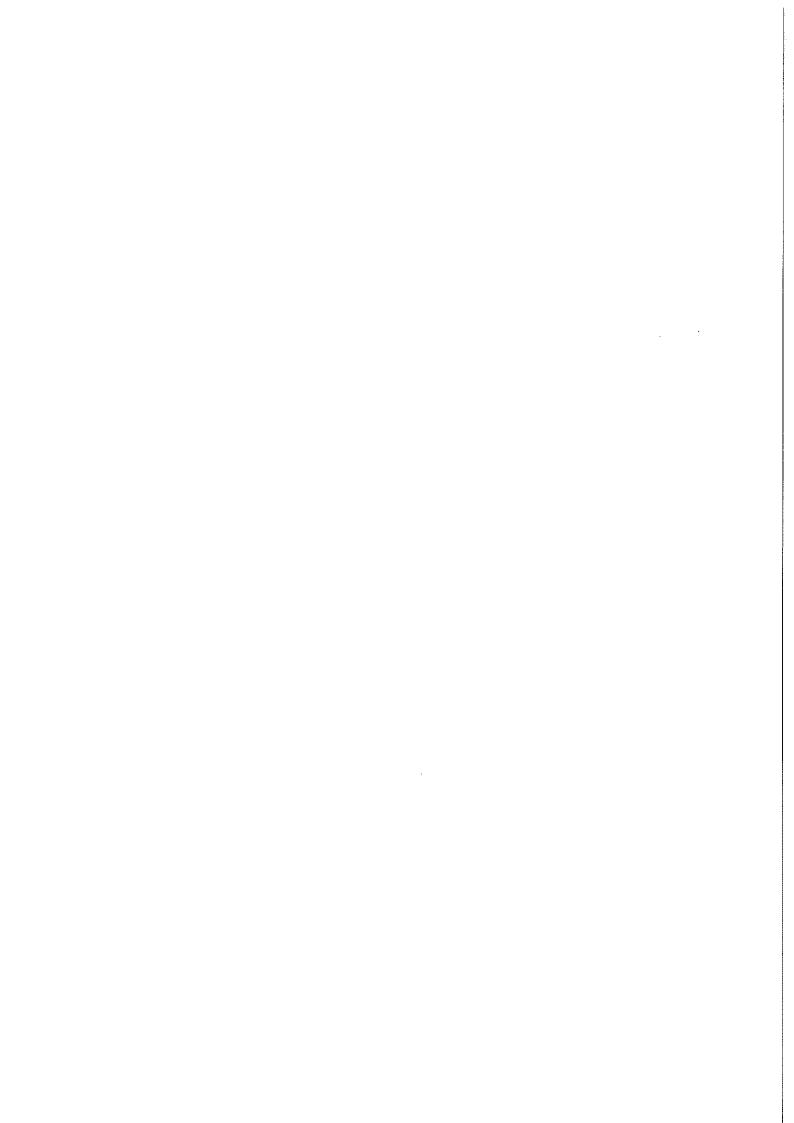
Curriculum Vitae of

MASSIMO FRAGIACOMO

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- Dissertation Thesis in Steel Construction entitled "Influence of viscous phenomena on long-term behavior of steel-concrete composite structures", supervisor: Prof. C. Amadio.
- Diploma as Master Builder at the Technical School "A. Volta" in Trieste on July 1986 with the score of 60/60.

Attended courses

- "Timber Construction in the new Millennium", Venice, Sept. 28-29, 2000.
- "Seismic Resistant Steel Structures: Progress and Challenge", Udine, October 18-22, 1999.
- "Timber Structures in new Constructions and Refurbishment", Udine, June 8-12, 1999.
- "Wind Resistant Design of Structures: Codified and Advanced Methods", Udine, Sept. 21-25, 1998.
- FIB "Advanced Design of Concrete Structures", Treviso, July 13-31, 1998.
- "Management in the Public Administration", organized by the School of Public Management, Bocconi University, Trieste, Sept. 24-Nov. 13, 1996.

Military Service

• Midshipman in the Coast Guard, Italian Army of the Navy, with honourable discharge in 1993.

Positions held

- From 01/09/2015 to present: Professor of Structural Engineering ("Professore Ordinario"), Department of Civil, Construction-Architectural and Environmental Engineering, University of L'Aquila (Italy).
- From 30/12/2009 to 31/08/2015: Associate Professor of Structural Design with tenure ("Professore Associato confermato"), Department of Architecture, Design and Urban Planning, University of Sassari (Italy).
- From 30/12/2006 to 29/12/2009: Associate Professor of Structural Design without tenure ("Professore Associato non confermato"), Department of Architecture, Design and Urban Planning, University of Sassari (Italy).
- From 2005 to 2006: Senior Lecturer (equivalent to US and Italian Associate Professor) in the Department of Civil Engineering, University of Canterbury (New Zealand).
- From 1999 to 2005: Research Fellow ("Assegnista di Ricerca") in the Department of Civil Engineering, University of Trieste (Italy).
- From 1994 to 1999: Civil Engineer in the City Council of Trieste (Italy), with duties of designer and building construction management.

Positions offered and national habilitation as full Professor in Italy

- Qualified for the position of Full Professor in Italy on 11/12/2013 with an excellent assessment from a national panel which included also an international (US) academic member.
- Offer of a position as Professor of Structure Engineering, University of Technology Sydney (Australia), Febr. 16, 2015.

• Appointment to Professor of Wooden Structures, Aalto University, Helsinki (Finland), Sept. 1, 2014.

Research experiences abroad

- 2018: Visiting Professor, College of Engineering, Fuzhou University, China 2018 High-end Foreign Experts Recruitment Program, working on the preservation of the Tulou, historical construction made of rammed earth and wood.
- 2017: Visiting Professor, College of Engineering, Fuzhou University, China 2017 High-end Foreign Experts Recruitment Program, working on the development of timber-concrete composite bridges.
- 2016: Visiting Professor, College of Engineering, Fuzhou University, China 2016 High-end Foreign Experts Recruitment Program, working on the development of a short procurement chain of timber.
- 2013: Visiting Scientist in the Wood Products Division, FPInnovations, Vancouver, and Visiting Professor in the Department of Wood Science, the University of British Columbia, Vancouver, Canada, working on seismic design of cross-laminated timber buildings.
- 2007, 2008, 2009, 2010 and 2012: Visiting Academic, Department of Civil Engineering, University of Canterbury, Christchurch, New Zealand, working on experimental projects on timber engineering and lecturing at undergraduate and postgraduate level.
- 2007 and 2008: Colorado State University, Fort Collins, Colorado, U.S.A., working on experimental tests and modelling of wood-concrete composite beams.
- From 2005 to 2006: Department of Civil Engineering, University of Canterbury, Christchurch, New Zealand, working as Senior Lecturer in Civil Engineering.
- 1999, 2001, 2002 and 2003: Building Research Establishment (B.R.E.), U.K., working on experimental tests on wood-concrete composite floors.
- 2001: Colorado State University, Fort Collins, Colorado, U.S.A., working on experimental tests on wood-concrete composite beams.

RESEARCH

Awards and honours

- Recipient of the one-off incentive for research, teaching and administration activities at the University of Sassari for the years 2011 and 2013, according to art. 29 clause 19 of the L. 240 / 2010.
- Prize offered by the AGLC Licio Cernobori's Geophysical Association, in 2013 to Rinaldin, G. for the best paper presented at the 32nd National Conference of the GNGTS, Italian Group of Geophysics of Solid Ground, Trieste (Italy), November 19-21, by an author less than 35-year old in the stream "Seismic Hazard, Vulnerability, and Damage Scenarios", for the article: "Effectiveness of the N2 method for the seismic analysis of structures with different hysteretic behaviour" by Rinaldin, G., Amadio, C., and Fragiacomo, M.
- Recipient of the Frederick Palmer Prize offered by the Institution of Civil Engineers UK in 2012 for the paper: "Development of prefabricated timber-concrete composite floor systems." by Fragiacomo, M., and Lukaszewska, E. ICE Journal Structures and Buildings – Timber Special Issue, 2011, Vol. 164 No. SB2, pp. 117-129.

- Recipient of the Research Prize offered by the University of Sassari, Italy, for the scientific production during the five-years period 2004-2008. He was assessed the first Associate Professor in Italy for scientific production in Structural Engineering, and within the first five Italian Academics (Assistant, Associate and Full Professors) in Structural Engineering.
- Prize of € 8.640,00 € offered by the University of Sassari, Italy, for the success in the Research Project: "Building with Environmentally Sustainable Structural Timber" funded by the European Union, International Research Staff Exchange Scheme, Call: FP7-PEOPLE-IRSES-2008, 79,200 €, 2009-2012.
- Recipient of the Research Prize of 5,000 € offered by the University of Sassari, Italy, for the research activity during the two-year period 2006-2007.
- Prize for the Best Research Paper at the New Zealand Society for Earthquake Engineering Conference 2008, Wairakei (New Zealand), for the paper: "Feasibility and detailing of prestressed timber buildings for seismic areas" by Smith, T., Pampanin, S., Buchanan, A., and Fragiacomo, M. (2008).
- Inclusion in the "Who's Who in Computational Science and Engineering" (2005-2006 Edition) and "Madison Who's Who" (2007 Edition).
- Awarded in 2005 with a Fulbright scholarship for a six-month period at Colorado State University, U.S.A., for the research project entitled: "Time-dependent and collapse behavior of wood-concrete composite structures". Scholarship not used because of the appointment as Senior Lecturer at the University of Canterbury, New Zealand.
- Degree award of 500 € in memory of Prof. R. Puhali, University of Trieste, 1992.

Main research interests

The following sections summarize the main research interests pursued by the undersigned alone or in cooperation with other researchers in Italy and abroad.

Structural Earthquake Engineering

- Revision of the timber chapter within the Eurocode 8 Design for earthquake resistance. This activity aims to develop a brand-new timber chapter within Eurocode 8 as the existing chapter is largely outdated and very short (only 4 pages), so as to reflect the current state-of-the-art in timber engineering.
- Seismic resistance of log-house buildings. This research project, funded by Rubner Haus Spa, European leader in the production of timber houses, aims to investigate the seismic resistance of log-house timber buildings. Experimental and numerical studies were and are being carried out with special emphasis on developing an advanced FE model to characterize the complex hysteretic behaviour of these types of structures, and to propose simplified mechanical models to capture the actual behaviour of the structure. Provisions for capacity based design are sought, and conservative values of the q-factor are being derived.
- Seismic resistance of moment-resisting timber frames. A numerical study was performed to investigate the seismic performance of moment-resisting timber frames with high ductility steel tube fastener connections. The aim was to estimate the behaviour factor depending on the joint ductility for inclusion in the next generation of the Eurocode 8. The advanced FE model was calibrated on the results of experimental cyclic tests carried out on full-scale beam-column moment joints performed at Eindhoven Technical University.

- Innovative seismic-resistant multi-storey timber buildings made from glulam. A research project was carried out in cooperation with the Federlegno Arredo, the Italian Wood Processor Association, three glulam producers, the University of Trieste, Italy, and IVALSA Timber and Trees Institute to develop innovative multi-storey timber buildings using glulam as main structural materials. A new wall-foundation connection using innovative lead extruded dampers invented at the University of Canterbury was experimentally investigated showing appropriate seismic resistance and larger energy dissipation when compared to the traditional bolted connection.
- Cyclic behaviour of typical connections and wall subassemblies for cross-laminated buildings. A research project in cooperation with the IVALSA Trees and Timber Institute and the University of Trieste, Italy was carried out to experimentally characterize the cyclic behaviour of typical connections (hold-downs, angle brackets, screw connections) used in cross-laminated timber buildings. Ductility ratios, strength values, overstrength factors, and impairment of strength were measured and are now available to designers, together with simplified analytical design formulas, and capacity based design criteria to avoid brittle failure in the connection and ensure ductile behaviour. Cyclic tests on single and coupled cross-laminated timber wall panels with different metal connector distribution were also performed and analytical rules proposed to ensure a dissipative behaviour of the subassembly.
- Seismic design of cross-laminated timber buildings. Design methods for cross-laminated timber buildings in accordance with the Eurocode 8 were proposed, with special emphasis on suggesting simplified FE schematizations that can account for the typical seismic behaviour of the metal connectors. It was shown that the connection flexibility cannot be ignored in linear static and linear dynamic analysis. A proposal for the determination of the axial forces in the hold-down and angle bracket restraining connections of a crosslam wall subjected to seismic forces was derived by regarding the section of the wall at the interface with the foundation/supporting floor like a concrete section with zero tensile strength reinforced with the metal connections, and using the basic theory of reinforced concrete section at the II (cracked) stage with some modifications. A design procedure based on the N2 method proposed by Fajfar was also developed. Capacity based rules for the design of the buildings, currently missing in the Eurocode 8, were also proposed. A worked example of design of a real crosslam building according to the new draft of Timber Chapter within the Eurocode 8 was carried out and published.
- Behaviour of hybrid cross-laminated lightframe timber buildings. Since often in construction the two different lateral load-resisting systems are use, a numerical investigation was carried out using Drain 3DX to derive practical design rules for implementation in codes of practice. By varying the proportion of lighframe walls with respect to the crosslam walls, a simplified formula for the q-factor of the hybrid building was derived and will be proposed for the revision of the Eurocode 8.
- Development of advanced FE models for seismic performance of multi-storey timber buildings made from cross-laminated panels. An advanced hysteretic model capable to follow the typical cyclic behaviour of metal connectors (hold-downs, angle brackets, and screws) used in cross-laminated buildings was developed and implemented in ABAQUS and OpenSees software packages. The hysteretic model was calibrated on experimental tests carried out on the connectors, and then used to model both the experimental cyclic behaviour of cross-laminated panels and subassemblies, and the shaking table tests performed on entire buildings, finding good agreement. The model is now being used to carry out parametric studies aimed to assess the behaviour factor q, currently missing in the Eurocode 8 for this type of buildings, depending on the construction method (e.g. use of small wall panels with several vertical screw joints as opposed to the use of a long wall panel without vertical screw joints). The model was also

implemented in Abaqus to predict the cyclic behaviour of a single steel-timber screw joint. A further development, in co-operation with IVALSA Trees and Timber Institute, was the use of the model to predict the cyclic behaviour of the metal connector itself (hold-downs and angle brackets) starting from the cyclic behaviour of the single nail used to connect the angle bracket to the timber panel. These models were compared with the results of experimental tests showing good accuracy, and then used to perform parametric studies on cases of interest, like for example the determination of the shear-axial force interaction domain for hold-downs and angle brackets.

- Use of Single and Multi-Tuned Mass Dampers (TMDs) for seismic mitigation of cross-laminated timber buildings. The possibility to use single and multi-tuned mass dampers as a way to reduce the high accelerations typically induced by earthquake on medium and high-rise multi-storey cross-laminated timber buildings was investigated via advanced FE modelling in co-operation with IVALSA Trees and Timber Institute. A reduction of up to 40% has been obtained when using genetic optimization algorithms to optimize the mechanical properties and locations of the TMDs.
- Use of passive base isolation systems for timber buildings. The possibility to use passive base isolation was investigated by designing a three-storey building with lightframe construction with and without passive base isolation. The structural performances and costs of both solutions were compared, demonstrating passive base isolation can be effectively used also for timber buildings providing the design is not governed by wind.
- Seismic performance of timber structures prestressed with unbonded tendons. A wide
 experimental programme was undertaken at the University of Canterbury, New Zealand to
 develop an innovative seismic resistance system characterized by energy dissipation with
 limited damage at the end of the seismic event. The system is very promising and has already
 been used for multi-storey buildings with vertical and horizontal structure made entirely from
 timber.
- Seismic design using the capacity spectrum method. An extensive parametric study carried out on different structural systems using numerical methods and design approaches has shown the different degree of accuracy achievable using different codes of practice. The N2 method proposed by Fajfar fitted with the numerical results better than the other analytical methods. The possibility to use the N2 method was checked also for timber structures, which show a behaviour fairly different from reinforced concrete and steel, by comparing the inelastic spectrum obtained out of a rigorous time history analysis with the approximate spectrum calculated using the N2 method.
- Effectiveness of passive base isolation systems. An analytical design method for the evaluation of the properties of the best passive base isolation system was developed. The procedure is extremely simple and easy to use, and leads to accurate results.
- Effect of repeated earthquakes on structures. Repeated seismic events strongly affect the building capacity in earthquake-prone regions, as its resilience, intended as the capacity of a system to quickly revert to a fully operational state after a damage due to a significant event, depends on the ability to withstand cumulated damage. The outcomes of a parametric study carried out on different types of steel, reinforced concrete frames, and masonry panels characterized by different hysteretic behaviour and ductility levels led to a design proposal based on the reduction of the behaviour factor aimed to limit the structural damage in earthquake-prone areas where sequences of two or more medium-high intensity shakings may be likely to occur. The use of linear and non-linear viscous dampers was also analysed in SDOF systems subjected to seismic sequences, demonstrating the effectiveness of this mitigation measure.

- Out-of-plane seismic behavior of masonry walls via rocking analysis. A research into the out-ofplane behaviour of masonry walls was carried out. Both rocking analysis and kinematic analysis
 as suggested by the Italian code were performed. It was shown that the latter approach is
 generally over-conservative and therefore potentially inappropriate for historic buildings, where
 rehabilitation may be expensive and can affect their cultural value. The equation of motion
 given by the Housner formulation, corresponding to the movement of a rigid block, was
 modified to account for different boundary conditions at different heights of the wall. These
 boundary conditions can represent vaults, transverse walls or retrofitting devices such as steel
 tie-rods. A systemic analysis of walls having different dimensions and slenderness was
 performed, and the results from the Italian code and rocking analysis compared. The interaction
 between the masonry wall and the roof was also investigated via the Housner formulation, as the
 thrust of the roof generates a destabilizing effect over motion of the wall, but the roof weight
 produces a stabilizing effect for rotation amplitudes of the wall smaller than the critical value.
- In-plane behaviour of masonry structures in earthquake-prone regions. The seismic performance of masonry buildings was investigated using two-dimensional models based on the use of shell elements (ABAQUS code) and equivalent frames (beam elements SAP 2000 code) for the in-plane behaviour of masonry walls. The fragility curves of an existing stone-masonry building typical of the North-East of Italy were drawn.
- Seismic behaviour of steel and steel-concrete composite frames with rigid and semi-rigid beamto-column connections. Numerical component models were implemented in the ABAQUS finite element software to investigate the cyclic behaviour of the frames. The possibility to significantly improve the seismic performance using dissipative bracings was also analysed.

Timber-concrete and steel-concrete composite structures

- Finite Element modelling of composite beams. Specific software for non-linear analysis to failure and time-dependent behaviour of timber-concrete and steel-concrete composite beams was developed. The software accounts for the flexibility of the shear connection and for all sort of mechanical nonlinearity of the component materials (concrete, reinforcement, shear connection, timber and steel beams). Advanced rheological models for the time-dependent behaviour of the component materials (creep, mechano-sorption, shrinkage) were implemented. The software was used in some institutions (Colorado State University, University of Canterbury, Lulea University of Technology, and University of Trieste) for research on time-dependent behaviour of timber-concrete composite beams. More recently, 3D FE modelling was implemented in Abaqus software package for both time-dependent behaviour and non-linear analyses to collapse of timber-concrete composite beams. A 3D FE modelling of timber-timber composite beams was also implemented in Abaqus where the steel screws (vertical and inclined) were explicitly modelled and the cohesive layer was used to schematize the failure at the screw to timber interface.
- Dynamic, collapse and long-term performance of timber-concrete composite beams. A number of experimental tests were performed on full-scale floors, strips of floors, beams and connection systems in different institutions (United Kingdom, United States, New Zealand, Sweden, and Italy). The outcomes of the tests have demonstrated the excellent mechanical performance and economical feasibility of the composite system for stiffness upgrading of existing floors as well as new prefabricated or semi-prefabricated floors. Some dynamic tests were also performed to evaluate the natural frequency, damping ratio, and mode shapes of the composite structure. A simplified analytical procedure for the design of the composite structure in the long-term was developed and recently implemented in the new CEN Technical Specifications for Timber-concrete composite, which will become in the near future a new Eurocode 5 part. This procedure considers a number of important phenomena such as concrete shrinkage, thermal and

hygroscopic strains of concrete and timber, and type of construction (propped or unpropped) which were neglected by current Codes of Practice. In addition, rigorous closed form equations for the effect of concrete shrinkage, thermal and environmental strains were derived, as well as approximate equations based on the use of the gamma-method proposed in the Annex B of Eurocode 5-Part 1-1.

- Preparation of a new Eurocode part on timber-concrete composites. A new Technical Specification was prepared and recently submitted to CEN, where it will become a new Eurocode 5 part in the next few years dealing with the design of timber-concrete composite. A background document was also submitted where the reasons for some of the choices made in the Technical Specification are given.
- Collapse and long-term performance of steel-concrete composite beams. Several aspects of the collapse behaviour such as the moment redistribution from the interior support to mid-span in continuous beams, the time-dependent behaviour, the segmental construction of composite girders where the concrete slab is cast at different times and with different order, the type of construction (propped or unpropped), the effect of concrete shrinkage, creep and cracking were extensively investigated.
- Effective width of concrete slabs in steel-concrete composite beams. Simplified solutions based on the outcomes of finite element modelling carried out with software packages such as ABAQUS and ADAPTIC, as well as on results of experimental tests to failure have been proposed for nonlinear and long-term analyses.

Timber Engineering

- Use of locally grown timber for multi-storey buildings. An experimental programme aimed to develop structural solutions for multi-storey buildings using locally grown timber was developed at the University of Sassari in cooperation with the University of Cagliari, IVALSA Trees and Timber Institute, and is now being developed at the University of L'Aquila in cooperation with the Tuscia University and other Italian Universities within a National Interest Research Project PRIN 2015. After mechanical characterization (bending tests of boards) of the timber grown in Sardinia (maritime pine) and Italy (beech), tests (in-plane shear and out-of-plane bending) will be carried out on cross-laminated timber panels made from locally grown timber. Analytical design formulas will be then derived for these panels.
- Long-term behaviour of Laminated Veneer Lumber (LVL) and glulam members prestressed with unbonded tendons. Creep and relaxation tests were performed at the University of Canterbury to evaluate the prestress losses over time and at the end of the service life, and separate the contributions of different phenomena such as creep parallel and perpendicular to grain, relaxation of the tendon, environmental temperature and relative humidity variations. An extension of the simplified formulas suggested by the Eurocode 2 for the evaluation of the prestress losses in precast concrete structures was proposed. More recently, the study has been continued at ETH, Zurich (Switzerland) on glulam beams and frames prestressed with unbonded tendons.
- Long-term behaviour of epoxy glued connections between glulam members. Creep tests were carried out at the University of Canterbury to evaluate the increase in rotation and the redistribution of stresses between timber and rods in epoxy glued moment resisting beam-column connections due to the creep of timber and epoxy resin. Analytical formulas were derived and used to predict the stress distribution and increase in rotation of the joint due to creep.
- Influence of ductility on the behaviour of timber structures. This research was carried out within Cost Action E55 'Modelling of the performance of timber structures' with the aim to identify

the best definition of ductility for timber structures and connections, and the implications of this quantity on the design of timber structures. The research also aimed to evaluate the overstrength ratios, which are needed for capacity based design of timber structures in earthquake-prone areas.

- Influence of the environmental conditions on the behaviour of timber beams. This research, carried out within COST Action E55 in co-operation with VTT Finland and the University of Brescia, aimed to estimate the self equilibrated stress distribution ('eigenstresses') arising in a timber beam exposed to different environmental conditions. An advanced numerical model of wood allowing for creep, mechano sorption, shrinkage/swelling was used to carry out a parametric study for different section sizes exposed to different environmental climates. A correlation between the severity of the climate and the variation of eigenstresses was found, demonstrating the possibility of failure for tension perpendicular to grain of cross-sections exposed to environmental conditions characterized by significant relative humidity variations.
- Resistance of connections with multiple glued-in rods. An extensive experimental programme was undertaken at Lulea University of Technology with the aim to investigate the applicability of current design equations for single glued-in rods to the case of connections with multiple glued-in rods. Provisions to obtain ductile failure were also given.
- Prefabricated stabilising timber walls anchored with glued-in rods. An innovative construction system made of posts-and-beams and cantilevered walls was developed at Lulea University of Technology. This research investigated the behaviour of the wall-foundation connection, and provided a simplified analytical method to design this connection.
- Buckling of log-house walls. This research project, funded by Rubner Haus Spa, European leader in the production of timber houses, aims to investigate the buckling load of log-house walls loaded in-plane. Experimental and numerical studies (suing 3D models implemented in Abaqus) on walls with different geometrical configurations were carried out with the aim to investigate the effect of openings such as windows and doors, and load eccentricities. Simple design equations were derived and will be proposed for the new generation of the Eurocode 5. Currently, simplified mechanical models are being developed with the aim to gain a better undertstanding of the problem and derive closed form solutions.

Fatigue and fracture

- Fatigue of shear connections for timber-concrete composite beams. Tests under repeated (cyclic) loading of notched and steel metal plate shear connections for timber-concrete composite beams were performed at the University of Canterbury and at Metropolitan State College of Denver. The aim of the tests, carried out on both push-out specimens and full-scale beams, was to derive the S-N lines for these types of connections, which are crucial for the design of timber-concrete composite bridges.
- Fracture mechanics of timber beams. With the aim of investigating the performance and design of LVL beams with holes, an extensive experimental programme was undertaken at the University of Canterbury. Results of the tests include fracture toughness and fracture energy in Mode I (opening) and II (shear) for LVL loaded in tension perpendicular to grain and longitudinal shear, respectively. In addition, tests on LVL beams weakened by holes placed at different locations and with different diameters were carried out. Numerical FE models based on linear fracture mechanics and on cohesive elements were developed and used, in conjunction with the experimental results, to carry out a parametric study aimed to extend the experimental results to different beam geometries and to derive a design method. The influence of different types of reinforcement used in the proximity of the hole was also investigated via experimental and numerical analysis.

Structural Fire Engineering

- Fire resistance of timber connections. A number of experimental tests at constant high temperature, and under fire conditions were performed at the University of Canterbury. The purpose was to assess the fire resistance of different types of timber connections (bolted, screwed, nailed, with steel or timber splice plates). A simplified design procedure was derived and will be proposed for implementation in the new generation of the Eurocode 5-Part 1-2.
- Numerical modelling of timber members subjected to fire. A FE model was implemented in ABAQUS software package with the aim to allow the user to perform a coupled thermalstructural analysis for prediction of the fire resistance of loaded timber members exposed to fire. Comparison with experimental tests of LVL members loaded in tension and subject to fire showed the excellent accuracy of the model developed.
- Fire resistance of crosslam panels loaded in-plane and out-of-plane. Fire tests to failure were conducted at IVALSA Trees and Timber Institute, Italy on full-scale cross-laminated panels loaded in-plane and out-of-plane, with and without thermal insulation layers. Analytical formulas based on the Eurocode 5-Part 1-2 approach were compared with the experimental results. The results were also compared with the fire tests performed at SP Swedish National Testing and Research Institute, Sweden on strips of panels. The FE model discussed in the previous bullet point was validated on the experimental results, and was used to extend the results to other cases of technical interest and provide some simplified design chart that are currently being considered for implementation in the new Eurocode 5-Part 1-2.
- Fire resistance of log-house wall panels loaded in-plane. Fire tests to failure were conducted at the laboratory of MFPa Leipzig GmbH, Germany on full-scale log-house walls, with and without thermal insulation layers, loaded in-plane with constant load and exposed to fire on one side. Analytical formulas based on the Eurocode 5-Part 1-2 approach were compared with the experimental results. The FE model discussed in the aformentioned bullet point was validated on the experimental results, and was used to extend the results to other cases of technical interest.
- Fire resistance of timber-concrete composite beams. Full-scale fire tests of timber-concrete composite floors were carried out at Building Research Association of New Zealand. Based on the experimental results, an analytical design model was developed and used to provide some tabular design values for the fire resistance. Recently, a 3D FE model has been implemented in Abaqus and validated on the experimental results carried out at ETH in Switzerland to predict the fire resistance of timber-concrete composite beams.
- Simplified design method for the fire resistance of timber members. A research carried out in cooperation with SP Traetek (Sweden) and ETH (Switzerland) has looked into the accuracy of the reduced cross-section method for the evaluation of the fire resistance of timber members, which is currently adopted by the Eurocode 5-Part 1-2. The determination of the zero-strength layer thickness for members in bending, tension and compression was investigated, and guidelines on the use of standard experimental tests to determine this quantity were provided. It was shown that the zero-strength layer may exceed the value used in practice, indicating that the Eurocode 5-Part 1-2 may be non-conservative and will be revised based on this proposal.

