in Civil Engineering (Scientific Journal)
Member. *Earthquake Engineering*, Frontiers in Civil Engineering (Scientific Journal)
- Scientific Coordination

Scientific Coordinator. Sapienza University of Rome, PhD Course on "Design of Wind-Excited Civil Structures: Phenomenological Basis, Performances Assessment, Solutions and Case Studies"
- Paper reviewer for (selected)
 - *Computer-Aided Civil and Infrastructure Engineering*, Wiley
 - *Engineering Structures*, Elsevier
 - *Journal of Bridge Engineering*, ASCE
 - *Journal of Structural Engineering*, ASCE
 - *Journal of Pressure Vessel Technology*, ASME
 - *Journal of Wind Engineering and Industrial Aerodynamics*, Elsevier
 - *Nonlinear Dynamics*, Springer
 - *Proceedings of the Institution of Civil Engineers journal Bridge Engineering*, ICE
 - *Structure and Infrastructure Engineering- Maintenance, Management, Life-Cycle Design & Performance*, Taylor&Francis
 - *Wind and Structures*, Techno Press
- Member of the Scientific Committee

17th Conf of the Italian Association for Wind Engineering, Milan, Italy, Sept 4-7, 2022.
 15th Conf of the Italian Association for Wind Engineering, Naples, Italy, Sept 9-12, 2018.
 14th Conf of the Italian Association for Wind Engineering, Terni Italy, Sept 25-28, 2016.
- Chairman and organizer of sessions and Mini-symposia in International Conferences

Chairman. Session: *Rehabilitation and Service Life Extension of Historic Railways Bridges (IABMAS 2022)*. Barcelona, Spain, July 11-15, 2022.

Organizer. Mini-symposium: *Performance Assessment and Performance-Based Design of Structures for Single/Multiple Hazards*. 13th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP13). Seoul, S. Korea, May 26- 30, 2019.

Chairman. Session: *Seismic design*. X International Conference on Structural Dynamics (EURODYN 2017). Rome, Italy, September 10-13, 2017.

Organizer and chairman. Mini-symposium: *Performance-Based Design of Dynamically excited structures*. X International Conference on Structural Dynamics (EURODYN 2017). Rome, Italy, September 10-13, 2017.

Chairman. Session: *Performance Based Wind Engineering*. 14th Conference of the Italian Association for Wind Engineering, Terni Italy, September 25-28, 2016

Chairman. Session: *Bridges*. 13th Conference of the Italian Association for Wind Engineering, Genova, Italy, June 22-25, 2014.

- Member of the organizing committee

Organizer and chairman. *Mini-symposium: Performance-Based, Reliability-Based, and Risk-Based Design: Rational approaches to mitigate natural and man-made hazards. 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), New York, U.S., June 16-20, 2013.*

Organizer. *Special session. Energy Harvesting for the Life-Cycle of Structures and Infrastructures, Third International Symposium on Life-Cycle Civil Engineering (IALCCE 2012), Vienna, Austria, October 3-6, 2012.*

Chairman. *Session: Wind Effects on bridges, 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa, Italy, July 8-12, 2012.*

Organizer and chairman. *Special session: Advances in Modeling and Analysis for the Performance-Based Design of Bridge Structures subjected to Multiple Hazards, 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa, Italy, July 8-12, 2012.*

Chairman. *Session: Fluid-Structure interaction, Joint Conference of the Engineering Mechanics Institute and 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability (EMI/PMC 2012), South Bend, USA, June 17-20, 2012.*

Organizer and chairman. *Mini-symposium: Performance-Based Design for Structures Subject to Natural Hazard, 11th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP11), 1 - 4 August 2011, Zurich, Switzerland*

Chairman. *Session: Structural Analysis of Wind Turbines, Earth & Space 2010 Conference, Honolulu, HI, USA, 14-17 March 2010*

National organizing Committee: *6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Stresa, Lake Maggiore, Italy, July 8-12, 2012.*

Local organizing Committee: *Workshop Handling the exceptions: sistemi strutturali, scenari accidentali, complessità di progetto, Sapienza University of Rome, July 8-9 2010, Rome*

Local organizing Committee: *Workshop Handling the exceptions: sistemi strutturali, scenari accidentali, complessità di progetto, Sapienza University of Rome, November 13-14 2008, Rome*

- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- Sept 2022- ongoing
Sapienza University of Rome
Civil engineering
Professor
Course (120 hours):
Tecnica delle Costruzioni (Structural analysis and Design)
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- Sept 2021- ongoing
Sapienza University of Rome
Civil engineering
Professor
Course (60 hours):
Costruzioni Metalliche (Steel Structures)
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- Sept 2020- Aug 2022+ exams (two academic years)
Sapienza University of Rome
Civil engineering
Professor
Course (60 hours):
Progettazione Strutturale Antincendio (Structural Design for Fire Safety)
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- Sept 2020- Aug 2022+ exams (two academic years)
Sapienza University of Rome
Civil engineering
Professor
Course (60 hours):
Structural Design
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- March 2018- June 2019 + exams (two academic years)
Sapienza University of Rome
Civil engineering
Appointed Professor
Teaching module (60 hours):
Tecnica delle Costruzioni (Structural analysis and Design)
- Dates
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- September 2017
Sapienza University of Rome, Course on “Design of Wind-Excited Civil Structures: Phenomenological Basis, Performances Assessment, Solutions and Case Studies” (part of the PhD education Program)
Structural engineering
Appointed Lecturer
Lectures (2 hours each):
Uncertainty Quantification in the design process; High-rise buildings, design concepts and case studies
- Dates
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- March 2017
University of Pisa, 2nd International Workshop on Traditional and Innovative Approaches in Seismic Design (part of the DAAD-program Hochschuldialog mit Südeuropa 2017)
Structural engineering
Appointed Lecturer
Lecture (1 hour):
Finite Element modeling of non-linear structural response under seismic and accidental actions

- Dates (from – to)
- Name and address of employer
 - Type of business or sector
 - Occupation or position held
- Main activities and responsibilities

October 1st 2005- March 31st 2017 (12 years)

Sapienza University of Rome

Structural engineering

Teaching assistant

Teaching modules:

Costruzioni metalliche (Steel Structures) (12 years); Modellazione dei sistemi strutturali (Structural Analysis) (4 years); Progettazione di strutture antincendio (Fire Safety Structural Design) (2 years); Tecnica delle Costruzioni (Structural Design) (1 year)

**OTHER SCIENTIFIC AND
TUTORING ACTIVITIES**

- Dates (from – to)
- Name and address of employer
 - Activity

Jun 2014 - March 2017

StroNGER S.r.l. (own Company)

Leading of a working group of 2 to 5 people composed by Engineers and Economists for:

- Developing R&D projects;
- Structural Design projects for Industry
- Development of research proposal for national and EU funding applications

- Dates (from – to)
- Name and address of employer
 - Activity

Nov 2012- ongoing

Sapienza University of Rome

Ph.D students co-advisory of 5 candidates (see annex):

- Dates (from – to)
- Activity

June 2005- September 2018

Speaker or Invited Speaker in 26 scientific international Conferences (32 presentations)

- Dates (from – to)
- Name and address of employer
 - Activity

2005- 2018

Sapienza University of Rome

MSC theses co-advisory of 45 candidates (see annex)

- Dates (from – to)
- Name and address of employer
 - Activity

2009- Ongoing

Sapienza University of Rome

Member of MSC degree commissions of Civil Engineering

**MAIN WORK EXPERIENCES AS
EXPERT CONSULTANT**

- Object
 - Role
- Commitment
 - Dates

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- Commitment
 - Dates

Forensic consultant for the process regarding a private historical building
Assessment of the design procedure

Mrs. Sentinelli Diana

October 2018- January 2019

Design of a number of reinforce concrete buildings being part of a site for military air traffic control(strategic structure) located in Bangladesh

Structural analysis and design

Studio Sebastiani S.r.l.

