

PERSONAL INFORMATION

Lavinia Chiara Tagliabue



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Gender F | Date of birth | Nationality Italian

PROFESSIONAL EXPERIENCE

- Her professional experience started in 2003 with the participation as energy consulting for several projects, among which the evaluation of the energy-environmental performance of Department B11 for Parco Farnese, Parma, Pizzarotti client (2003-2004) and for the Borgo Solare settlement in Ferrara (2003-2004) with the Politecnico di Milano; she has worked as Works Supervisor of the Solarized Roofing at the Regional Hotel Training Centre of Casargo, Piasco, Lecco (2003-2005) for the Municipality of Casargo, Lecco, Italy. The most recent activities have been carried out in the field of energy efficiency and photovoltaic plant design with methodological and technological analyses for the energy retrofit of existing buildings. Below are some experiences from 2010 to 2016.

2018-2019 Reinventing Cities C40 energy and environmental expert

Studio Consalez-Rossi & Borio-Mangiarotti construction company

Design and strategies for energy efficiency, resilience, sustainability towards carbon zero buildings for C40 contest in Milan area, dynamic simulation evaluations, BiPV, LEED evaluation, Embodied Energy and LCA, water saving.

[Activity or sector](#) energy efficiency, Building Energy Modelling, BiPV, daylighting analysis

2012-2016 Declaration of photovoltaic systems energy production

DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno

- Preparation and submission to the Tax Agency of annual declarations of production of photovoltaic plants for different clients.

[Activity or sector](#) PV plants

2012-2013 Analysis and methodological proposals for energy retrofit interventions

Tender for the integrated energy service for public administrations pursuant to Article 26, Legislation. 488/1999 and subsequent amendments and additions and art. 58, Law no. 388/2000 (ID 1178), for DATAMINING S.n.c., Via Borromeo 29, 20031 Cesano Maderno

- Analyses, methodological proposals and decision-making tools for the energy refurbishment of buildings.

[Activity or sector](#) Energy efficiency and environmental impacts assessment

2013 Heating system design

Data processing for the drafting of the Janssen project thermal systems retrofit of an office building located in Milan, DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno

- Project drawings and documents

[Activity or sector](#) Plant design

2012 Analysis and proposals for energy management and maintenance of building assets

- Assistance for data processing for the drawing up of the tender project of Schools, province of Treviso Ref. order 976-11-169C-MI, Protocol 01_03-1066_11-442F-E355 GARA relative to the restricted procedure for the tender for the management of the maintenance management service of the heritage of the Province of Treviso - 3rd generation Global service, for DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno
- Analysis and methodological and technological proposals for energy management and maintenance
- Activity or sector** Energy efficiency and environmental impacts assessment
- 2012-2013 Design of thermal, electrical and special systems**
Building renovation of a residential building located in Loc. Aietta, via Comunale della Venezia di Rezzano, Calci (PI) - Electrical and thermal installations, for Detraco s.r.l., Via Londonio 14, 20154 Milan.
- Thermal and electrical systems drawings and documents
- Activity or sector** Design of thermal and electrical systems
- 2012 Analysis of technological and methodological systems for energy efficiency**
Participation in the Project "*Energy in the City: scenarios and reflections on the energy aspects in the urban environment*" Member of the Working Group for the study "ENERGY IN THE CITY", client Centro di Cultura Scientifica "Alessandro Volta", Villa del Grumello Via per Cernobbio 11, 22100 Como (CO), Politecnico di Milano, Responsible: G. Chiesa
- Analysis of technological systems of energy efficiency for building and urban scale.
- Activity or sector** Energy efficiency and environmental impacts assessment
- 2012 Energy efficiency systems for healthcare buildings**
Data processing for the drafting of the Consip Technical Offer "Open tender procedure for the entrusting of an integrated multi-service technology with energy supply for buildings used for health care purposes, in use for any reason, to Public Administrations pursuant to art. 26 Law No. 488/1999 and S.M.I. and art. 58 Law No. 388/2000, for DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno
- Analysis and methodological and technological proposals for the energy refurbishment of hospitals
- Activity or sector** Energy efficiency
- 2012 Environmental impacts assessment and strategies to reduce the impacts**
Data processing for the project: Analysis of the current status and evaluation of the measures to contain environmental impacts due to energy consumption for heating on the Italian territory, for DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno
- Analysis of the national building sector, energy performance and envelope and system technologies for energy retrofit and new construction.
- Activity or sector** Energy efficiency and environmental impacts
- 2011 Energy assessments on a greenhouse prototype**
Analysis of energy and lighting performance for agricultural purposes for a greenhouse prototype. For DATAMINING S.n.c., Via Borromeo n. 29, 20031 Cesano Maderno
- Energy and environmental analysis
- Activity or sector** Energy efficiency and energy production
- 2011 Efficiency for a residential building**
Energy assessment of housing and plant of the competition project Housing Contest - High quality/low cost residential construction, for PATERLINI COSTRUZIONI S.P.A. Via Stretta n. 181, 25136 Brescia
- Analysis of energy consumption for a low-cost, high-efficiency residence building.
- Activity or sector** Energy efficiency and environmental impacts
- 2011-2013 Analysis of the application potential of low temperature terminal units**
Low temperature terminal units, evaluation of application potential, Consorzio Milano Ricerche Via Cicognara, 7, Milan, Responsible. G. Chiesa
- Study of the application potential of emission plant solutions
- Activity or sector** Plant design
- 2010 Energy requalification Ex-Filanda Robecchetto**
Consultancy for plant design Ex-Filanda redevelopment, Robecchetto Energy certification, electrical systems, air conditioning systems, envelope solutions for energy saving, for Navigli Lombardi scarl Via Copernico, 42 - 20125 Milan
- Study of technological solutions and drafting of plant tables
- Activity or sector** Energy efficiency and plant design