Miscellaneous

• Glass-steel joints. An extensive experimental program of tests to failure followed by finite element modelling with the ABAQUS and STRAUS packages has led to the formulation of a simplified design method based on the use of the stress intensity factor.

• Use of evolutionary multi-objective algorithms for structural optimization. Those algorithms have been used for the design of a barrel vault roof made from glass and steel. The algorithm is based on the use of the code MODE FRONTIER for optimization and the code STRAUS for structural analysis. A significant reduction in cost was obtained.

Number of citations and h-index:

- Included in the Top Italian Scientists Engineering, the list of the best 150 Italian scientists in the World in all the engineering research fields (http://topitalianscientists.org/TIS HTML/Top Italian Scientists Engineering.htm).
- Number of papers according to Google Scholar: 345.
- Number of papers according to Scopus: 189.
- Number of papers according to Web of Science: 132.
- Number of citations according to Google Scholar: 4455 (2641 since 2014).
- Number of citations according to Scopus: 2669 (2046 excluding self citations).
- Number of citations according to Web of Science: 1701 (1352 excluding self citations).
- h-index according to Google Scholar: 34 (26 since 2014).
- i-10 index (number of papers with at least 10 citations) according to Google Scholar: 110 (79 since 2014).
- h-index according to Scopus: 29 (26 excluding self citations).
- h-index according to Web of Science: 24.

Summary of scientific production:

Summary – Entire production

Books

·	
Technical regulations	4
Books	2
Chapters of book	7
Editorials of international journals	2
Refereed international journal papers	126
National journal papers	11
Refereed conference papers	30
Other papers presented at international conferences	97
Other papers presented at national conferences	60
Research reports	11
Total	346
Summary – Production in the last five years	
Technical regulations	3

2

Chapters of book	3
Editorials of international journals	2
Refereed international journal papers	68
National journal papers	3
Refereed conference papers	9
Other papers presented at international conferences	29
Other papers presented at national conferences	17
Research reports	0
Total	136

Papers not yet published

Journal papers under review

5

List of publications:

(the name of the undersigned is <u>underlined</u> for immediate evidence; the names of the Ph.D./Master students supervised by the undersigned are *in italic and with an asterisk**)

Technical regulations:

- 4. Dias, A., <u>Fragiacomo, M.</u>, Harris, R., Kuklík, P., Rajčić, V., and Schänzlin, J. (2018). "Background Document – Eurocode 5: Design of Timber Structure. Structural design of timber-concrete composite structures – Common rules and rules for buildings." CEN, 65 pp.
- 3. Dias, A., <u>Fragiacomo, M.</u>, Harris, R., Kuklík, P., Rajčić, V., and Schänzlin, J. (2018). "Technical Specification – Eurocode 5: Design of Timber Structure. Structural design of timber-concrete composite structures – Common rules and rules for buildings." CEN, 63 pp.
- Bedon, C., Brunetti, M., Calderoni, B., Ceraldi, C., Faggiano, B., Ferracuti, B., Fragiacomo, M., Follesa, M., Gattesco, N., Giubileo, C., Gubana, A., Lauriola, M.P., Martinelli, E., Metelli, G., Piazza, M., Pizzo, B., Pampanin, S., Podestà, S., Sandoli, A., and Zanon, P. (2018). "Norme CNR-DT 206 R1/2018: Instructions for design, execution and control of timber structures (Istruzioni per la progettazione, l'esecuzione ed il controllo delle strutture di legno)." 160 pp., CNR. (in Italian).
- 1. Panecaldo, M., Lucchese, A., Lorenzi, G., Zanon, P., Piazza, M., Fragiacomo, M., Tomasi, R., Ceccotti, A., and Luchetti, M. (2012). "Guidelines for evaluating the compliance of timber products and structural systems to the Italian Technical Regulation of Construction" (Linee Guida per la certificazione dell'idoneità tecnica all'impiego di materiali e prodotti innovativi in legno per uso strutturale (DM 14.01.08 Norme Tecniche per le costruzioni, paragrafo 11.1, lettera C)). Presidence of the Upper Council of Public Works, Central Technical Service (Presidenza del Consiglio Superiore dei Lavori Pubblici, Servizio Tecnico Centrale), Rome (Italy), pp. 14 (in Italian).

Books:

 Dias, A., <u>Fragiacomo, M.</u>, Gramatikov, K., Kreis, B., Kupferle, F., Monteiro, S., Sandanus, J., Schänzlin, J., Schober, K.-U., Sebastian, W., and Sogel, K. (2018). "Design of timber-concrete composite structures." State-of-the-art report by COST Action FP1402 / WG4, Dias, A.,

- Schänzlin, J., & Dietsch, P. Editors, 228 pp., ISBN 978-3-8440-6145-1, ISSN 0945-067X.
- 1. Martinez de Arano, I., Muys, B., Topi, C., Pettenella, D., Feliciano, D., Rigolot, E., Lefevre, F., Prokofieva, I., Labidi, J., Carnus, J.M., Secco, L., <u>Fragiacomo, M.</u>, Follesa, M., Masiero, M., Llano-Ponte, R. (2018). "A forest-based circular bioeconomy for southern Europe: visions, opportunities and challenges. Reflections on the bioeconomy." European Forest Institute, Synthesis Report, March 2018, http://www.efimed.efi.int/files/images/efimed/virtual_library/reflections_on_the_bioeconomy_synthesis_report_2018_web_.pdf.

Chapters of books:

- 7. Romagnoli, M., <u>Fragiacomo, M.</u>, Brunori, A., Follesa, M., Scarascia Mugnozza, G. (2019). "Solid wood and wood based composites: The challenge of sustainability looking for a short and smart supply chain." Chapter of the book "Digital Wood Design: Innovative Techniques of Representation in Architectural Design", Part of the Lecture Notes in Civil Engineering book series (LNCE, volume 24), Editors: Fabio Bianconi and Marco Filippucci, Publisher: Springer, pp. 783-807 https://link.springer.com/book/10.1007/978-3-030-03676-8
- 6. *Izzi, M.**, and <u>Fragiacomo, M.</u> (2018). "Hysteretic behaviour of connections and wall systems used in CLT structures." Chapter of the book "Timber: bonds, connections and structures", Commemorative Pubblication Honoring the 65th Birthday of Simon Aicher, Editor: Gerhard Dill-Langer, Publisher: Material Testing Institute (MPA), University of Stuttgart (Germany), pp. 257-260.
- 5. Trulli, N., Valdes, M., De Nicolo, B., and <u>Fragiacomo, M.</u> (2017). "Grading of low quality wood for use in structural elements." Chapter of the book "Wood Engineering", edited by Intech, ISBN 978-953-51-5018-3, doi: 10.5772/63178.
- 4. Fragiacomo, M., and Rinaldin, G.* (2011). "Advanced models for seismic analyses of timber buildings." Chapter of the book "Außergewöhnliche Einwirkung Erdbeben im Holzbau", Workshop on crosslam construction "Grazer Holzbau-Fachtagung 9. Gra FHT'11", Technical University of Graz, Austria, pp. J-1 J-28.
- 3. Gavric, I.*, Ceccotti, A., and <u>Fragiacomo</u>, M. (2011). "Experimental cyclic tests on cross-laminated timber panels and typical connections." Chapter of the book "Außergewöhnliche Einwirkung Erdbeben im Holzbau", Workshop on crosslam construction "Grazer Holzbau-Fachtagung 9. Gra FHT'11", Technical University of Graz, Austria, pp. H-1 H-28.
- 2. <u>Fragiacomo, M., Yeoh, D.C.*</u>, and Davison, R. (2007). "Timber Flooring." Chapter 25 of the "Timber Design Guide", Third Edition, edited by Prof. Andy Buchanan, published by New Zealand Timber Industry Federation Inc., pp. 273-281.
- 1. Amadio, C., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2006). "Advanced analysis methods for continuous steel-concrete composite beams". Chapter of the book "Composite structures: new construction, refurbishment, bridges", edited by L. Dezi and N. Gattesco, International Centre for Mechanical Sciences (CISM), Udine, pp. 43-73 (in Italian).

Editorials of international journals:

- 2. <u>Fragiacomo, M.</u>, Barros, H., Adam, J.M., Ferreira, C., Loja, A., Infante Barbosa, J., and Nuno Silvestre, N. (2016). "Preface for the special issue on Structures Rehabilitation." Engineering Structures, Special issue on "Structures Rehabilitation", Vol. 129, 15 December 2016, pp. 1, doi: org/10.1016/j.engstruct.2016.10.025.
- 1. <u>Fragiacomo, M.</u>, and van de Lindt, J.W. (2016). "Introduction: Special Issue on Seismic Resistant Timber Structures." ASCE Journal of Structural Engineering, Special issue on

Seismic Resistant Timber Structures, Vol. 142 No. 4, E2016001, 2 pp., doi: 10.1061/(ASCE)ST.1943-541X.0001509.

Publications in peer-reviewed international journals:

- 126. Aloisio, A.*, Fragiacomo, M., and D'Alò, G. (2019). "The eighteenth-century baraccato of L'Aquila. The eighteenth-century buildings of the upper valley of the river Aterno, in Abruzzo, Italy." International Journal of Architectural Heritage, in press.
- 125. Tiso, M., Just, A., Schmid, J., Mäger, K.N., Klippel, M., Izzi, M., and <u>Fragiacomo, M.</u> (2019). "Evaluation of zero-strength layer depths for timber members of floor assemblies with heat resistant cavity insulations." Fire Safety Journal, Special issue "Wood Buildings and Fire", in press.
- 124. van de Lindt, J.W., Furley, J., Amini, M.O., Pei, S., *Tamagnone, G.**, Barbosa, A., Rammer, D., Line, P., <u>Fragiacomo, M.</u>, and Popovski, M. (2019). "Experimental seismic behavior of a two-story CLT platform building." Engineering Structures, Vol. 183, 15 March 2019, pp. 408–422, doi: 10.1016/j.engstruct.2018.12.079.
- 123. Bedon, C., and <u>Fragiacomo, M.,</u> (2019). "Fire resistance of thermally insulated log-house timber walls." Fire Technology, Vol. 55 No. 1, pp. 307-341, doi: 10.1007/s10694-018-0792-1.
- 122. Bedon, C., Rinaldin, G., <u>Fragiacomo, M.</u>, and Noé, S. (2019). "q-factor estimation for 3D log-house timber buildings via Finite Element analyses." Soil Dynamics and Earthquake Engineering, Vol. 116, pp. 215-229, doi: 10.1016/j.soildyn.2018.09.040.
- 121. Bedon, C., and <u>Fragiacomo, M.</u> (2019). "Numerical analysis of timber-to-timber joints and composite beams with inclined self-tapping screws." Composite Structures, Vol. 207, pp. 13-28, doi: 10.1016/j.compstruct.2018.09.008.
- 120. Bedon, C., and <u>Fragiacomo, M.</u> (2018). "Fire resistance of in-plane compressed log-house timber walls with partial thermal insulation." Buildings, Special issue "Advances in Mass Timber and Timber Hybrid Lateral Load Resisting Systems", Vol. 8, 131, 24 pp., http://dx.doi.org/10.3390/buildings8100131.
- 119. Vassallo, D., Follesa, M., and <u>Fragiacomo, M.</u> (2018). "Seismic design of a six-storey CLT building in Italy." Engineering Structures, Special issue "Seismic Wood Structures", Vol. 175, 15 November 2018, pp. 322-338, doi: 10.1016/j.engstruct.2018.08.025.
- 118. Sciomenta, M.*, Bedon, C., Fragiacomo, M., and Luongo, A. (2018). "Shear performance assessment of timber log-house walls under in-plane lateral loads via numerical and analytical modelling." Buildings, Special Issue "Advances in Mass Timber and Timber Hybrid Lateral Load Resisting Systems", Vol. 8, 99, 18 pp., http://dx.doi.org/10.3390/buildings8080099.
- 117. Tannert, T., Follesa, M., <u>Fragiacomo, M.</u>, Gonzales, P., Isoda, H., Moroder, D., Xiong, H., and van de Lindt, J. (2018). "Seismic design of cross-laminated timber buildings." Wood and Fiber Science Journal, Vol. 50 (Special issue CLT/Mass Timber), pp. 3-26, https://wfs.swst.org/index.php/wfs/article/view/2720.
- 116. Schänzlin, J., and <u>Fragiacomo, M.</u> (2018). "Analytical derivation of the effective creep coefficients for timber-concrete composite structures." Engineering Structures, Special issue on Cost Action FP 1402, Vol. 172, 1 October 2018, pp. 432–439, doi: 10.1016/j.engstruct.2018.05.056.
- 115. <u>Fragiacomo, M.</u>, Gregori, A., Xue, J., Demartino, C., and Toso, M. (2018). "Timber-concrete composite bridges: Three case studies." Journal of Traffic and Transportation Engineering,

- Special issue on "Holistic Approach to Sustainability of Existing and New Bridges", Vol. 5 No. 6, pp. 429-438, doi: 10.1016/j.jtte.2018.09.001.
- 114. Follesa, M., <u>Fragiacomo, M.</u>, Casagrande, D., Tomasi, R., Piazza, M., Vassallo, D., Canetti, D., and Rossi, S. (2018). "The new provisions for the seismic design of timber buildings in Europe." Engineering Structures, Special issue "Seismic Wood Structures", Vol. 168, 1 August 2018, pp. 736-747, doi: 10.1016/j.engstruct.2018.04.090.
- 113. Follesa, M., and <u>Fragiacomo, M.</u> (2018). "Force-based seismic design of mixed CLT/Light-Frame buildings." Engineering Structures, Special issue "Seismic Wood Structures", Vol. 168, 1 August 2018, pp. 628-642, doi: 10.1016/j.engstruct.2018.04.091.
- 112. Bedon, C., and <u>Fragiacomo, M.</u> (2018). "Experimental and numerical analysis of in-plane compressed unprotected log-haus timber walls in fire conditions." Fire Safety Journal, Special issue "Wood Buildings and Fire", in press, doi: 10.1016/j.firesaf.2017.12.007.
- 111. Menis, A., <u>Fragiacomo, M.</u>, and Clemente, I. "Fire resistance of unprotected cross-laminated timber floor panels: parametric study and simplified design." Fire Safety Journal, Special issue "Wood Buildings and Fire", in press, doi: 10.1016/j.firesaf.2018.02.001.
- 110. Tamagnone, G.*, Rinaldin, G., and <u>Fragiacomo, M.</u> (2018). "A novel method for non-linear design of CLT wall systems." Engineering Structures, Special issue "Seismic Wood Structures", Vol. 167, 15 July 2018, pp. 760-771, doi: 10.1016/j.engstruct.2017.09.010.
- 109. Iqbal, A., <u>Fragiacomo, M.</u>, Pampanin, S., and Buchanan, A. (2018). "Seismic resilience of plywood-coupled LVL wall panels." Engineering Structures, Special issue "Seismic Wood Structures", Vol. 167, 15 July 2018, pp. 750-759, doi: 10.1016/j.engstruct.2017.09.053.
- 108. Bedon, C. and <u>Fragiacomo, M.</u> (2018). "Numerical investigation of timber log-haus walls with steel dovetail reinforcements under in-plane seismic loads." Advances in Civil Engineering, Vol. 2018, Article ID 6929856, 12 pages, doi:10.1155/2018/6929856.
- 107. *Izzi*, *M.**, Polastri, A., and <u>Fragiacomo, M.</u> (2018). "Investigating the hysteretic behavior of Cross-Laminated Timber wall systems due to connections." ASCE Journal of Structural Engineering, Vol. 144 No. 5, 04018035, 10 pp., doi: 10.1061/(ASCE)ST.1943-541X.0002022.
- 106. *Izzi, M.**, Polastri, A., and <u>Fragiacomo, M.</u> (2018). "Modelling the mechanical behaviour of typical wall-to-floor connection systems for Cross-Laminated Timber structures." Engineering Structures, Vol. 162, 1 May 2018, pp. 270-282, doi: 10.1016/j.engstruct.2018.02.045.
- 105. *Izzi*, *M.**, Rinaldin, G., Polastri, A., and <u>Fragiacomo, M.</u> (2018). "A hysteresis model for timber joints with dowel-type fasteners." Engineering Structures, Vol. 157, 15 February 2018, pp. 170-178, doi: 10.1016/j.engstruct.2017.12.011.
- 104. Berardinucci, B.*, Di Nino, S., Gregori, A., and <u>Fragiacomo, M.</u> (2017). "Mechanical behavior of timber-concrete connections with inclined screws." Int. Journal of Computational Methods and Experimental Measurements, Special Issue Timber Structures, Vol. 5 No. 6, pp. 807–820.
- 103. Rinaldin, G., <u>Fragiacomo, M.</u>, and Amadio, C. (2017). "On the accuracy of the N2 inelastic spectrum for timber structures." Soil Dynamics and Earthquake Engineering, Vol. 100, pp. 49–58, doi: 10.1016/j.soildyn.2017.05.026.
- 102. Rinaldin, G., Amadio, C., and <u>Fragiacomo, M.</u> (2017). "Effects of seismic sequences on structures with hysteretic or damped dissipative behaviour." Soil Dynamics and Earthquake Engineering, Vol. 97, pp. 205–215, doi: 10.1016/j.soildyn.2017.03.023.

- 101. Van Bakel, R., Rinaldin, G., Leijten, A.J.M., and <u>Fragiacomo, M.</u> (2017). "Experimental-numerical investigation on the seismic behaviour of moment-resisting timber frames with Densified Veneer wood reinforced timber connections and expanded tube fasteners." Earthquake Enginering and Structural Dynamics, Vol. 46 No. 8, pp. 1307–1324, doi: 10.1002/eqe.2857.
- 100. Bedon, C., and <u>Fragiacomo</u>, <u>M.</u> (2017). "Three-dimensional modelling of notched connections for timber-concrete composite beams." IABSE Structural Engineering International, Special Issue on Timber Structures, Vol. 27 No. 2, pp. 184-196.
- 99. Bedon, C., and <u>Fragiacomo, M.</u> (2017). "Derivation of buckling design curves via FE modelling for in-plane compressed timber log-walls in accordance with the Eurocode 5." European Journal of Wood and Wood Products, Vol. 75 No. 3, pp. 449-465, doi: 10.1007/s00107-016-1083-5.
- 98. Concu, G., De Nicolo, B., <u>Fragiacomo, M.</u>, Trulli, N., and Valdes, M. (2016). "Grading of Maritime Pine from Sardinia (Italy) for use in Cross Laminated Timber." Construction Materials Proceedings of the Institutions of Civil Engineers, Vol. 171 No. CM1, pp. 11–21, paper 1600043, https://doi.org/10.1680/jcoma.16.00043.
- 97. *Poh'sie, G.H.**, Chisari, C., Rinaldin, G., Amadio, C. and <u>Fragiacomo, M.</u> (2016). "Optimal design of tuned mass dampers for a multi-storey cross laminated timber building against seismic loads." Earthquake Engineering and Structural Dynamics, Vol. 45 No. 12, pp. 1977–1995, doi: 10.1002/eqe.2736.
- 96. Giresini, L., <u>Fragiacomo, M.</u>, and Sassu, M. (2016). "Rocking analysis of masonry walls interacting with roofs." Engineering Structures, Vol. 116, 1 June 2016, pp. 107–120, doi: 10.1016/j.engstruct.2016.02.041.
- 95. Wrzesniak, D.*, and <u>Fragiacomo, M.</u> (2016). "Cyclic behaviour of glulam shear walls with bolted connections." European Journal of Wood and Wood Products Special issue on COST Action FP1004, Vol. 74 No. 3, pp. 393-405, doi: 10.1007/s00107-016-1020-7.
- 94. Rinaldin, G., and <u>Fragiacomo, M.</u> (2016). "Non-linear simulation of shaking-table tests on 3-and 7-storey X-lam timber buildings." Engineering Structures, Vol. 113, 15 April 2016, pp. 133-148, doi: 10.1016/j.engstruct.2016.01.055.
- 93. Amadio, C., Rinaldin, G., and <u>Fragiacomo, M.</u> (2016). "Investigation on the accuracy of the N2 method and the equivalent linearization procedure for different hysteretic models." Soil Dynamics and Earthquake Engineering, Vol. 83, 69–80, doi:10.1016/j.soildyn.2016.01.005.
- 92. *Izzi, M.**, Flatscher, G., <u>Fragiacomo, M.</u>, and Schickhofer, G. (2016). "Experimental investigations and design provisions of steel-to-timber joints with annular-ringed shank nails for Cross-Laminated Timber structures." Construction and Building Materials, Vol. 122, 446-457, doi: 10.1016/j.conbuildmat.2016.06.072.
- 91. Wrzesniak, D.*, Rodgers, G.W., Fragiacomo, M., and Chase, J.G. (2016). "Experimental testing and analysis of damage-resistant rocking glulam walls with lead extrusion dampers." Construction and Buildings Materials, Shatis 2013 Special issue: Research on Timber Materials and Structures, Volume 102, Part 2, 1145-1153, doi: 10.1016/j.conbuildmat.2015.09.011.
- 90. Sustersic, I., <u>Fragiacomo, M.</u>, and Dujic, B. (2016). "Seismic analysis of cross-laminated multistory timber buildings using code-prescribed methods: influence of panel size, connection ductility, and schematization." ASCE Journal of Structural Engineering, Special issue on Seismic Resistant Timber Structures, Vol. 142 No. 4, E4015012, 15 pp., doi: 10.1061/(ASCE)ST.1943-541X.0001344.

- 89. *Poh'sie*, *G.H.**, Chisari, C., Rinaldin, G., Fragiacomo, M., Amadio, C., and Ceccotti, A. (2016). "Application of a translational tuned mass damper designed by means of genetic algorithms on a multistorey cross-laminated timber building." ASCE Journal of Structural Engineering, Special issue on Seismic Resistant Timber Structures, Vol. 142 No. 4, E4015008, 10 pp., doi: 10.1061/(ASCE)ST.1943-541X.0001342.
- 88. Iqbal, A., Smith, T., Pampanin, S., <u>Fragiacomo, M.</u>, Palermo, A., and Buchanan, A.H. (2016). "Experimental performance and structural analysis of plywood-coupled LVL walls." ASCE Journal of Structural Engineering, Vol. 142 No. 2, 04015123, 10 pp., doi: 10.1061/(ASCE)ST.1943-541X.0001383.
- 87. Ardalany, M.*, Fragiacomo, M., and Moss, P. (2016). "Modelling of Laminated Veneer Lumber (LVL) beams with holes using cohesive elements." ASCE Journal of Structural Engineering, Vol. 142 No. 1, 04015102, 13 pp., doi: 10.1061/(ASCE)ST.1943-541X.0001338.
- 86. Schmid, J., Menis, A., <u>Fragiacomo, M.</u>, Clemente, I., and Bochicchio, G. (2015). "Behaviour of loaded cross-laminated timber wall elements in fire conditions." Fire Technology Special Issue on Timber in Fire, Vol. 51 No. 6, pp. 1341-1370, doi: 10.1007/s10694-015-0516-8.
- 85. Schmid, J., Just, A., Klippel, M., and <u>Fragiacomo, M.</u> (2015). "The reduced cross-section method for the evaluation of the fire resistance of timber members Discussion and determination of the zero-strength layer." Fire Technology Special Issue on Timber in Fire, Vol. 51 No. 6, pp. 1285-1309, doi: 10.1007/s10694-014-0421-6.
- 84. Giresini, L., <u>Fragiacomo, M.</u>, and Lourenço, P.B. (2015). "Comparison between rocking analysis and kinematic analysis for the dynamic out-of-plane behavior of masonry walls." Earthquake Engineering and Structural Dynamics, Vol. 44 No. 13, pp. 2359–2376, doi: 10.1002/eqe.2592.
- 83. <u>Fragiacomo, M., Riu, R.*</u>, and Scotti, R. (2015). "Can structural timber foster short procurement chains within Mediterranean forests? A research case in Sardinia." South-east European forestry journal, Vol 6 No 1 (June 2015), 11 pp., http://dx.doi.org/10.15177/seefor.15-09
- 82. Bedon, C., Rinaldin, G., and <u>Fragiacomo, M.</u> (2015). "Non-linear modelling of the seismic behaviour of 'Blockhaus' structures." Engineering Structures, Vol. 91, 15 May 2015, pp. 112-124, doi: 10.1016/j.engstruct.2015.03.002.
- 81. Bedon, C., Rinaldin, G., *Izzi, M.**, <u>Fragiacomo, M.</u>, and Amadio, C. (2015). "Assessment of the structural stability of Blockhaus timber walls under in-plane compression via full-scale buckling experiments." Construction and Building Materials, Vol. 78, pp. 474-490, doi: 10.1016/j.conbuildmat.2015.01.049.
- 80. Gavric, I.*, <u>Fragiacomo, M.</u>, and Ceccotti, A. (2015). "Cyclic behaviour of typical screwed connections for cross-laminated (CLT) structures." European Journal of Wood and Wood Products, Vol. 73 No. 2, pp. 179-191, doi: 10.1007/s00107-014-0877-6.
- 79. Gavric, I.*, Fragiacomo, M., and Ceccotti, A. (2015). "Cyclic behavior of cross-laminated timber (CLT) wall systems: Experimental tests and analytical prediction models." ASCE Journal of Structural Engineering, Vol. 141 No. 11, 14 pp., 04015034, doi: 10.1061/(ASCE)ST.1943-541X.0001246.
- 78. <u>Fragiacomo, M.</u>, and Lukaszewska, E. (2015). "Influence of the construction method on the long-term behavior of timber-concrete composite beams." ASCE Journal of Structural Engineering, Vol. 141 No. 10, 15 pp., 04015013, doi: 10.1061/(ASCE)ST.1943-

- 541X.0001247.
- 77. Bedon, C., and <u>Fragiacomo, M.</u> (2015). "Numerical and analytical assessment of the buckling behaviour of Blockhaus log-walls under in-plane compression." Engineering Structures, Vol. 82, 1 January 2015, pp. 134-150, doi: 10.1016/j.engstruct.2014.10.033.
- 76. Wanninger, F.*, Frangi, A., and <u>Fragiacomo, M.</u> (2015). "Long-term behaviour of post-tensioned timber connections." ASCE Journal of Structural Engineering, Vol. 141 No. 6, 13 pp., 04014155, doi: 10.1061/(ASCE)ST.1943-541X.0001121.
- 75. Gavric, I.*, Fragiacomo, M., and Ceccotti, A. (2015). "Cyclic behaviour of typical metal connectors for cross-laminated (CLT) structures". RILEM Materials and Structures, Vol. 48 No. 6, pp. 1841-1857, doi: 10.1617/s11527-014-0278-7.
- 74. Bedon, C., <u>Fragiacomo, M.</u>, Amadio, C., and Sadoch, C. (2015). "Experimental study and numerical investigation of "Blockhaus" shear walls subjected to in-plane seismic loads." ASCE Journal of Structural Engineering, Vol. 141 No. 4, 11 pp., 04014118, doi: 10.1061/(ASCE)ST.1943-541X.0001065.
- 73. <u>Fragiacomo, M.</u>, Balogh, J., To, L., and Gutkowski, R.M. (2014). "Three dimensional modeling of long-term structural behavior of wood-concrete composite beams." Journal of Structural Engineering, ASCE, Special Issue: Computational Simulation in Structural Engineering, Vol. 140 No. 8, 11 pp., A4014006, doi: 10.1061/(ASCE)ST.1943-541X.0000909.
- 72. Sancin, L.*, Rinaldin, G., <u>Fragiacomo, M.</u>, and Amadio, C. (2014). "Seismic analysis of an isolated and a non-isolated light-frame timber building using artificial and natural accelerograms." Bollettino di Geofisica Teorica e Applicata/Bulletin of Theoretical and Applied Geophysics, Vol. 55 No. 1, pp. 103-118, doi: 10.4430/bgta0093.
- 71. Follesa, M.*, Christovasilis, I.P., Vassallo, D., <u>Fragiacomo, M.</u>, and Ceccotti, A. (2013). "Seismic design of multi-storey CLT buildings according to Eurocode 8." Ingegneria Sismica/International Journal of Earthquake Engineering, Special Issue on Timber Structures, No. 4 October-December 2013, pp. 27-53.
- 70. Rinaldin, G., *Poh'sie*, *G.H.**, Amadio, C., and <u>Fragiacomo</u>, <u>M.</u> (2013). "Modelling of seismic behaviour of light-frame timber structures." Ingegneria Sismica/International Journal of Earthquake Engineering, Special Issue on Timber Structures, No. 4 October-December 2013, pp. 82-98.
- 69. <u>Fragiacomo, M., Menis, A.*</u>, Clemente, I., Bochicchio, G., and Ceccotti, A. (2013). "Fire resistance of cross-laminated timber panels loaded out-of-plane." Journal of Structural Engineering, ASCE, Vol. 139 No. 12, 11 pp., 04013018, doi: 10.1061/(ASCE)ST.1943-541X.0000787.
- 68. Yeoh, D.*, <u>Fragiacomo, M.</u>, and Carradine, D. (2013). "Fatigue behaviour of timber-concrete composite connections and floor beams." Engineering Structures, Vol. 56 Issue November 2013, pp. 2240-2248, doi: 10.1016/j.engstruct.2013.08.042.
- 67. Ardalany, M.*, Fragiacomo, M., Carradine, D., and Moss, P. (2013). "Experimental behaviour of Laminated Veneer Lumber (LVL) beams with holes and different methods of reinforcement." Engineering Structures, Vol. 56 Issue November 2013, pp. 2154-2164, doi: 10.1016/j.engstruct.2013.08.034.
- 66. Rinaldin, G.*, Amadio, C., and <u>Fragiacomo, M.</u> (2013). "A component approach for the hysteretic behaviour of connections in cross-laminated wooden structures." Earthquake Engineering and Structural Dynamics, Vol. 42 No. 13, pp. 1885–2042, doi: 10.1002/eqe.2310.