September 2016- February 2017

Forensic consultant for the process regarding a strategic Healthcare Infrastructure

Assessment of the design procedure

Catholic University of Rome

October 2014- February 2016

Forensic consultant for the process regarding an harbor infrastructure

Expert of structures

Cidonio S.p.a.

July 2014- January 2015

Design of a steel reinforcement structure for an industrial tank in pressure

Conceptual Design and Developing of the detailed FE modeling

Department of chemical and material Engineering, Sapienza University of Rome

June 2014- July 2014

Design of innovative moment resisting connections for steel-rib support structures of road tunnels

Developing of the detailed FE modeling of the support structures

Ghella S.p.a.

January 2013- May 2013

Design of special devices for slab-column connections in precast constructions

Developing of the detailed FE modeling of the devices for the design against vertical loads and fire action

Styl-Comp S.p.a.

October 2012- January 2013

Design of strategic infrastructures for the aqueduct "Sele-Calore" (Italy)

Seismic design of concrete structures

Technic S.p.a.

January 2012- September 2012

Forensic consultant for the process regarding the retrofitting of a building

Assessment of the design procedure

Public Minister of the Tribunal of Firenze

October 2010- December 2010

Design of measures for limiting the vibrations of the foundations of high precision atomic clocks

Experimental test design and interpretation, Structural protection designer

Angelo Rago Engineering

March 2010- June 2010

- Object
- Role
- Commitment
- Dates

- Object
- Role
- Commitment
- Dates

PERSONAL SKILLS AND COMPETENCES

NATIVE LANGUAGE
OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

TECHNICAL SKILLS
AND COMPETENCES

REFERENCES

- Prof. Franco Bontempi
- Prof. Agathoklis Giaralis
- Prof. Michele Barbato

ANNEXES

Design of the support structures for Offshore Wind Turbines

Structural designer

DMS Geotechnical Engineering S.r.l.

February 2008- June 2008

Design of special steel devices for beam-column connections in precast constructions

Developing of the detailed FE modeling of the devices for the design against vertical loads

Styl-Comp S.p.a.

January 2007- November 2007

ITALIAN

ENGLISH

GOOD

GOOD

GOOD

FINITE ELEMENT (FE) LINEAR AND NON-LINEAR ANALYSIS (ABAQUS®, ANSYS®, ADINA®, OPENSEES®, STRAND7®, SAP 2000®)

SOFTWARE DEVELOPMENT FOR STOCHASTIC ANALYSIS (MATLAB®)

MICROSOFT OFFICE®

*Dept. of Structural and Geotechnical Engineering
School of Engineering, Sapienza University of Rome.
Via Eudossiana, 18 - 00184 Rome (Italy)*

*Dept. of Civil Engineering
School of Mathematics, Computer Science & Engineering. City, University of London.
Northampton Square, London, EC1V 0HB (United Kingdom)*

*Dept. of Structural and Geotechnical Engineering
Department of Civil and Environmental Engineering
3149 Ghausi Hall
University of California
Davis, CA 95616*

A- Scientific Publications

B- Author H-Index

C- Active scientific collaborations

D- PhD, MSc and BSc Theses Co-advisory

ANNEX A: SCIENTIFIC PUBLICATIONS

PH.D. THESIS (1 DOCUMENT)

1. Petrini F., (2009). "A probabilistic approach to Performance-Based Wind Engineering", Ph.D. dissertation, department of Structural and Geotechnical Engineering, Sapienza University of Rome, Rome, Italy. DOI : 10.3267/petrinithesis. http://www.francobontempi.org/pdf/tesidott/tesi_dottorato_petrini.pdf.

TEACHING BOOKS (1 DOCUMENT)

2. Bontempi F., Aguinagalde A., Petrini F.. Progettazione Strutturale Antincendio - Come sviluppare analisi strutturali e verifiche di sicurezza in caso di incendio. Dario Flaccovio Editore, 2021. IN ITALIAN

PATENTS APPLICATIONS (1 DOCUMENT)

3. European Patent Application. Device made of piezoelectric material having a fin for harvesting energy from air flows. Date of publication: 09.12.2015 Bulletin 2015/50 Application number: 15170907.8 Date of filing: 05.06.2015 Applicant: StroNGER S.r.l. 00123 Roma (IT) Inventors: BONTEMPI, Franco I-39100 Bolzano (IT) CROSTI, Chiara I-05100 Terni (TR) (IT) GKOU MAS, Konstantinos I-00100 Roma (IT) PETRINI, Francesco I-00018 Palombara Sabina (RM) (IT) ARANGIO, Stefania I-00100 Roma (IT).

INTERNATIONAL PEER REVIEWED JOURNALS (31 DOCUMENTS) - in grey the papers indexed in Scopus

4. Petrini F., Aguinagalde A., Bontempi F. (2022). Structural Fire Risk for Heritage Buildings by the Performance-Based Engineering Format, International Journal of Architectural Heritage, 24 Pages. DOI: 10.1080/15583058.2021.2022249
5. Francioli M, Petrini F., Olmati P., Bontempi F. (2021). "Robustness of reinforced concrete frames against blast induced progressive collapse". Vibration, 4: 722–742. DOI: 10.3390/vibration4030040.
6. De Angelis M., Petrini F., Pietrosanti D. (2021). Optimal design of the ideal grounded tuned mass damper inerter for comfort performances improvement in footbridges with practical implementation considerations. Structural Control and Health Monitoring, 28(9): e2800. DOI: 10.1002/stc.2800.
7. Bertolucci Colherinhas G., Petrini F., de Moraes M.V.G., Bontempi F. (2021). Optimal design of passive-adaptive pendulum tuned mass damper for the global vibration control of offshore wind turbines. Wind Energy, 24: 573–595. DOI: 10.1002/we.2590
8. Petrini F., Gkoumas, K., Rossi, C. Bontempi, F. (2020). Multi-Hazard Assessment of Bridges in Case of Hazard Chain: State of Play and Application to Vehicle-Pier Collision Followed by Fire. Frontiers in Built Environment - Bridge Engineering, 15 September 2020. DOI: 10.3389/fbuil.2020.580854
9. Sobhaniai M., Petrini, F., Karimirad, M., Bontempi, F. (2020). Fatigue Life Assessment for Power Cables in Floating Offshore Wind Turbines. Energies 13:3096. DOI:10.3390/en13123096
10. Petrini F., Giarlis A., Wang Z. (2020). Optimal tuned mass-damper-inerter (TMDI) design in wind-excited tall buildings for occupants' comfort serviceability performance and energy harvesting. Engineering Structures 204: 109904. DOI: 10.1016/j.engstruct.2019.109904. **Rank JCR: Q1. IF: 3.084 (JCR 2018)**
11. Watson S., ..., Petrini F., ... (32 Authors in total) (2019). Future emerging technologies in the wind power sector: A European perspective. Renewable and Sustainable Energy Reviews, 113: 109270. **Rank JCR: Q1. IF: 10.556 (JCR 2018)**
12. De Angelis M., Giarlis A., Petrini F., Pietrosanti D. (2019). Optimal tuning and assessment of inertial dampers with grounded inerter for vibration control of seismically excited base-isolated systems. Engineering Structures 196: 109250. DOI: 10.1016/j.engstruct.2019.05.091. **Rank JCR: Q1. IF: 3.084 (JCR 2018)**
13. Petrini F., Olmati P., Bontempi F. (2019). Coupling effects between wind and train transit induced fatigue damage in suspension bridges. Structural Engineering and Mechanics, 70(3), 311-324. DOI: <https://doi.org/10.12989/sem.2019.70.3.311>. **Rank JCR: Q1. IF: 2.804 (JCR 2018)**
14. Petrini F., Gkoumas K. (2018). Piezoelectric energy harvesting from vortex shedding and galloping induced vibrations inside HVAC ducts. Energy and Buildings, 158: 371–383. DOI: 10.1016/j.enbuild.2017.09.099. **Rank JCR: Q1. IF: 4.457 (JCR 2017)**
15. Franchin P., Petrini F., Mollaioli F. (2018). Improved risk-targeted performance-based seismic design of reinforced concrete frame structures. Earthquake Engineering & Structural Dynamics, 47(1), 49-67. DOI: 10.1002/eqe.2936. **Rank JCR: Q1. IF: 2.807 (JCR 2017)**