EDUCATION AND TRAINING

- February 2021 **Associate Professor**
University of Turin, Computer Science Department, Italy
- December 2018 **RTDA Assistant Professor**
University of Brescia, Department of Civil Engineering Environment Territory
Architecture and Mathematics, Italy
- December 2017 **National Scientific Habilitation Associate Professor**
National scientific qualification achieved for second band 08/C1.
 - Indicator 1:34, indicator 2:7, indicator3:1.
- November 2010 **LEED Course to take the LEED GA exam**
Business strategies LEED ME
 - LEED course with certification to take the LEED Green Associate exam.
- March 2002 - May 2005 **Philosophy Doctor PhD**
Politecnico di Milano, Department BEST - Building Environment Science & Technology
 - Doctorate in Technology and Design for Environmental Quality at building and urban scale, Faculty of Architecture, Thesis: **Sustainability in architecture between performance and language: Analysis and evaluation of the effective compliance with energy-environmental specifications of sustainable buildings**, Supervisor: Prof. Federico Butera, Tutor: Arch. Niccolò Aste, XVII Cycle.
- November 2002 **Architect professional certification**
State examination for professional qualification , Polytechnic University of Milan, Faculty of Architecture
 - Enrollment in the Register of the Order of Architects, Planners, Landscapers and Conservators of the Province of Milan, n° 13597.
- October 2001 **Doctor of Architecture D Arch**
Politecnico di Milano, Faculty of Architecture, Leonardo Campus
Year 1997-1998 Esquela Tecnica Superior, Valladolid, Spain - ERASMUS Programme
 - Thesis: **Hybrid Photovoltaic-Termal Technology: design analysis of an integral system and preparation for the experimental phase of the component**, Speaker Prof. Giancarlo Chiesa, Co-rapporteurs: Arch. Niccolò Aste, Engineer Marco Beccali.
- June 1994 **High school leaving exam specializing in science**
Liceo Scientifico Piero Bottoni, Milan,
 - Scientific High School, experimental section in Physics and Computer Science

PERSONAL SKILLS

Mother tongue	Italian				
Other languages	INCLUDING		SPEAKED		WRITTEN PRODUCTION
	Listening	Reading	Interaction	Oral production	
English	C1	C2	C1	C1	C2
Spanish	C2	C2	C2	C2	C2
Portuguese	B2	B2	B2	B2	B2
French	A1	A2	A1	A1	A2

- Computer skills**
- Good knowledge of Microsoft Office tools;
 - Good knowledge of CAD tools
 - Good knowledge of BIM instruments and basic on VPL;
 - Good knowledge of energy simulation software (EnergyPlus, Design Builder, IES VE);
 - Good knowledge of lighting simulation software (Radiance, Daysim, Dialux).

Communicative and didactic
experience

Good communication skills acquired during international experiences in participation processes (2008) in developing countries, **teaching at university level (2005/2021)**; **teaching in Master's Degrees I and II Level (2009/2021)** and **professional training courses** on energy efficiency (2006/2015). Lecturer at **Intensive course in BIM, University of Jonkoping (2018-2021)**, Lecturer at **PhD Course University of Turin, Department of Management (2021)**.

TEACHING ACTIVITY:

2018-2021 Lecturer of the course **Building Performance Engineering**, University of Brescia, Civil and Environmental Engineering

2018-2020 Lecturer of the course **Architectural Design Studio for Complex Construction 2**, Faculty of Architecture and Construction of Architecture, Politecnico di Milano, Module: **Technology and Design in BIM environment**

2016 Guest Lecturer for the course Heat and Moisture Transport Fundamentals and Applications in Building Envelope, Prof. Riccardo Paolini, PhD doctorate course ABC-PHD Politecnico di Milano, title of the contribution: **Influence of users' behaviour on indoor conditions**

2014 Lecturer for the course **Comparison between the different protocols for the certification of sustainability at the different design scales** - Order of Architects of Milan with Consorzio CISE/Scuola Master F.lli Pesenti

2012-2020 Lecturer for the Course: **Laboratory of Construction of Architecture 1**, Study Course in Environmental Architecture, Politecnico di Milano; Module of **Building Physics**, Teachers: A.Rogora, M. Fianchini, L.C.Tagliabue.

2011-2014 Lecturer for the Course: **Building Technology Studio**, Course in Architecture, Politecnico di Milano; Modulo Building Physics, Teachers: M. Morena, F. Mazzola, L.C.Tagliabue.

2010-2012 Lecturer for the Course: **Laboratory of Construction of Architecture 1**, Study Course in Environmental Architecture, Politecnico di Milano; Module of Environmental Technical Physics, Teachers: M. Fianchini, A. Pasini, L.C.Tagliabue.

2009-2013 Lecturer at the Master of the Fratelli Pesenti School and Department of Structural Engineering of Politecnico di Milano - Energy Module: **Sustainability and energy management; Building envelope; Lighting principles.**

2009-2013 Lecturer at the Continuing Education Course: Specialist Design of **Photovoltaic Systems** organized by Politecnico di Milano

2009-2014 Lecturer at the Course for **Energy Certifiers** Regione Lombardia organized by Politecnico di Milano.