- 65. Ardalany, M.*, Fragiacomo, M., Moss, P., and Deam, B. (2013). "An Analytical model for design of reinforcement around holes in Laminated Veneer Lumber (LVL) beams." Materials and Structures, Rilem, Vol. 46 No. 11, pp. 1811-1831, doi: 10.1617/s11527-013-0019-3.
- 64. Parida, G.*, Johnsson, H., and <u>Fragiacomo, M.</u> (2013). "Provisions for ductile behavior of timber-steel connections with multiple glued-in rods." Journal of Structural Engineering, ASCE, Vol. 139 No. 9, pp. 1468-1477, doi: 10.1061/(ASCE)ST.1943-541X.0000735.
- 63. Parida, G.*, Fragiacomo, M., and Johnsson, H. (2013). "Prefabricated stabilising timber walls anchored with glued-in rods Experimental tests and preliminary design." European Journal of Wood and Wood Product, Vol. 71 No. 5, pp. 635-646, doi: 10.1007/s00107-013-0726-z.
- 62. <u>Fragiacomo, M.</u>, and Lukaszewska, E. (2013). "Time-dependent behaviour of timber-concrete composite floors with prefabricated concrete slabs." Engineering Structures, Vol. 52, Issue July 2013, pp. 687-696, doi: 10.1016/j.engstruct.2013.03.031.
- 61. Balogh, J., <u>Fragiacomo, M.</u>, Gutkowski, R., Atadero, R., Ivanyi P. (2013). "Low-to-high cycle fatigue behavior of wood-concrete composite beams with notched interlayer connections." Pollack Periodica, Vol. 8 No. 1, pp. 3-14, doi: 10.1556/Pollack.8.2013.1.1.
- 60. <u>Fragiacomo, M., Menis, A.*</u>, Moss, P., Clemente, I., Buchanan, A., and De Nicolo, B. (2013). "Predicting the fire resistance of timber members loaded in tension." Fire and Materials, Vol. 37 No. 2, pp. 114-129, doi: 10.1002/fam.2117.
- 59. <u>Fragiacomo, M.</u>, and Schänzlin, J. (2013). "Proposal to account for environmental effects in design of timber-concrete composite beams." Technical note, Journal of Structural Engineering, ASCE, Vol. 139 No. 1, pp. 162-167, doi: 10.1061/(ASCE)ST.1943-541X.0000605.
- 58. Ardalany, M.*, Fragiacomo, M., Deam, B., and Crews, K. (2013). "Analytical cracking load estimation of Laminated Veneer Lumber (LVL) beams with holes." European Journal of Wood and Wood Products, Vol. 71 No. 1, pp. 37-48, doi: 10.1007/s00107-012-0646-3.
- 57. Ardalany, M.*, <u>Fragiacomo, M.</u>, Deam, B., and Carradine, D. (2012). "Effect of hole location on the load-carrying capacity of laminated veneer lumber (LVL) beams." Australian Journal of Structural Engineering, Vol. 13 No. 3, pp. 231-242.
- 56. *Menis*, A.*, <u>Fragiacomo</u>, <u>M.</u>, and Clemente, I. (2012). "Numerical investigation of the fire resistance of protected cross-laminated timber floor panels." Structural Engineering International, IABSE, Special Edition on Structural Fire Engineering, Vol. 22 No. 4, pp. 523-532, doi: http://dx.doi.org/10.2749/101686612X13363929517659.
- 55. Yeoh, D., and <u>Fragiacomo, M.</u> (2012). "The design of a semi-prefabricated LVL-concrete composite floor." Advances in Civil Engineering, Volume 2012, Article ID 626592, 19 pages, doi:10.1155/2012/626592.
- 54. <u>Fragiacomo, M.</u> (2012). "Experimental behaviour of a full-scale timber-concrete composite floor with mechanical connectors." Materials and Structures, Rilem, Vol. 45 No. 11, pp. 1717-1735, doi: 10.1617/s11527-012-9869-3.
- 53. Ardalany, M.*, Deam, B., and <u>Fragiacomo, M.</u> (2012). "Experimental results of fracture energy and fracture toughness of radiata pine laminated veneer lumber (LVL) in mode I (opening)." Materials and Structures, Rilem, Vol. 45 No. 8, pp. 1189-1205.
- 52. Zona, A., Barbato, M., and <u>Fragiacomo, M.</u> (2012). "Finite element model updating and probabilistic analysis of timber-concrete composite beams." Journal of Structural Engineering, ASCE, Vol. 138 No. 7, pp. 899-910.

- 51. <u>Fragiacomo, M.</u>, and Batchelar, M. (2012). "Timber frame moment joints with glued-in steel rods. I: Design." Journal of Structural Engineering, ASCE, Vol. 138 No. 6, pp. 789-801.
- 50. <u>Fragiacomo, M.</u>, and Batchelar, M. (2012). "Timber frame moment joints with glued-in steel rods. II: Experimental investigation of long-term performance." Journal of Structural Engineering, ASCE, Vol. 138 No. 6, pp. 802-811.
- 49. Amadio, C., <u>Fragiacomo, M.</u>, and Macorini, L. (2012). "Evaluation of the deflection of steel-concrete composite beams at serviceability limit state." Journal of Constructional Steel Research, Vol. 73 (June 2012), pp. 95–104.
- Davies, M.*, and <u>Fragiacomo, M.</u> (2011). "Long-term behavior of prestressed LVL members.
 Experimental tests." Journal of Structural Engineering, ASCE, Vol. 137 No. 12, pp. 1553-1561.
- 47. <u>Fragiacomo, M.</u>, and *Davies, M.** (2011). "Long-term behavior of prestressed LVL members. II: Analytical approach." Journal of Structural Engineering, ASCE, Vol. 137 No. 12, pp. 1562-1572.
- 46. Yeoh, D.*, Fragiacomo, M., De Franceschi, M.*, and Koh, H.B. (2011). "State-of-the-art on timber-concrete composite structures literature review." Journal of Structural Engineering, ASCE, Vol. 137 No. 10, pp. 1085-1095.
- 45. Moss, P.J., Buchanan, A.H., *Nilsen, T.M.**, and <u>Fragiacomo, M.</u> (2011). "Fire resistance of connections using steel plates and mechanical fasteners in timber structures." Journal of Structural Fire Engineering, Special Issue on 6th International Conference on Structures in Fire SiF'10, Vol. 2 No. 4, pp. 243-257.
- 44. O'Neill, J.*, Carradine, D., Moss, P., <u>Fragiacomo, M.</u>, Dhakal, R., and Buchanan, A. (2011). "Design of timber-concrete composite floors for fire resistance." Journal of Structural Fire Engineering, Special Issue on 6th International Conference on Structures in Fire SiF'10, Vol. 2 No. 3, pp. 231-242.
- 43. Jorissen, A., and <u>Fragiacomo, M.</u> (2011). "General notes on ductility in timber structures." Engineering Structures, Special Issue on Timber Structures, Vol. 33 No. 11, pp. 2987-2997.
- 42. <u>Fragiacomo, M.</u>, Dujic, B., and Sustersic, I. (2011). "Elastic and ductile design of multistorey crosslam massive wooden buildings under seismic actions." Engineering Structures, Special Issue on Timber Structures, Vol. 33 No. 11, pp. 3043-3053.
- 41. <u>Fragiacomo, M.</u>, Fortino, S., *Tononi, D.**, *Usardi, I.**, and Toratti, T. (2011). "Moisture-induced stresses perpendicular to grain in timber sections exposed to European climates." Engineering Structures, Special Issue on Timber Structures, Vol. 33 No. 11, pp. 3071-3078.
- 40. Yeoh, D.*, <u>Fragiacomo, M.</u>, and Deam, B. (2011). "Experimental behaviour of LVL-concrete composite floor beams at strength limit state." Engineering Structures, Vol. 33 No. 9, pp. 2697-2707.
- 39. Gutkowski, R.M., Miller, N., <u>Fragiacomo, M.</u>, and Balogh, J. (2011). "Composite wood-concrete beams using utility poles: time-dependent behavior." Journal of Structural Engineering, ASCE, Vol. 137 No. 6, pp. 625-634.
- 38. Fragiacomo, M., and Lukaszewska, E.* (2011). "Development of prefabricated timber-concrete composite floor systems." ICE Journal Structures and Buildings Timber Special Issue, Vol. 164 No. SB2, pp. 117-129 (Recipient of the Frederick Palmer Prize offered by the Institution of Civil Engineers UK in 2012).
- 37. To, L.*, Fragiacomo, M., Balogh, J., and Gutkowski, R.M. (2011). "Long-term load test of a wood-concrete composite beam." ICE Journal Structures and Buildings Timber Special

- Issue, Vol. 164 No. SB2, pp. 155-163.
- 36. Yeoh, D.*, <u>Fragiacomo, M.</u>, De Franceschi, M., and Buchanan, A. (2011). "Experimental tests of notched and plate connectors for LVL-concrete composite beams." Journal of Structural Engineering, ASCE, Vol. 137 No. 2, pp. 261-269.
- 35. <u>Fragiacomo, M., Menis, A.*</u>, Moss, P., Buchanan, A., and Clemente, I. (2010). "Numerical and experimental evaluation of the temperature distribution within laminated veneer lumber (LVL) members exposed to fire." Journal of Structural Fire Engineering, Vol. 1 No. 3, pp. 145-159.
- 34. Gattesco, N., Macorini, L., and <u>Fragiacomo, M.</u> (2010). "Moment redistribution in continuous steel-concrete composite beams with compact cross-section." Journal of Structural Engineering, ASCE, Vol. 136 No. 2, pp. 193-202.
- 33. Moss, P., Buchanan, A., <u>Fragiacomo, M.</u>, and *Austruy, C.** (2010). "Experimental testing and analytical prediction of the behaviour of timber bolted connections subjected to fire." Fire Technology, SiF'08 Special Issues 1 & 2, Vol. 46 No. 1, pp. 129-148.
- 32. *Lukaszewska*, *E.**, <u>Fragiacomo</u>, <u>M.</u>, and Johnsson, H. (2010). "Laboratory tests and numerical analyses of prefabricated timber-concrete composite floors." Journal of Structural Engineering, ASCE, Vol. 136 No.1, pp. 46-55.
- 31. Smith, T.*, Fragiacomo, M., Pampanin, S. and Buchanan, A. (2009). "Construction time and cost estimates for post-tensioned multi-storey timber buildings." Proceedings of the Institutions of Civil Engineers, Construction Materials, Special Issue on Timber Structures, Vol. 162 No. 4, pp. 141-149.
- 30. Moss, P.J., Buchanan, A.H., <u>Fragiacomo, M.</u>, Lau, P.H., and Chuo, T. (2009). "Fire performance of bolted connections in laminated veneer lumber." Fire and Materials, Vol. 33 No. 5, pp. 223-243.
- 29. Yeoh, D.*, Fragiacomo, M., Buchanan, A., and Gerber, C. (2009). "Preliminary research towards a semi-prefabricated LVL-concrete composite floor system for the Australasian market." Australian Journal of Structural Engineering, Special Issue on Timber, Vol. 9 No. 3, pp. 225-240.
- 28. Lukaszewska, E.*, Johnsson, H., and <u>Fragiacomo, M.</u> (2008). "Performance of connections for prefabricated timber-concrete composite floors." Materials and Structures, RILEM, Vol. 41 No. 9, pp. 1533-1550.
- 27. Amadio, C., De Luca, O., *Fedrigo, C.**, <u>Fragiacomo, M.</u>, and Sandri, C. (2008). "Experimental and numerical analysis of a glass-to-steel joint." Journal of Structural Engineering, ASCE, Vol. 34 No. 8, pp. 1389-1397.
- 26. Amadio, C., Clemente, I., Macorini, L., and <u>Fragiacomo, M.</u> (2008). "Seismic behaviour of hybrid systems made of PR composite frames coupled with dissipative bracings." Earthquake Engineering and Structural Dynamics, Vol. 37 No. 6, pp. 861-879.
- 25. Buchanan, A., Deam, B., <u>Fragiacomo, M.</u>, Pampanin, S., and Palermo, A. (2008). "Multistorey prestressed timber buildings in New Zealand." Structural Engineering International, IABSE, Special Edition on Tall Timber Buildings, Vol. 18 No. 2, pp. 166-173.
- 24. Deam, B.L., <u>Fragiacomo, M.</u>, and Gross, L.S. (2008). "Experimental behavior of prestressed LVL-concrete composite beams." Journal of Structural Engineering, ASCE, Vol. 134 No. 5, pp. 801-809.
- 23. Pasticier, L.*, Amadio, C., and <u>Fragiacomo, M.</u> (2008). "Non-linear seismic analysis and vulnerability evaluation of a masonry building by means of the Sap2000 v.10 code."

- Earthquake Engineering and Structural Dynamics, Vol. 37 No. 3, pp. 467-485.
- 22. Deam, B.L., <u>Fragiacomo, M.</u>, and Buchanan, A.H. (2008). "Connections for composite concrete slab and LVL flooring systems." Materials and Structures, RILEM, Vol. 41 No. 3, pp. 495-507.
- 21. Balogh, J., <u>Fragiacomo, M.</u>, Gutkowski, R. M., and Fast, R.S. (2008). "Influence of repeated and sustained loading on the performance of layered wood-concrete composite beams." Journal of Structural Engineering, ASCE, Vol. 134 No. 3, pp. 430-439.
- 20. Amadio, C., <u>Fragiacomo, M., Lucia, P.*</u>, and de Luca, O. (2008). "Optimized design of a steel-glass parabolic vault using evolutionary multi-objective algorithms." International Journal of Space Structures, Vol. 23 No. 1, pp. 21-33.
- 19. <u>Fragiacomo, M.</u>, Amadio, C., and Macorini, L. (2007). "Short- and long-term performance of the "Tecnaria" stud connector for timber-concrete composite beams." Materials and Structures, RILEM, Vol. 40 No. 10, pp. 1013-1026.
- 18. <u>Fragiacomo, M.</u>, Gutkowski, R.M., Balogh, J., and Fast, R.S. (2007). "Long-term behavior of wood-concrete composite floor/deck systems with shear key connection detail." Journal of Structural Engineering, ASCE, Vol. 133 No. 9, pp. 1307-1315.
- 17. Ceccotti, A., <u>Fragiacomo, M.</u>, and Giordano, S. (2007). "Long-term and collapse tests on a timber-concrete composite beam with glued-in connection." Materials and Structures, RILEM, Special Issue "Research for Reliable Timber Structures", Vol. 40 No. 1, pp. 15-25.
- 16. <u>Fragiacomo, M.</u>, Amadio, C., and Rajgelj, S. (2006). "Evaluation of the structural response under seismic actions using non-linear static methods." Earthquake Engineering & Structural Dynamics, Vol. 35 No. 12, pp. 1511-1531.
- 15. Macorini, L., <u>Fragiacomo, M.</u>, Amadio, C., and Izzuddin, B.A. (2006). "Long-term analysis of steel-concrete composite beams: FE modelling for effective width evaluation." Engineering Structures, Vol. 28 No. 8, pp. 1110-1121.
- 14. <u>Fragiacomo, M.</u>, and Ceccotti, A. (2006). "Long-term behavior of timber-concrete composite beams. I: Finite element modeling and validation." Journal of Structural Engineering, ASCE, Vol. 132 No. 1, pp. 13-22.
- 13. <u>Fragiacomo, M.</u> (2006). "Long-term behavior of timber-concrete composite beams. II: Numerical analysis and simplified evaluation." Journal of Structural Engineering, ASCE, Vol. 132 No. 1, pp. 23-33.
- 12. <u>Fragiacomo, M.</u> (2005). "A finite element model for long-term analysis of timber-concrete composite beams." Structural Engineering & Mechanics, Vol. 20 No. 2, pp. 173-189.
- 11. <u>Fragiacomo, M.</u>, Amadio, C., and *Macorini, L.** (2004). "Seismic response of steel frames under repeated earthquake ground motions." Engineering Structures, Vol. 26 No. 13, pp. 2021-2035.
- 10. <u>Fragiacomo, M.</u>, Amadio, C., and *Macorini, L.** (2004). "Finite element model for collapse and long-term analysis of steel-concrete composite beams." Journal of Structural Engineering, ASCE, Vol. 130 No. 3, pp. 489-497.
- 9. Amadio, C., Fedrigo, C.*, Fragiacomo, M., and Macorini, L.* (2004). "Experimental evaluation of effective width in steel-concrete composite beams". Journal of Constructional Steel Research, Vol. 60 No. 2, pp. 199-220.
- 8. <u>Fragiacomo, M.</u>, Rajgelj, S., and *Cimadom, F.** (2003). "Design of bilinear hysteretic isolation systems." Earthquake Engineering & Structural Dynamics, Vol. 32 No. 9, pp. 1333-

1352.

- 7. Amadio, C., and <u>Fragiacomo, M.</u> (2003). "Analysis of rigid and semi-rigid steel-concrete composite joints under monotonic loading. Part I: finite element modelling and validation." Steel & Composite Structures, Vol. 3 No. 5, pp. 349-369.
- 6. Amadio, C., and <u>Fragiacomo, M.</u> (2003). "Analysis of rigid and semi-rigid steel-concrete composite joints under monotonic loading. Part II: parametric study and comparison with the Eurocode 4 proposal." Steel & Composite Structures, Vol. 3 No. 5, pp. 371-382.
- 5. Amadio, C., <u>Fragiacomo, M.</u>, and Rajgelj, S. (2003). "The effects of repeated earthquakes ground motions on the non-linear response of SDOF systems." Earthquake Engineering & Structural Dynamics, Vol. 32 No. 2, pp. 291-308.
- 4. Amadio, C., and <u>Fragiacomo, M.</u> (2003). "Seismic analysis of a historical stone-masonry industrial building by the Abaqus code." European Earthquake Engineering, Vol. 17 No. 1, pp. 18-30.
- 3. Amadio, C., and <u>Fragiacomo, M.</u> (2002). "Effective width evaluation for steel-concrete composite beams." Journal of Constructional Steel Research, Vol. 58 No. 3, pp. 373-388.
- 2. <u>Fragiacomo, M.</u>, Amadio, C., and *Macorini, L.** (2002). "Influence of viscous phenomena on steel-concrete composite beams with normal or high performance slab." Steel & Composite Structures, Vol. 2 No. 2, pp. 85-98.
- 1. Amadio, C., and <u>Fragiacomo, M.</u> (1997). "Simplified approach to evaluate creep and shrinkage effects in steel-concrete composite beams". Journal of Structural Engineering, ASCE, Vol. 123 No. 9, pp. 1153-1162.

Publications in international journals under review:

- 5. Di Nino, S., Gregori, A., and <u>Fragiacomo, M.</u>, "Experimental and numerical investigations on timber-concrete connections with inclined screws." Submitted to Engineering Structures.
- 4. *Tamagnone, G.**, Rinaldin, G., and <u>Fragiacomo, M.</u>, "Influence of the floor diaphragm on the rocking behavior of CLT walls." Submitted to ASCE Journal of Structural Engineering.
- 3. *Aloisio, A.**, Alaggio, R., Köhler, J., and <u>Fragiacomo, M.</u>, "Extension of the generalized Bouc-Wen hysteresis modelling of wood joints and structural systems." Submitted to ASCE Journal of Engineering Mechanics.
- 2. D'Arenzo, G.*, Rinaldin, G., Fossetti, M., <u>Fragiacomo, M.</u>, "An innovative angle bracket for Cross Laminated Timber structures: experimental tests and numerical modelling." Submitted to Engineering Structures.
- 1. Amadio, C., <u>Fragiacomo, M.</u>, and Macorini, L. "Long term response of steel-concrete composite girder bridges at serviceability limit state." Submitted to Structural Engineering and Mechanics.

Publications in national journals:

- 11. Bedon, C., and Fragiacomo, M. (2014). "Buckling of log-haus structural systems A simplified method for in-plane buckling design of compressed log-haus walls." Ingenio, special issue on Timber structures, December 2014, Vol. 28, 20 pp. (in Italian).
- Vassallo, D., Christovasilis, I. P., Follesa, M.*, and Fragiacomo, M. (2014). "Design of a four-story cross laminated timber building in northern Italy." Wood Design Focus, Forest Products Society, Vol. 23 No. 4, http://www.forestprod.org/knowledge_base/demo2.0/Main/ind/?id=74442

- 9. Iqbal, A., Pampanin, S., Palermo, A., Buchanan, A., and <u>Fragiacomo, M.</u> (2013). "Seismic design options for post-tensioned timber walls." New Zealand Timber Design Journal, Vol. 21 No. 4, pp. 3-10.
- 8. Ardalany, M.*, Fragiacomo, M., Carradine, D., and Moss, P. (2012). "Design of reinforcement around holes in laminated veneer lumber (LVL) beams." New Zealand Timber Design Journal, Vol. 20 No. 4, pp. 6-17.
- 7. <u>Fragiacomo, M.</u> (2011). "Seismic design: update of the Eurocode 8 Timber part." Il Giornale dell'Ingegnere, Special Issue on 'Timber design', No. 5, March 1, 2011 (in Italian).
- 6. Yeoh, D.*, <u>Fragiacomo, M.</u>, Aldi, P., Mazzilli, M., and Kuhlmann, U. (2009). "Performance of notched coach screw connection for timber-concrete composite floor system." New Zealand Timber Design Journal, Vol. 17 No. 1, pp. 4-10.
- 5. Yeoh, D.*, Fragiacomo, M., Buchanan, A., Crews, K., Haskell, J., and Deam, B. (2009). "Development of semi-prefabricated timber-concrete composite floors in Australasia." New Zealand Timber Design Journal, Vol. 17 No. 1, pp. 13-18.
- 4. Smith, T.*, Pampanin, S., <u>Fragiacomo, M.</u>, and Buchanan, A. (2008). "Design and construction of prestressed timber buildings for seismic areas." New Zealand Timber Design Journal, Vol. 16 No. 3, pp. 3-10.
- 3. Davies, M.*, and <u>Fragiacomo, M.</u> (2008). "Long-term behaviour of laminated veneer lumber members prestressed with unbonded tendons." New Zealand Timber Design Journal, Vol. 16 No. 3, pp. 13-20.
- 2. Amadio, C., *Clemente, I.**, <u>Fragiacomo, M., *Macorini, L.**</u>, Noè, S., and Pasquale, D. (2004). "Problems with semi-rigid steel frames modeling in seismic regions." Costruzioni Metalliche No. 3, pp. 44-51 (in Italian).
- 1. Amadio, C., and <u>Fragiacomo, M.</u> (1993). "A finite element model for the study of creep and shrinkage effects in composite beams with deformable shear connections." Costruzioni Metalliche No. 4, pp. 213-228.

Publications in peer reviewed proceedings of international conferences: (con indication of the 10 papers that were presented by the undersigned during the conferences)

- 30. *Izzi, M.**, Polastri, A., and <u>Fragiacomo, M.</u> (2016). "Advanced modelling of CLT wall systems for earthquake resistant timber structures." Meeting three of the International Network on Timber Engineering Research (INTER), Graz (Austria), August 16-19, 14 pp.
- 29. Bedon, C., Rinaldin, G., Izzi, M. and <u>Fragiacomo, M.</u> (2016). "q-factor estimation for timber Blockhaus buildings." Meeting three of the International Network on Timber Engineering Research (INTER), Graz (Austria), August 16-19, 14 pp.
- 28. Concu, G, De Nicolo, B., Riu, R., Trulli, N., Valdes, M., and Fragiacomo, M. (2016). "Sonic testing on cross laminated timber panels." The Sixth International Conference on Structural Engineering, Mechanics and Computation Insights and Innovations in Structural Engineering, Mechanics and Computation SEMC 2016, Cape Town (South Africa), September 5-7, 4 pp., Print 978-1-138-02927-9 e-book (pdf) ISBN 978-1-315-64164-5.
- 27. Follesa, M., <u>Fragiacomo, M.</u>, Vassallo, D., Piazza, M., Tomasi, R., Rossi, S., and Casagrande, D. (2015). "A proposal for a new background document of Chapter 8 of Eurocode 8." Meeting two of the International Network on Timber Engineering Research (INTER), Šibenik (Croatia), August 24-27, 19 pp.
- 26. Bedon, C., <u>Fragiacomo, M.</u>, and Amadio, C. (2015). "Proposal of a Eurocode-based method for the buckling design of timber log-walls." Meeting two of the International Network on

- Timber Engineering Research (INTER), Šibenik (Croatia), August 24-27, 16 pp.
- 25. Bedon, C., <u>Fragiacomo, M.</u>, Amadio, C., and Battisti, A. (2014). "A buckling design approach for 'Blockhaus' timber walls under in-plane vertical loads." Meeting one of the International Network on Timber Engineering Research (INTER), Bath (UK), September 01-04, 12 pp. (*Presented*).
- 24. Concu, G., De Nicolo, B., Trulli, N., Valdés, M., and <u>Fragiacomo, M.</u> (2013). "Strength class prediction of Sardinia grown timber by means of non destructive parameters." 2nd International Conference on Structural Health Assessment of Timber Structures (SHATIS 13), September 4-6, 2013, Trento (Italy), Maurizio Piazza and Mariapaola Riggio (eds.), Published in the Periodical: Advanced Materials Research, Vol. 778 (2013), pp. 191-198, ISSN: 1662-8985, Trans Tech Publications, Switzerland, doi: 10.4028/www.scientific.net/AMR.778.191.
- 23. Wrzesniak, D.*, Rinaldin, G.*, Fragiacomo, M., and Amadio, C. (2013). "Proposal for the q-factor of moment-resisting timber frames with high ductility dowel connectors." Meeting forty-six of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Vancouver (Canada), August 26-29, paper No. CIB-W18/46-15-6, pp. 339-351 (Presented).
- 22. Gavric, I.*, Fragiacomo, M., and Ceccotti, A. (2013). "Capacity seismic design of X-LAM wall systems based on connection mechanical properties". Meeting forty-six of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Vancouver (Canada), August 26-29, paper No. CIB-W18/46-15-2, pp. 285-298.
- 21. Sustersic, I., <u>Fragiacomo, M.</u>, and Dujic, B. (2011). "Influence of connection properties on the ductility and seismic resistance of multi-storey cross-lam buildings." Meeting forty-four of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Alghero (Italy), August 29-September 1, paper No. CIB-W18/44-15-9, 11 pp.
- 20. Follesa, M., Fragiacomo, M., and Lauriola, M.P. (2011). "A proposal for revision of the current timber part (Section 8) of Eurocode 8 Part 1." Meeting forty-four of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Alghero (Italy), August 29-September 1, paper No. CIB-W18/44-15-1, 13 pp.
- Moss, P.J., Buchanan, A.H., Nilsen, T.M., and <u>Fragiacomo, M.</u> (2011). "Fire resistance of connections in timber structures." In Fragomeni, S., Venkatesan, S., Lam, N., and Setunge, S. (eds.), 21st Australasian Conference on the Mechanics of Structures & Materials ACMSM21, Melbourne (Australia), 7-10 Dec., pp. 495-500.
- 18. Ardalany, M., Deam, B., <u>Fragiacomo, M.</u>, and Crews, K. (2011). "Tension perpendicular to grain strength of wood, laminated veneer lumber (LVL), and cross-banded LVL (CBLVL)." In Fragomeni, S., Venkatesan, S., Lam, N., and Setunge, S. (eds.), 21st Australasian Conference on the Mechanics of Structures & Materials ACMSM21, Melbourne (Australia), 7-10 Dec., pp. 891-896.
- 17. <u>Fragiacomo, M.</u>, and *Yeoh*, *D.* (2010). "Design of timber-concrete composite beams with notched connections." Meeting forty-three of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Nelson (New Zealand), August 23-26, paper No. CIB-W18/43-7-4, 12 pp. (*Presented*).
- 16. Jorissen, A., and <u>Fragiacomo, M.</u> (2010). "Ductility in timber structures." Meeting forty-three of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Nelson (New Zealand), August 23-26, paper No. CIB-W18/43-7-2, 13 pp.
- 15. O'Neill, J., Carradine, D., Dhakal, R., Moss, P., Buchanan, A., and <u>Fragiacomo, M.</u> (2010). "Timber-concrete composite floors in fire." Meeting forty-three of the Working Commission