16. Giaralis A., Petrini F. (2017). "Wind-Induced Vibration Mitigation in Tall Buildings Using the Tuned Mass-Damper-Inerter". *Journal of Structural Engineering ASCE*, 143(9), article number 04017127, DOI: 10.1061/(ASCE)ST.1943-541X.0001863. **Rank JCR: Q2. IF: 1.903 (JCR 2017)**
17. Vassilopoulou I., Petrini F., Gantes C.J. (2017). Nonlinear Dynamic Behavior of Cable Nets Subjected to Wind Loading. *Structures* 10, 170–183. DOI: 10.1016/j.istruc.2017.03.004. **Rank JCR: N.A. CiteScore: 1.46 (journal website)**
18. Sebastiani P.E., Petrini F., Bontempi F. (2016). "Back calculation and model calibration for earthquake damaged bridges - a general procedure and its application to a highway viaduct". *Structure & Infrastructure Engineering - Maintenance, Management, Life-Cycle Design & Performance*, 12(8), 949-963. DOI:10.1080/15732479.2015.1075050. **Rank JCR: Q2. IF: 1.565 (JCR 2016)**
19. Gentili F., Petrini F. (2016). "On the role of the numerical analyses in forensic investigations of fire-induced progressive collapses of tall buildings". *International Journal of Forensic Engineering*, 3(1/2), 45-68. DOI: 10.1504/IJFE.2016.075996.
20. Olmati P., Petrini F., Vamvatsikos D., Gantes C.J. (2016). Simplified fragility-based risk analysis for impulse governed blast loading scenarios. *Engineering Structures* 117:457–469. DOI: 10.1016/j.engstruct.2016.01.039. **Rank JCR: Q1. IF: 2.258 (JCR 2016)**
21. Dimopoulos C.A., Koulatsou K., Petrini F., Gantes C.J. (2015). Assessment of Stiffening Type of the Cutout in Tubular Wind Turbine Towers Under Artificial Dynamic Wind Actions. *Journal of Computational and Nonlinear Dynamics*. 10(4),041004-041004-9. DOI: 10.1115/1.4028074. **Rank JCR:Q2. IF: 1.223 (JCR 2015), 1.732 (JCR 2016)**
22. Barbato M., Palmeri A., Petrini F. (2014). Special Issue on Performance-based engineering. Editorial foreword, *Engineering Structures*, 78, 1-2. DOI: 10.1016/j.engstruct.2014.10.001 **Rank JCR: Q1. IF: 1.838 (JCR 2014), 2.258 (JCR 2016)**
23. Olmati P., Petrini F., Gkoumas K. (2014). Fragility analysis for the Performance-Based Design of cladding wall panels subjected to blast load. *Engineering Structures*, 78, 112- 120. DOI: 10.1016/j.engstruct.2014.06.004. **Rank JCR: Q1. IF: 1.838 (JCR 2014), 2.258 (JCR 2016)**
24. Petrini F. (2013). "Performance-based fire design of complex structures", *International Journal of Lifecycle Performance Engineering*, 1(2), 185-208.
25. Barbato M., Petrini F., Unnikrishnan V.U., Ciampoli M. (2013). Performance-Based Hurricane Engineering (PBHE) framework. *Structural Safety*, 45, 24-35. DOI: 10.1016/j.strusafe.2013.07.002. *(Awarded in December 2016 as one of the most highly cited papers in Structural Safety during 2014, 2015 and up until June 2016)* **Rank JCR: Q1. IF: 1.594 (JCR 2013), 2.746 (JCR 2016)**
26. Olmati P., Petrini F., Bontempi F. (2013). "Numerical analyses for the assessment of structural response of buildings under explosions". *Structural Engineering and Mechanics*, 45 (6), 803-819. **Rank JCR: Q3. IF: 0.803 (JCR 2013), 1.118 (JCR 2016)**
27. Petrini F., Ciampoli M., (2012). "Performance-based wind design of tall buildings", *Structure & Infrastructure Engineering - Maintenance, Management, Life-Cycle Design & Performance*, 8 (10), 954-966. DOI: 10.1080/15732479.2011.574815. **Rank JCR: Q2. IF: 2.805 (JCR 2012), 1.565 (JCR 2016)**
28. Petrini F., Gkoumas K., Zhou W., Li H. (2012). "Multi-level structural modeling of an offshore wind turbine". *Ocean System Engineering*, 2 (1), 1-16. DOI: 10.12989/ose.2012.2.1.001.
29. Ciampoli M, Petrini F. (2012). "Performance-Based Aeolian Risk assessment and reduction for tall buildings", *Probabilistic Engineering Mechanics*, 28, 75–84. DOI:10.1016/j.probengmech.2011.08.013. **Rank JCR: Q2. IF: 1.086 (JCR 2012), 1.714 (JCR 2016)**
30. Ciampoli M, Petrini F., Augusti G., (2011). "Performance-Based Wind Engineering: towards a general procedure", *Structural Safety*, 33 (6), 367-378. DOI: 10.1016/j.strusafe.2011.07.001. **Rank JCR: Q1. IF: 1.867 (JCR 2011), 2.746 (JCR 2016)**
31. Petrini F., Bontempi F. (2011), "Estimation of fatigue life for long span suspension bridge hangers under wind action and train transit" *Structure and Infrastructure Engineering- Maintenance, Management, Life-Cycle Design & Performance*, 7(7-8), 491 – 507, DOI: 10.1080/15732479.2010.493336. **Rank JCR: Q2. IF: 0.966 (JCR 2011), 1.118 (JCR 2016)**
32. Petrini F., Li H., Bontempi F. (2010). "Basis of Design and Numerical Modeling of Offshore Wind Turbines", *Structural Engineering Mechanics*, 36(5), 599-624. ISSN: 1225-4568, eISSN: 1598-6217. **Rank JCR:Q3. IF: 0.429 (JCR 2010), 1.118 (JCR 2016)**
33. Petrini F., Manenti S., Gkoumas K., Bontempi F. (2010). "Structural design and analysis of offshore wind turbines from a system point of view", *Wind Engineering*, 34 (1), 85-108. ISSN 0309-524X - DOI: 10.1260/0309-524X.34.1.85. **Rank JCR: N.A. IF: 0.780 (SJR 2010), 0.650 (SJR 2016)**
34. Petrini F., Giuliano F., Bontempi F. (2007). "Comparison of time domain techniques for the evaluation of the response and the stability of long span suspension bridges", *Computers & Structures*, vol. 85 (2007), 1032-1048. ISSN: 0045-7949 - DOI: 10.1016/j.compstruc.2006.11.015. **Rank JCR: Q2. IF: 0.934 (JCR 2007), 2.847 (JCR 2016)**

BOOK CHAPTERS (3 DOCUMENTS)

35. Petrini F., Wang Z., Giaralis A. Simultaneous Vibration Suppression and Energy Harvesting in Wind Excited Tall Buildings Equipped with the Tuned Mass Damper Inerter (TMDI). In *Proceedings of the XV Conference of the Italian Association for Wind Engineering*. Published in *Lecture Notes in Civil Engineering* book series (LNCE, volume 27), Ricciardelli F. and Avossa A.M. (eds.).