2008-2010 Lecturer: **Environmental Control of Architectural Design**, Study Course in Environmental Architecture, Politecnico di Milano; Lecturers: V. Right, L.C. Tagliabue. **Laboratory of Constructions of Architecture 1**, Study Course in Environmental Architecture, Politecnico di Milano; Module of Environmental Technical Physics, Teachers: C. Zappone, F. Elsa Bertrand, L.C. Tagliabue.

July 2008 - Lecturer at the course: **Energy efficiency of the building shell**, University of Mantua Foundation, Training Framework Project for Competitiveness and Innovation in the Implementation of Energy Policies".

November 2007- February 2008 Lecturer at the Training Courses **Energy Certification of Buildings**, BEST Department in collaboration with the Order of Architects of Mantua, the Province of Como, the Province of Monza and Brianza, topics covered: **Use of renewable energy sources; Energy performance indicators of buildings; Energy efficiency of installations**

2008 Lecturer at the Sustainable Territory and Architecture Master, 2nd level University Master - 1st edition, INDACO Department, Faculty of Architecture and Society, Politecnico di Milano, **Active solar systems for energy production**

2006-2008 Lecturer for the following Courses: **Technical** and course **installations**, Course of studies in Architecture and Building Production, Politecnico di Milano; **Environmental Technical Physics**, Course of studies in Architecture and Building Production, Politecnico di Milano.

2005-2006 Lecturer for Courses: **Technical Installations**, Course of Studies in Architecture and Building Production, Politecnico di Milano; **Models for Environmental Control**, Course of Studies in Architecture and Building Production, Politecnico di Milano

PhD SUPERVISOR AND CORRELATOR FOR DOCTORAL THESIS:

2015-2018 PhD Thesis: A. Pasquinelli, **The creation of a citywide Building Information System: criticalities and potentialities of public information on buildings**, Supervisor: F. Guzzetti, E. De Angelis Correlator: L.C.Tagliabue

2010-2012 PhD Thesis: I. Ruhi, **"The Implications of the use of Building Environmental Assessment Tools within the Building Practice in Turkey"** Tesi di Dottorato TEPAC, Politecnico di Milano, Supervisors: N.Aste, L.C.Tagliabue.

RAPPORTEUR/CORRELATOR OF THE FOLLOWING THESES:

2018-2019 Luigi Costardi, "**LCA evaluation and Energy performance of a housing building in different technological scenarios**" University of Brescia, Degree Course in Building Engineering-Architecture, Supervisor: Lavinia Chiara Tagliabue

2017-2018 Daniele Accardo "**Indoor conditions assessment in summer period given by opaque envelope elements for educational buildings in different climate conditions compared to adaptive thermal comfort standard**" University of Brescia, Degree Course in Building Engineering-Architecture, Supervisor: A.L.C. Ciribini, Correlators: L.C. Tagliabue, K. Kontoleon

2016-2017 Mario Favalli Ragusini "**A Data-Mining Approach For Energy Profiling Characterization Of Urban Building Archetypes - The Use Of Data-Mining For The Characterization Of Energy Profiles Of Urban Building Archetypes**" University of Brescia, Degree Course in Building Engineering-Architecture, Supervisor: A.L.C. Ciribini, Correlators: Lavinia Chiara Tagliabue, Giovanni Tardioli.

2016-2017 Carlotta Santachiara "**Indoor Comfort Parameters for Educational Buildings**", Politecnico di Milano, Master's Degree in Building Engineering Architecture, Supervisor: Enrico De Angelis, Correlators: L.C. Tagliabue, M. Cairoli

2016-2017 Manuel Mancosu Laura Canonico, "**Performance verification through a BIMtoBEM interoperability path**" Politecnico di Milano, Degree in Architecture, Supervisor: Lavinia Chiara Tagliabue Co-rapporteur: Fulvio Re Cecconi.

2016-2017 Stephan Viktor Franz Bitterbinder, Che Liu, "**Maritime oasis**", Politecnico di Milano, Master in Architecture, Degree Course in Architecture, Supervisor Lavinia Chiara Tagliabue, Correlators: Angelo Luigi Camillo Ciribini, Stefano Tropea.

2015-2016 Maria Emma Sala "**Variations in the energy performance of existing buildings following the process of urban densification - A method to study solar availability, case study Paradiso, Lugano, CH**" Politecnico di Milano, Master of Science in Architecture, Master of Science in Architecture, Supervisor: L.C. Tagliabue, Correlator: Cristina Silvia Polo Lòpez

2013-2014 K. Kisler, D. Olovyannikova "**Vivifying Secluded Areas: Sustainable revitalization of the Solovetsky Archipelago**" Politecnico di Milano, Master of Science in Architecture, Master of Science in Architecture, Supervisor: E. Cattaneo, Correlator: L.C. Tagliabue

2013-2014, K.L. Ibarra Arvizu, "**Functional, Architectural and Energy Refurbishment of a High-Rise Building in Monterrey Mexico**", Politecnico di Milano, Master in Architecture, Master of Science in Architecture, Supervisor: L.C. Tagliabue, Co-rapporteur: M. Manfren

2013-2014, L. Ciuffi, "**Performance of the building envelope: energy, environmental and economic assessments of envelope systems**", Politecnico di Milano, Degree Course in Architectural Science, Supervisor: L.C. Tagliabue, Co-rapporteur: M. Buzzetti.

2012-2013, L. Maestri, "**Performance analysis of an LSCeni component integrated in the building sector**", Politecnico di Milano, Degree Course in Architecture, Supervisor: N. Auctions, Correlators: L.C. Tagliabue, P. Palladino.