- W18-Timber Structures, CIB, International Council for Research and Innovation, Nelson (New Zealand), August 23-26, paper No. CIB-W18/43-16-3 10 pp.
- 14. O'Neill, J., Carradine, D., Moss, P., <u>Fragiacomo, M.</u>, and Buchanan, A. (2010). "Design of timber-concrete composite floors for fire resistance." 6th International Conference on Structures in Fire SiF'10, Michigan State University, East Lansing, MI (USA), June 2-4, V. Kodur & J-M Franssen (eds), DEStech Publications, Inc., Lancaster, Pennsylvania, USA, pp. 536-543.
- Moss, P.J., Nilsen, T.M., <u>Fragiacomo, M.</u>, and Buchanan, A.H. (2010). "Fire resistance of connections in timber structures." 6th International Conference on Structures in Fire SiF'10, Michigan State University, East Lansing, MI (USA), June 2-4, V. Kodur & J-M Franssen (eds), DEStech Publications, Inc., Lancaster, Pennsylvania, USA, pp. 528-535.
- 12. <u>Fragiacomo, M., Menis, A., Moss, P., Buchanan, A., and Clemente, I. (2009).</u> "Comparison between the conductive model of Eurocode 5 and the temperature distribution within a timber cross-section exposed to fire." Meeting forty-two of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Dübendorf (Switzerland), August 24-27, paper No. CIB-W18/42-16-3, 11 pp. (*Presented*).
- 11. Moss, P.J., Buchanan, A.H., and <u>Fragiacomo, M.</u> (2008). "Predicting the behaviour of timber connections subjected to fire." In T. Aravinthan, W. Karunasena and H. Wang (eds.), 20th Australasian Conference on the Mechanics of Structures & Materials, Toowoomba, Queensland (Australia), 2-5 Dec., pp. 857-863 (*Presented*).
- 10. <u>Fragiacomo, M.</u>, and *Davies, M.* (2008). "Evaluation of the prestressing losses in timber members prestressed with unbonded tendons." Meeting forty-one of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Saint Andrews, New Brunswick (Canada), August 24-28, paper No. CIB-W18/41-10-2, 10 pp. (*Presented*).
- 9. Moss, P., Buchanan, A., <u>Fragiacomo, M.</u>, and *Austruy, C.* (2008). "On the design of timber bolted connections subjected to fire." In K.H. Tan, V.K.R. Kodur and T.H. Tan (eds.), 5th International Conference on Structures in Fire, Singapore, 28-30 May, pp. 632-643.
- 8. Lukaszewska, E., <u>Fragiacomo, M.</u>, and Frangi, A. (2007). "Evaluation of the slip modulus for ultimate limit state verifications of timber-concrete composite structures." Meeting forty of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Bled (Slovenia), August 28-31, paper No. CIB-W18/40-7-5, 14 pp. (*Presented*).
- 7. Schänzlin, J., and <u>Fragiacomo, M.</u> (2007). "Extension of EC5 Annex B formulas for the design of timber-concrete composite structures." Meeting forty of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Bled (Slovenia), August 28-31, paper No. CIB-W18/40-10-1, 10 pp.
- 6. <u>Fragiacomo, M.</u>, Buchanan, A.H., Moss, P., *Carshalton, D.**, and *Austruy, C.** (2007). "Predicting the strength of bolted timber connections subjected to fire." Meeting forty of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Bled (Slovenia), August 28-31, paper No. CIB-W18/40-7-1, 12 pp. (*Presented*).
- Palermo, A., Pampanin, S., <u>Fragiacomo, M.</u>, Buchanan, A.H., Deam, B.L., and *Pasticier, L.** (2006). "Quasi-static cyclic tests on seismic-resistant beam-to-column and column-to-foundation subassemblies using Laminated Veneer Lumber (LVL)." 19th Australasian Conference on the Mechanics of Structures & Materials, Christchurch (New Zealand), 29 Nov.-1 Dec., pp. 1043-1049.
- 4. Fragiacomo, M., and Deam, B.L. (2006). "Composite concrete slab and LVL flooring

- systems." 19th Australasian Conference on the Mechanics of Structures & Materials, Christchurch (New Zealand), 29 Nov.-1 Dec., pp. 57-62 (*Presented*).
- 3. <u>Fragiacomo, M.</u>, and Ceccotti, A. (2006). "Simplified approach for the long-term behaviour of timber-concrete composite beams according to the Eurocode 5 provisions." Meeting thirty-nine of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Florence (Italy), August 28-31, paper No. CIB-W18/39-9-1, 12 pp (*Presented*).
- 2. Pampanin, S., Palermo, A., Buchanan, A.H., <u>Fragiacomo, M.</u>, and Deam, B.L. (2006). "Code provisions for seismic design of multi-storey post-tensioned timber buildings." Meeting thirty-nine of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Florence (Italy), August 28-31, paper No. CIB-W18/39-15-6, 12 pp.
- 1. Ceccotti, A., <u>Fragiacomo, M.</u>, and Gutkowski, R.M. (2002). "Design of timber-concrete composite structures according to EC5-2002 version." Meeting thirty-five of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Kyoto (Japan), September, Paper No. CIB-W18/35-15-6, 10 pp.

Publications in non-refereed proceedings of international conferences (con indication of the 31 papers that were presented by the undersigned during the conferences)

- 97. van de Lindt, J.W., Amini, M.O., Furley, J., Pei, S., *Tamagnone, G.**, Barbosa, A.R., Line, P., Rammer, D., and <u>Fragiacomo, M.</u> (2018). "Experimental seismic behavior of a two-story CLT platform building: shake table testing results." 15th World Conference on Timber Engineering WCTE 2018, Seoul (South Korea), August 20-23, 2018, 7 pp., CD.
- 96. D'Arenzo, G.*, Rinaldin, G, Fossetti, M., <u>Fragiacomo, M.</u>, Nebiolo, F., and Chiodega, M. (2018). "Tensile and shear behaviour of an innovative angle bracket for CLT structures." 15th World Conference on Timber Engineering WCTE 2018, Seoul (South Korea), August 20-23, 2018, 9 pp., CD.
- 95. Bedon, C., <u>Fragiacomo, M.</u>, and *Tamagnone, G.** (2018). "Numerical investigation on timber-to-timber joints and composite beams with inclined self-tapping screws." 15th World Conference on Timber Engineering WCTE 2018, Seoul (South Korea), August 20-23, 2018, 7 pp., CD.
- 94. *Tamagnone, G.**, and <u>Fragiacomo, M.</u> (2018). "On the rocking behavior of CLT wall assemblies." 15th World Conference on Timber Engineering WCTE 2018, Seoul (South Korea), August 20-23, 2018, 8 pp., CD.
- 93. Pei, S., van de Lindt, J.W., Barbosa, A.R., Berman, J., Blomgren, H.-E, Dolan, J., McDonnell, E., Zimmerman, R., <u>Fragiacomo, M.</u>, and Rammer, D. (2018). "Full-scale shake table test of a two-story mass timber building with resilient rocking walls." 16th European Conference on Earthquake Engineering (16ECEE), Thessaloniki (Greece), June 18-21, 10 pp.
- 92. van de Lindt, J.W., Furley, J., Amini, M.O., Pei, S., *Tamagnone, G.**, Barbosa, A.R., Rammer, D., Line, P., <u>Fragiacomo, M.</u>, and Popovski, M. (2018). "Experimental seismic behaviour of a two-storey CLT platform building: Design and shake table testing." 16th European Conference on Earthquake Engineering (16ECEE), Thessaloniki (Greece), June 18-21, 12 pp.
- 91. Concu, G., <u>Fragiacomo, M.</u>, Trulli, N. and Valdès, M. (2017). "Non-destructive assessment of gluing in cross-laminated timber panels." WIT Transactions on Ecology and The Environment, Vol 226, 9th International Conference on Sustainable Development and Planning, Bristol (UK), June, 27–29, 559-569.

- 90. Giaccu, G.F., Meloni, D., Valdès, M., and <u>Fragiacomo, M.</u> (2017). "Dynamic determination of the modulus of elasticity of maritime pine cross-laminated panels using vibration methods." WIT Transactions on Ecology and The Environment, Vol 226, 9th International Conference on Sustainable Development and Planning, Bristol (UK), June, 27–29, 571-579.
- 89. Rinaldin, G., <u>Fragiacomo</u>, <u>M.</u>, and Amadio, C. (2017). "Accuracy of N2 inelastic spectra for timber structures." 1st ECCOMAS Thematic Conference on Computational Methods in Wood Mechanics from Material Properties to Timber Structures COMPWOOD 2017, J. Füssl, T. Bader, J. Eberhardsteiner (eds.), Vienna (Austria), June 7-9, 1 pp. (Abstract) (*Presented*).
- 88. <u>Fragiacomo, M.</u>, Rinaldin, G., Bedon, C., and Izzi, M. (2017). "A framework for seismic analysis of timber structures." 1st ECCOMAS Thematic Conference on Computational Methods in Wood Mechanics from Material Properties to Timber Structures COMPWOOD 2017, J. Füssl, T. Bader, J. Eberhardsteiner (eds.), Vienna (Austria), June 7-9, 1 pp. (Abstract Key-note speaker) (*Presented*).
- 87. Bedon, C., and <u>Fragiacomo</u>, <u>M.</u> (2017). "Numerical investigation of the in-plane seismic performance of timber log-haus walls with reinforced dovetails." 6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN 2017, M. Papadrakakis, M. Fragiadakis (eds.), Rhodes Island (Greece), June 15–17, 2017, 10 pp. (*Presented*).
- 86. Berardinucci, B.*, Di Nino, S., Gregori, A., and <u>Fragiacomo, M.</u> (2017). "Mechanical behavior of timber-concrete connections with inclined screws." 1st International Conference on Timber Structures and Engineering Timber Structures 2017, New Forest (UK), June 13-15, 2017, 14 pp.
- 85. Rinaldin, G., Scaramuzza, L., Amadio, C., and <u>Fragiacomo, M.</u> (2017). "Behaviour of non and partially re-centering structures under repeated ground motions." 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago (Chile), January 9-13, 2017, Paper No. 1928 12 pp.
- 84. Bedon, C., Rinaldin, G., <u>Fragiacomo, M.</u> and Noé, S. (2016). "Finite element assessment of the seismic performance of three dimensional Blockhaus buildings." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 9 pp., CD.
- 83. Sustersic, I., <u>Fragiacomo, M.</u>, and Dujic, B. (2016). "Seismic analysis of cross laminated timber buildings using code prescribed methods." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 8 pp., CD.
- 82. Van Bakel, R., Rinaldin, G., Leijten, A.J.M., and <u>Fragiacomo, M.</u> (2016). "Experimental tests and numerical modelling of timber joints with tube fasteners." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 8 pp., CD.
- 81. Bedon, C., and <u>Fragiacomo, M.</u> (2016). "FE modelling of notched connections for timber-concrete composite structures." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 9 pp., CD.
- 80. Iqbal, A., Pampanin, S., <u>Fragiacomo, M.</u>, and Buchanan, A. (2016). "Response of plywood-coupled post-tensioned LVL walls to repeated seismic loading." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 11 pp., CD.
- 79. Tamagnone, G.*, Rinaldin, G., and <u>Fragiacomo, M.</u> (2016). "A simplified non-linear procedure for seismic design of CLT wall systems." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 9 pp., CD.
- 78. Izzi, M.*, Rinaldin, G., <u>Fragiacomo</u>, M., and Polastri, A. (2016). "Numerical modelling of steel-to-timber joints and connectors for CLT structures." 14th World Conference on Timber

- Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 9 pp., CD.
- 77. Follesa, M., <u>Fragiacomo, M.</u> (2016). "Seismic design of mixed CLT/light-frame multi-storey buildings." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 10 pp., CD.
- Follesa, M., <u>Fragiacomo, M.</u>, Casagrande, D., Tomasi, R., Piazza, M., Vassallo, D., and Rossi, S. (2016). "The new version of Chapter 8 of Eurocode 8." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 7 pp., CD.
- Vassallo, D., Follesa, M., and <u>Fragiacomo, M.</u> (2016). "Seismic design of a six-storey CLT building in Florence, Italy." 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016, 10 pp., CD.
- 74. Bedon, C., Fragiacomo, M., Amadio, C., and Battisti, A. (2014). "Buckling behaviour of Blockhaus timber walls under in-plane vertical loads." Proceedings of COST Action FP1004 Conference Experimental Research with Timber, Prague, Czech Republic, May 21-23 2014. pp. 42-49. Ed. Kay-Uwe Schober, published by University of Bath. ISBN 1-85790-183-5.
- 73. Rinaldin, G., *Poh'sie*, *G.H.**, <u>Fragiacomo</u>, <u>M.</u>, Amadio, C., and Pontarin, F. (2014). "Non-linear modelling of the three and seven storey X-lam buildings tested within the SOFIE project." 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014, 9 pp., CD (*Presented*).
- 72. *Poh'sie, G.H.**, Rinaldin, G., <u>Fragiacomo, M.</u>, Amadio, C., and Ceccotti, A. (2014). "Application of translational tuned-mass dampers on the seven storey building tested within the SOFIE project." 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014, 10 pp., CD (*Presented*).
- 71. Wanninger, F.*, Frangi, A., and <u>Fragiacomo, M.</u> (2014). "Post-tensioned timber connections: experimental analysis of the long term behavior." 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014, 9 pp., CD.
- 70. Bedon, C., <u>Fragiacomo, M.</u>, Amadio, C., and Battisti, A. (2014). "Buckling of 'Blockhaus' walls under in-plane vertical loads." 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014, 9 pp., CD (*Presented*).
- 69. Wrzesniak, D.*, Rodgers, G.W., <u>Fragiacomo, M.</u>, and Chase, J.G. (2014). "Damage avoidance design of timber structures using high-force-to-volume damping devices." 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014, 10 pp., CD (*Presented*).
- 68. Gavric, I.*, <u>Fragiacomo</u>, <u>M.</u>, Popovski, M., and Ceccotti, A. (2013). "Behaviour of cross-laminated timber panels under cyclic loads." RILEM Conference "Materials and Joints in Timber Structures Recent Developments of Technology", October 08 10, Stuttgart (Germany), S. Aicher, H.-W. Reinhardt, & H. Garrecht (eds.), RILEM Bookseries 9, Springer, pp. 689-702, doi: 10.1007/978-94-007-7811-5 62 (*Presented*).
- 67. Sustersic, I., Dujic, B., and <u>Fragiacomo, M.</u> (2013). "Influence of the connection modelling on the seismic behaviour of crosslam timber buildings." RILEM Conference "Materials and Joints in Timber Structures Recent Developments of Technology", October 08 10, Stuttgart (Germany), S. Aicher, H.-W. Reinhardt, & H. Garrecht (eds.), RILEM Bookseries 9, Springer, pp. 677-687, doi: 10.1007/978-94-007-7811-5_61.
- 66. Rinaldin, G.*, and Fragiacomo, M. (2013). "A component model for cyclic behaviour of wooden structures." RILEM Conference "Materials and Joints in Timber Structures Recent Developments of Technology", October 08 10, Stuttgart (Germany), S. Aicher, H.-W. Reinhardt, & H. Garrecht (eds.), RILEM Bookseries 9, Springer, pp. 519-530, doi:

- 10.1007/978-94-007-7811-5 48 (Presented).
- 65. Wrzesniak, D.*, Fragiacomo, M., and Jorissen, A. (2013). "Alternative approach to avoid brittle failure in dowelled connections." RILEM Conference "Materials and Joints in Timber Structures Recent Developments of Technology", October 08 10, Stuttgart (Germany), S. Aicher, H.-W. Reinhardt, & H. Garrecht (eds.), RILEM Bookseries 9, Springer, pp. 273-287, doi: 10.1007/978-94-007-7811-5_26.
- 64. Schmid, J., Menis, A., <u>Fragiacomo, M.</u>, Boström, L., Just, A., Gustafsson, A., and Bochicchio, G. (2013). "The load-bearing performance of CLT wall elements in full-scale fire tests." 13th International Fire Science and Engineering Conference Interflam 2013, 24-26 June, Royal Holloway College, University of London (UK), Vol. 2, pp. 1143-1156.
- 63. Fragiacomo, M. (2013). "Seismic behaviour of cross-laminated timber buildings: numerical modelling and design provisions." COST Action FP1004 Conference "Focus Solid Timber Solutions European Conference on Cross Laminated Timber (CLT)", May 21-22, Graz (Austria), Edited by R. Harris, A. Ringhofer and G. Schickhofer, published by The University of Bath, ISBN Number: 1-85790-181-9, pp. 166-182 (*Presented*).
- 62. Concu, G., De Nicolo, B., Valdés, M., <u>Fragiacomo, M.</u>, *Menis, A.**, and Trulli, N. (2012). "Experimental grading of locally grown timber to be used as structural material." 2nd International Conference on Civil Engineering and Building Materials (CEBM2012), November 17-18, Hong Kong (China).
- 61. Gavric, I.*, Rinaldin, G., Amadio, C., <u>Fragiacomo, M.</u>, and Ceccotti, A. (2012). "Experimental-numerical analyses of the seismic behaviour of cross-laminated wall systems." 15th World Conference on Earthquake Engineering (15WCEE), September 24-28, Lisbon (Portugal) (*Presented*).
- 60. <u>Fragiacomo, M., Menis, A.*</u>, Clemente, I., Bochicchio, G., and Tessadri, B. (2012). "Experimental and numerical behaviour of cross-laminated timber floors in fire conditions." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 2, pp. 36-43, CD (*Presented*).
- 59. Iqbal, A., Pampanin, S., <u>Fragiacomo, M.</u>, Palermo, A., and Buchanan, A. (2012). "Seismic response of post-tensioned LVL walls coupled with plywood sheets." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 5, pp. 291-296, CD.
- 58. Yeoh, D., <u>Fragiacomo, M.</u>, and Deam, B. (2012). "Long-term performance of LVL-concrete composite beams under service load." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 3, pp. 461-465, CD.
- 57. Gavric, I.*, <u>Fragiacomo</u>, <u>M.</u>, and Ceccotti, A. (2012). "Strength and deformation characteristics of typical X-lam connections." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 2, pp. 146-155, CD.
- Sustersic, I., <u>Fragiacomo, M.</u>, and Dujic, B. (2012). "Influence of the connection behaviour on the seismic resistance of multi-storey crosslam buildings." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 3, pp. 402-410, CD.
- 55. Balogh, J., <u>Fragiacomo, M.</u>, Gutkowski, R., Atadero, R., and Ivanyi, P. (2012). "Fatigue behavior of notched connections in wood-concrete composites." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 3, pp. 146-150, CD.
- 54. Fragiacomo, M., Amadio, C., Sancin, L.*, and Rinaldin, G.* (2012). "Seismic analysis of a

- light-frame timber building with and without friction pendulum base isolation." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 2, pp. 420-428, CD (*Presented*).
- 53. Ardalany, M.*, Fragiacomo, M., Deam, B., and Buchanan, A. (2012). "Design of reinforcement around holes in laminated veneer lumber (LVL) beams." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 1, pp. 539-547, CD.
- 52. <u>Fragiacomo, M.</u>, Amadio, C., *Rinaldin, G.**, and *Sancin, L.** (2012). "Non-linear modelling of wooden light-frame and X-lam structures." 12th World Conference on Timber Engineering WCTE 2012, Auckland (New Zealand), July 16-19, 2012, Vol. 5, pp. 152-157, CD (*Presented*).
- 51. <u>Fragiacomo, M., Menis, A.*</u>, and Clemente, I. (2012). "Finite element modelling of cross-laminated timber floors exposed to fire." 7th International Scientific Conference Wood & Fire Safety, Strbske Pleso, The Patria Hotel, Slovakia, May 13-16, 2012, 8 pp. (*Presented*).
- 50. Tlustochowicz, G.*, and <u>Fragiacomo, M.</u> (2011). "Prefabricated stabilising walls for multistorey timber buildings General concepts and preliminary design." Structural Engineers World Congress 2011, Villa Erba, Como (Italy), April 4-6, 9 pp., CD (*Presented*).
- 49. Balogh, J., <u>Fragiacomo, M.</u>, Miller, N., Gutkowski, R. M., and Atadero, R. (2010). "Testing of wood-concrete composite beams with shear key detail." 1st International Conference Timber Bridges ICTB2010, Lillehammer (Norway), September 12-15, Editor Kjell A. Malo, Otto Kleppe, Tormod Dyken, ISBN 978-82-519-2680-5, Tapir Academic Press, pp. 393-398.
- 48. <u>Fragiacomo, M.</u>, and Schänzlin, J. (2010). "Moisture-induced stresses in timber-concrete composite structures." 1st International Conference on Structures & Architecture, University of Minho, Guimarães (Portugal), July 21-23, 8 pp. (*Presented*).
- 47. Fragiacomo, M., Menis, A.*, Moss, P., Clemente, I., and Buchanan, A. (2010). "Numerical and experimental thermal-structural behaviour of laminated veneer lumber (LVL) exposed to fire." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD.
- 46. Fragiacomo, M., Batchelar, M., Wallington, C.*, and Buchanan, A. (2010). "Moment joints in timber frames using glued-in steel rods: experimental investigation of long-term performance." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD (*Presented*).
- 45. Yeoh, D.*, <u>Fragiacomo, M.</u>, Buchanan, A., and Deam, B. (2010). "Experimental and analytical performance of LVL-concrete composite floor beams." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD.
- 44. Lukaszewska, E.*, and <u>Fragiacomo, M.</u> (2010). "Static and dynamic (vibration) performance of composite beams with prefabricated concrete slab." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD.
- 43. O'Neill, J.*, Carradine, D., Moss, P., Buchanan, A., and <u>Fragiacomo, M.</u> (2010). "Fire performance of timber-concrete composite floors." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD.
- 42. <u>Fragiacomo, M.</u>, and Schänzlin, J. (2010). "The effect of moisture and temperature variations on timber-concrete composite beams." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 8 pp., CD.
- 41. Ardalany, M.*, Deam, B., Fragiacomo, M., and Buchanan, A. (2010). "Numerical investigation of the load carrying capacity of laminated veneer lumber (LVL) joists with

- holes." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 10 pp., CD.
- 40. Balogh, J., Miller, N., <u>Fragiacomo, M.</u>, and Gutkowski, R.M. (2010). "Time-dependent behaviour of composite wood-concrete bridges made from salvaged utility poles." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 8 pp., CD.
- 39. *Abd Ghafar, H.**, Deam, B., and <u>Fragiacomo, M.</u> (2010). "Vibration susceptibility of multispan LVL-concrete composite floors." 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010, 7 pp., CD.
- 38. *Abd Ghafar, H.**, Deam, B., and <u>Fragiacomo, M.</u> (2009). "Dynamic measurements of LVL-concrete composite floors." 13th Asia Pacific Vibration Conference, University of Canterbury, Christchurch (New Zealand), November 22-25, pp. 8, CD.
- 37. <u>Fragiacomo, M.</u>, Amadio, C., and Macorini, L. (2009). "Time-dependent behaviour of the 'Tecnaria' stud connector for timber-concrete composite structures." International Symposium "Timber Structures from Antiquity to the Present" edited by J. Chilton and I. Mungan, Istanbul (Turkey), June 25-27, pp. 275-286 (*Presented*).
- 36. Yeoh, D.*, Fragiacomo, M., Buchanan, A., and Deam, B. (2009). "Experimental behaviour at ultimate limit state of a semi-prefabricated timber-concrete composite floor system." International Symposium "Timber Structures from Antiquity to the Present" edited by J. Chilton and I. Mungan, Istanbul (Turkey), June 25-27, pp. 287-298 (Presented).
- 35. Yeoh, D.*, Fragiacomo, M., Abd Ghafar, H.*, Buchanan, A., Deam, B., and Crews, K. (2008). "Behaviour of timber-concrete composite floor systems." Australasian Structural Engineering Conference ASEC 2008, Melbourne (Australia), June 26-27, 2008, Paper No. 009, 11 pp.
- 34. Yeoh, D.*, Fragiacomo, M., Buchanan, A., Crews, K., Haskell, J.*, and Deam, B. (2008). "Development of semi-prefabricated timber-concrete composite floors in Australasia." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 33. Yeoh, D.*, Fragiacomo, M., Aldi, P., Mazzilli, M.*, and Kuhlmann, U. (2008). "Performance of notched coach screw connection for timber-concrete composite floor system." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 32. *Lukaszewska, E.**, and <u>Fragiacomo, M.</u> (2008). "Static performance of prefabricated timber-concrete composite systems." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 31. Moss, P., <u>Fragiacomo, M., Austruy, C.*</u>, and Buchanan, A. (2008). "On the design of timber bolted connections subjected to fire." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 30. Balogh, J, <u>Fragiacomo, M.</u>, Gutkowski, R. M., and Fast, R.S. (2008). "Performance of wood-concrete beams under repeated and sustained loading." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- Schänzlin, J., and <u>Fragiacomo, M.</u> (2008). "Modelling and design of timber-concrete-composite structures in the long-term." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 28. Davies, M.*, and <u>Fragiacomo, M.</u> (2008). "Long-term behaviour of laminated veneer lumber members prestressed with unbonded tendons." 10th World Conference on Timber Engineering

- WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD (Presented).
- 27. Smith, T.*, Pampanin, S., <u>Fragiacomo, M.</u>, and Buchanan, A. (2008). "Design and construction of prestressed timber buildings for seismic areas." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- Abd Ghafar, H.*, Deam, B., <u>Fragiacomo, M.</u>, and Buchanan, A. (2008). "Vibration performance of LVL- concrete composite floor systems." 10th World Conference on Timber Engineering WCTE 2008, Miyazaki (Japan), June 2-5, 2008, 8 pp., CD.
- 25. Gattesco, N., Macorini, L., and <u>Fragiacomo, M.</u> (2007). "Allowable moment redistribution in the structural design of continuous steel-concrete composite beams." 4th Specialty Conference on "The Conceptual Approach to Structural Design", Venice, Italy, 28-29 June 2007, 8 pp., CD.
- Amadio, C., Clemente, I., Macorini, L., and <u>Fragiacomo, M.</u> (2007). "Seismic behaviour of composite frames coupled with viscoelastic dissipative bracings." Pacific Structural Steel Conference 2007 "Steel Structures in Natural Hazards", Wairakei, New Zealand, 13-16 March 2007, Vol. 2, pp. 363-368 (*Presented*).
- 23. Gutkowski, R.M., Fast, R.S., Balogh, J., and <u>Fragiacomo, M.</u> (2006). "Time-dependent load performance of notched wood-concrete composite beams." Structural Faults + Repair-2006 Conference, Edinburgh, Scotland (UK), June 13-15, 11 pp., CD, ISBN-0-947644-59-8.
- 22. Palermo, A., Pampanin, S., <u>Fragiacomo, M.</u>, Buchanan, A.H., and Deam, B.L. (2006). "Innovative seismic solutions for multi-storey LVL timber buildings." 9th World Conference on Timber Engineering WCTE 2006, Portland (U.S.A.), August 6-10, 8 pp., CD.
- 21. Buchanan, A.H., Deam, B.L., <u>Fragiacomo, M.</u>, Gibson, T., and Morris, H. (2006). "Fifteen years of performance-based design in New Zealand." 9th World Conference on Timber Engineering WCTE 2006, Portland (U.S.A.), August 6-10, 8 pp., CD.
- Fragiacomo, M., Gutkowski, R.M., Balogh, J., and Fast, R.S. (2006). "Long-term behaviour
 of wood-concrete composite beams with notched connection detail." 9th World Conference on
 Timber Engineering WCTE 2006, Portland (U.S.A.), August 6-10, 8 pp., CD.
- 19. Ceccotti, A., <u>Fragiacomo, M.</u>, and Giordano, S. (2006). "Behaviour of a timber-concrete composite beam with glued connection at strength limit state." 9th World Conference on Timber Engineering WCTE 2006, Portland (U.S.A.), August 6-10, 8 pp., CD (*Presented*).
- 18. Amadio, C., Clemente, I., Macorini, L., and <u>Fragiacomo, M.</u> (2006). "Seismic analysis of partially restrained composite frames coupled with dissipative bracings." 5th International Conference Stessa 2006, Yokohama (Japan), August 14-17, pp. 565-571.
- Amadio, C., Moschino, D.*, and <u>Fragiacomo, M.</u> (2006). "Probabilistic analysis of a PR steel-concrete composite frame." 5th International Conference Stessa 2006, Yokohama (Japan), August 14-17, pp. 573-579.
- 16. <u>Fragiacomo, M.</u>, and Ceccotti, A. (2004). "A simplified approach for long-term evaluation of timber-concrete composite beams." 8th World Conference on Timber Engineering WCTE 2004, Lahti (Finland), June 14-17, Vol. 2, pp. 537-542.
- 15. Grantham, R., Enjily, V., <u>Fragiacomo, M., Nogarol, C.*, Zidaric, I.*</u>, and Amadio, C. (2004). "Potential upgrade of timber frame buildings in the UK using timber-concrete composites." 8th World Conference on Timber Engineering WCTE 2004, Lahti (Finland), June 14-17, Vol. 2, pp. 59-64.
- 14. Amadio, C., <u>Fragiacomo, M., Macorini, L.*</u>, and *Petrovich, F.** (2003). "The effect of repeated earthquakes on steel structures." 4th International Conference Stessa 2003, Naples