36. Gkoumas, K., Petrini F., Bontempi, F. (2015). "Design of Cable-Supported Bridges, Control Strategies", Aseismic Design, Lignos. D. Section Editor, in Encyclopedia of Earthquake Engineering, Beer, M., Kougoumtzoglou, I.A., Patelli, E., Au, I.S.-K. (Eds.), pp. 536-550, Springer
37. Petrini F., Ciampoli M., Augusti G. (2011). "The role of uncertainties in Aeolian risk assessment." In M Papadrakakis, G Stefanou, V Papadopoulos (eds.), Computational Methods in Stochastic Dynamics, Computational Methods in Applied Sciences 22, 187- 208, DOI 10.1007/978-90-481-9987-7_10, Springer Science+Business Media B.V. Editors.

CONFERENCE PROCEEDINGS (76 DOCUMENTS) - in grey he papers presented by F.Petrini in Conferences

38. Mennonna M., Francioli M., Petrini F., Bontempi F. (in press). Structural Robustness of RC Frames under Blast events. Proceedings of the 4th International Conference on Numerical Modelling in Engineering (NME 2021), online due to the COVID pandemic emergency, August 24-25, 2021. To be published in Lecture Notes in Civil Engineering.
39. Gashi F., Petrini F., Bontempi F. (2021). Component Tests, Fracture Simulation, and Experimental Study on Steel Damper for passive energy dissipation. Proceedings of 1st Croatian Conference on Earthquake Engineering, 1CroCEE, Zagreb, Croatia - March 22nd to 24nd, 2021. Edited by Laksusic, S. and Atalic, J. Copyright © 2021 CroCE.
40. Petrini F., Rossi C., Gkoumas K., Bontempi F. (2021). Multi-hazard events for bridges: state of play and numerical modeling of chained impact and fire scenarios. Proceedings of the 10th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2020), online due to the COVID pandemic emergency, 11-19 April 2021.
41. De Angelis M., Petrini F., Pietrosanti D. (2021). Comfort performances improvements in existing footbridges by the Tuned-Mass Damper Inerter (TMDI). Proceedings of the 10th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2020), online due to the COVID pandemic emergency, 11-19 April 2021.
42. Petrini F., Wang Z., Giaralis A., (2018). Simultaneous vibration suppression and energy harvesting in wind excited tall buildings equipped with the tuned mass damper inerter (TMDI). IN-VENTO 2018 15th Conference of the Italian Association for Wind Engineering, Napoli, Italy, September 9-12, 2018.
43. Giaralis A., Petrini F. (2017). Optimum design of the tuned mass-damper-inerter for serviceability limit state performance in wind-excited tall buildings. Procedia Engineering, 199: 1773-1778.
44. Gkoumas K., Petrini F., Bontempi F. (2017). Piezoelectric vibration energy harvesting from airflow in HVAC (Heating Ventilation and Air Conditioning) systems. Procedia Engineering, 199: 3444-3449.
45. Franchin P., Mollaioli F., Petrini F. (2017). An equivalent linear procedure for probabilistic displacement-based design of RC structures under earthquake. Procedia Engineering, 199: 3570-3575.
46. Franchin P., Petrini F., Mollaioli F. (2017). Risk-targeted seismic performance-based design of RC structures: application to an irregular building frame. Proceedings of the International Workshop On Performance-Based Seismic Design Of Structures (Resilience, Robustness) Shanghai, China, 12-15 October 2017
47. Petrini F., Gkoumas K., Bontempi F. (2016). Energy Harvesting from Flow-Induced vibrations: numerical analysis and experimental testing. 5th International Workshop on Design in Civil and Environmental Engineering, Sapienza University of Rome, Italy, October 6-8, 2016
48. Gkoumas K., Petrini F., Arangio S., Crosti C., Bontempi F. (2016). Development of a piezoelectric energy harvesting sensor: from concept to reality, 5th International Workshop on Design in Civil and Environmental Engineering, Sapienza University of Rome, Italy, October 6-8, 2016
49. Franchin P., Mollaioli F., Petrini F. (2016). Improved gradient-based equivalent linear procedure for probabilistic displacement-based design of RC structures, accounting for damage-induced stiffness degradation. Italian Concrete Days, Evolution and sustainability of concrete structures, Rome, Italy, 27 - 28 October 2016.
50. Petrini F., Giaralis A. (2016). Assessment of different tuned mass-damper-inerter (TMDI) topologies to suppress tall building oscillations in the across-wind direction. IN-VENTO 2016 14th Conference of the Italian Association for Wind Engineering, Terni Italy, September 25-28, 2016.
51. Biscarini G., Petrini F., Gkoumas K., Bontempi F. (2016) Piezoelectric EH from flow-induced structural vibrations. IN-VENTO 2016 14th Conference of the Italian Association for Wind Engineering, Terni Italy, September 25-28, 2016
52. Petrini F., Giaralis A (2016). Control of across-wind vortex shedding induced vibrations in tall buildings using the tuned mass-damper-inerter (TMDI). EACS 2016 – 6th European Conference on Structural Control, Sheffield, England: 11-13 July 2016
53. Bontempi F., Gkoumas K., Arangio S., Petrini F., Crosti C. (2015). "The long way towards a sound framework for structural design: 10 years of experience in Rome", 4th International Workshop on Design in Civil and Environmental Engineering (DCEE4), National Taiwan University, Taipei, Taiwan, October 30-31, 2015
54. Petrini F., Gkoumas K., Bontempi F. (2015). "From resilient - and towards antifragile - design: Considerations from a civil engineering point of view", Proceedings of the SHMII 2015 - 7th International Conference on Structural Health Monitoring of Intelligent Infrastructure, Turin, Italy, July 1-3, 2015.