2011-2012, B. Arosio, F. Lo Bianco, "**Optimization of lighting design, energy and fire scenarios of an RSA**", Politecnico di Milano, Degree Course in Architecture, Supervisor: R. Felicetti, L.C. Tagliabue, Correlator: M. Manfren.

2009-2010, G. Marenzi, E. Angeloni, "**La solare: functional evolution and energy performance**", Politecnico di Milano, Degree Course in Architecture, Supervisor: L.C. Tagliabue, Correlators: M. Buzzetti, C. Zappone.

Organization of conferences

Organization of the conference “*BIM in the Architectural Technology Design*”, Aula Rossa Viale Pindaro, University of Pescara, Department of Architecture and Department of Engineering and Geomatics, 27-11-2019

Organization of the conference *Ibergekumene tsores iz gut tsu dertseylin it's nice to tell the past troubles*, Aula S.01 "De Donato" - Politecnico di Milano - P.zza Leonardo Da Vinci, Milano PRESENTATION OF THE BOOK IS NORMAL...I DO IT ALL 20-01-2017

Organization of the Conference "*Language is not only the vehicle of a communication, but it becomes the object of an interpretation*" BOOK PRESENTATION THE ANTICORRUPTIONAL NATIONAL AUTHORITY, MILAN 20 April 2017 14.30 - 17.30 Hall S.01 "De Donato" - Politecnico di Milano - P.zza Leonardo Da Vinci, Milan from 20-04-2017

Research activities

Activities in national and international research in different fields of work related to the use of renewable energy sources in buildings, energy efficiency, use of local energy resources, Smart Living, Innovation, Building Information Modeling, Behavioral Design.

RESEARCH ACTIVITIES:

2019-2020 Scientific committee **eLUX – energy Laboratory as University eXpo**, University of Brescia

2017-2018 Coordination of the national project **Elisir (Energy, Life Styled & Seismic Innovation For Regenerated Build-ings)** Regional **Call for Proposals** Smart Living, Lombardy Region in implementation of l.r. 26/2015 "Diffuse, Creative, Technological Manufacture, 4.0" development strategy for "LOMBARDIA 5.0", University of Brescia, Department of Civil, Environmental, Architectural Engineering and Mathematics

2016-2017 Research Fellow at University of Brescia, Department of Information Engineering **Study about Environment for Smart Living** Responsible: A.L.C. Cirbini,.

2015-2016 Research Fellow at University of Brescia, Department of Information Engineering **School Buildings in the era of the circular and digital economy**. Responsible: A.L.C. Cirbini,

2014-2015 Research Fellow at University of Brescia Department of Civil, Environmental, Architectural Engineering and Mathematics **Technical-economic optimization of the thermo-energy performance of the envelope of quasi-zero energy buildings, within intelligent energy networks**, Smart Campus as Urban Open LABs (SCHOOL) Project, Responsible: A.L.C. Cirbini

2013-2014 **Development of a decision support protocol for the sustainable design and management of the environment** built for "Det Norske Veritas" (DNV) - Italy, Politecnico di Milano, Department of Architecture, Built environment and Construction engineering , Responsible: N. Aste.

2012-2014 Research Fellow at Politecnico di Milano for the development of research: **Integration of concentrator components in different types of buildings and classification in the context of the incentive plan provided by Conto Energia**, Politecnico di Milano, Department of Architecture, Built environment and Construction engineering , Responsible: N. Aste.

2014 UNDP Project Strengthening the effectiveness of the protected area system in Qinghai Province, China, to conserve globally important biodiversity." – Consultancy on Community Co-Management, Energy Assessment for "**Small-scale infrastructure for wildlife/environmental monitoring and patrolling for the Sanjiangyuan National Nature Reserve**", Responsible: D. Casarini

2013-2014 Research project UN-Habitat Promoting Energy Efficiency in Building in East Africa participation to the realization of the Handbook: "**Integrated Building Design - Handbook of Sustainable Architecture in the East African community climates**" developed by UN-Habitat and Politecnico di Milano, Responsible: F. Butera.

2012-2013 PRIN research project of the Ministry of Education, University and Research: **Integration of technologies from renewable sources in the built environment, process, projects/instruments, systems and components**, Responsible: G. Scudo.

2010-2011 Research Fellow at Politecnico di Milano **Methods and Systems for optimized integration: innovative components for the use of renewable solar energy sources**, Responsible: G. Chiesa, Federico Butera

2009- 2010: Participation in the research **Guidelines for sustainable building for public and proven buildings** Convention between Lombardy Region and Fondazione Politecnico di Milano, Responsible: G. Chiesa.

2008: Participation in the research **SURE-Africa - Sustainable Urban Renewal: Energy Efficient Building for Africa**, Intelligent Energy, COOPNER, Responsabile: Leão Lopes della M-EIA, Escola Internacional de Arte de Mindelo, São Nicolau, Cape Verde, with the Institute of Mechanical Engineering - IST Pole of Lisbon, The Chancellor, Masters and Scholars of the University of iCambridge, University of Lund, Dept of Technology and Society, Eduardo Mondane University Faculty of Architecture and Physical Planning of Maputo, Mozambique, Agostinho Neto University Faculty of Architecture, Angola.