- (Italy), 9-12 June, pp. 389-395 (*Presented*).
- 13. Amadio, C., <u>Fragiacomo, M.</u>, and Rajgelj, S. (2002). "The effect of repeated seismic actions on structures." 12th European Conference on Earthquake Engineering, London (U.K.), September 9-13, CD (*Presented*).
- 12. Amadio, C., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2002). "A new effective F.E. formulation for studying the long-term behaviour of continuous steel-concrete composite beams." 5th World Congress on Computational Mechanics (WCCM), Vienna (Austria), July 7-12, http://wccm.tuwien.ac.at.
- 11. Amadio, C., <u>Fragiacomo, M.</u>, Ceccotti, A., and Di Marco, R. (2001). "Long-term behaviour of a timber-concrete connection system." RILEM Conference "Joints in Timber Structures", Stuttgart (Germany), September 12-14, pp. 263-272 (*Presented*).
- 10. Amadio, C., <u>Fragiacomo, M.</u>, Ceccotti, A., and Di Marco, R. (2001). "Influence of rheological phenomena in timber-concrete composite beams." IABSE Conference "Innovative Wooden Structures and Bridges", Lahti (Finland), August 29-31, pp. 525-530 (*Presented*).
- 9. <u>Fragiacomo, M.</u> (2000). "Long-term behaviour of timber-concrete composite beams." 3rd International Ph.D. Symposium in Civil Engineering, Vienna (Austria), October 5-7, Vol. 1, pp. 525-535 (*Presented*).
- 8. <u>Fragiacomo, M.</u>, and Schänzlin, J. (2000). "Modelling of timber-concrete floor structures." Cost Workshop "Timber construction in the new millennium", Venice (Italy), September 29 (*Presented*).
- 7. Amadio, C., <u>Fragiacomo, M.</u>, Rajgelj, S., and *Scarabelli, F.** (2000). "Effects of repeated seismic events on structures." 3rd International Conference Stessa 2000, Montreal (Canada), August 21-24, pp. 435-442.
- 6. Amadio, C., Ceccotti, A., Di Marco, R., and <u>Fragiacomo, M.</u> (2000). "Numerical evaluation of long-term behaviour of timber-concrete composite beams." World Conference on Timber Engineering WCTE 2000, Vancouver, British Columbia (Canada), July 31-Aug. 3, CD.
- 5. <u>Fragiacomo, M.</u>, Amadio, C., and *Macorini, L.** (2000). "Numerical evaluation of long-term behaviour for continuous steel-concrete composite beams." International Conference on Steel Structures of the 2000's, Istanbul (Turkey), September 11-13, pp. 137-142.
- 4. Amadio, C., Briganti, D., and <u>Fragiacomo, M.</u> (2000). "Effective width for an elastic or plastic analysis of a steel-concrete composite beam." International Conference on Steel Structures of the 2000's, Istanbul (Turkey), September 11-13, pp. 143-148.
- 3. Amadio, C., <u>Fragiacomo, M.</u>, and Rajgelj, S. (2000). "Seismic response under repeated earthquakes." 3rd Japan-Turkey Workshop on Earthquake Engineering, Istanbul (Turkey), February 21-25, Vol. 1, pp. 29-41 (*Presented*).
- 2. Amadio, C., Di Marco, R., and <u>Fragiacomo, M.</u> (1999). "A linear finite element model to study creep and shrinkage effects in a timber-concrete composite beam with deformable connections." RILEM Symposium on Timber Engineering, Stockholm (Sweden), September 13-15, pp. 747-756 (*Presented*).
- 1. Amadio, C., and <u>Fragiacomo, M.</u> (1997). "Evaluation of long-term effects in the steel-concrete composite beams." International Conference on Composite Construction, Innsbruck (Austria), September 16-18, pp. 211-216.

Publications in proceedings of national conferences

(con indication of the 12 papers that were presented by the undersigned during the conferences)

- 60. Bedon, C., and <u>Fragiacomo</u>, <u>M.</u> (2017). "Numerical analysis of timber log-haus walls with steel dovetail reinforcements under in-plane seismic loads." 17th ANIDIS Conference "The Earthquake Engineering in Italy", Pistoia (Italy), Sept. 17th-21st, Franco Braga, Walter Salvatore & Andrea Vignoli Editors, 10 pp., CD.
- 59. *Tamagnone, G.**, and <u>Fragiacomo, M.</u> (2017). "On the seismic design of Xlam structures." 17th ANIDIS Conference "The Earthquake Engineering in Italy", Pistoia (Italy), Sept. 17th-21st, Franco Braga, Walter Salvatore & Andrea Vignoli Editors, 9 pp., CD (in Italian).
- 58. Fanale, L., Rinaldin, G., <u>Fragiacomo, M.</u>, Alaggio, R., and Antonacci, E. (2017). "Investigation on the dynamic behaviour of the isolated seismic mass for the construction of a 6-degrees-of-freedom shaking table." 17th ANIDIS Conference "The Earthquake Engineering in Italy", Pistoia (Italy), Sept. 17th-21st, Franco Braga, Walter Salvatore & Andrea Vignoli Editors, 7 pp., CD (in Italian).
- 57. Pontarin, F., Rinaldin, G., Amadio, C., and <u>Fragiacomo, M.</u> (2015). "Implementation of response spectrum analysis and adaptive pushover procedures in OpenSees." 2nd Italian Conference "OpenSees Days Italy", Salerno (Italy), June 10-11, 2015, 8 pp.
- 56. Rinaldin, G., Pontarin, F., and <u>Fragiacomo, M.</u> (2015). "Advanced modelling and analysis of X-lam buildings with the opensees framework." 2nd Italian Conference "OpenSees Days Italy", Salerno (Italy), June 10-11, 2015, 8 pp.
- 55. Tamagnone, G., Rinaldin, G., and <u>Fragiacomo, M.</u> (2015). "A simplified procedure for non-linear design of the metal connectors in XLam timber walls subjected to gravity and lateral loads." 16th ANIDIS Conference "The Earthquake Engineering in Italy", L'Aquila (Italy), Sept. 13th-17th, Franco Braga & Dante Galeota Editors, 10 pp., CD.
- 54. Izzi, M., Flatscher, G., Rinaldin, G., <u>Fragiacomo, M.</u>, and Schickhofer, G. (2015). "Experimental tests on annular ringed shank nails for seismic resistant Cross-Laminated Timber (CLT) structures." 16th ANIDIS Conference "The Earthquake Engineering in Italy", L'Aquila (Italy), Sept. 13th-17th, Franco Braga & Dante Galeota Editors, 11 pp., CD.
- 53. Follesa, M., Vassallo, D., <u>Fragiacomo, M.</u>, Piazza, M., Tomasi, R. Rossi, S., and Casagrande, D. (2015). "Una proposta di revisione del Capitolo 8 sulle strutture di legno dell'Eurocodice 8." 16th ANIDIS Conference "The Earthquake Engineering in Italy", L'Aquila (Italy), Sept. 13th-17th, Franco Braga & Dante Galeota Editors, 13 pp., CD (in Italian) (*Presented*).
- 52. Bedon, C., Rinaldin, G., <u>Fragiacomo, M.</u>, and Amadio, C. (2015). "Exploratory cyclic and dynamic numerical investigation for the assessment of the seismic vulnerability of *Blockhaus* shear walls under in-plane lateral loads." 16th ANIDIS Conference "The Earthquake Engineering in Italy", L'Aquila (Italy), Sept. 13th-17th, Franco Braga & Dante Galeota Editors, 12 pp., CD.
- 51. Fong, L.Y., *Abd. Ghafar, N.H.**, Abd Rahman, N., <u>Fragiacomo, M.</u>, Ibrahim, Z., and Buchanan, A. (2014). "Comparison between the vibration performance of LVL-concrete composite (LCC) flooring system made of Malaysian and New Zealand LVL." The National Seminar on Civil Engineering Research (SEPKA 2014), UTM Training Centre, Universiti Teknologi Malaysia (UTM) Johor Bahru, April 14-15, Malaysia, pp. 10, CD.
- 50. Bedon, C., <u>Fragiacomo, M.</u>, Amadio, C., and Sadoch, C. (2013). "Experimental and numerical seismic characterization of 'Blockhaus' shear walls under in-plane lateral loads." 32^{nd} National Conference of the GNGTS, Italian Group of Geophysics of Solid Ground, Trieste (Italy), November 19-21, Vol. 2, pp. 22 29, ISBN 978-902101-7-4.

- 49. Rinaldin, G., Amadio, C., and <u>Fragiacomo, M.</u> (2013). "Effectiveness of the N2 method for the seismic analysis of structures with different hysteretic behaviour." 32nd National Conference of the GNGTS, Italian Group of Geophysics of Solid Ground, Trieste (Italy), November 19-21, Vol. 2, pp. 131 136, ISBN 978-902101-7-4 (Recipient of the prize offered by the AGLC Licio Cernobori's Geophysical Association, to the best paper in the stream "Seismic Hazard, Vulnerability, and Damage Scenarios" presented by an author less than 35-year old G. Rinaldin).
- 48. *Poh'sie, G.H.**, Amadio, C., *Rinaldin, G.**, <u>Fragiacomo, M.</u>, and Ceccotti, A. (2013). "Application of tuned mass dampers on multi-storey timber buildings." 15th ANIDIS Conference "The Earthquake Engineering in Italy", Franco Braga & Claudio Modena Editors, Padua (Italy), June 30th-July 4th, 10 pp., CD (in Italian).
- 47. Rinaldin, G.*, Amadio, C., and <u>Fragiacomo, M.</u> (2013). "Accuracy of the N2 and overdamped spectrum method for different hysteretic models." 15th ANIDIS Conference "The Earthquake Engineering in Italy", Franco Braga & Claudio Modena Editors, Padua (Italy), June 30th-July 4th, 10 pp., CD.
- 46. Rinaldin, G.*, Fragiacomo, M., Poh'sie, G.H.*, and Amadio, C. (2013). "A component model for seismic analysis of light frame timber structures." 15th ANIDIS Conference "The Earthquake Engineering in Italy", Padua (Italy), Franco Braga & Claudio Modena Editors, June 30th-July 4th, 9 pp., CD (in Italian).
- 45. Wrzesniak, D.*, Amadio, C., Rinaldin, G.*, and <u>Fragiacomo, M.</u> (2013). "Non-linear cyclic modelling of moment-resisting timber frames." 15th ANIDIS Conference, Padua (Italy), Franco Braga & Claudio Modena Editors, June 30th-July 4th, 9 pp., CD.
- 44. Bedon, C., <u>Fragiacomo</u>, <u>M.</u>, Amadio, C., and Sadoch, C. (2013). "Experimental and numerical investigation of "Blockhaus" shear walls under in-plane cyclic loads." 15th ANIDIS Conference "The Earthquake Engineering in Italy", Franco Braga & Claudio Modena Editors, Padua (Italy), June 30th-July 4th, 11 pp., CD.
- 43. Rinaldin, G.*, Amadio, C., and <u>Fragiacomo, M.</u> (2012). "Non-linear springs for cyclic analysis of wooden structures." Proceedings of the OpenSees Days Modelling, calculation and analysis of structures in earthquake-prone regions 1st Italian Conference. Roma, May 24-25.
- 42. <u>Fragiacomo, M.</u>, Amadio, C., and *Sancin, L.** (2011). "Numerical modeling of a strategic timber building in L'Aquila with and without passive base isolation." 30th National Conference of the GNGTS, Italian Group of Geophysics of Solid Ground, Trieste (Italy), November 14-17, pp. 208-210, ISBN 978-88-902101-6-8.
- 41. Amadio, C., <u>Fragiacomo, M.</u>, Macorini, L., and Lovato, S. (2011). "Long-term analysis of steel-concrete composite beams in cracked and uncracked phase." 23rd CTA (Italian Steel) Conference, Ischia (Italy), October 9-12, pp. 111-123 (in Italian).
- 40. <u>Fragiacomo, M., Menis, A.*</u>, Clemente, I., and Bochicchio, G. (2011). "Fire resistance of cross-laminated timber floors." 23rd CTA (Italian Steel) Conference, Ischia (Italy), October 9-12, pp. 571-578 (in Italian) (*Presented*).
- 39. Rinaldin, G.*, Amadio, C., and <u>Fragiacomo, M.</u> (2011). "A component approach for non-linear behavior of cross-laminated solid timber panels." 14th ANIDIS Conference, Bari (Italy), September 18th-22nd, 10 pp., CD (*Presented*).
- 38. Gavric, I.*, Ceccotti, A., and <u>Fragiacomo, M.</u> (2011). "Experimental cyclic tests on cross-laminated timber panels and typical connections." 14th ANIDIS Conference, Bari (Italy), September 18th-22nd, 12 pp., CD.

- 37. Newcombe, M.P., van Beerschoten, W.A., Carradine, D., Pampanin, S., Buchanan, A.H., Deam, B.L., and <u>Fragiacomo, M.</u> (2009). "In-plane experimental testing of timber-concrete composite floor diaphragms." New Zealand Society for Earthquake Engineering Conference 2009, Christchurch (New Zealand), April 3-5, Paper No. 19, CD, 8 pp.
- 36. <u>Fragiacomo, M.</u> (2009). "Timber-concrete composite bridges." 3rd Italian Workshop on Bridge Design "BridgeItaly 2009", Padova (Italy), December 14 (*Presented*).
- 35. Smith, T.*, Pampanin, S., Buchanan, A., and <u>Fragiacomo, M.</u> (2008). "Feasibility and detailing of prestressed timber buildings for seismic areas." New Zealand Society for Earthquake Engineering Conference 2008, Wairakei (New Zealand), April 11-13, Paper No. 53, CD, 8 pp. (recipient of the Prize for the Best Research Paper at the New Zealand Society for Earthquake Engineering Conference 2008).
- 34. Abd. Ghafar, N. H.*, Deam, B., <u>Fragiacomo, M.</u>, and Buchanan, A. (2008). "Susceptibility to vibrations of LVL-concrete composite floors." 7th Italian Workshop on Composite Construction, Benevento (Italy), October 23-24, pp. 321-328 (*Presented*).
- 33. Yeoh, D., <u>Fragiacomo, M.</u>, De Franceschi, M.*, and Clemente, I. (2008). "Short- and long-term investigations of LVL-concrete composite floors in Australasia." 7th Italian Workshop on Composite Construction, Benevento (Italy), October 23-24, pp. 309-320 (*Presented*).
- 32. Gattesco, N., Macorini, L., and <u>Fragiacomo, M.</u> (2008). "Moment redistribution limits for steel-concrete composite beams accounting for ULS and SLS requirements." 7th Italian Workshop on Composite Construction, Benevento (Italy), October 23-24, pp. 23-32.
- 31. Smith, T.*, Ludwig, F.*, Pampanin, S., <u>Fragiacomo, M.</u>, Buchanan, A., Deam, B., and Palermo, A. (2007). "Seismic response of hybrid-LVL coupled walls under quasi-static and pseudo-dynamic testing." New Zealand Society for Earthquake Engineering Conference 2007, Palmerston North (New Zealand), March 30-April 1, Paper No. 60, CD, 8 pp.
- 30. Pettigrew, T.M.*, Fragiacomo, M., and Bull, D.K. (2006). "Verification of raker shores using New Zealand timber." New Zealand Society for Earthquake Engineering Conference 2006, Napier (New Zealand), March 10-12, Paper No. 10, CD, 10 pp.
- 29. Amadio, C., Clemente, I., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2005). "Seismic analysis of partially restrained composite frames coupled with dissipative bracings." 20th CTA Conference "Advances in Steel Construction", Ischia (Italy), Sept. 26-28, pp. 1-8.
- 28. Amadio, C., Clemente, I., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2005). "Modelling of steel-concrete composite frames with semi-rigid joints by means of the component method." 20th CTA Conference "Advances in Steel Construction", Ischia (Italy), Sept. 26-28, pp. 9-16.
- 27. <u>Fragiacomo, M.</u>, Amadio C., and *Macorini, L.** (2004). "Stud connector 'Tecnaria' for timber-concrete composite beams: short- and long-term experimental tests." 6th Italian Workshop on Composite Construction, Trieste (Italy), November 22-23, CD (in Italian) (*Presented*).
- 26. Amadio, C., <u>Fragiacomo, M.</u>, Ferro, D., *Macorini, L.**, and Pasquale, D. (2004). "On the modeling of steel-concrete semi-rigid joints and PR composite frames using the component method." 6th Italian Workshop on Composite Construction, Trieste (Italy), November 22-23, CD (in Italian).
- 25. Amadio, C., *Martin*, A.*, and <u>Fragiacomo</u>, M. (2004). "Seismic analysis of a steel frame coupled with dissipative bracings." 6th Italian Workshop on Composite Construction, Trieste (Italy), November 22-23, CD (in Italian).
- 24. Amadio, C., De Luca, O., Fedrigo, C.*, Fragiacomo, M., and Sandri, C.* (2004). "Experimental tests and numerical analysis of a glass-to-steel connection subjected to shear."

- 6th Italian Workshop on Composite Construction, Trieste (Italy), November 22-23, CD (in Italian).
- 23. Amadio, C., *Lucia*, *P.**, <u>Fragiacomo</u>, <u>M.</u>, and De Luca, O. (2004). "Optimal design of steel-glass barrel vaults using the genetic algorithm code 'Frontier'." 6th Italian Workshop on Composite Construction, Trieste (Italy), November 22-23, CD (in Italian).
- 22. <u>Fragiacomo, M.</u>, Amadio, C., and *Macorini, L.** (2004). "Collapse and serviceability behaviour of a stud connector for timber-concrete composite structures." 15th CTE Conference, Bari, November 4-6, Vol. 1, pp. 313-322 (in Italian).
- 21. Gattesco, N., *Macorini*, L.*, and <u>Fragiacomo M.</u> (2004). "Numerical evaluation of the possible moment redistribution in steel-concrete composite beams" 15th CTE Conference, Bari, November 4-6, Vol. 1, pp. 211-220 (in Italian).
- 20. *Macorini*, L., Amadio, C., *Foresto*, E.*, and <u>Fragiacomo</u>, M. (2003). "Evaluation of effective width for steel-concrete composite beams under long-term loading." 19th CTA Conference, Genoa, September 28-30, Vol. 1, pp. 281-292 (in Italian).
- 19. Amadio, C., Clemente, I.*, <u>Fragiacomo, M., Macorini, L.*</u>, Noè, S., and Pasquale, D. (2003). "On the numerical modelling of partially restrained steel frames in seismic regions". 19th CTA Conference, Genoa, September 28-30, Vol. 1, pp. 157-168 (in Italian).
- 18. Amadio, C., <u>Fragiacomo, M., Macorini, L.*</u>, and Urizio, M. (2002). "Evaluation of deflections under the service load for composite beams with different static schemes and modalities of construction". 5th Italian Workshop on Composite Construction, Salerno, November 28-29, Vol. 1, pp. 37-51 (in Italian) (*Presented*).
- 17. Amadio, C., <u>Fragiacomo</u>, <u>M.</u>, *Macorini*, *L.**, and Qualli, A. (2002). "Effect of casting sequence on behaviour under the service load of composite girder bridges in cracked and uncracked phase". 5th Italian Workshop on Composite Construction, Salerno, November 28-29, Vol.1, pp. 113-128 (in Italian).
- 16. Amadio, C., Fedrigo, C.*, Fragiacomo, M., and Macorini, L.* (2002). "Experimental investigation of the shear lag phenomenon in steel-concrete composite beams". 5th Italian Workshop on Composite Construction, Salerno, November 28-29, Vol.1, pp. 53-70 (in Italian).
- 15. Amadio, C., <u>Fragiacomo, M., Macorini, L.*</u>, and Urizio, M. (2002). "On the serviceability limit state verification of propped and unpropped steel-concrete composite beams with deformable connection." 14th CTE Conference, Mantua, November 7-9, Vol. 2, pp. 465-473 (in Italian).
- 14. Amadio, C., <u>Fragiacomo, M.</u>, Grandelis, F., and *Macorini, L.** (2001). "On the modelling of semi-rigid steel-concrete composite joints." 18th CTA Conference, Venice, September 26-28, Vol. 2, pp. 341-354 (in Italian) (*Presented*).
- 13. Amadio, C., <u>Fragiacomo, M.</u>, and *Kliman, I.** (2001). "Effect of repeated earthquakes on structures." 10th ANIDIS Conference, Potenza, September 9-13, CD (in Italian) (*Presented*).
- 12. Amadio, C., Fedrigo, F.*, Fragiacomo, M., Pozzetto, O.*, Ceccotti, A., and Di Marco, R. (2000). "Numerical modelling and long-term behavior of timber-concrete composite beams". 4th Italian Workshop on Composite Construction, Palermo, November 23-24, pp. 293-305 (in Italian).
- 11. Amadio, C., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2000). "Parameters affecting the short-and long-term modelling of steel-concrete composite beams." 4th Italian Workshop on Composite Construction, Palermo, November 23-24, pp. 36-49 (in Italian).

- 10. Amadio, C., Ceccotti, A., Di Marco, R., and <u>Fragiacomo, M.</u> (2000). "Effects of rheological phenomena on behaviour of timber-concrete composite beams." 13th CTE Conference, Pisa, November 9-11, Vol. 1, pp. 59-68 (in Italian).
- 9. Amadio, C., <u>Fragiacomo, M.</u>, and *Macorini, L.** (2000). "Effects of shrinkage and creep on steel-concrete composite beams with normal or high strength concrete slab". 13th CTE Conference, Pisa, November 9-11, Vol. 1, pp. 69-78 (in Italian).
- 8. Amadio, C., Briganti, D., and <u>Fragiacomo, M.</u> (1999). "Effective width in steel-concrete composite beams for an ultimate analysis." 17th CTA Conference, Naples, October 3-7, Vol. 2, pp. 239-249.
- 7. Amadio, C., and <u>Fragiacomo, M.</u> (1999). "A finite element model for short and long term analysis of steel-concrete composite beams in cracked phase." 17th CTA Conference, Naples, October 3-7, Vol. 2, pp. 251-261.
- 6. Amadio, C., and <u>Fragiacomo, M.</u> (1998). "Influence of connection properties on evaluation of short- and long-term effects for steel-concrete composite beams under service loading." 3rd Italian Workshop on Composite Construction, Ancona, October 29-30, pp. 21-42 (in Italian) (*Presented*).
- 5. Amadio, C., and <u>Fragiacomo, M.</u> (1997). "Effects produced by creep on steel-concrete composite beams with slab reinforcement and simplified evaluation based on the AAEM method." 16th CTA Conference, Ancona, October 2-5, pp. 33-46 (in Italian).
- 4. Amadio, C., and <u>Fragiacomo, M.</u> (1995). "Evaluation of shrinkage effects in steel-concrete composite beams with deformable connection." 15th CTA Conference, Riva del Garda (Trento), October 15-18, pp. 1-12 (in Italian).
- 3. Amadio, C., and <u>Fragiacomo, M.</u> (1995). "Simplified evaluation of creep effects in composite beams with deformable connection." 2nd Italian Workshop on Composite Construction, Naples, June 22-23, pp. 19-38 (in Italian) (*Presented*).
- 2. Amadio, C., and <u>Fragiacomo, M.</u> (1993). "Evaluation of creep and shrinkage effects in steel-concrete composite beams with rigid or deformable connection using a simplified approach based on the AAEM method." 14th CTA Conference, Viareggio, October 24-27, pp. 22-38 (in Italian).
- 1. Amadio, C., and <u>Fragiacomo, M.</u> (1993). "On the evaluation of rheological phenomena in composite beams with rigid or deformable connection using the AAEM method." 1st Italian Workshop on Composite Construction, Trento, June 17-18, pp. 133-151 (in Italian).

Research reports

- 11. Bedon, C., Amadio, C., and <u>Fragiacomo, M.</u> (2012). "Buckling experiments on full-scale blockhaus walls under in-plane compression." Research Report, University of Trieste, Italy, 31 pp.
- 10. <u>Fragiacomo, M.</u> (2012). "Experimental-analytical behaviour of multilayer timber panels under in-plane and out-of-plane loading." Final Research Report for the Sardinia Region, founding agency of the corresponding research project, University of Sassari, Italy, 19 pp. (in Italian).
- 9. Bedon, C., <u>Fragiacomo, M.</u>, and Amadio, C. (2012). "Implementation of an advanced numerical model in Abaqus for in-plane cyclic behaviour of 'Blockhaus' (log-house) timber walls." Research Report, University of Sassari, Italy, 180 pp. (in Italian).
- 8. Wallington, C.C.*, Fragiacomo, M., Buchanan, A., and Batchelar, M. (2009). "Long term deformation of epoxy glued glulam portal frame knee joints." Final Report for Building

- Research Association of New Zealand Inc. Contract No. 85147, May 2009.
- 7. Crews, K., Gerber, C., *Yeoh*, *D.**, Buchanan, A., and <u>Fragiacomo, M.</u> (2008). "Innovative engineered timber building systems for non residential applications. Summary report testing of prototype components and floor beams for Forest and Wood Products Australia." Milestone 4 September 2008.
- 6. Crews, K., Gerber, C., Buchanan, A., and <u>Fragiacomo, M.</u> (2008). "Innovative engineered timber building systems for non residential applications. Report Of Test Specification And Results Prototype Components For Forest And Wood Products Association." Milestone 3 May 2008.
- 5. Crews, K., Gerber, C., Choi, F., Buchanan, A., and <u>Fragiacomo, M.</u> (2007). "Innovative engineered timber building systems for non residential applications. Preliminary report (concept design) and literature review for Forest and Wood Products Association." Milestone 2 November 2007.
- 4. Pasticier, L.*, Pampanin, S., <u>Fragiacomo, M.</u>, Buchanan, A., and Palermo, A. (2006). "Experimental and numerical validation of innovative connections for LVL (laminated veneer lumber) frame systems: Laboratory results from tests carried out on a column-foundation subassembly." Research report, Dept. of Civil Engineering, University of Canterbury, New Zealand, 68 pp.
- 3. Amadio, C., <u>Fragiacomo, M.</u>, <u>Martin, A.*</u>, and <u>Pasquale, D.*</u> (2004). "Seismic analysis of partially restrained frames coupled with dissipative bracings." Technical report No. 3, Scientific research programme of relevant national interest "Advanced design and system performance control of steel-concrete composite frames in earthquake-prone areas" June 2004.
- 2. Amadio, C., Clemente, I., Ferro, D., <u>Fragiacomo, M.</u>, and *Pasquale, D.** (2003). "Component modeling of semi-rigid composite joints under cyclic loading." Technical report No. 2, Scientific research programme of relevant national interest "Advanced design and system performance control of steel-concrete composite frames in earthquake-prone areas" December 2003.
- 1. Amadio, C., Clemente, I.*, <u>Fragiacomo</u>, <u>M.</u>, and *Pasquale*, D.* (2003). "Cyclic modelling of joint and seismic analysis of frames with semi-rigid composite joints." Technical report No. 1, Scientific research programme of relevant national interest "Advanced design and system performance control of steel-concrete composite frames in earthquake-prone areas" September 2003.

Adjunct appointments, fellowships to other institutions, membership to Doctoral schools and Master courses

- From 2018 to present: member of the scientific-didactic committee of the 2nd level Master "Europroject: structural design according to Eurocodes", Universities of Roma Tre, La Sapienza, Tor Vergata, Niccolò Cusano, L'Aquila, Chieti-Pescara, Camerino, Politecnica university of Ancona, and Politecnico of Bari.
- From 2011 to 2015 and from 2017 to present: Associate fellow at CNR IVALSA Trees and Timber Institute (Italy).
- From 2016 to present: member of the academic body of the Doctoral School in Civil Engineering, University of L'Aquila (Italy)

- From 2012 to 2015: Adjunct Associate Professor at the Department of Civil and Natural Resources Engineering, University of Canterbury (New Zealand).
- From 2009 to 2013: member of the academic body of the Doctoral School in Structural Engineering, University of Cagliari (Italy).
- From 2007 to 2009; member of the academic body of the Doctoral School in Architecture, University of Sassari (Italy).
- From 2005 to 2006: member of the academic body of the Doctoral School in Civil Engineering, University of Canterbury (New Zealand).
- From 2001 to 2005 and from 2010 to 2015: member of the academic body of the Doctoral School in Civil and Environmental Engineering, University of Trieste (Italy).