55. Petrini F., Gkoumas K., Bontempi F. (2015). "Design for resilience of structures and infrastructures: Theoretical framework and applications", Proceedings of the SHMII 2015 - 7th International Conference on Structural Health Monitoring of Intelligent Infrastructure, Turin, Italy, July 1-3, 2015.
56. Ferri S., Gkoumas K., Petrini F., Bontempi F. (2014) "Flow-induced energy harvesting: conceptual design and numerical analyses of a piezoelectric bender for smart building applications", Proceedings of the 3rd International Workshop on Design in Civil and Environmental Engineering, Technical University of Denmark, Denmark, August 21-23, 2014 Lotte Bjerregaard Jensen & Mary Kathryn Thompson Editors, pp. 146-156, ISBN 978-0-9894658-3-0
57. Sebastiani P.E., Pagett E., Petrini F., Bontempi F. (2014). "Effectiveness Evaluation of Seismic Protection Devices for Bridges in the PBEE Framework". Second International Conference on Vulnerability and Risk Analysis and Management (ICVRAM) and the sixth International Symposium on Uncertainty Modeling and Analysis (ISUMA)
58. Petrini F., Olmati K., Bontempi F. (2014). "Building occupant comfort assessment in the PBWE framework". Proceedings of the thirteenth Italian National Conference on Wind Engineering, Genova, Italy, 22-25 June 2014.
59. Petrini F., Gkoumas K., Bontempi F. (2014). "Piezoelectric Energy Harvesting under Air Flow Excitation". Proceedings of the thirteenth Italian National Conference on Wind Engineering, Genova, Italy, 22-25 June 2014.
60. Monti A., Pariciani T., Gentili F., Petrini F. (2013). "No-sway collapse of steel frames under fire conditions: a parametric investigation". Proceedings of the the Fifth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2013), Capetown, South Africa, 2-4 September 2013.
61. Gkoumas K., Petrini F., Arangio S., Crosti C. (2013). "Energy harvesting for the sustainability of structures and infrastructures". Proceedings of the the Fifth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2013), Capetown, South Africa, 2-4 September 2013.
62. Petrini F., Palmeri A., Barbato M. (2013). "Performance-based wind design of tall buildings equipped with viscoelastic dampers", 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), June 16-20, 2013, Columbia University, New York, USA.
63. Olmati P., Petrini F., Gkoumas K. (2013). "Blast resistance assessment of a reinforced precast concrete wall under uncertainty", 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), June 16-20, 2013, Columbia University, New York, USA.
64. Petrini F., Gkoumas K., Bontempi F. (2013). "Damage and loss evaluation in the performance-based wind engineering", 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), June 16-20, 2013, Columbia University, New York, USA.
65. Orteni M., Petrini F., Giuliani L., Bontempi F. (2013). "RISE: a method for the design of resilient infrastructures and structures against emergencies", 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), June 16-20, 2013, Columbia University, New York, USA.
66. Petrini F., Gkoumas K., Bontempi F. (2013). "Recent developments and uncertainty aspects In the Performance Based Design of structures for wind". Proceedings of the 4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPdyn 2013), June 12-14, Kos island, Greece.
67. Koulatsou K., Petrini F., Vernardos S., Gantes C. (2013). "Artificial time histories of wind actions for structural analysis of wind turbines". 2nd International Balkans Conference on Challenges of Civil Engineering, to be held in Tirana, Albania, on 23-25 May 2013.
68. Gkoumas K., De Gaudenzi O., Petrini F. (2012). "Energy harvesting applications in transportation infrastructure networks", Procedia - Social and Behavioral Sciences 48, 1097 – 1107. DOI: 10.1016/j.sbspro.2012.06.1086.
69. Unnikrishnan V.U., Barbato M., Petrini F., Ciampoli M. (2012). "Probabilistic Performance Based Risk Assessment Considering the Interaction of Wind and Windborne Debris Hazard". Proceedings of the ATC-SEI Advances in Hurricane Engineering Conference, Miami, USA, October 24-26, 2012.
70. Petrini F., De Gaudenzi O., Gkoumas K. (2012). "An energy harvesting application in a long span suspension bridge". Proceedings of the third International Conference on Life-Cycle Civil Engineering (IALCCE 2012), Vien, Austria, October 3-6, 2012.
71. Gkoumas K., Petrini F., Bontempi F. (2012). "Energy harvesting for the lifecycle of structures and infrastructures: state of art, recent trends and future developments". Proceedings of the third International Conference on Life-Cycle Civil Engineering (IALCCE 2012), Vien, Austria, October 3-6, 2012.
72. Petrini F., Palmeri A. (2012). "Performance-Based Design of bridge structures subjected to multiple hazards: a review". Proceedings of the six International Conference on Bridge Maintenance, Safety and Management (IABMAS2012). Stresa, Lake Maggiore, Italy, July 8-12, 2012.
73. Gentili F., Petrini F. (2012). "Evaluation of structural risk for bridges under fire". Proceedings of the six International Conference on Bridge Maintenance, Safety and Management (IABMAS2012). Stresa, Lake Maggiore, Italy, July 8-12, 2012.
74. Sebastiani P.E., Petrini F., Franchin P., Bontempi F. (2012). "Back Analysis for Earthquake Damaged Bridges. Part I: a general procedure". Proceedings of the six International Conference on Bridge Maintenance, Safety and Management (IABMAS2012). Stresa, Lake Maggiore, Italy, July 8-12, 2012.

75. Sebastiani P.E., Franchin P., Petrini F., Bontempi F. (2012). "Back Analysis for Earthquake Damaged Bridges. Part II: an application to a viaduct damaged in the April 6th, 2009 L'Aquila Earthquake". Proceedings of the six International Conference on Bridge Maintenance, Safety and Management (IABMAS2012), Stresa, Lake Maggiore, Italy, July 8-12, 201.
76. Petrini F., Gkoumas K., De Gaudenzi O., Bontempi F. (2012). "Performance-Based Wind Engineering and uncertainty propagation in the design of Offshore Wind Turbines". Joint Conference of the Engineering Mechanics Institute and 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability (EMI/PMC 2012), South Bend, USA, June 17-20, 2012.
77. Petrini F., Gkoumas K., De Gaudenzi O. (2012). "Wind energy harvesting in civil engineering systems". Joint Conference of the Engineering Mechanics Institute and 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability (EMI/PMC 2012), South Bend, USA, June 17-20, 2012.
78. De Gaudenzi O., Petrini F., Gkoumas K., Bontempi F. (2012). "Energy harvesting and vibration damping on wind turbines", Proceedings of the 2012 MEMSCOM workshop, Athens, Greece, 29 March 2012.
79. Chiani R., Petrini F., Rago A., Bontempi F. (2011). "Distributed dissipation mechanism for precast structures", Proceedings of the 57th PCI Annual Convention and National Bridge Conference, Salt Lake City, USA, 22-26 October 2011.
80. Olmati P., Bontempi F., Petrini F. (2011). "Structural Robustness of Buildings and Design for Structural Elements under Explosions", Proceedings of the 2011 World Congress on Advances in Structural Engineering and Mechanics (ASEM11+), Seoul, South Korea, 12-22 September 2011.
81. Petrini F., Gkoumas K., Zhou W., Li H. (2011). "Multi-level structural modelling of an offshore wind turbine", Proceedings of the 2011 World Congress on Advances in Structural Engineering and Mechanics (ASEM11+), Seoul, South Korea, 12-22 September 2011.
82. Gkoumas K., Petrini F., Bontempi F. (2011). "Framework and issues for the structural evaluation of tunnels under fire", Proceedings of the 2011 World Congress on Advances in Structural Engineering and Mechanics (ASEM11+), Seoul, South Korea, 12-22 September 2011.
83. Olmati P. Petrini F., Bontempi F. (2011). "Design and analysis of steel structures for explosions", Proceedings of the 6th European Conference on Steel and Composite Structures (EUROSTEEL 2011), Budapest, Hungary, 31 August – 2 September 2011.
84. Gentili F., Giuliani L., Petrini F. (2011). "Numerical investigation of fire induced collapse of a single storey two span frame", Proceedings of the 6th European Conference on Steel and Composite Structures (EUROSTEEL 2011), Budapest, Hungary, 31 August – 2 September 2011.
85. Ciampoli M., Petrini F. (2011). "Performance-Based Design of Structures under Aeolian Hazard", Proceedings of the 11th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP11), 1 - 4 August 2011, Zurich, Switzerland.
86. Petrini F., Gkoumas K. (2011). "Computational modelling for performance based fire engineering (PBFE)", Proceedings of the Application of Structural Fire Design (ASFE) Conference, Prague, Check Republic, 29 April, 2011.
87. Barbato M, Petrini F., Ciampoli M. (2011). "A preliminary proposal for a probabilistic Performance-Based Hurricane Engineering framework", Proceedings of the 2011 Structures Congress, Las Vegas, USA, 14-16 April 2011.
88. Ciampoli M., Petrini F., Augusti G. (2010). "Optimal Design of Structures in the framework of PBWE", Proceedings of the International Symposium on Reliability Engineering and Risk Management (ISRERM2010), Shanghai, Cina, 23-26 September, 2010. ISBN 978-7-5608-4388-9.
89. Petrini F. (2010). "Numerical analyses for Performance-Based Fire Engineering (PBFE)", in: Advances and Trends in Structural Engineering, Mechanics and Computation, A. Zingoni Editor, Proceedings of the Fourth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2010), Capetown, South Africa, 6-8 September 2010. ISBN 978-0-415-58472-2.
90. Bontempi F., Petrini F. (2010). "Fire-induced collapses in structures: Basis of the analysis and design", in: Advances and Trends in Structural Engineering, Mechanics and Computation, A. Zingoni Editor, Proceedings of the Fourth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2010), Capetown, South Africa, 6-8 September 2010. ISBN 978-0-415-58472-2.
91. Ciampoli M., Petrini F. (2010). "Performance-Based Aeolian risk assessment and reduction for Tall Buildings", Proceedings of the Sixth International Conference on Computational Stochastic Mechanics (CSM6), Rhodes, Greece, 13-16 June 2010.
92. Petrini F., Ciampoli M., Barbato M. (2010). "Performance-Based Design of Tall Buildings under Wind Action", Proceedings of the 2010 Structures Congress/North American Steel Construction Conference (NASCC), Orlando, USA, 12-15 May 2010.
93. Petrini F., Ciampoli M., Augusti G. (2010). "Optimal design of Tall Buildings subjected to wind action in the framework of Performance-Based Design", Proceedings of the 2010 ifip WG7 Conference on reliability and optimization of structural systems, Munich, Germany, 7- 10 April 2010.
94. Ciampoli M., Petrini F. (2010). "Performance-Based Design of Offshore Wind Turbines", Proceedings of the 12th biennial ASCE Aerospace Division International Conference (Earth & Space 2010), Honolulu, USA, 14 – 17 March 2010. ISBN 978-0-7844-1096-7.