2008 ECOFAC Programme Component of Sao Tome and Principe, European Union, BRLI Engineering, Planning Consultancy Mission for the country's protected areas, **Participatory processes with communities for the development of sustainable activities** Team: C. Albuquerque D. Cesarini

2008 GEF/UNDP and Ministry of Environment and Agriculture of the Republic of Cape Verde, Project: Integrated Participatory Ecosystem Management in and around protected areas, United Nation Development Project and Ministry of Environment of Cape Verde, **Mini wind turbine project for the Monte Gordo Natural Park**, São Nicolau, Cabo Verde, **Project for the rehabilitation of the paths of the Serra Malagueta Natural Park**, Santiago, Cabo Verde, **Feasibility study for the exploitation of renewable sources at the Serra Malagueta Natural Park**, Santiago, Cabo Verde, Responsible: L.C. Tagliabue

2006-2007 Research Fellow at Politecnico di Milano **Experimental performance evaluation of solar thermal panels and photovoltaic-thermal hybrids**, Responsible: N. Aste, G. Chiesa

2005-2006 Participation to MIUR Research 2004-2006: **Sun, wind, water, vegetation and advanced technologies as matrices of a new design approach to the Territory, Architecture and Industrial Design**, funded by the Ministry of Education, Universities and Research, Responsible operative unit: G. Chiesa, Energy plans in the study area: Critical analysis and relevant artefacts, Alternative energies and related technologies in their urban and architectural relations, Photovoltaic and solar thermal: current developments and expectations.

2005 Participation in the research **Technological and performance aspects of photovoltaic integration in architectural structures**, CESI (Centro Elettrotecnico Sperimentale Italiano) contract, Responsible: N. Aste, Department of Energy, Politecnico di Milano

2005: Participation in the research **PV Power Systems Task 10 - Urban Scale PV Applications**, International Energy Agency IEA Politecnico di Milano, Department of Energy, Responsible: N. Aste,.

2002- 2003 **Energy and landscape planning of the Val Cavargna area, analysis and evaluation of the energy potential of resources for the Lepontine Alps Mountain Community**, Responsible: G. Chiesa, D. Pandakovich, Politecnico di Milano

2001 **Environment Project - Integration of photovoltaics in buildings**, co-financed by CNR and the Ministry of Environment, Responsible: C. Blasi, Department of Conservation and History of Architecture, responsible: G. Chiesa, Department of Energy, Politecnico di Milano.

Publications
Conferences
Editorial committees
Scientific review activities

Contributions in books:

Eva Vaništa Lazarević, Milena Vukmirović, Aleksandra Krstić-Furundžić, Aleksandra Đukić (editors), (2019) *Keeping Up with Technologies to Create the Cognitive City*, Alice Pasquinelli, Silvia Mastrolembo Ventura, Lavinia Chiara Tagliabue, angelo Luigi Camillo Ciribini, Franco Guzzetti, Chapter six: *Information Modelling for the Cognitive City*, Cambridge Scholars Publishing, ISBN 978-1-5275-2048-6

Tagliabue L, Villa V (2017). *The BIM for schools analysis of school heritage and intervention strategies*. Milan:Ulrico Hoepli Editore S.p.A. , ISBN: 978-88-203-8106-6

Lavinia Chiara Tagliabue, Massimiliano Manfren, Enrico De Angelis, Angelo Luigi Camillo Ciribini, *Energy Efficiency Assessment Based on Realistic Occupancy Patterns Obtained through Stochastic Simulation*, in Modelling Behaviour: Design Modelling Symposium 2015, a cura di Mette Ramsgaard Thomsen, Martin Tamke, Christoph Gengnagel, Billie Faircloth, Fabian Scheurer, Springer, 2015, Pag. 469-478, ISBN 978-3-319-24206-4

Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, Enrico De Angelis, Silvia Mastrolembo Ventura (2015) *Testing the value chain of the Information in Building Information Modelling and Building Energy Modelling*, in Studies and Research – Annual Review, Editors Antonio Migliacci, Pietro G. Gambarova, Paola Ronca, Volume 34-2015, pag 109-129, Edizioni MReady, ISBN 978-88-98720-12-5

Barbara Angi (edited by), Angelo Luigi Camillo Ciribini, Giovanni Caratozzolo, Silvia Mastrolembo Ventura, Michela Paneroni, Lavinia Chiara Tagliabue, *L'Ambiente Costruito tra Building Information Modelling e Smart Land*, Ingenio ebook, Publisher: Edizioni IMREADY, Editor: Barbara Angi, ISBN: 9788897820101

Barbara Angi, Silvia Mastrolembo Ventura, Massimiliano Battisti (ed.), Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini et al. (2016) *Digitizing the analogical thoughts in architecture: a menace or a promise?* , Publishing house IMREADY, ISBN: 9788898720132

F. M. Butera et al., *Sustainable Building Design for Tropical Climates, Principles and Applications for Eastern Africa*, First published in Nairobi in August 2014 by UN-Habitat. ISBN: 978-92-1-132644-4

N. Auctions, L.C.Tagliabue, S. Torri, in G.Scudo, *Solar technologies integrated in architecture*, Wolters Kluwer Italia, 2013.

Giuseppe Martino Di Giuda, Valentina Villa, Paolo Ettore Giana, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini (2017) *Lean construction applied to a BIM process: how to control point attribution in MEAT tender process*. In: TEMA, vol. 3 no. 1, pp. 35-44. - ISSN 2421-4574

Articles in International Journal Class A/ISI:

Lavinia Chiara Tagliabue, Giuseppe Martino di Giuda, Valentina Villa, Enrico De Angelis, Angelo Luigi Camillo Ciribini (2017) *Multi-criteria Performance Analysis based on a Parametric Computational Evaluation for decision process on envelope technologies and configurations*, Energy and Buildings 158 (2018) 736–749.