Research grants, contracts and sponsorships

(Exchange rate: 1 USD=0.86 €, 1 NZD=0.57 €, 1 AUD=0.62 €, 1 GBP=1.11 €)

Summary

Total amount of research grants secured as PI:

1,776,346 €

Total amount of funds on which he has worked as a researcher or key researcher:

7,403,546 €

Detailed list

- 41. University of L'Aquila Civil Engineering Dept.'s coordinator for the research project: "S.A.F.E. Sustainable design of Anti-seismic Furniture as smart life-saving systems during an Earthquake (Design sostenibile di sistemi di arredo intelligenti con funzione salva-vita durante eventi sismici)" Progetto di ricerca industriale e Sviluppo sperimentale nelle 12 aree di specializzazione individuate nel PNR 2015-2020, di cui al D.D. del 13 luglio 2017 n. 1735 Area di specializzazione Design, creatività e Made in Italy 417,546 € (30 months from 4/6/2018) national coordinator: Prof. Lucia Pietroni, University of Camerino.
- 40. University of L'Aquila's coordinator for the research project: "RELUIS-Research line: Timber Structures WP 3: Cross-laminated timber panels: reduction of the seismic vulnerability of existing buildings and regulation updating for new buildings", funded by the Italian Department for Civil Protection, 15,300 €, 2017-2018 (2 years).
- 39. University of L'Aquila's coordinator for the research project: "RELUIS-Research line: Timber Structures WP3: Xlam buildings and WP4: Timber buildings with special systems and/or protective devices", funded by the Italian Department for Civil Protection, 8,500 €, 2016 (1 year).
- 38. University of L'Aquila's coordinator for the research project: "The short supply chain in the biomass-timber sector: procurement, traceability, certification and Carbon Dioxide sequestration", funded by the Italian Ministry of the University within the Research Projects of National Interest PRIN 2015, national coordinator Prof. G. Scarascia Mugnozza, Tuscia University, 66,582 €, 2017-2019 (3 years).
- 37. Principal Investigator, "Development of glulam and X-lam products made of Sardinia wood", funded by the Sardinia Region to the Universities of Sassari and Cagliari within the "Funds for Basic Research Projects", 151,360 €, 2016-2018 (3 years).
- 36. Principal Investigator, "Analysis and retrofitting techniques of historical and traditional buildings within the Mediterranean basin", funded by the Centre for Logistics Systems of the

- University of Pisa, Italy, for 12,000 €, 2014-2015.
- 35 University of Sassari's coordinator for the research project: "RELUIS-Research line: Timber Structures WP4: Timber buildings with special systems and/or protective devices", funded by the Italian Department for Civil Protection, 18,500 €, 2014-2015 (2 years).
- 34. Principal Investigator, "Design of cross-lam multi-storey timber buildings for fire safety", funded by the IVALSA Trees and Timber Institute, CNR, Italy, for 30,000 €, and by the University of Trieste, Italy, for 30,000 €. Funds are being used to pay a Ph.D. grant to Matteo Izzi at the Dept. of Civil and Environmental Engineering of the University of Trieste, 2014-2016.
- 33. Principal Investigator, "Sustainable use of Sardinia forests for production of timber panels and bio-energy", funded by Sardegna Ricerche, the Research Association of Sardinia, Cluster Research Programme: "Materials for Sustainable Construction", 191,304.7 €, 4/2014-4/2016 (24 months).
- 32. Principal Investigator, "Determination of a procedure for seismic design of log house timber buildings with 'Blockbau' system, and assessment of the seismic performance of multi-storey light-frame timber buildings", funded by Rubner Haus Spa, 75,000 €, 2012-2013 (18 months).
- 31. University of Sassari's coordinator for the research project: "The application in Sardinia of the new Italian technical rules for Construction", funded by the Sardinia Region to the Universities of Sassari and Cagliari within the "Funds for Research Projects on Selected Topics of Strict Regional Interest", 50,000 €, 2012-2015 (36 months).
- 30. Obtained a grant of 900 € from the University of Sassari for visiting Luleå University of Technology, teaching mobility, LLP Erasmus programme 2011/12.
- 29. Achieved a contribution of 6,000 € from 'Fondazione Banco Sardegna' and 3500 € from seven private companies for the sponsorship of the meeting forty-four of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Alghero (Italy), August 28-Sept.1, 2011.
- 28. Principal Investigator, "Numerical modelling of timber elements and timber structures as part of the Cornet project OptimberQuake", Subcontract of the University of Kassel (Germany) within the Cornet Research project 'OptimberQuake: Optimization of Timber Multi-storey Buildings against Earthquake impact', 80,000 €, 2011-2013 (2 years).
- 27. University of Sassari's coordinator for the research project: "RELUIS-Seismic design of new timber buildings", funded by the Italian Department for Civil Protection, 8,500 €, 2010-2013 (3 years).
- 26. Principal Investigator, "Experimental-analytical behaviour of multilayer timber panels under in-plane and out-of-plane loading", funded by the Sardinia Region to the Universities of Sassari and Cagliari within the "Funds for Basic Research Projects", 70,000 €, 2010-2011 (18 months).
- 25. Principal Investigator, "Seismic resistance of multi-storey glulam buildings", funded by Federlegno, the Italian Federation of Timber Constructors, and by three timber enterprises, for 24,150 €, and by the University of Trieste, Italy, for 24,150 €. Funds used to pay a Ph.D. grant to Daniela Wrzesniak at the Dept. of Civil and Environmental Engineering of the University of Trieste, 2011-2013.
- 24. Principal Investigator, "Development of sustainable buildings using locally grown timber in Sardinia", 50% co-fund of a research fellowship, University of Sassari, 18,905.13 €, 2010-2011.

- 23. Principal Investigator, "Structural analysis of cross-lam multi-storey buildings", funded by the IVALSA Trees and Timber Institute, CNR, Italy, for 60,000 €, and by the University of Trieste, Italy, for 60,000 €. Funds used to pay a Ph.D. grant to Igor Gavrič at the Dept. of Civil and Environmental Engineering of the University of Trieste, 2010-2012, and a Ph.D. grant to Pohsie Guillaume Herve at the Dept. of Civil Engineering and Architecture of the University of Trieste, 2012-2014.
- 22. Grants for Visiting Professorships at the University of Sassari for Prof. J. Natterer (20 days in 2009 4000 €), Prof. R. Gutkowski (10 days in 2009 6000 €), Mr. Hank Bier (40 days in 2009 8000 €), Prof. Ian Smith (10 days in 2010 8000 €), Prof. André Jorissen (20 days in 2010 5000 €), Dr. David Yeoh (20 days in 2011 4000 €), Prof. Hans Larsen (20 days in 2011 5300 €), Prof. Gerhard Schickhofer (20 days in 2012 5300 €), Prof. Richard Harris (30 days in 2014 3500 €) Funds paid by the University of Sassari.
- 21. Obtained a grant of 1200 € from the University of Sassari for visiting Luleå University of Technology, OM mobility, LLP Erasmus programme 2008/09.
- 20. Co-Principal investigator, "Development of sustainable buildings using locally grown timber in Sardinia", funded by the Forest Association of Sardinia to the Universities of Sassari and Cagliari, 95.879,15 €, 2009-2011.
- 19. University of Sassari's coordinator for the Research Project: "Building with Environmentally Sustainable Structural Timber" funded by the European Union, International Research Staff Exchange Scheme, Call: FP7-PEOPLE-IRSES-2008, 28,800 €, 2009-2012.
- 18. Key researcher, "Structural timber building systems", 10,000,000 NZD, Structural Timber Innovation Company, Christchurch, New Zealand, 2009-2013.
- 17. Granted 4,613 AUD in 2007 for the purchase of an instrumented impulse hammer for dynamic testing, Department of Civil Engineering, University of Canterbury, Christchurch, New Zealand.
- Granted 10,315 USD in 2007 for the purchase of a long stroke shaker for dynamic testing, Department of Civil Engineering, University of Canterbury, Christchurch, New Zealand.
- 15. Principal Investigator, "Performance of composites of concrete slab and LVL beams at strength and serviceability limit state", 3,000 NZD to support Mr David Yeoh, Ph.D. candidate, Department of Civil Engineering, University of Canterbury, Christchurch (New Zealand), June 2006 to May 2009.
- 14. Principal Investigator, "Dynamic response of concrete-timber composite floor systems", 1,373 NZD to support Ms Nor Hayati Abd. Ghafar, Ph.D. candidate, Department of Civil Engineering, University of Canterbury, Christchurch (New Zealand), January 2007 to December 2009.
- 13. Key researcher, "Innovative engineered timber building systems for non residential applications", 609,985 AUD, Forest and Wood Products Research and Development Corporation, University of Technology of Sydney (Australia), and University of Canterbury (New Zealand), January 2007 to December 2008.
- 12. Key researcher, "LVL-concrete composite floor system", 56,362 NZD, Carter Holt Harvey, University of Canterbury (New Zealand), June 2006 to June 2009.
- 11. Principal investigator, "Long-term behaviour of epoxy-glued connection between glulam members", 18,130 NZD, Building Research, 1,000 NZD plus material, McIntosh Laminates, University of Canterbury (New Zealand), November 2006 to March 2009.
- 10. Principal investigator, "Performance of connections for composite concrete and LVL systems", 2,000 NZD, Department of Civil Engineering, University of Canterbury (New

- Zealand), September 2006 to January 2007.
- 9. Principal investigator, "Long-term behaviour of prestressed LVL members", 7,000 + 2,450 NZD, Department of Civil Engineering, and 6,300 NZD Carter Holt Harvey, University of Canterbury (New Zealand), November 2005 to October 2007.
- 8. Co-principal investigator, "Experimental and numerical validation of innovative connections for LVL (Laminated Veneer Lumber) frame systems", 40,000 NZD, Carter Holt Harvey, University of Canterbury (New Zealand), October 2005 to March 2006.
- 7. Researcher, "Damage and seismic response evaluation of partially-restrained composite frames with or without dissipative bracings", 23,700 €, Scientific Research Programme of Relevant National Interest PRIN 2004, University of Trieste (Italy), 2004.
- 6. Achieved a contribution of 1,000 € from a private company, Tecnaria SpA (Italy), for the sponsorship of the 6th Workshop on Composite Constructions, held at the University of Trieste (Italy), November 22-23, 2004.
- 5. Researcher, "Experimental tests on glass-steel joints", 6,000 €, Permasteelisa Group, University of Trieste (Italy), 2003.
- 4. Researcher, "Advanced design and system performance control of steel-concrete composite frames in earthquake-prone areas", 25,700 €, Scientific Research Programme of Relevant National Interest PRIN 2002, University of Trieste (Italy), 2002.
- 3. Principal Investigator, "Short- and long-term behaviour of wood concrete composite beams", GBP 79,000 (1st phase) and 64,000 (2nd phase), EC TMR Large Scale Facilities Programme, Building Research Establishment, U.K., 2001-2003.
- 2. Principal Investigator, "Short- and long-term behaviour of timber-concrete composites", 9,000 €, Young Researcher Project, University of Trieste (Italy), 2000.
- 1. Principal Investigator, "Short- and long-term behaviour of mechanical connections between wood and concrete", 3,400 €, Tecnaria SpA, University of Trieste (Italy), 2000.

Network of national and international partnerships

Research cooperation is currently ongoing with the Institutions listed in the following (in brackets the main contact persons):

- Fuzhou University, China (Prof. Bruno Briseghella).
- Eindhoven Technical University, The Netherlands (Prof. André Jorissen and Prof. Ad Leijten).
- VTT, Espoo, Finland (Dr. Stefania Fortino).
- Biberach University of Applied Sciences, Biberach, Germany (Prof. Jörg Schänzlin).
- University of Kassel, Kassel, Germany (Prof. Werner Seim).
- ETH Zurich, Switzerland (Prof. Andrea Frangi, Mr. Joachim Schmid).
- University of Canterbury, Christchurch, New Zealand (Prof. Geoff Chase, Prof. Peter Moss, Prof. Andy Buchanan).
- Colorado State University, Fort Collins, Colorado, USA (Prof. John van de Lindt).
- FPInnovations, Vancouver, Canada (Dr. Marjan Popovski).
- Norwegian University of Science and Technology, Trondheim, Norway (Prof. Jochen Koehler).
- Contemporary Building Design (CBD), Celje, Slovenia (Dr. Bruno Dujic).

- Imperial College, London, U.K. (Dr. Lorenzo Macorini).
- IVALSA Trees and Timber Institute, CNR, San Michele all'Adige (Trento) and Sesto Fiorentino, Italy (Dr. Andrea Polastri, Giovanna Bochicchio, Dr. Michele Brunetti, Dr. Michela Nocetti).
- University of Cagliari, Italy (Dr. Giovanna Concu, Dr. Monica Valdes)
- University of Trieste, Italy (Prof. Claudio Amadio, Prof. Natalino Gattesco, Dr. Chiara Bedon).
- University of Brescia, Italy (Dr. Giovanni Metelli).
- University of Camerino, Italy (Dr. Alessandro Zona).
- University of Pisa, Italy (Dr. Linda Giresini).

ADMINISTRATION DUTIES

ANVUR (Italian National Agency for the Evaluation of Universities and Research Institutes)

• From 10/2015 to 03/2017: Member of the National Expert Panel for the Third Mission of the University (CETM – "Comitato di Esperti per la Terza Missione"), Research Quality Assessment VQR 2011-14.

University of L'Aquila (Italy)

- From 6/2017 to present: Member of the University Committee for the Management of the Emergencies ("Unità di crisi per la gestione della comunicazione del rischio sismico in fase di emergenza").
- From 1/2017 to 12/2019: Head of the University Committee on the consultancy and external teaching activity of the university staff ("Presidente della Commissione per il servizio ispettivo di ateneo per il personale docente e ricercatore").
- From 3/2017 to present: Manager of the Laboratory for Material and Structure Testing ("Responsabile scientifico del laboratorio prove su modelli e strutture").
- From 2/2017 to present: Course Coordinator, Bachelor in Civil and Environmental Engineering & Master in Civil Engineering ("Presidente del corso di laurea triennale in Ingegneria Civile Ambientale, e del corso di laurea specialistica in Ingegneria Civile").
- From 02/2016 to present: Chairman of the Dept. Panel for the Third Mission of the University ("Presidente del comitato dipartimentale per la terza missione dell'Università").
- From 11/2015 to 2/2017: Deputy Head of the Department, Dept. of Civil, Construction-Architecture and Environmental Engineering ("Vice Direttore del Dipartimento di Ingegneria Civile, Edile-Architettura e Ambientale").
- From 11/2015 to present: University Officer for the construction of the new Laboratory for Seismic Engineering Research, which include a six dofs shaking table ("Responsabile per l'esecuzione del contratto per la fornitura e la posa in opera di una tavola vibrante per il laboratorio di ricerca per l'ingegneria sismica").
- From 9/2015 to 3/2017: member of the University Teaching Committee ("Commissione di revisione del Regolamento Didattico di Ateneo").

University of Sassari (Italy)

- From 2014 to 2015: reference person for the EU Erasmus mobility programme to and from Riga Technical University, Riga, Latvia.
- September 2013: member of the selection committee of teaching assistants for the laboratories in architectural design.
- From 2013 to 2015: reference person for the EU Erasmus mobility programme to and from Kauno Techologijos Universitetas, Kaunas, Lithuanian.
- From 2009 to 2015: reference person for the EU Erasmus mobility programme to and from Lulea University of Technology, Sweden.

University of Canterbury (New Zealand)

- 2006: member of the Health and Safety committee, Dept. of Civil Engineering.
- Patron for an International Memorandum Of Understanding between the University of Canterbury and Colorado State University (US), signed in December 2006. Designated representative for the Dept. of Civil Engineering, and contact person for the University of Canterbury, in the aforementioned IMOU.
- March 2006: member of the selection committee for the Civil Engineering Grant (500 NZ\$ for 12 3rd professional students).
- May 2006: member of the selection committee for the McCallion Engineering Scholarship (1500 NZ\$).

TEACHING AND SUPERVISION

Courses and lectures taught

At the undergraduate level

- From 2016 to present: Reinforced Concrete Design for 3rd year civil engineering students, University of L'Aquila, Italy (90 hours).
- From 2016 to present: Timber Engineering for 5th year civil engineering students, University of L'Aquila, Italy (90 hours).
- 2013, December 9: 3-hour lecture on "Timber Engineering" for 4th and 5th year engineering undergraduate students, University of Bologna, Italy.
- 2011: 5-hour lecture on "Design of timber arches and timber trusses" and 2-hours tutorial on the same subject for the course "Timber Engineering Advanced level", 4th year engineering students, Lulea University of Technology, Sweden.
- 2009: 1-hour lecture on "Fire safety in timber buildings", 2nd year undergraduate students, Faculty of Engineering, Luleå University of Technology, Sweden.
- 2008: Timber Structures for 5th year undergraduate students at the Faculty of Architecture, University of Sassari, Italy (12 hours) as a part of the Architecture Technology course.
- 2008: invited lecturer for the course "Design Studio 1" (2nd year undergraduate students) at the Faculty of Engineering, University of Canterbury, New Zealand (10 hours lecture and 15 hours tutorials).

- 2008, September 4: 2-hours lecture on "Floor solutions for multi-storey buildings" for the course "Steel Design 1" for 3rd and 4th year undergraduate students, Civil Engineering Technology, Metropolitan State College of Denver, Denver, USA.
- 2008, August 7: 2-hours lecture on "Timber floors" for the course "Steel and timber design" for 2nd year undergraduate students, School of Civil and Environmental Engineering, University of Technology, Sydney, Australia.
- 2008, May 12: 2-hours lecture on "Laminated Veneer Lumber (LVL) and Plywood" for the course "Process and Construction Technique" for 1st year undergraduate students, Faculty of Architecture "Valle Giulia", University of Rome "La Sapienza", Rome, Italy.
- From 2007 to 2015: Structural Design for 4th year undergraduate students at the Faculty of Architecture, University of Sassari, Italy (120 hours), with good teaching assessment from the students (average of 7.5 out of 10 over the last 7 years, and 8.2 out of 10 over the last 2 years).
- 2006, April 11: 2-hours lecture on "Buildings with timber structures" for undergraduate students on structural engineering, University of Trento (Italy).
- 2006, April 11: 2-hours lecture on "Buildings with timber structures" for undergraduate students on architectural engineering, University of Trento (Italy).
- From 2005 to 2007: 3-year teaching of Design Studio 1 (2nd year undergraduate students 20 hours lectures and 36 hours tutorials) and Timber Engineering (4th year undergraduate students 48 hours lectures and tutorials) and 1-year teaching of Advanced Timber Engineering (postgraduate students and practicing engineers (20 hours lectures and tutorials) at the Faculty of Engineering, University of Canterbury (New Zealand).
- From October 2001 to May 2005: Theory and Design of Steel Construction (4th year undergraduate students) at the Faculty of Architecture, University of Trieste, Italy (40 hours).
- November 2000: lectures on "Timber Construction" for the course "Structural Design" (4th year undergraduate students) at the Faculty of Architecture, University Institute of Architecture of Venice, Italy (8 hours).
- From March 1999 to May 2005: lectures on "Fire Engineering" and "Finite Element Modelling" for the course "Structural Design" (5th year undergraduate students), including tutorials, at the Faculty of Engineering, University of Trieste, Italy (30 hours).
- From November 1999 to September 2001: lectures on "Theory of Reinforced Concrete" for the course "Structural Design" (2nd year undergraduate students), including tutorials, at the Faculty of Architecture, University of Trieste, Italy (10 hours).

At the postgraduate level

- 2018, May 18 and 19: lectures on "Design of timber structures according to Eurocodes 5 and 8" within the 2nd level Master "Europroject: structural design according to Eurocodes", University of Roma Tre (12 hours).
- 2016, May 20 and 21, June 16: lectures on "Design of timber structures according to Eurocodes 5 and 8" within the 2nd level Master "Europroject: structural design according to Eurocodes", University of Rome La Sapienza (18 hours).
- 2015, November 6: lecture on "Design of timber structures for fire resistance" within the 2nd level Master "Fire Safety and Fire Engineering SAFEng", University of Ferrara (4 hours)

- 2015, May 29 and 30: lectures on "Design of timber structures according to Eurocodes 5 and 8" within the 2nd level Master "Europroject: structural design according to Eurocodes", University of Rome La Sapienza (12 hours).
- 2014, September 13: lecture on "Seismic Risk and Vulnerability of Buildings and the Built Environment", Resilient places and spaces Design for risk reduction, 6th International School: Awareness and Responsibility of Environmental Risk, Nuoro (Italy) (1 hour).
- 2014, July, 9: course "Use of timber for sustainable housing" within the 2nd level Master "Sustainable and Affordable Housing", University of Sassari (4 hours).
- 2014, June 21, 28 and July, 4: course "Timber engineering" within the 2nd level Master "Innovation in Design, Rehabilitation and Control of Structures: Assessment and Retrofitting in Seismic Areas", University of Roma Tre (12 hours).
- 2014, May 22-23-24, and May 29-30: courses "Timber as a structural material" and "Seismic design of timber structures" within the 2nd level Master "Earthquake engineering: Seismic design of construction and mitigation of seismic hazard of existing buildings", University of Enna 'Kore' (28 hours).
- 2014, February 28-March 1: course "Timber Engineering" within the 2nd level Master "Innovative Solutions in Architectural Engineering", University of Pisa (8 hours).
- 2012 and 2009: Short course "Timber Engineering" for PhD students, Doctoral School in Structural Engineering, Building and Urban Refurbishment, University of Salerno, Italy (9 hours in 2012 and 6 hours in 2009).
- 2009: Lecture on "Structural Design of Ply Shear Walls Multi-Storey Buildings" within the Postgraduate course "Advanced topics in timber housing design", Doctoral School in Engineering of Civil and Mechanical Structural Systems, University of Trento, Italy (2 hours).
- From 2008 to 2012: Course on "Timber engineering Material properties, design process of structural members and connections, ply-shear walls and innovative multi-storey buildings", 2nd level Master in "Seismic Design of Structures" MUPAC, Dept. of Civil and Environmental Engineering, University of Trieste, Italy (12 hours).
- 2008: Monographic course "Advances in Timber Engineering" for PhD students, Doctoral School in Engineering of Civil and Mechanical Structural Systems, University of Trento, Italy (20 hours).

Student supervision

Special effort has been put by the undersigned to ensure his Ph.D. students will publish one or more papers in peer-reviewed international journals. In the following, the number of such papers published by each Ph.D. student together with the undersigned are provided in {curly brackets}.

Main supervisor of post-docs ("Assegnisti di Ricerca")

- 4. Maurizio Follesa, "Numerical and analytical modeling of cross-laminated (X-lam) panels", 7/2014-12/2015, University of Sassari (Italy).
- 3. Linda Giresini, "Techniques and analysis for the restoration of historic and traditional buildings in the Mediterranean basin", 5/2014-10/2015, University of Sassari (Italy).
- 2. Giovanni Rinaldin, "Numerical modelling and design of multi-storey timber buildings in earthquake-prone areas", 7/2012-6/2017, University of Sassari (Italy).

1. Nicoletta Trulli, "Development of sustainable buildings using low-quality Sardinia timber", 1/2011-12/2012, University of Sassari (Italy).

Main supervisor of graduated research fellows ("Borse di studio post lauream")

- 9. Giuseppina Porcu, "Seismic analysis of reinforced concrete buildings via pushover analysis", 11/2014-06/2015, University of Sassari (Italy).
- 8. Daniela Wrzesniak, "Innovative wall and moment-resisting frames for multi-storey timber buildings: technical implications of the use in Sardinia of new Italian Technical Regulations for Construction", 2/2014-4/2014, University of Sassari (Italy).
- 7. Igor Gavric, "Seismic analyses of new timber buildings: implications of the use in Sardinia of the new Italian Technical Regulations for Construction", 1/2014-6/2014, University of Sassari (Italy).
- 6. Agnese Menis, "Design of buildings with timber load-resisting systems: implications of the use in Sardinia of the new Italian Technical Regulations for Construction", 1/2014-12/2014, University of Sassari (Italy).
- 5. Giuseppina Porcu, "Seismic analyses of existing buildings: technical and economical implications of the use in Sardinia of new Italian Technical Regulations for Construction", 11/2013-10/2014, University of Sassari (Italy).
- 4. Igor Gavric, "Experimental analysis of the cyclic behaviour of timber walls and connections", 1/2013-12/2013, University of Sassari (Italy).
- 3. Chiara Bedon, "Implementation in Abaqus software package of an advanced numerical model for non-linear cyclic behaviour of log-house timber wall panels loaded in-plane", 8/2012-7/2013, University of Sassari (Italy).
- 2. Agnese Menis, "Numerical analyses of the structural behaviour of cross-laminated timber panels, and comparison with experimental results", 4/2012-2/2013, University of Sassari (Italy).
- 1. Ljuba Sancin, "Experimental-numerical behaviour of timber cross-laminated panels loaded inplane and out-of-plane", 10/2011-12/2011, University of Sassari (Italy).

Main supervisor of Ph.D. students {in curly brackets, No. of papers published in International Journals with the undersigned}

- 11. Vincenzo Rinaldi, "Seismic behaviour of mixed reinforced concrete and timber buildings", 1/2018-12/2020, University of L'Aquila (Italy) (in progress).
- Martina Sciomenta, "Analytical and numerical analysis of log-haus wall systems", 1/2016-12/2018, University of L'Aquila (Italy) (in progress) {1}.
- 9. Gabriele Tamagnone, "Seismic design of cross-laminated timber buildings", 1/2016-12/2018, University of Trieste (Italy) (in progress) {2 + 1 paper submitted under review}.
- 8. Matteo Izzi, "FE modelling of cyclic resistance of timber members and connections", 1/2014-12/2016, University of Trieste (Italy) (completed with flying colours) {4}.
- 7. Riccardo Riu, "Development of a short procurement chain of the Sardinia wood for the construction sector", 1/2012-12/2015, University of Cagliari (Italy) (completed with flying colours) {1}.
- 6. Guillaume Hervé Poh'sie, "Ductility of multi-storey timber buildings and seismic mitigation using Tuned Mass Dampers", 1/2012-12/2014, University of Trieste (Italy) (completed with

- flying colours) {3}.
- 5. Maurizio Follesa, "Seismic design of timber structures A proposal for the revision of Chapter 8 of Eurocode 8", 1/2011-12/2014, University of Cagliari (Italy) (completed with flying colours) {5}.
- 4. Daniela Wrzesniak, "Connection systems in multi storey timber buildings under seismic action", 1/2011-12/2013, University of Trieste (Italy) (completed with flying colours) {2}.
- 3. Igor Gavric, "Seismic behaviour of cross-laminated timber buildings", 1/2010-12/2012, University of Trieste (Italy), http://hdl.handle.net/10077/8638 (completed with flying colours) {3}.
- 2. Agnese Menis, "Fire resistance of laminated veneer lumber (LVL) and cross-laminated timber (XLAM) elements", 1/2009-12/2011, University of Cagliari (Italy) (completed with flying colours) {6}.
- David Yeoh Eng Chuang, "Behaviour and design of timber-concrete composite floor system", 1/2007-12/2009, University of Canterbury (New Zealand) (completed with flying colours) {6}.

Associate supervisor of Ph.D. students {in curly brackets, No. of papers published in International Journals with the undersigned}

- 12. Giuseppe D'Arenzo, "Seismic behaviour of innovative connectors for cross-laminated timber structures", 1/2017-12/2019, Enna Kore University (Italy) (in progress).
- 11. Mattia Tiso, "Contribution of the insulation materials on the fire resistance of timber members", 12/2014-12/2017, Tallinn University of Technology (Estonia) (completed with flying colours) {1}.
- 10. Fabiana Riparbelli, "The large roof structures made of small sawn timber members. Computational models for the gridshells", 1/2014-12/2016, University of Roma Tre (Italy) (completed with flying colours).
- 9. Flavio Wanninger, "Post-tensioned timber frame structures", 1/2012-8/2015, ETH Zurich (Switzerland) (completed with flying colours) {1}.
- 8. Nor Hayati Abd. Ghafar, "Dynamic Behaviour of LVL-Concrete Composite Flooring System", 1/2008-12/2014, University of Canterbury (New Zealand) (completed).
- 7. Giovanni Rinaldin, "Modelling and non-linear analysis of masonry and timber structures", 1/2010-12/2012, University of Trieste (Italy) (completed with flying colours) {14}.
- 6. Manoochehr Ardalany, "Analysis and design of laminated veneer lumber beams with holes and reinforcement around the holes", 1/2009-8/2012, University of Canterbury (New Zealand) (completed with flying colours) {6}.
- 5. Gabriela Tlustochowicz, "Stabilising system for multi-storey beam and post timber buildings", 1/2007-12/2011, Lulea University of Technology (Sweden) (completed with flying colours) {2}.
- 4. Elzbieta Lukaszewska, "Development of prefabricated timber-concrete composite floors", 1/2005-9/2009, Lulea University of Technology (Sweden) (completed with flying colours) {5}.
- 3. Lam Giang To, "3D finite element modelling of time-dependent behaviour of wood-concrete composite beams", 1/2006-12/2008, Colorado State University (USA) (completed with flying colours) {2}.