95. Barbato M., Ciampoli M., Petrini F. (2010). "Effects of Modelling Parameter Uncertainty on the Structural Response of Offshore Wind Turbines", Proceedings of the 12th biennial ASCE Aerospace Division International Conference (Earth & Space 2010), Honolulu, USA, 14 – 17 March 2010. ISBN 978-0-7844-1096-7.
96. Manenti S., Petrini F. (2010). "Dynamic Analysis of an Offshore Wind Turbine: Wind-Waves Nonlinear Interaction", Proceedings of the 12th biennial ASCE Aerospace Division International Conference (Earth & Space 2010), Honolulu, USA, 14 – 17 March 2010. ISBN 978-0-7844-1096-7.
97. Torcinaro M., Petrini F., Arangio, S. (2010). "Structural Offshore Wind Turbines Optimization", Proceedings of the 12th biennial ASCE Aerospace Division International Conference (Earth & Space 2010), Honolulu, USA, 14 – 17 March 2010. ISBN 978-0-7844-1096-7.
98. Augusti G, Ciampoli M, Petrini F. (2010). "Reliability of structural systems under wind action", Proceedings of the ASME 2009 International Mechanical Engineering Congress & Exposition IMECE2009, Volume 10, PART B, 811-820, Lake Buena Vista, Florida, USA, 13-19 November 2009. ISBN 978-0-7918-4383-3.
99. Petrini F., Ciampoli M., Augusti G. (2009). "A probabilistic framework for Performance-Based Wind Engineering", Proceedings of the 5th European, African Conference Wind Engineering (EACWE 2009), Florence, Italy, 19-23 July 2009.
100. Ciampoli M, Petrini F., Augusti G., (2009). "A Procedure for the Performance-Based Wind Engineering", Proceedings of the tenth international conference on structural safety and reliability (ICOSSAR'09), Osaka, Japan, 13-17 September 2009. Taylor & Francis Group, London. ISBN 978-0-415-47557-0.
101. Petrini F., Bontempi F., Ciampoli M. (2009). "A probabilistic approach to investigate uncertainty propagation in wind engineering problems", Proceedings of the 2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2009), Rhodes, Greece, 22-24 June 2009. ISBN 978-960-254-682-6.
102. Petrini F., Ciampoli M., Augusti G. (2009). "The role of uncertainties in aeolian risk assessment", Proceedings of the 2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2009), Rhodes, Greek, 22-24 June 2009. ISBN 978-960-254-682-6.
103. Bontempi F., Gkoumas K., Manenti S., Petrini F. (2009). "Basis of design for offshore wind turbines", Proceedings of the OWEMES 2009 Conference, Brindisi, Italy, 21-23 May 2009.
104. Bontempi F., Zambelli S., Pagani C., Petrini F. (2008). "Evolution of the design of a cable-stayed bracket", Proceedings of the 2008 PCI National Bridge Conference, Orlando, Florida, 5-7 October 2008.
105. Gkoumas K., Petrini F., Manenti S., Bontempi F. (2008). "Offshore Wind Turbines: Basis of Structural Design", Proceedings of the 9th Int. Conf. on Computational Structures Technology, Athens, Greece, 2-5 September 2008. ISBN 978-1-905088-23-2.
106. Petrini F., Ciampoli M., Augusti G. (2008). "Performance-Based Wind Engineering: risk assessment of a long span suspension bridge", Proceedings of the 2008 ifip WG7 Conference on reliability and optimization of structural systems, Toluca, Mexico, 6- 9 August 2008.
107. Petrini F., Giuliano F., Bontempi F. (2008). "Estimation of fatigue life for suspension bridge hangers under wind action and train transit", Proceedings of the fourth International Conference on Bridge Maintenance, Safety and Management (IABMAS'08), Seoul, South Korea, 13-17 July 2008.
108. Petrini F., Bontempi F., Ciampoli M. (2008). "Performance-Based Wind Engineering as a tool for the design of the hangers in a Suspension Bridge", Proceedings of the fourth International ASRANET Colloquium, Athens, Greece, 25-27 June 2008. ISBN 0-9553550-2-8 / 978-0-9553550-2-8. Available at: <http://www.maritime-conferences.com/asranet2010-conference/asranet2008/programme.htm>.
109. Petrini F., Bontempi F. (2008). "Estimation of life-cycle fatigue damage for suspension bridge hangers", Proceedings of the first International Conference on Life-Cycle Civil Engineering (IALCCE'08), Varenna, Como Lake, Italy, 10-14 June 2008.
110. Petrini F. (2008). "Performance-Based Wind Engineering (PBWE): formulation and application on a long-span suspension bridge" Proceedings of the 4th International Conference on Advances in Wind and Structures (AWAS'08), Seoqwipo KAL Hotel, Jeju, South Korea, 29-31 May 2008. ISBN 978-89-89693-23-9-98530.
111. Bontempi F., Li H., Petrini F., Manenti S. (2008). "Numerical modelling for the analysis and design of offshore wind turbines", Proceedings of the Fourth International Conference on Advances in Structural Engineering and Mechanics (ASEM'08), Jeju, South Korea, 26-28 May 2008. ISBN 978-89-89693-21-5-98530.
112. Bontempi F., Li H., Petrini F., Gkoumas K. (2008). "Basis of Design of Offshore Wind Turbines by System Decomposition", Proceedings of the Fourth International Conference on Advances in Structural Engineering and Mechanics (ASEM'08), Jeju, South Korea, 26-28 May 2008. ISBN 978-89-89693-21-5-98530.
113. Arangio S., Petrini F. (2007). "Neural networks time history response of a complex structural system subjected to wind actions", Proceedings of the Third International Conference on Structural Engineering, Mechanics and Computation (SEMC 2007), Capetown, South Africa, 10-12 September 2007.

114. Petrini F., Paduano F., Bontempi F. (2007). "Comparison between steady and complete dynamic procedures to assess wind action on structures with different geometric sizes and flexibility", Proceedings of the Third International Conference on Structural Engineering, Mechanics and Computation (SEMC 2007), Capetown, South Africa, 10-12 September 2007.
115. Petrini F., Giuliano F., Bontempi F. (2005). "Modelling and simulation of Aerodynamics in a long span suspension bridge", Proceedings of the ninth international conference on structural safety and reliability (ICOSSAR'05), Rome, Italy, 19-23 June 2005. ISBN 978-90-5966-056-4.