Angelo Luigi Camillo Ciribini, Lavinia Chiara Tagliabue, (2017) *Cognitive Analytics and Smart Construction Sites: from BIM to Industrial Internet of Things (IIoT) for Industry 4.0*, Automation in Construction (under review)

Re Cecconi Fulvio, Manfren Massimiliano, Tagliabue Lavinia Chiara, Ciribini Angelo Luigi Camillo, De Angelis Enrico (2017). *Probabilistic behavioral modeling in building performance simulation: A Monte Carlo approach*. ENERGY AND BUILDINGS, vol. 148, p. 128-141, ISSN: 0378-7788, doi: 10.1016/j.enbuild.2017.05.013

Lavinia Chiara Tagliabue, Massimiliano Manfren, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2016), *Probabilistic behavioural modelling in building performance simulation – the Brescia eLUX lab*, Energy and Building, 128 (2016) 119-131.

Lamberto Tronchin, Massimiliano Manfren, Lavinia Chiara Tagliabue (2015) *Optimization of building energy performance by means of multi-scale analysis—Lessons learned from case studies*. Sustainable Cities and Society 27 (2015) 296-306.

N. Aste, L.C. Tagliabue, C. Del Pero, D. Testa , R. Fusco, *Performance analysis of a large-area luminescent solar concentrator module*. Renewable Energy 76 (2015) 330-337.

N. Aste, L. C. Tagliabue, P. Palladino, D. Testa, *Integration of a luminescent solar concentrator: Effects on daylight, correlated color temperature, illuminance level and color rendering index*. Solar Energy 114 (2015) 174–182.

N. Aste, M. Beccali, L.C. Tagliabue, *Nomograph for rapid technical and economic assessment of solar thermal systems for DHW production*, Solar Energy 86 (2012) 2472–2485.

N. Aste, R. Adhikari, L.C. Tagliabue, *Evaluation of Energy Policies for Promotion and Dissemination of Photovoltaic Technology in Italy*, Progress in Photovoltaic: Research & Applications, Wiley Interscience, John Wiley & Sons, Gennaio 2007

R. Paolini, L.C. Tagliabue, E. Rosina, M. MeshkinKiya, E. De Angelis (2016) Use of biological proliferation models in historical heritage management, *Techne* n.12/2016.

Conferences

The social (digital) citizenship dimension of the district through three key concepts: the shuttle, the home manager and the behavioural contract, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, World Summit on the Digital Built Environment WDBE 2018, Helsinki, Finland, 24-25 September 2019.

CognitiveBIM - BIM, ETICS & Smart contracting for Cognitive Buildings, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, World Summit on the Digital Built Environment WDBE 2018, Helsinki, Finland, 11-12 September 2018.

BIM World 2016 Session IOT2: Integrating the Internet of Things in Buildings and Urban Space / The Augmented City: Towards a New Digital Experience of Urban Spaces and the Learning City 7 April 2016, Paris, France, speech title: "eLUX LAB project: Industries of Behaviours".

BIM World 2017 Session GE7: Exemples d'usages avancés du BIM : cognitive building, design by data, deconstruction, 30 march 2017, Paris, France, speech title: "Cognitive Building"

Mariaemma Sala, Cristina S. Polo López, Francesco Frontini, Lavinia Chiara Tagliabue, Enrico De Angelis (2016) *The energy performance evaluation of buildings in an evolving built environment: an operative methodology*, Energy Procedia 91 (2016) 1005 – 1011

Cristina S. Polo López, Mariaemma Sala, Lavinia Chiara Tagliabue, Francesco Frontini, Salim Bouziri (2016) *Solar radiation and daylighting assessment using the Sky-View Factor (SVF) analysis as method to evaluate urban planning densification policies impacts*, Energy Procedia 91 (2016) 989 – 996

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Angelo Luigi Camillo Ciribini, Daniela Pasini, Lavinia Chiara Tagliabue, Massimiliano Manfren, Bruno Daniotti, Stefano Rinaldi, Enrico De Angelis (2016) *Tracking users' behaviors through real-time information in BIMs: workflow for interconnection in the Brescia Smart Campus Demonstrator*, International High- Performance Built Environment Conference – A Sustainable Built Environment Conference 2016 Series (SBE16), iHBE 2016, Procedia Engineering 180 (2017) 1484 – 1494.

Angelo Luigi Camillo Ciribini, Lavinia Chiara Tagliabue, Silvia Mastrolembo Ventura, Barbara Angi (2016) *Occupants and Users Into The Servitized Built Assets*, Architecture and City Planning SAFESUST workshop, November 26-27, 2015 Ispra, Italy.

Enrico De Angelis, Angelo Luigi Camillo Ciribini, Lavinia Chiara Tagliabue, Michela Paneroni (2015) *The Brescia Smart Campus demonstrator Renovation toward a zero energy classroom building* International Conference on Sustainable Design, Engineering and Construction - ICSDC 2015, 10 - 13 May 2015 | Hyatt Regency McCormick Place, Chicago, USA.

Angelo Luigi Camillo Ciribini, Enrico De Angelis, Lavinia Chiara Tagliabue, Michela Paneroni, Silvia Mastrolembo Ventura, Giovanni Caratozzolo (2015) *Workflow of interoperability towards energy management of the building*, ISTE 2015 Annual National Conference - Environmental Sustainability and Building Production - 24/25 September 2015, Milan, Italy.

Enrico De Angelis, Fulvio Re Cecconi, Lavinia Chiara Tagliabue, Sebastiano Maltese, Giorgio Pansa, Alice Torricelli, Simone Valagussa, *Reliability of energy performance evaluations through different BIM and BEM models*, ISTE 2015 Annual National Conference - Environmental Sustainability and Building Production - 24/25 September 2015, Milan, Italy.