- 2. Isaia Clemente, "Steel and steel-concrete frames with partially-restrained connections subjected to seismic loads", 1/2002-12/2004, University of Trieste (Italy) (completed with flying colours) (in Italian) {7}.
- 1. Lorenzo Macorini, "Analysis of steel-concrete composite beams at strength and serviceability limit states", 1/2001-12/2003, University of Trieste (Italy) (completed with flying colours) (in Italian) {9}.

Associate supervisor of Master students

1. O'Neill, J.W. (2010). "The fire performance of timber-concrete composite floors." Main Supervisor: A. Buchanan. Master of Engineering in Fire Engineering, University of Canterbury (New Zealand).

Main supervisor of undergraduate students

- 23. Pecoraro, A. (Academic Year 2017-18). "Fibre modelling of reinforced concrete shear walls in OpenSees." Supervisor: M. Fragiacomo. Co-supervisor V. Rinaldi. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 22. Bizzarri, L. (Academic Year 2017-18). "Degradation of reinforce concrete structures: the carbonation." Supervisor: M. Fragiacomo. Co-supervisor V. Rinaldi. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 21. D'Onofrio, F. (Academic Year 2017-18). "Design of a panoramic lookout at the Carlo Franchetti's hut." Supervisor: M. Fragiacomo. Co-supervisors: Prof. P. Rizzi, V. Rinaldi. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 20. De Santis, Y. (Academic Year 2017-18). "Buckling of log-haus walls. FE models for the derivation of design curves, and validation of numerical results against analytical models and experimental tests." Supervisor: M. Fragiacomo. Co-supervisor: M. Sciomenta. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 19. Holzknecht, A. (Academic Year 2017-18). "Evaluation of the behaviour factor of cross-laminated buildings via non-linear dynamic analysis." Supervisors: M. Fragiacomo, G. Rinaldin. Co-supervisors: V. Rinaldi, G. Tamagnone. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 18. Di Marcello, A. (Academic Year 2017-18). "Modelling of reinforced concrete structures strengthened for seismic resistance with innovative techniques." Supervisor: M. Fragiacomo, Co-supervisor: A. Salvatori. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 17. Sette, A. (Academic Year 2017-18). "Definition of an analytical model for Block-haus walls with openings loaded in-plane, and numerical comparison." Supervisor: M. Fragiacomo, Cosupervisor: M. Sciomenta. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 16. Di Diego, B. (Academic Year 2016-17). "Seismic design of X-Lam buildings according to the draft of the new Chapter 8 of Eurocode 8." Supervisor: M. Fragiacomo, Co-supervisor: M. Follesa. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 15. Raggiunti, A. (Academic Year 2016-17). "The new proposal of the European standard about timber-concrete composite structures: critical discussion and application of a case of study." Supervisor: M. Fragiacomo. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 14. Murri, L. (Academic Year 2016-17). "The prestress: design of a precast reinforced concrete beam and viscoelastic analysis." Supervisor: M. Fragiacomo, Co-supervisor: V. Rinaldi. 3-year Thesis, University of L'Aquila (Italy) (in Italian).

- 13. Stracquadaino, A. (Academic Year 2016-17). "Fire resistance of a reinforced concrete building and worked example". Supervisor: M. Fragiacomo. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 12. Rinaldi, V. (Academic Year 2016-17). "Direct Displacement Based Design of hybrid seismic resistant precast concrete moment resisting frames." Supervisor: M. Fragiacomo. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 11. Pesce, V. (Academic Year 2016-17). "Properties and technologies of the FRP composites for the seismic retrofitting". Supervisor: M. Fragiacomo. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 10. Nucatola, G. (Academic Year 2016-17). "Serviceability limit state design of a two-bay, three-storey reinforced concrete frame". Supervisor: M. Fragiacomo. 3-year Thesis, University of L'Aquila (Italy) (in Italian).
- 9. D'Amico, G. (Academic Year 2015-16). "Seismic design of lightframe timber buildings in accordance with the new working draft of Section 8 of Eurocode 8". Supervisor: M. Fragiacomo. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 8. Berardinucci, B. (Academic Year 2015-16). "Mechanical behaviour of timber-concrete joints with inclined metal fasteners". Supervisor: M. Fragiacomo. Co-Supervisors: A. Gregori and S. Di Nino. Diploma Thesis, University of L'Aquila (Italy) (in Italian).
- 7. Fringuello, L. (Academic Year 2010-11). "Design of a fire safety look-out Development of a solution made of locally-grown timber". Supervisors: M. Fragiacomo and A. Lino. Diploma Thesis, University of Sassari (Italy) (in Italian).
- 6. Soddu, S. (Academic Year 2009-10). "Development of a sustainable solution for public housing: from masonry to cross-laminated timber structures." Supervisor: M. Fragiacomo. Diploma Thesis, University of Sassari (Italy) (in Italian).
- 5. Paglia, G. (Academic Year 2009-10). "Opportunities for the production a cross-laminated timber structures in Sardinia." Supervisors: M. Fragiacomo and G. Maciocco. Diploma Thesis, University of Sassari (Italy) (in Italian).
- 4. Davies, M. (2007). "Long term behaviour of prestressed LVL members." Supervisor: M. Fragiacomo. Final year research project, University of Canterbury (New Zealand).
- 3. O'Neill, J. (2007). "Performance of connections for concrete-LVL composite systems." Supervisor: M. Fragiacomo. Final year research project, University of Canterbury (New Zealand).
- 2. Stub, M. (2007). "Fire resistance of bolted and screwed connections in timber structures." Supervisors: M. Fragiacomo, P. Moss. Final year research project, University of Canterbury (New Zealand).
- 1. Pettigrew, T. (2005). "Verification of raker shores constructed with New Zealand timber." Supervisor: M. Fragiacomo. Final year research project, University of Canterbury (New Zealand).

Associate supervisor of undergraduate students

- 49. Elia, P. (Academic Year 2014-15). "Terrestrial laser scanning and structure from motion: comparison between two methods applied to the study of the Santo Stefano Protomartire church in Santo Stefano di Sessanio". Main Supervisor: R. Continenza. Diploma Thesis, University of L'Aquila (Italy).
- 48. Tamagnone, G. (Academic Year 2014-15). "Numerical analysis of X-Lam buildings under

- seismic loads and validation of design procedures." Main Supervisor: B. Chiaia. Diploma Thesis, Technical University of Turin (Italy).
- 47. Tiso, M. (Academic Year 2013-14). "Charring behavior of cross laminated timber with respect to the fire protection; comparison of different methods in small, model and large scale with simulations." Main Supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 46. Lisci, E., and Fadda, G. (Academic Year 2013-14). "The design of the new Rubner exhibition hall: Report of an experimental architectural research." Main Supervisor: Josep Miàs. Diploma Thesis, University of Sassari (Italy) (in Italian).
- 45. Conti, E. (Academic Year 2012-13). "The eco-luxury tourism as a means of landscape exploitation and protection. Design of a luxury eco-lodge for the National Park of La Maddalena, Sardinia (Italy)." Main Supervisor: S. Tischer. Diploma Thesis, University of Sassari (Italy) (in Italian).
- 44. Rigonat, R. (Academic Year 2010-11). "Fire resistance of cross-laminated floor panels: experimental-numerical analysis." Main supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 43. Gratton, P. (Academic Year 2010-11). "Experimental-numerical investigation of the fire resistance of cross-laminated wall panels." Main supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 42. Tononi, D., and Usardi, I. (Academic Year 2009-10). "On the deflection control of timber floors." Main supervisor: E. Giuriani. Diploma Thesis, University of Brescia (Italy).
- 41. Sancin, L. (Academic Year 2009-10). "Seismic analysis of a lightframe multi-storey timber building with and without passive base isolation system." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 40. Goina, M. (Academic Year 2009-10). "Fire resistance of cross-laminated solid wall panels loaded in compression." Main supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 39. Murray, R. (2009). "Fatigue analysis of timber-concrete composite connections." Main supervisor: A. Buchanan. 3rd year research project, University of Canterbury (New Zealand).
- 38. Nielsen, T. M. (2009). "Fire resistance of connections in timber structures." Main supervisor: A. Buchanan. 3rd year research project, University of Canterbury (New Zealand).
- 37. Fiori, S. (Academic Year 2008-09). "Experimental-numerical analysis of crosslam floor panels exposed to fire." Main supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 36. Chaning-Pearce, K. R. (2008). "Dynamic Characteristics of a Timber-Concrete Composite Floor." Main supervisor: B. Deam. 3rd year research project, University of Canterbury (New Zealand).
- 35. Wallington, C. (2008). "Long term deformation of epoxy glued glulam portal frame knee joints." Main supervisor: A. Buchanan. 3rd year research project, University of Canterbury (New Zealand).
- 34. De Franceschi, M. (Academic Year 2007-08). "Experimental behavior of LVL-concrete composite connections." Main supervisor: I. Clemente. Diploma Thesis, University of Trieste (Italy).
- 33. Menis, A. (Academic Year 2007-08). "Numerical and experimental analyses of timber members exposed to fire." Main supervisor: I. Clemente. Diploma Thesis, University of

- Trieste (Italy) (in Italian).
- 32. Smith, T. (2006). "LVL rocking shear walls with external dissipater attachment." Main supervisor: S. Pampanin. 3rd year research project, University of Canterbury (New Zealand).
- 31. Grohe, R. (Academic Year 2005-06). "Comparison of different design methods for timber-concrete composite systems." Main supervisors: U. Kuhlmann and J. Schänzlin. Diploma Thesis, University of Stuttgart (Germany).
- Soddu, S. (Academic Year 2005-06). "Evolution of Japanese domestic architecture: from underground house to the Nagakin capsule tower apartment block." – Main supervisor: P. Rizzi. 3rd year Thesis, University of Sassari (Italy) (in Italian).
- 29. Moschino, D. (Academic Year 2004-05). "Probabilistic analysis of steel-concrete composite frames in earthquake-prone areas." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 28. Predetto Bonvecchio, G. (Academic Year 2003-04) "Church in Val Visdende (province of Belluno, Italy): architectural and structural design." Main supervisor: F. Benussi. 3rd year Thesis, University of Trieste (Italy) (in Italian).
- 27. Pasticier, L. (Academic Year 2003-04). "Non-linear analysis of a masonry building in seismic area." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 26. Lucia, P. (Academic Year 2003-04). "Structural optimization of a steel-to-glass vault roof using evolutionary multi-objective algorithms." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 25. Ferro, D. (Academic Year 2003-04). "Analysis and cyclic modelling of steel-concrete composite beam-to-column connections." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 24. Pavan, T. (Academic Year 2002-03). "Modelling of partially restrained steel and steel-concrete composite beam-to-column connections using the component method and the Adaptic FE code." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 23. Zanchin, M. (Academic Year 2002-03). "Analysis of shape-resistant steel-to-glass vault roof structures." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 22. Sandri, C. (Academic Year 2002-03). "Laboratory tests and numerical modelling of steel-to-glass connections" Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 21. Zidarič, I. (Academic Year 2002-2003). "Numerical-experimental behaviour of timber-concrete composite beams at strength limit state." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 20. Nogarol, C. (Academic Year 2002-2003). "Numerical-experimental time-dependent behaviour of timber-concrete composite floors." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 19. Bincoletto, G. (Academic Year 2002-2003). "Evaluation of the moment plastic redistribution domain for steel-concrete composite beams." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 18. Pasquale, D. (Academic Year 2001-2002). "Seismic behaviour of partially restrained steel frames." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in

- Italian).
- 17. Padovan, M. (Academic Year 2001-2002). "Refurbishing the storehouse-silo in Trieste (Italy): analysis of the structural problems." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 16. Fedrigo, C. (Academic Year 2001-2002). "Experimental evaluation of the effective width of steel-concrete composite beams." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 15. Bittesnich, E. (Academic Year 2001-2002). "Storehouse No. 26 in the old harbour of Trieste (Italy): investigation of the structural behaviour of the existing steel and reinforced concrete floors." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 14. Rorato, F. (Academic Year 2000-2001). "Experimental-analytical investigation of timber-concrete composite floors." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 13. Petrovich, F. (Academic Year 1999-2000). "Performance of partially restrained steel frames under repeated earthquake ground motions." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 12. Calzi, S. (Academic Year 1999-2000). "Short- and long-term behaviour of continuous steel-concrete composite beams at serviceability limit state." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 11. Kliman, I. (Academic Year 1999-2000). "Performance of steel structures under repeated earthquake ground motions." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 10. Pozzetto, O. (Academic Year 1999-2000). "Effect of time-dependent phenomena on the behavior of timber-concrete composite beams." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 9. Cimadom, F. (Academic Year 1999-2000). "Passive protection of structures in earthquake-prone regions." Main supervisor: S. Rajgelj. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 8. Berardinucci, M. (Academic Year 1999-2000). "Durability and strengthening of normal and high-performance concrete structures." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 7. Barazza, G. (Academic Year 1999-2000). "Design of a road tunnel for by-passing the historical center of Muggia (province of Trieste, Italy)." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 6. Fedrigo, F. (Academic Year 1999-2000). "Behaviour of timber-concrete composite beams at serviceability limit state." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 5. Ussai, D. (Academic Year 1999-2000). "Refurbishment of 'Villa Ritter' in Gorizia (Italy) for a special service school." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 4. Basilisco, G. (Academic Year 1998-1999). "The civic library of Trieste (Italy): refurbishment and fire design." Main supervisor: F. Benussi. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 3. Macorini, L. (Academic Year 1998-1999). "Short- and long-term analyses of steel-concrete composite beams in cracked phase." Main supervisor: C. Amadio. Diploma Thesis, University

- of Trieste (Italy) (in Italian).
- 2. Scarabelli, F. (Academic Year 1998-1999). "Influence of repeated earthquake ground motions on the performance of structures." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).
- 1. Altinier, T. (Academic Year 1996-1997). "Time-dependent analysis of steel-concrete composite beams using the Age-Adjusted Effective Modulus Method." Main supervisor: C. Amadio. Diploma Thesis, University of Trieste (Italy) (in Italian).

Member of University, Professional, Master and PhD examination panels

- External examiner of the PhD Thesis "Seismic response of multi-storey cross-laminated timber buildings" by Cagatay Demirci, Imperial College of London, UK, 2019.
- External examiner of the PhD Thesis "Structural analysis and design of timber light-frame shear walls" by Giorgia Di Gangi, University of Roma "La Sapeinza", Italy, 2019.
- Co-examiner of the PhD Thesis "Post-Tensioned Timber Frames under Wind and Seismic Loading" by Jelena Ogrizovic, ETH Zurich, Switzerland, 2018.
- Member of the panel for the selection of a Fixed term researcher (RTDB) in Structural Engineering at the University G. d'Annunzio of Chieti-Pescara, Italy, 2018.
- Member of the panel for the selection of a Fixed term researcher (RTDA) in Structural Engineering at the University of Roma Tre, Italy, 2018.
- Member of the panel for the PhD final exam in "Science and Technology: Computer Sciences", XXX Cycles, University of Camerino, 07/05/2018, Dr. Scozzese – Ph.D. Thesis entitled: "An efficient probabilistic framework for seismic risk analysis of structural systems equipped with linear and nonlinear viscous dampers".
- Member of the panel for the selection of a Full Professor in Structural Engineering at the Technical University of Turin, Italy, 2017-2018.
- External Reviewer for the Italian National Habilitation 2016 Examination Sector 07/B2 Science and Technology of Arboreal and Forest Systems Scientific Sector AGR/06: Wood Technology and Forest Utilization ("Revisore esterno ai fini della formulazione dei pareri proveritate per i candidati all'Abilitazione Scientifica Nazionale Italiana del 2016-2018 Settore concorsuale 07/B2: Scienze e Tecnologie dei Sistemi Arborei e Forestali Settore Scientifico-Disciplinare AGR/06: Tecnologia del Legno e Utilizzazioni Forestali").
- External examiner of the PhD Thesis "A temperature controlled semi-active tuned mass damper using shape memory alloy for vibration reduction applications" by Haoyu Huang, University of Bath, UK, 2017.
- External examiner of the PhD Thesis "Development of steel-timber composite system for large scale construction" by Amirhossein Hassanieh, The University of New South Wales, Australia, 2017.
- External examiner of the PhD Thesis "Nonlinear numerical approach to the analysis of Cross-Laminated Timber" by Agnese Scalbi, Technical University of Ancona, Italy, 2017.
- Member of the panel for the selection of an Associate Professor in Structural Engineering at the University La Sapienza of Rome, Italy, 2016.
- External examiner of the PhD Thesis "Displacement-based seismic design for multi-storey cross laminated timber buildings" by Johannes Hummel, University of Kassel, Germany, 2016.

- Member of the panel for the PhD final exam in "Structural and Geotechnical Engineering", XXVIII Cycles, University of Roma La Sapienza, 26/02/2016, Dr. Gaetani PhD Thesis entitled: "Seismic performance of masonry cross vaults: Learning from historical developments and experimental Testing".
- External examiner of the PhD Thesis "Insight into seismic behaviour of timber shear-wall systems" by Davide Trutalli, University of Padua, Italy, 2016.
- External examiner of the PhD Thesis "Seismic design of low-damage post-tensioned timber wall systems" by Francesco Sarti, University of Canterbury, New Zealand, November 2015.
- Faculty opponent/external examiner of the PhD Thesis "Aspects of mechanically jointed prefabricated composite floors elements with Cross Laminated Timber" by Nicolas Jacquier, Lulea University of Technology, Sweden, 7/5/2015.
- Member of the panel for the exam of qualification to practice the profession of architect, landscape designer and urban planner, Province of Sassari, Italy, June and November 2014.
- External examiner of the PhD "Thin-topping timber concrete composites" by Jonathan Skinner, University of Bath, UK, 2014.
- External examiner of the Master of Engineering in Fire Engineering "Charring Rates for Different Cross Sections of Laminated Veneer Lumber (LVL)" by Wey Heng (Kevin) Tsai, University of Canterbury, Christchurch, New Zealand, 2010.
- Member of the panel for the exam of qualification to practice the profession of engineer, Province of Trieste, Italy, November 2010.
- Member of the panel for the PhD final exam in "Modelling, Preservation and Control of Structures and Materials" and "Structural Engineering: Modelling, Preservation and Control of Structures and Materials", University of Trento, 20-21/3/2009.

SCHOLARLY ACTIVITIES AND ORGANIZATION OF CONFERENCES AND PROFESSIONAL COURSES

Reviewer activity

- Certificate of Outstanding Contribution in Reviewing awarded in February 2017 by Elsevier in recognition of the contributions made to the quality of the Engineering Structures Journal.
- Certificate of Outstanding Contribution in Reviewing awarded in July 2017 by Elsevier in recognition of the contributions made to the quality of the Fire Safety Journal.
- For international journals (177 papers): ASCE Journal of Structural Engineering (19 papers), ASCE Journal of Engineering Mechanics (2 papers), Earthquake Engineering and Structural Dynamics (7 papers), Engineering Structures (43 papers), ASCE Journal of Bridge Engineering (4 papers), ASCE Journal of Performance of Constructed Facilities (3 papers), Structural Engineering & Mechanics (5 papers), Material and Structures (6 papers), Journal of Mechanical Sciences (1 paper), Structures and Buildings (10 papers), Steel and Composite Structures (4 papers), Structural Engineering International (5 papers), Journal of Structural Fire Engineering (8 papers), Fire Safety Journal (3 papers), Fire and Materials (1 paper), Wood and Fiber Science Journal (2 papers), Construction and Building Materials (10 papers), Proceedings of the Institution of Civil Engineers (2 papers), Earthquake Spectra (4 papers), Journal of Earthquake Engineering (5 papers), Earthquakes and Structures (2 papers), European Journal of Wood and Wood Products (3 papers), Wood and Fiber Science Journal (2 papers), Fire Technology (2 papers), International Journal of Adhesion and Adhesives (1 paper), Computers and Structures

- (1 paper), Composite Structures (1 paper), Composites Part B: Engineering (1 paper), The Structural Design of Tall and Special Buildings (1 paper), ASCE Journal of Materials in Civil Engineering (1 paper), Construction Materials (1 paper), Structural Control and Health Monitoring (1 paper), Journal of Civil Structural Health Monitoring (1 paper), Journal of Civil Engineering and Architecture (2 papers), International Wood Products Journal (1 paper), The Scientific World Journal (1 paper), Chinese Journal of Engineering (1 paper), Journal of Traffic and Transportation Engineering (1 paper), Advances in Civil Engineering (2 papers), Experimental Techniques (1 paper), Australian Journal of Structural Engineering (1 paper), Journal of Solids and Structures (1 paper), Civil and Environmental Engineering (1 paper), Journal of Mechanics of Materials and Structures (1 paper), New Zealand Timber Design Journal (2 papers), Journal of Civil Engineering and Management Vilnius Gediminas Technical University (1 paper).
- For international conferences (259 abstracts and papers): 6th International Network for Timber Engineering Research INTER 2019 (abstract selection: 19 papers); 3rd International Conference on Civil. Structural and Transportation Engineering (ICCSTE'19) (4 papers); 5th International Conference on Structural Health Assessment of Timber Structures SHATIS 2019 (abstract selection: 7 papers); First South Asia Conference on Earthquake Engineering (SACEE'19) (abstract selection: 5 papers; paper selection: 3 papers); 5th International Network for Timber Engineering Research INTER 2018 (abstract selection: 19 papers); Structures in Fire Conference SiF 18 (abstract selection - 6 papers); 4th International Network for Timber Engineering Research INTER 2017 (abstract selection: 16 papers); The 2017 Global Conference on Polymer and Composite Materials (PCM 2017) (1 abstract); 3rd International Network for Timber Engineering Research INTER 2016 (abstract selection: 15 papers); 2nd International Conference on Civil, Structural and Transportation Engineering (ICCSTE'16) (3 papers); Structures in Fire Conference SiF 16 (abstract selection - 12 papers); The 2nd International Conference on Historic Earthquake-Resistant Timber Frames in the Mediterranean Area (EaRT 2015) (3 papers and 4 abstracts); The 4th International Conference on Civil Engineering and Urban Planning (CEUP2015) (2 papers); 2nd International Symposium Advances in Civil and Infrastructure Engineering ACE 2015 (4 papers); IASS Working Groups 12 + 18 International Colloquium 2015 (6 abstracts and 5 full papers); 2nd International Network for Timber Engineering Research INTER 2015 (abstract selection: 19 papers); Conference Structures in Fire Conference SiF 14 (abstract selection - 10 papers); World Conference on Timber Engineering WCTE 2014 (abstract selection – 15 papers); Meeting forty-five of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation (abstract selection - 14 papers); Structures in Fire Conference SiF 12 (abstract selection - 13 papers); World Conference on Timber Engineering WCTE 2012 (abstract selection - 38 papers); World Conference on Timber Engineering WCTE 2010 (abstract selection - 18 papers): 21st Australasian Conference on the Mechanics of Structures & Materials ACMSM21, Melbourne (Australia) (2 papers); 19th Australasian Conference on the Mechanics of Structures & Materials, Christchurch (New Zealand) (4 papers).
- For non-Italian funding organizations (14 research reports and proposals): Mountain Plains Consortium A University Transportation Center of the U.S. Department of Transportation, Colorado, USA (3 independent reports on research funded by this organization, and 3 research funds applications); Estonian Science Foundation postdoctoral research proposal (1); Natural Sciences and Engineering Research Council of Canada, Discovery Grants Program (1 research proposal); Ministry of Education of Greece, Research program "Archimedes III" 'Enhancement of Research Groups at the Technological Educational Institutes of Greece" (1 preliminary proposal); the Portuguese Foundation for Science and Technology (2 final proposals); Czech Science Foundation (1 final proposal); Swiss National Science Foundation (1 final proposal);

- For Italian funding organizations (4 research proposals): Italian Ministry of University Future for the Research FIR 2013 (Pre-selection of 1 Research Proposal); Italian Ministry of University Scientific Independence of young Researchers Programme SIR (Pre-selection of 2 Research Proposals); University of Catania Future for the Research FIR 2014 (Selection of 1 Research Proposal).
- For books: Timber Design Guide, Third Edition, edited by Prof. Andy Buchanan, published by New Zealand Timber Industry Federation Inc. (Chapter 16 "Timber beams" and Chapter 17 "Timber columns").
- For the Italian Research Quality Assessment (VQR) period 2004-2010: 9 papers period 2011-2014: 7 papers.
- External reviewer of Italian Master Thesis: 2 Theses.

Member of journal editorial boards

- Member of the Editorial Board of the Journal of Architectural Heritage: Conservation, Analysis, and Restoration, since 3/2019.
- Associate Editor, Wood Structures, ASCE Journal of Structural Engineering, from 12/2018.
- Member of the Editorial Board of the Journal of Engineering, Civil Engineering Section, Hindawi, from 2018.
- Member of the Editorial Board of the European Journal of Wood and Wood Products, Springer, from 2017.
- Member of the Editorial Board of the Wood and Fiber Science Journal, The Sheridan Press, from 2017.
- Guest Editor, together with Dr. Barros, H., Adam, J.M., Ferreira, C., Loja, A., Infante Barbosa, J., and Nuno Silvestre, N., of the special issue "Structures Rehabilitation" of Engineering Structures, Vol. 129, 2016.
- Guest Editor, together with Prof. John van de Lindt (Colorado State University), of the special issue 'Seismic Resistant Timber Structures' of the ASCE Journal of Structural Engineering, Vol. 142 No. 4, 2016.
- Member of the Editorial Board of Engineering Structures, Elsevier, from 2014.
- Member of the Editorial Board of The Scientific World Journal, Civil Engineering Section, Hindawi, from 2013 to 2018.
- Member of the Editorial Board of the Chinese Journal of Engineering, Civil Engineering Section, Hindawi, from 2013 to 2018.
- Member of the Editorial Board of the Structural Engineering and Mechanics International Journal, Technopress, from 2013.
- Member of the Editorial Board of the Journal of Civil Engineering and Architecture, David Publishing Company, from 2012.
- Member of the Editorial Board of the Journal of Structural Fire Engineering, Multi-science Publishing Company, from 2009.
- Member of the Peer Review Committee of the New Zealand Timber Design Journal from 2007.

Member of conference scientific committees

- Member of the Scientific Committee of the 4th International Conference on Civil, Structural and Transportation Engineering ICCSTE'19, Ottawa (Canada), June 11-12, 2019.
- Member of the Scientific Committee of the 5th International Conference on Structural Health Assessment of Timber Structures, SHATIS 2019, Guimarães (Portugal), September 25-27, 2019.
- Member of the International Scientific Committee of the First South Asia Conference on Earthquake Enineering (SACEE'19), Karachi (Pakistan), February 21-22, 2019.
- Member of the International Scientific Committee of the 3rd International Conference on Protection of Historical Constructions, PROHITECH'17, Instituto Superior Técnico, Universidade de Lisboa, Lisbon (Portugal), July 12-15, 2017.
- Member of the Scientific Committee of the 1st International Conference on Construction Materials for Sustainable Future, COMS 2017, Zadar (Croatia), April 19 21, 2017.
- Member of the Scientific Committee of the 2nd International Conference on Civil, Structural and Transportation Engineering ICCSTE'16, Ottawa (Canada), May 2016.
- Member of the International Advisory Board of the 14th World Conference on Timber Engineering WCTE 2016, Vienna, Austria, August 22-25, 2016.
- Member of the International Scientific Committee for the 8th International Conference on Wood and Fire Safety 2016, Hotel Patria, Strbske Pleso (Slovakia), May 8-12, 2016.
- Member of The OpenSees Days Committee since 2014.
- Member of the Organizing and Scientific Committee for the International Conference on Recent Advances in Rehabilitation and Sustainability of Structures RehabStructures 2015, Azores (Portugal), June 01-02, 2015.
- Member of the Scientific Committee of the International Conference on Civil, Structural and Transportation Engineering ICCSTE'15, Ottawa (Canada), May 4-5, 2015.
- Member of the International Scientific Committee for the IASS Working Groups 12-18 International Colloquium on Bio-based and Bio-inspired Environmentally Compatible Structures, Tokyo (Japan), April 9-13, 2015.
- Member of the Scientific Committee for the SAIE construction fair, Bologna (Italy), 2013.
- Member of the Scientific Committee for the 'Italian Forum of Structural Design', MADE expo construction fair, Milano (Italy) from 2011 to 2012.
- Member of the International Panel of Reviewers for the 13th World Conference of Timber Engineering WCTE 2014, Quebec City (Canada), August 10 14, 2014.
- Member of the Scientific Committee for the 8th International Conference on Structures in Fire SiF2014, Tongji University, Shanghai (China), June 11 − 13, 2014.
- Member of the Program Committee of the 3rd International Conference on Civil Engineering and Urban Planning CEUP2013, Wuhan (China), November 20 22, 2013.
- Member of the International Advisory Board for the RILEM Conference 'Materials and Joints in Timber Structures – Recent Advancement of Technology', University of Stuttgart, Materials Testing Institute (MPA), Otto-Graf-Institute and Department of Construction Materials, Stuttgart (Germany), October 08 – 10, 2013.