ANNEX B: AUTHOR H-INDEX

SCOPUS. Reference date 04 May 2022



Petrini, Francesco

[Sapienza Università di Roma, Rome, Italy](#) [Show all author info](#)

[sc 16304828000](#) <https://orcid.org/0000-0002-9477-110X>

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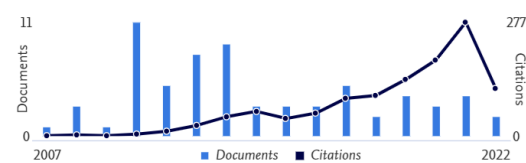
Metrics overview

67
Documents by author

1161
Citations by 832 documents

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Most contributed Topics 2016–2020

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NOTE. Above results from Scopus® are considering also self-citations. Results obtained by excluding self-citations are the following (Updated to 04 May 2022)

h-index: 17
Citations: 1065

ANNEX C: ACTIVE SCIENTIFIC COLLABORATIONS

Name	Affiliation	Research collaboration topic	Type of collaboration
Michele Barbato	University of California, Davis, USA	Numerical modelling of wind turbines Probabilistic performance-based design of structures for hurricanes	Joint scientific papers Joint research proposals Co-organization of mini-symposia
Luca Caracoglia	Northeastern University, Boston, USA	Performance-Based Engineering	Joint research proposals
Agathoklis Giaralis	City University of London, London, United Kingdom	Performance-Based Design of structures under wind	Joint scientific papers Joint research projects Co-organization of mini-symposia
Charis Gantes	National Technical University of Athens, Athens, Greece	Numerical modelling of wind turbines Probabilistic design of blast-resistant structural components	Joint scientific papers Joint research proposals
Hui Li	Harbin University, Harbin, China	Numerical modelling of wind turbines	Joint scientific papers
Pierluigi Olmati	Taisei Corporation, Tokyo, Japan	Probabilistic Performance-Based Design under multiple-hazards	Joint research papers
Paolo Franchin	Sapienza University of Rome	Probabilistic design of Earthquake-resistant structures	Joint scientific papers Joint research proposals

ANNEX D: PHD, MSC AND BSC THESES CO-ADVISORING

PH.D. THESIS (5 RECORDS)

Advisoring

1. Mohsen Sobhaniai (attempted March 2021). Topic: Multilevel modeling of Floating Offshore Wind Turbines. Sapienza University of Rome (Italy)
2. Mattia Francioli (end of the 3rd year of course out of three years). Topic: Performance-Based Design of Structures under Multiple Hazards. Sapienza University of Rome (Italy)
3. Juliano Ferreira Martins (mid of the 3rd year of course out of three years). Topic: Energy Harvesting from wind-induced structural vibrations. Sapienza University of Rome (Italy)

Co-Advisoring

4. Sebastiani Paolo (PhD attempted March 2016). Dissertation Title: Performance-Based Life-cycle cost assessment of bridges equipped with earthquake-protective bearings. Sapienza University of Rome (Italy)
5. Gino Bertolucci (attempted January 2021). Topic: Performance-Based Optimal Vibration Control of Offshore Wind Turbines. University of Brasilia (Brazil)

MSC AND BSC (46 RECORDS)

Advisoring

1. Riccardo Panico, A.Y. 2019/2020. "Sustainable design of a steel structure under fire" (in Italian: "Progettazione sostenibile di una struttura in acciaio sotto fuoco") (Bachelor degree). Sapienza Università di Roma, Ingegneria dell'edilizia sostenibile.
2. Marco Mennona, A.Y. 2019/2020. "STRUCTURAL ROBUSTNESS: parametric analysis and definition of robustness curves under blast load for a reinforced concrete and steel building". Sapienza Università di Roma, Ingegneria Civile.
3. Angelo Iacovelli, A.Y. 2020/2021. "Advanced numerical analyses for structural fire safety assessment" (in Italian: "Analisi numeriche avanzate per lo studio della sicurezza strutturale antincendio"). Sapienza Università di Roma, Ingegneria della sicurezza e protezione civile.
4. Chiara Rossi, A.Y. 2020/2021. "Structural fire safety assessment by risk analysis" (in Italian: "Valutazione della sicurezza strutturale antincendio mediante l'analisi di rischio"). Sapienza Università di Roma, Ingegneria della sicurezza e protezione civile.

Co-Advisoring

5. Luongo Eva, A.Y. 2004/2005, "Fatigue assessment of a long-span suspension bridge" (in Italian: "Analisi di diverse modellazioni della struttura e dei carichi ciclici per le verifiche a Fatica di un ponte sospeso"), advisor prof. F. Bontempi, Sapienza Università di Roma.
6. Paduano Flavio, A.Y. 2004/2005, "Stochastic fields generation for wind action simulation" (in Italian: "Generazione di campi stocastici per la simulazione dell'azione del vento sulle costruzioni"), advisor prof. F. Bontempi, Sapienza Università di Roma.
7. Ferrazzoli Vanessa, A.Y. 2006/2007, "Comparison of different standard codes in the design of a cantilever roof" (in Italian: "Progetto di una pensilina: confronto tra diverse normative") (Bachelor degree), advisor prof. F. Bontempi, Sapienza Università di Roma.
8. Mattei Anita, A.Y. 2005/2006, "Modeling of irregular steel structures under seismic excitation" (in Italian: "Modellazioni non lineari di strutture in acciaio non regolari in pianta ed in elevazione soggette all'azione sismica"), advisor prof. F. Bontempi, Sapienza Università di Roma.
9. Sebastiani Paolo Emidio, A.Y. 2005/2006, "Numerical analyses for fire strength evaluation of steel members" (in Italian: "Valutazione numerica della resistenza al fuoco di elementi in acciaio"), (Bachelor degree), advisor prof. F. Bontempi, Sapienza Università di Roma.
10. Barbieri Andrea, A.Y. 2006/2007, "Comparison of different models for buildings assessment under wind actions" (in Italian: "Confronto Modellazione del comportamento di edifici sotto l'azione del vento"), advisor prof. F. Bontempi, Sapienza Università di Roma.
11. Crosti Chiara, A.Y. 2006/2007, "Structural analyses for performance evaluation of steel structures under fire" (in Italian: "Analisi strutturali per la valutazione prestazionale di costruzioni in acciaio soggette ad incendio"), advisor prof. F. Bontempi, Sapienza Università di Roma.
12. Lisi Sabina, A.Y. 2006/2007, "Buckling analysis of arches" (in Italian: "Modellazione ed analisi dei fenomeni di instabilità negli archi"), (Bachelor degree), advisor prof. F. Bontempi, Sapienza Università di Roma.
13. Ermellini Davide, A.Y. 2006/2007, "Buckling analysis of steel structures" (in Italian: "Modellazione ed analisi dei fenomeni di instabilità nelle strutture in acciaio"), advisor prof. F. Bontempi, Sapienza Università di Roma.