Angelo Luigi Camillo Ciribini, Lavinia Chiara Tagliabue, Enrico De Angelis, Silvia Mastrolembo Ventura (2016), *Modelling for interoperability between building information and energy performance towards management of the building life*, CIB World Building Congress 2016, 30 May-3 June 2016, Tampere, Finland.

Lavinia Chiara Tagliabue, Massimiliano Manfren, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2016), *Tuning energy performance simulation on behavioural variability with inverse modelling: the case of Smart Campus Building*, Sustainable Built Environment (SBE) regional conference Zurich, Expanding Boundaries: Systems Thinking for the Built Environment, June 15-17 2016, Zurich, CH.

Lavinia Chiara Tagliabue, Massimiliano Manfren, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2016), *Prediction of Users' Behaviour Patterns Impact on Energy Performance of a Social Housing in Cremona*, Italy, Sustainable Built Environment (SBE) regional conference Zurich, Expanding Boundaries: Systems Thinking for the Built Environment, June 15-17 2016, Zurich, CH.

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Enrico De Angelis, Lavinia Chiara Tagliabue, Paolo Zecchini, Mattia Milanese (2016) *Environmental and comfort upgrading through lean technologies in informal settlements: Case study in Nairobi, Kenya and New Delhi, India*, AIP Conference Proceedings 1758, 030021 (2016); doi: 10.1063/1.4959417

Alice Pasquinelli, Daniela Pasini, Lavinia Chiara Tagliabue, Enrico De Angelis, Franco Guzzetti, Angelo Luigi Camillo Ciribini (2016) *Energy Management of the Smart City through Information Systems and Models*, Convegno Internazionale ISTE 2016, BACK TO 4.0: Rethinking the Digital Construction Industry, 30 June-1 July 2016, Naples, Italy.

Fulvio Re Cecconi, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2016) *Predicting Energy Performance of an Educational Building through Artificial Neural Network*, Convegno Internazionale ISTeA 2016, BACK TO 4.0: Rethinking the Digital Construction Industry, 30 June-1 July 2016, Naples, Italy.

Valentina Villa, Lavinia Chiara Tagliabue, Giuseppe Martino Di Giuda, Angelo Luigi Camillo Ciribini, *Parametric Configuration and Comfort Parameters for Dynamic Learning Spaces*, Convegno Internazionale ISTeA 2016, BACK TO 4.0: Rethinking the Digital Construction Industry, 30 June-1 July 2016, Naples, Italy.

Lavinia Chiara Tagliabue, Lorenzo Consalez, Angelo Luigi Camillo Ciribini (2016) *The Educational Building in the Circular Economy: an Extended Concept of Asset Quality*, Convegno Internazionale ISTeA 2016, BACK TO 4.0: Rethinking the Digital Construction Industry, 30 June-1 July 2016, Naples, Italy.

Franz Bittenbinder, Che Liu, Stefano Rinaldi, Paolo Bellagente, Angelo Luigi Camillo Ciribini, Lavinia Chiara Tagliabue (2016) *Bi-Directional Interactions between Users and Cognitive Buildings by means of Smartphone App*, IEEE Second International Smart Cities Conference (ISC2 2016), Improving the citizens quality of life, 12-15 September 2016, Trento, Italy

Giuseppe Martino Di Giuda, Valentina Villa, Enrico De Angelis, Paolo Piantanida, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini (2016) *Progressive Energy Retrofit for the educational building stock in a Smart City*, IEEE Second International Smart Cities Conference (ISC2 2016), Improving the citizens quality of life, 12-15 September 2016, Trento, Italy.

Lavinia Chiara Tagliabue, Alice Pasquinelli, Giuseppe Martino Di Giuda, Valentina Villa, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2016) *Cognitive Adaptive Urban Systems for the Living Built Environment*, 2nd Annual International Conference on Urban Planning and Property Development (UPPD 2016), 10-11 Ottobre 2016, Singapore. DOI: 10.5176/0000-0000_UPPD.43

Lavinia Chiara Tagliabue, Giuseppe Martino Di Giuda, Valentina Villa, Enrico De Angelis, Angelo Luigi Camillo Ciribini, (2016) *Parametric Assessment of Energy, Environmental and Economic Performances of Building Envelope Technologies*, Colloqui.AT.e 2016, Convegno Ar.Tec – Mater(i)a, 12-15 Ottobre 2016.

Giuseppe Martino Di Giuda, Valentina Villa, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, (2016), *Process Innovation: Use Of BIM-Oriented Model For Most Economically Advantageous Tender*, Colloqui.AT.e 2016, Conference Ar.Tec - Mater(s) a, 12-15 October 2016.

Lavinia Chiara Tagliabue, Alice Pasquinelli, Enrico De Angelis, Angelo Luigi Camillo Ciribini, Franco Guzzetti, (2017). *GIS Based Approach For District Energy Retrofit Optioneering* In: Proc. Lean & Computing in Construction Congress (LC3), Vol. 1 (CIB W78), Heraklion, Greece, 4-12 JUL 2017

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Lavinia Chiara Tagliabue, Andrea Giovanni Mainini, Fulvio Re Cecconi, Sebastiano Maltese, Enrico De Angelis, Andrea Zani (2017), *Thermal and Economic Efficiency of Progressive Retrofit Strategies for School Buildings by a Statistical Analysis based Tool*, IBPSA 2017 - Building Simulation 2017 Conference, Hyatt Regency Embarcadero, 7-9 August, 2017, San Francisco, California, USA.