- Member of the International Scientific Committee for the 12th World Conference of Timber Engineering WCTE 2012, Auckland (New Zealand), July 16 19, 2012.
- Member of the Scientific Committee for the 7th International Conference on Structures in Fire SiF2012, ETH Zurich (Switzerland), June 6 − 8, 2012.
- Member of the International Scientific Committee for the 7th International Conference on Wood and Fire Safety, Hotel Patria, Strbske Pleso, Slovakia, May 13-16, 2012.
- Member of the International Scientific Committee for the Structural Engineers World Conference SEWC 2011, Como (Italy), April 4-6, 2011, and co-organizer of the Special Session "Design of innovative solutions for timber structures".
- Member of the Conference Advisory Committee for the 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda, Trentino (Italy), June 20-24, 2010.
- Member of the International Scientific Committee for the International Symposium "Timber Structures from Antiquity to the Present", Istanbul (Turkey), June 25-27, 2009.
- Member of the organizing committee of the 6th Workshop on Composite Constructions, Trieste (Italy), November 22-23, 2004.
- Secretary of the Meeting 34 of the Working Commission W18 Timber Structures, International Council for research and Innovation in Building and Construction (CIB), Venice, August 22-24, 2001.

Moderator and chairman of national and international conferences

- Moderator of the special session "Seismic design and behaviour of innovative timber systems" by M. Fragiacomo, J. van de Lindt, H. Isoda, 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016.
- Moderator of the special session "Fire safety of structures made of timber and other bio-based products COST Action FP1404" by J. Schmid, M. Fragiacomo, S. Craft, K. Kagiya, 14th World Conference on Timber Engineering WCTE 2016, Vienna (Austria), August 22-25, 2016.
- Moderator of the sessions "H-Traditional and Innovative Materials", "C-Design Methods and Structural Analysis" and "F-Timber Construction", 16th ANIDIS (Italian National Association of Seismic Engineering) Conference, L'Aquila (Italy), September 13-16, 2015.
- Moderator of the session "Hybrid building systems", 13th World Conference on Timber Engineering WCTE 2014, Quebec City (Canada), August 10-14, 2014.
- Moderator of the session "Timber and Concrete/Cement/Polymer Composites 2", RILEM Conference "Materials and Joints in Timber Structures Recent Advancement of Technology", October 08 10, 2013, Stuttgart (Germany).
- Moderator of the sessions "Timber Construction" and "Technical Regulation for Construction, and Passive Base Isolation", 15th ANIDIS (Italian National Association of Seismic Engineering) Conference, Padova (Italy), July 1-4, 2013.
- Moderator of the session "DS 38a: Innovative Seismic Resistant Systems for Multi-Storey Timber Buildings", 15th World Conference on Earthquake Engineering 15WCEE, Lisbon (Portugal), September 24-28, 2012.
- Moderator of the session "b1 Vulnerability and seismic hazard", 14th ANIDIS (Italian National Association of Seismic Engineering) Conference, Bari (Italy), September 18-22, 2011.

- Moderator of the sessions "Wood Structures 1" and "Wood Structures 2", Structural Engineers World Conference SEWC 2011, Como (Italy), April 4-6, 2011.
- Moderator of the session "Mechanical Modelling 4", 11th World Conference on Timber Engineering WCTE 2010, Riva del Garda (Italy), June 20-24, 2010.
- Moderator of the session "Fire I", 10th World Conference on Timber Engineering WCTE 2008, Myazaki (Japan), June 2-5, 2008.
- Moderator of the session "Seismic Frames and Fire", Pacific Structural Steel Conference 2007
 "Steel Structures in Natural Hazards", Wairakei, New Zealand, March 13-16, 2007
- Moderator of the session "Timber Engineering", 19th Australasian Conference on the Mechanics of Structures & Materials, Christchurch (New Zealand), Nov. 29-Dec. 1, 2006.
- Moderator of the session "Architecture III", 9th World Conference on Timber Engineering WCTE 2006, Portland (U.S.A.), August 6-10, 2006.

Organization of conferences, seminars and professional courses

- Host of the Annual Management Committee Meeting of COST Action FP 1404 "Fire safe use of Bio-Based Building products", L'Aquila (Italy), January 31st- February 2nd, 2018.
- Course coordinator, Professional Training course "Retrofit techniques of existing timber structures, and design of timber and timber-concrete composite structures", Trieste, 25-26 January 2018, 8 hours on timber engineering offered to practicing engineers of the Province of Trieste (Italy).
- Co-organizer of the Seminar for continuing professional development and for the students: "Reconstruction: Planning and revitalizing after an earthquake. Comparing the cases of the Umbria, L'Aquila and Emilia with the most recent Japanese experiences." L'Aquila, 25th February 2016.
- Professional course for students and practicing architects "The Principles of Timber Engineering - for Architects", by Richard Harris, 1-month Visiting Researcher at the University of Sassari, and Massimo Fragiacomo, on June 8-9, 2015, in Alghero (Italy).
- Course coordinator, Professional Training course "Retrofit techniques of existing timber structures, and design of timber and timber-concrete composite structures", Gorizia, 27-28 March 2015, 8 hours on timber engineering offered to practicing engineers of the Province of Gorizia (Italy).
- Course coordinator, Professional Training course "Cycle of seminars on timber structures", Jesi, 2-3 and 9-10 October 2014, 32 hours on timber engineering offered to practicing engineers of the Province of Ancona (Italy).
- Professional course for students and practicing engineers and architects "Masonry Construction", by Linda Giresini, Ph.D. student at the University of Pisa, on April 11-13, 2013, in Alghero (Italy).
- Organizer of the First Sino-Italian Workshop "Advance in Timber Engineering", November 9-10, 2012, Shanghai (China).
- Seminar for the profession "Design of timber structures in accordance with the new version of the technical regulations for construction" within the MADE expo fair, Milan, October 19, 2012.

- Professional course for students and practicing engineers and architects "Solid Timber Construction", by Gerhard Schickhofer, 20-day Visiting Professor at the University of Sassari, Stephen John, and Andreas Ringhofer, on May 3-5, 2012, in Alghero (Italy).
- Course coordinator, Advanced Professional Training course "Design and execution of timber structures in accordance with the new regulations", International Centre for Mechanical Sciences CISM, Udine, 9-10 and 16-17 March 2012.
- Seminar for the profession "Design of large span single-storey buildings made of glulam" within the MADE expo fair, Milan, October 6, 2011.
- Professional course for students and practicing engineers and architects "Design of timber structures according to Eurocode 5", by Hans Larsen, 20-day Visiting Professor at the University of Sassari, and Massimo Fragiacomo, on September 2-5, 2011, in Alghero (Italy).
- Host of the meeting forty-four of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation, Alghero (Italy), August 28-Sept.1, 2011.
- Professional course for students and practicing engineers and architects "Use of timber as a construction material", by Andrè Jorissen, 20-day Visiting Professor at the University of Sassari, Giorgio Bignotti, Angelo M. Marchetti, Gabriela Tlustochowicz, and Massimo Fragiacomo, on October 14-16, 2010, in Alghero (Italy).
- Course coordinator, together with Prof. B. De Nicolo, of the Professional training course "Structures and infrastructures of civil engineering", Sassari, March-December 2010, about 120 hours in several modules offered to practicing architects and civil engineers of the Province of Sassari (Sardinia, Italy).
- Professional course for students and practicing engineers and architects "Use of timber as a construction material", by Ian Smith, 10-day Visiting Professor at the University of Sassari, Andrè Jorissen, Giorgio Bignotti and Massimo Fragiacomo, on May 13-15, 2010, in Alghero (Italy).
- Course coordinator, Advanced Professional Training course "Timber structures: design and innovation solutions", International Centre for Mechanical Sciences CISM, Udine, 29-31 October 2009.
- Professional course for students and practicing engineers and architects "A short course in timber structures" by Hank Bier, 40-day Visiting Professor at the University of Sassari, and Massimo Fragiacomo, on October 22-24, 2009, in Alghero (Italy).
- Professional course for students and practicing engineers and architects "Use of timber in architecture" by Julius Natterer, Professor of Timber Engineering, University of Lausanne, Switzerland, 20-day Visiting Professor at the University of Sassari, and Richard Gutkowski, Professor of Civil Engineering, Colorado State University, Fort Collins, USA, 10-day Visiting Professor at the University of Sassari, on May 28-30, 2009, in Alghero (Italy).
- Course coordinator for the professional course "Structural Design of Timber and Composite Floor" for practising engineers and architects, organized by the Institution of Professional Engineers of New Zealand and by the New Zealand Timber Design Society, Auckland (New Zealand), February 4, 2009.
- Professional course for students and practicing engineers and architects "Bridges and viaducts: form and structure. Conceptual design, diagnostic, management, and rehabilitation" by Enzo Siviero, Professor of Structural Design, University of Venice, Italy; Tobia Zordan, Visiting Professor, Tongji University, China; and Bruno Briseghella, Visiting Professor, Fuzhou University, China, on October 3 and 4, 2008, in Alghero (Italy).

- Seminar for students and practicing engineers "Timber and composite floors: traditional and innovative solutions" by Massimo Fragiacomo; Nor Hayati Abd. Ghafar, Lecturer at Kolej Universiti Teknologi Tun Hussien Onn, Malaysia; and Elzbieta Lukaszewska, PhD Candidate at Luleå University of Technology, Sweden, on October 2, 2008, in Alghero (Italy).
- Seminar for students and practicing engineers and architects "A way to sustainable architecture by new technologies for engineered timber structures" by Julius Natterer, Honorary Professor EPHL, Lausanne (Switzerland), on September 30, 2008, in Alghero (Italy).
- Seminar for students and practicing engineers "Structural fire resistance" by Dr. Jeremy Chang, assistant lecturer at the University of Canterbury, New Zealand, on May 7, 2008, in Alghero (Italy).
- Course coordinator for the professional course "Structural Design of Timber Floors" for practising engineers and architects, organized by the University of Canterbury, Christchurch (New Zealand), July 25-26, 2007.
- Seminar for practicing engineers "Concrete-timber composite floor", by Massimo Fragiacomo and Elzbieta Lukaszewska, PhD Candidate at Luleå University of Technology, Sweden, on November 28, 2006, in Christchurch (New Zealand).

ACTIVITY IN NATIONAL AND INTERNATIONAL WORKING GROUPS, AND MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

Activity as representative in Italian and international committees

- From 2017 to 2019: Member of the Project Team SC8.T2 "Material dependent sections of EN 1998-1" for the revision of the Eurocode 8 Part 1, as an answer to the Mandate M/515 Phase 2.
- From 2015 to 2018: Member of the Project Team SC5.T2 on the preparation of a new Eurocode part on timber-concrete composite, as an answer to the Mandate M/515 Phase 1.
- From 2015 to present: Chairman of the Working Group WG3: "Timber Structures" within CEN/TC 250/SC 8 "Eurocode 8: Design of structures for earthquake resistance".
- From 2014 to 2015: Chairman of the Working Group WG8: "Seismic Resistance" within CEN/TC 250/SC 5 "Eurocode 5: Design of Timber Structures".
- From 2014 to 2018: Italian delegate, member of the Management Committee, and Vice-chairman of the COST Action FP1404 "Fire safe use of bio-based building products".
- From 2014 to 2018: Italian delegate and member of the Management Committee of the COST Action FP1402 "Basis of structural timber design from research to standards".
- From 2014 to present: Member of the Working Group WG2: "Timber-Concrete Composites" within CEN/TC 250/SC 5 "Eurocode 5: Design of Timber Structures".
- 2011: Member of the Italian working group for the preparation of the 'Guidelines for timber buildings with four or more storeys' (Linee Guida per edifici con sistemi costruttivi in legno a 4 o più piani (DPR 380/01 art 52)) and 'Guidelines for evaluating the compliance of timber products and structural systems to the Italian Technical Regulation of Construction' (Linee Guida per la certificazione dell'idoneità tecnica all'impiego di materiali e prodotti innovativi in legno per uso strutturale (DM 14.01.08 Norme Tecniche per le costruzioni, paragrafo 11.1, lettera C)).

- From 2011 to 2015: Italian delegate and member of the Management Committee of the COST Action FP1004 "Enhanced mechanical properties of timber, engineered wood products and timber structures".
- From 2011 to present: Representative for the Timber part (Liaison Officer) within CEN/TC 250/SC 8 "Eurocode 8: Design of structures for earthquake resistance" and the corresponding Italian mirror committee U7308 "Seismic-resistant structures".
- From 2011 to present: Member of the International Working Group "Fire Safe Use of Wood".
- From 2010 to present: Italian delegate within CEN/TC 250/SC 5 "Eurocode 5: Design of Timber Structures" and the corresponding Italian mirror committee U7305 "Timber Structures".
- From 2008 to 2010: Italian delegate and member of the Management Committee of the COST Action E55 "Modelling of the performance of timber structures".
- From 2008 to 2010: Member of the Italian working group "Timber Structures Technical Rules for Construction 2008".
- From 2006 to present: Member of the Working Commission W18-Timber Structures, CIB, International Council for Research and Innovation.
- New Zealand delegate at the meeting Number 025 of the Committee TM-001 "Timber Structures", Australia/New Zealand Standards, Melbourne.
- New Zealand observer for the 19th ISO/TC 165 "Timber Structures" meeting in Rotorua, New Zealand, 1-3/11/2005.
- From 2000 to 2001: Italian delegate for the "Cost Action E5 Timber Frame Building System".

Membership and activities in professional associations

- Member of the New Zealand Timber Design Society during the period 2005-2009, and member of the management committee during the period 2006-2007 No. 1008347.
- Member of the New Zealand Society for Earthquake Engineering Inc., and NZ Structural Engineering Society Inc., from 2005 to 2007 No. 1008347.
- Registered Professional Engineer, Province of Trieste, Italy, since 21/05/1992 No. 1762.

INVITED SPEAKER AT CONFERENCES, SEMINARS AND PROFESSIONAL COURSES Invited speaker at conferences (5)

- Key-note speaker, "A framework for seismic analysis of timber structures", ECCOMAS
 Thematic Conference on "Computational Methods in Wood Mechanics from Material

 Properties to Timber Structures CompWood 2017", Vienna, Austria, June 7-9, 2017.
- Key-note speaker, "Seismic design of cross-laminated timber buildings according to Eurocode 8", 16th International Symposium of the Macedonian Association of Civil Engineers, Ohrid, Macedonia, October 1-3, 2015.
- Key-note speaker, "Innovative uses of Mediterranean wood for products and energy", Scientific Seminar: "Profitable wood production in the Mediterranean: future or fantasy?", EFIMED Week and INFORM-LIFE Final Conference, Kavala, Greece, November 5-7, 2014.
- Invited speaker, "Seismic behaviour of cross-laminated timber buildings: numerical modelling and design provisions", COST Action FP1004 Conference on State-of-the Art in Cross Laminated Timber Manufacture, Design and Use, Graz, Austria, May 21-22, 2013.

• Invited speaker, "Wood-concrete composite beams: new regulations and state-of-the art" at the 6th Workshop on Composite Construction, Trieste (Italy), November 22-23, 2004, organized and coordinated by Prof. C. Amadio.

Invited speaker at seminars, workshops and professional courses (72)

- Seminar "A framework for seismic analysis of timber structures" for postgraduate students and staff members, Imperial College of London, UK, March 7, 2019.
- Lecture on "Seismic design of timber buildings" within the "Continuing professional development course on the new CNR technical document entitled Instructions for design, execution and control of timber structures (Istruzioni per la progettazione, l'esecuzione ed il controllo delle strutture di legno)", Naples, 28 February 2019, offered to practicing engineers.
- Presentation on "The use of timber in architecture" within the Workshop "Development of gluelaminated and cross-laminated products made of local Sardinia wood", Alghero, 21 February 2019, for practings architects, engineers and foresters.
- 4-hour lectures on "Timber Structures" within the course "The New Technical Regulation for Construction NTC2018", Chieti, 22 January 2019, offered to practicing engineers of the Province of Chieti and Pescara (Italy).
- Lecture on "Seismic design of timber buildings" within the "Continuing professional development course on the new CNR technical document entitled Instructions for design, execution and control of timber structures (Istruzioni per la progettazione, l'esecuzione ed il controllo delle strutture di legno)", Bologna, 8 June 2018, offered to practicing engineers.
- 8-hour lectures on "Seismic resistance of timber structures" within the course "Advanced design and analysis of structures for earthquake resistance", Gorizia, 18-19 January 2018, offered to practicing engineers of the Province of Gorizia (Italy).
- 8-hour lectures on "Retrofit techniques of existing timber structures, and design of timber and timber-concrete composite structures", Trieste, 25-26 January 2018, offered to practicing engineers of the Province of Trieste (Italy).
- Presentation on "A framework for non-linear seismic analysis of timber structures", Fuzhou (China), July 1, 2017, within the International Workshop "Holistic Approach to Sustainable New and Existing Structures and Bridges" organized by Fuzhou University.
- Lecture on "Seismic resistant and sustainable timber solutions", Potenza (Italy), April 20, 2016, panel discussion on "Seven years after L'Aquila's earthquake: what has been done and what will be done. Comparison between institutions and enterprises."
- 2-hour lecture on "Structural aspects and seismic design of timber structures", Munich, Germany, April 2, 2016, within the Hochschuldialog mit Südeuropa International Workshop on Traditional and Innovative Approaches in Seismic Design.
- 2-hour lecture on "Design of Timber Structures", Roma, 8 March 2016, as a part of a professional course 'Programme for continuing education development: The Italian technical regulation for construction' offered to practicing engineers of the Province of Rome (Italy).
- 4-hour lecture on "Introduction of timber as a construction material, mechanical and physical properties of timber, and construction systems", Roma, 28 January 2016, as a part of a professional course 'Design of timber structures' offered to practicing engineers of the Province of Rome (Italy).

- 12-hour lecture on "Building with wood and straw Technologies" within the Professional Training course "Eco-friendly solutions for the re-use of the real estate", Sassari, October 21 and 22, 2015.
- 8-hour lectures on "Retrofit techniques of existing timber structures, and design of timber and timber-concrete composite structures", Gorizia, 27-28 March 2015, offered to practicing engineers of the Province of Gorizia (Italy).
- 2-hour lecture on "Mechanical properties of timber and design process of timber structures" within the Professional Training course "Timber buildings in earthquake-prone regions: design and building construction management", Teramo (Italy), 13 November 2014.
- 1-hour lecture on "The use of locally-grown timber in construction: an opportunity of development for Sardinia" within the seminar: "Forestry technology and mechanization: the teaching, needs and research perspectives in Sardinia", Nuoro (Italy), 10 October 2014.
- 4-hour lecture on "Mechanical properties of timber and design process of timber structures" within the Professional Training course "Cycle of seminars on timber structures", Jesi (Italy), 2 October 2014.
- 4-hour lecture on "Timber-timber and timber-concrete composite structures" within the Professional Training course "Cycle of seminars on timber structures", Jesi (Italy), 3 October 2014.
- 12-hours lecture on "Building with wood and straw Technologies" within the Professional Training course "Eco-friendly solutions for the re-use of the real estate", Sassari, July 11, 17 and 18, 2014.
- 3-hours lecture on "Modelling of cross-laminated (X-lam) timber buildings" within the Advanced Professional Training course "Design and modelling of timber buildings", Engineer Professional Association of the Province of Udine (Italy), July 5, 2014.
- Lecture on "Wood as structural material and its performances" for practicing engineers and architects, within the seminar for the profession "High energy-efficient living solutions: Materials, performances and quality for sustainable and safe housing", Campobasso, Italy, January 29, 2014.
- Lecture on "Seismic resistance of tall timber buildings" for practicing engineers and architects, within the seminar for the profession "Wooden skyscrapers", Ljubljana, Slovenia, October 24, 2013.
- Lecture on "Capacity based design of timber buildings" for practicing engineers and architects, within the seminar for the profession "Timber and earthquake: seismic resistance timber buildings", SAIE expo fair, Bologna, Italy, October 16, 2013.
- Lecture on "Construction systems for multi-storey timber buildings: prefabrication and new trends" for practicing engineers and architects, within the seminar for the profession "Multi-storey timber buildings", MADE expo fair, Milan, Italy, October 4, 2013.
- Seminar "Seismic behavior of cross-laminated timber buildings: numerical modeling and design provisions" for undergraduate and postgraduate students, staff members and practising engineers, University of British Columbia, Vancouver, Canada, August 9, 2013.
- Seminar "Wood building systems An international perspective" for undergraduate and postgraduate students, staff members and practising engineers, University of British Columbia, Vancouver, Canada, July 30, 2013.

- Lecture on "Basics of design, the earthquake and the 'Flegrea' region" for practicing engineers and architects, within the seminar for the profession "The new city of the science and the 'Flegrea' region: New timber construction systems and sustainable solutions", Naples, Italy, June 21, 2013.
- Lecture on "Multi-storey timber buildings: seismic resistant and zero kilometers solutions" for practicing engineers and architects, within the seminar for the profession "Design and construction of seismic resistant buildings: technologies, materials and load resisting systems", Smart Village in Tour, Cagliari, March 7, 2013.
- Lecture on "Seismic design of timber structures: ductility, energy dissipation, and overstrength" for practicing engineers, within the seminar for the profession "Design of timber structures in accordance with the new version of the technical regulations for construction", MADE expo fair, Milan, October 19, 2012.
- Seminar "Use of timber in construction" for under-, postgraduate students and staff members, Universiti Tun Hussein Onn Malaysia, May 30, 2012.
- Seminar "Advances in Timber Engineering" for postgraduate students and staff members, Indian Institute of Technology, Kharagpur, February 14, 2012.
- 4-hours lecture on "Timber-timber and timber-concrete composite structures" within the Advanced Professional Training course "Design and execution of timber structures in accordance with the new regulations", International Centre for Mechanical Sciences CISM, Udine, 17 March 2012.
- Lecture on "Seismic and fire resistance of multi-storey timber buildings" as a part of the Italian forum of structural design within the MADE expo fair, Milan, October 7, 2011.
- Lecture on "Innovative systems for multi-storey timber buildings" as a part of the seminar for the profession "Tall dwellings. Energy-efficient multi-storey timber buildings: regulations, design constraints, and feasibility in Italy and abroad" within the MADE expo fair, Milan, October 7, 2011.
- Lecture on "Traditional and innovative structural systems for single-storey timber buildings" as a part of the seminar for the profession "Design of large span single-storey buildings made of glulam" within the MADE expo fair, Milan, October 6, 2011.
- Lecture on "Advanced models for seismic analyses of timber buildings" for practicing engineers within the "Grazer Holzbau-Fachtagung 9. Gra FHT'11", Workshop on crosslam construction, Technical University of Graz, Austria, September 29, 2011.
- Seminar "Seismic behavior of cross-laminated buildings" for postgraduate students and staff,
 University of Canterbury, Christchurch, New Zealand, August 12, 2011.
- Seminar on "Fire behavior of cross-laminated timber panels" for postgraduate students, Master in Fire Engineering, University of Canterbury, Christchurch, New Zealand, July 22, 2011.
- 8-hour lecture on "Limit State Design" within the Professional training course "Structures and infrastructures of civil engineering", Sassari, April 20, 2010.
- 8-hour lecture on "Limit State Design" within the Professional training course "Structures and infrastructures of civil engineering", Sassari, May 6 and 8, 2010.
- 8-hour lecture on "Limit State Design" within the Professional training course "Structures and infrastructures of civil engineering", Olbia, May 7, 2010.
- 8-hour lecture on "Timber Engineering" within the Professional training course "Structures and infrastructures of civil engineering", Cagliari, January 26, 2010.

- Lectures on "Mechanical properties of timber", "Innovative materials. Single-storey timber buildings", and "Multi-storey timber buildings with lightframe and hybrid structure", CISM course "Timber structures: design and innovation solutions", Udine, 29-31 October 2009.
- Seminar entitled "Timber engineering research An international perspective" for postgraduate and staff members, Luleå University of Technology, Sweden, September 29, 2009.
- Seminars entitled "Design of timber connections according to the Eurocode 5" and "Multistorey timber buildings", for practicing engineers and architects, organized by Luleå University of Technology, Sweden, September 28, 2009.
- Seminar entitled "Development of sustainable buildings using locally grown timber" for postgraduate students and practicing engineers, organized by the Forestry Association of Sardinia, Cagliari (Italy), April 17, 2009.
- Seminar entitled "Progress of construction techniques in timber engineering" for undergraduate, postgraduate students and practicing engineers organized by the University of Brescia (Italy), March 18, 2009.
- Seminar entitled "Use of timber in architecture" for postgraduate students organized by the University of Tokyo, Tokyo (Japan), December 10, 2008.
- Lectures on "Seismic timber design" and "Floor timber design" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Tauranga, July 23, 2008 (New Zealand).
- Lectures on "Seismic timber design" and "Floor timber design" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Napier, July 24, 2008 (New Zealand).
- Seminar entitled "Use of timber in construction" for students, practicing engineers and architects organized by the University of Cagliari (Italy), April 21, 2008.
- Lecture on "Innovative multi-storey timber buildings" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Wellington, November 22, 2007 (New Zealand).
- Lecture on "Innovative multi-storey timber buildings" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Christchurch, November 23, 2007 (New Zealand).
- Lecture on "Concrete-timber composite floors" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Rotorua, July 5, 2007 (New Zealand).
- Lecture on "Concrete-timber composite floors" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Auckland, July 4, 2007 (New Zealand).
- Lecture on "Concrete-timber composite floors" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Wellington, November 15, 2006 (New Zealand).
- Lecture on "Concrete-timber composite floors" at the Timber Design Seminars for practicing engineers and architects organized by the New Zealand Timber Design Society in Christchurch, November 16, 2006 (New Zealand).

- Seminar "A finite element model for collapse and long-term analysis of wood-concrete composite beams" organized by Prof. Gutkowski for postgraduate students at Colorado State University, Fort Collins, Colorado, USA on May 28-29, 2007.
- Seminar entitled "Timber buildings" for practicing engineers and architects organized by the University of Ljubljana (Slovenia), February 1, 2007.
- Seminar entitled "Timber buildings" for practicing engineers and architects organized by the University of Sassari (Italy), January 24, 2007.
- Seminar on "Concrete-timber composite floors" for practicing engineers on November 28, 2006 in Christchurch (New Zealand).
- Two lectures at the Workshop for practicing engineers and architects "Developments in Wood-Concrete Bridge Construction", organized by Prof. Gutkowski and sponsored by the Mountain Plains Consortium A University Transportation Center of the U.S. Department of Transportation, August 14-15, 2006, Colorado State University, Fort Collins, Colorado, USA.
- Seminar on "Buildings with timber structures" for undergraduate and postgraduate students at the University on Naples "Federico II" (Italy), April 28, 2006.
- Seminar on "How to build with timber" for students and practicing engineers and architects at the University of Trieste (Italy), April 21, 2006.
- Seminar on "Use of timber and engineered materials for multi-storey buildings" for postgraduate students at the University of Ljubljana (Slovenia), April 14, 2006.
- Seminar on "Seismic resistant multi-storey timber buildings" at IVALSA Trees and Timber Institute, CNR, San Michele all'Adige (Italy), April 10, 2006.
- Lecture on "Using LVL in multi-level building and flooring" at the Workshop on "Strategies for Growing High Wood Quality Trees and, Processing and Utilisation of Wood Products", Wood Technology Research Centre, University of Canterbury, Christchurch (New Zealand), February 2, 2006, organized by Prof. Shusheng Pang.
- Lecture on "Wood-concrete composite beams: issues under research" at the 1st Workshop on "Wood-Concrete Composite Structures", Innsbruck (Austria), October 1, 2004, organized and coordinated by Prof. M. Flach.
- Lecture on "Modelling of timber-concrete floor structures", Workshop "Seismic behaviour of timber buildings. Timber construction in the new millennium" held in Venice, September 28-29, 2000 organized and coordinated by A. Ceccotti and S. Thelandersson.