14. Schiavone Agostino, A.Y. 2007/2008, "Nonlinear modeling of concrete structural members" (in Italian: "Modellazione di elementi strutturali in Cemento Armato in campo non lineare"), advisor prof. F. Bontempi, Sapienza Università di Roma.
15. Memmo Francesca, A.Y. 2007/2008, "Elasto-plastic analysis in planar stress/strain regimes with Nastran" (in Italian: "Analisi Elasto-Plastica di strutture in regime di sforzo/deformazione piano con Nastran"), advisor prof. F. Bontempi, Sapienza Università di Roma.
16. De Cesare Silvana, A.Y. 2007/2008, "Dynamic analysis of offshore wind turbines" (in Italian: "Analisi dinamica di turbine eoliche offshore"), advisor prof. F. Bontempi, Sapienza Università di Roma.
17. Sciarra Guglielmo, A.Y. 2007/2008, "Parametric geometric optimization of an offshore wind turbines" (in Italian: "Modellazione parametrica per l'ottimizzazione geometrica di una turbina eolica offshore"), advisor prof. F. Bontempi, Sapienza Università di Roma.
18. Nokaj Julian, A.Y. 2007/2008, "Buckling phenomena of steel plates" (in Italian: "Analisi di fenomeni di instabilità in lastre di acciaio"), advisor prof. F. Bontempi, Sapienza Università di Roma.
19. Simonetti Pierpaolo, A.Y. 2008/2009, "Analysis of offshore wind turbines support structures" (in Italian: "Analisi di strutture di supporto per turbine eoliche offshore"), advisor prof. F. Bontempi, Sapienza Università di Roma.
20. De Cesare Valentina, A.Y. 2008/2009, "Advanced Modeling of Explosions and Dynamic Analysis of Structural Behavior", advisor prof. F. Bontempi, Sapienza Università di Roma.
21. Torcinaro Mario, A.A.2008/2009, "Optimization of offshore wind turbines support structures" (in Italian: "Ottimizzazione della struttura di supporto di una turbina eolica offshore"), advisor prof. F. Bontempi, Sapienza Università di Roma.
22. Bartolomeo Andrea, A.Y. 2009/2010, "Modeling of innovative connections for precast structures" (in Italian: "Modellazione di connessioni innovative in strutture prefabbricate"), advisor prof. F. Bontempi, Sapienza Università di Roma.
23. Latella Luigi, A.A.2009/2010, "Optimization of high rise buildings under wind actions: the efficiency of TMD" (in Italian: "Ottimizzazione del progetto di edifici alti esposti all'azione del vento: l'efficacia del TMD"), advisor prof. M. Ciampoli, Sapienza Università di Roma.
24. Boccamazzo Antonio, A.A.2009/2010, "Modeling and optimization of seismic isolation for masonry buildings" (in Italian: "Modellazione ed ottimizzazione dell'isolamento sismico per edifici in murature"), advisor prof. F. Bontempi, Sapienza Università di Roma.
25. Olmati Pierluigi, A.A.2009/2010, "Blast simulation and design methods for blast risk mitigation" (in Italian: "Simulazione di esplosioni e metodologie progettuali per la mitigazione del rischio associato"), advisor prof. F. Bontempi, Sapienza Università di Roma.
26. Angelelli Giorgio, A.Y. 2009/2010, "Civil structures in nuclear plants: design criteria and behavior in accidental scenarios" (in Italian: "Le strutture civili delle installazioni nucleari: criteri di progetto e loro comportamento in condizioni incidentali"), advisor prof. F. Bontempi, Sapienza Università di Roma.
27. Chiani Rachele, A.Y. 2009/2010, "Seismic protection of precast structures by innovative location of Energy dissipation devices" (in Italian: "Protezione sismica di strutture prefabbricate con disposizione innovativa di elementi dissipativi"), advisor prof. F. Bontempi, Sapienza Università di Roma.
28. Sebastiani Paolo Emidio, A.Y. 2009/2010, "Seismic back analysis for an existing viaduct: uncertainty assessment and engineering judgement" (in Italian: "Riproduzione dello scenario sismico per un viadotto esistente: valutazione delle incertezze e sintesi del giudizio"), advisor prof. F. Bontempi, Sapienza Università di Roma.
29. Cecini Domenico, A.Y. 2010/2011, "Generation of Seismic Signals with Stochastic Methods", advisor prof. F. Bontempi, Sapienza Università di Roma.
30. De Gaudenzi Oriana, A.Y. 2010/2011, "Energy Harvesting in civil structures under wind action: application of piezoelectric devices", advisor prof. F. Bontempi, Sapienza Università di Roma.
31. De Lorenzo Luigi, A.Y. 2010/2011, "Improvement of structural reliability by probabilistic methods and statistical evaluations" (in Italian: "Miglioramento della sicurezza strutturale in termini probabilistici con controlli di qualità statistici"), relatori proff. F. Bontempi e A. Gilio, Sapienza Università di Roma.
32. Demin Andrea, A.Y. 2010/2011, "Advanced modeling of semi-rigid connections for the assessment of steel structures" (in Italian: "Modellazione avanzata dei nodi semi-rigidi e dei pannelli d'anima nello studio del comportamento sismico di strutture in acciaio"), advisor prof. F. Bontempi, Sapienza Università di Roma.
33. Coppi Alessio, A.Y. 2010/2011, "Nonlinear analysis for seismic performance evaluation of hospital systems" (in Italian: "Analisi non lineare per lo studio delle prestazioni di una struttura ospedaliera soggetta a sisma"), advisor prof. F. Bontempi, Sapienza Università di Roma.
34. Schwarz Riccardo A.Y. 2010/2011. "Analysis of accidental impact of boats on offshore wind turbines" (in Italian: "Analisi di situazioni accidentali di urto di navi contro turbine eoliche offshore"), advisor prof. F. Bontempi, Sapienza Università di Roma.
35. Rossi Claudio A.Y. 2011/2012. "Multi-hazard analysis of a viaduct subjected to impact plus fire", advisor prof. F. Bontempi, Sapienza Università di Roma.
36. Cicoria Francesco A.Y. 2011/2012. "Progressive collapse analysis in a RC precast structure", advisor prof. F. Bontempi, Sapienza Università di Roma.

37. Memmo Francesca A.Y. 2011/2012. "Enhanced seismic behavior of monumental buildings by a steel dissipative system", advisor prof. F. Bontempi, Sapienza Università di Roma.
38. Orteni Monica. A.Y. 2012/2013. "System resilience against black swan events and progressive collapse by nonlinear analysis", advisor prof. F. Bontempi, Sapienza Università di Roma.
39. Sara Ferri A.Y. 2013/2014. Topic: "Flow induced energy harvesting for smart buildings: conceptual design of an innovative piezoelectric bender", advisor prof. F. Bontempi, Sapienza Università di Roma.
40. Alessandra Castelli A.Y. 2013/2014. "Structural identification on the basis of the experimental behaviour of innovative steel ribs for tunnel constructuin"(in Italian: Identificazione strutturale del comportamento sperimentale di centine innovative per gallerie), advisor prof. F. Bontempi, Sapienza Università di Roma.
41. Giovanni Di Mase A.Y. 2013/2014. "Numerical analysis for the fatigue assessment of an orthotropic slab used in deck assembly for a suspension bidge" (in Italian: Analisi Numeriche per la verifica a fatica di un impalcato a piastra ortotropa per ponte sospeso), advisor prof. F. Bontempi, Sapienza Università di Roma.
42. Raddi Roberto. A.Y. 2013/2014. "Wind induced Fatigue in long span suspension bridges", advisor prof. F. Bontempi, Sapienza Università di Roma.
43. Biscarini Giulio A.Y. 2014/2015. "Piezoelectric air flow energy harvesting", advisor prof. F. Bontempi, Sapienza Università di Roma
44. Francesca Proietti A.Y. 2015/2016. "Aerodynamic response of tall buildings with various configurations in elevation - Elicoidal shapes" (in Italian: Risposta aerodinamica di edifici alti con diverse configurazioni in elevazione), advisor prof. F. Mollaioli, Sapienza Università di Roma.
45. Mattia Tranfa A.Y. 2015/2016. "Aerodynamic response of tall buildings with various configurations in elevation - Bundle shapes" (in Italian: Risposta aerodinamica di edifici alti con diverse configurazioni in elevazione), advisor prof. F. Mollaioli, Sapienza Università di Roma.
46. Mattia Francioli, A.Y. 2017/2018. "Performance-Based Seismic assessment and design of hospital structures via non-linear analysis" (in Italian: Verifica e progettazione sismica prestazionale di strutture ospedaliere mediante analisi non lineare), advisor prof. F. Bontempi, Sapienza Università di Roma.
47. Emma Tartaglione, A.Y. 2017/2018. "The role of structural analysis in Forensic Engineering: the case of seismic collapse of strategic buildings" (in Italian: Il ruolo dell'analisi strutturale nell'ingegneria forense: caso di collasso sismico di edifici strategici), advisor prof. F. Bontempi, Sapienza Università di Roma
48. Alessandra Aguinagalde, A.Y. 2018/2019. "Use of non-linear analyses for the evaluation of structural behaviour under fire" (in Italian: Utilizzo di analisi non lineari nella valutazione della resistenza al fuoco delle strutture), advisor prof. F. Bontempi, Sapienza Università di Roma
49. Micol Ciabattoni, A.Y. 2019/2020. "Analysis of the behavior of tall steel and steel-timber buildings with and without hybrid connections, subjected to wind and earthquake" (in Italian: Analisi del comportamento degli edifici alti in acciaio e in acciaio-legno con e senza connessioni ibride, soggetti alle azioni del sisma e del vento), advisor prof. S. Pampanin, Sapienza Università di Roma