Lavinia Chiara Tagliabue, Sebastiano Maltese, Fulvio Re Cecconi, Enrico De Angelis (2017), *Integrated Design and Modelling-based Smart School Concept to Renovate the Existing School Building Sector*, Convegno Internazionale ISTeA 2017, Re-shaping the construction industry, 14-15 Settembre 2017, Firenze.

Fulvio Re Cecconi, Lavinia Chiara Tagliabue, Sebastiano Maltese, Angelo Luigi Camillo Ciribini, Enrico De Angelis, (2017), *A performance based management system for cost prediction suitable for school building stock*, Convegno Internazionale ISTeA 2017, Re-shaping the construction industry, 14-15 Settembre 2017, Firenze.

Lavinia Chiara Tagliabue, Maria Cairoli, Angelo Luigi Camillo Ciribini, Enrico De Angelis (2017), *Performance analysis of combined lighting and acoustic systems to enhance learning space quality*, Convegno Internazionale ISTeA 2017, Re-shaping the construction industry, 14-15 Settembre 2017, Firenze.

Fulvio Re Cecconi, Nicola Moretti, Mario Claudio Dejaco, Sebastiano Maltese, Lavinia Chiara Tagliabue (2017) *Community involvement in urban maintenance prioritization*, AEIT International Annual Conference, Cagliari, 20/22 September 2017.

Giuseppe Desogus, Emanuela Quaquero, Antonello Sanna, Gianluca Gatto, Giuseppe Di Giuda, Lavinia Chiara Tagliabue, Stefano Rinaldi, Angelo Luigi Camillo Ciribini, Valentina Villa (2017) *Preliminary Performance Monitoring Plan for energy retrofit: a Cognitive Building The "Mandolesi Pavillon" at the University of Cagliari*, AEIT International Annual Conference, Cagliari, 20/22 September 2017.

Giuseppe Martino Di Giuda, Valentina Villa, Lavinia Chiara Tagliabue, Angelo Luigi Camillo Ciribini, (2017) *Theory of Games and Contracts to define the Client role in Building Information Modeling*, 35th eCAADe Conference, Rome | Sharing of Computable Knowledge | 20th – 22nd September 2017

Nicola Moretti, Andrea Mainini, Sebastiano Maltese, Lavinia Chiara Tagliabue, Valentina Villa, Mario Claudio Dejaco, Giuseppe Di Giuda, Tiziana Poli, Angelo Ciribini, Enrico De Angelis, Fulvio Re Cecconi (2017) *School buildings data driven energy retrofit*, COLLOQUIATE 2017, Ancona, 28-29 September 2017.

Giuseppe Di Giuda, Emanuela Quaquero, Valentina Villa, Lavinia Chiara Tagliabue, Giuseppe Desogus, Antonello Sanna, Angelo Luigi Camillo Ciribini, Stefano Della Torre (2017) *Workflow BIM for the restoration and management of modern architecture*, COLLOQUIATE 2017, Ancona, 28-29 September 2017.

Giuseppe Martino Di Giuda, Emanuela Quaquero, Valentina Villa, Lavinia Chiara Tagliabue, Giuseppe Desogus, Antonello Sanna, Angelo Luigi Camillo Ciribini (2017), *Preliminary definition of an energy monitoring for the implementation of a cognitive building The "Mandolesi Pavillon" at the University of Cagliari*, COLLOQUIATE 2017, Ancona, 28-29 September 2017.

Participation in editorial boards

(2020-2021) Guest editor Special Issue "Cognitive Buildings", Applied Science.

(2017-2020) Participation in the scientific committee of the series: "The BIM. La modellazione informativa per le costruzioni", Casa Editrice libraria Ulrico Hoepli publisher,

(2018-2019) Guest editor Special Issue "Advancement in Smart Building Technologies: From Project to Operation and Management of Buildings", Electronics

Scientific review activities

2014-2020 Reviewer for the open access magazine *Management of Environmental Quality* for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

2014-2020 Reviewer for the open access magazine *Applied Energy* for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

2014-2020 Reviewer for the open access magazine *Solar Energy* for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

2015-2020 Reviewer for open access *Buildings* magazine for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

2015-2020 Reviewer for the open access magazine *Sustainability* for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

2015-2020 Reviewer for the open access magazine *Energy Efficiency* for energy issues at building and district level, environmental sustainability and assessment systems, renewable energy sources and energy management, redevelopment of existing buildings, lighting, nZEB

Architecture competitions

She has worked as energy consultant for several architectural competitions and professional firms supporting them for sustainability and energy efficiency issues. Including dynamic energy simulations for Crew / Brescia 2 (2017), competition for the design of the school in via Brocchi for HPDB Engineering & Architecture (2016), the design competition for the construction of new buildings for public housing in Grumello al Piano, Bergamo (2007) for Studio deARQ1, the energy-environmental consultancy for the FIAT Balocco design competition (2006) for Studio Dal Lago, and the International Living Design Competition in Milan - new urban spaces for social housing (2005) for StudioLisciandra.

Awards

2019 **Second Prize: Reinventig Cities C40** contest for Via Doria, Milan, Italy, with Studio Consalez-Rossi and Borio Mangiarotti construction company

2015 **First Prize: Beauty Contest** for Invited Architects for the Upgrading of 4 buildings in Via Ciro Menotti organized by Polaris, with Studio M2P, Milan.

2013 **Honorable Mention at the Less Competition**, KIC Climate for energy efficiency in buildings for large-scale retail trade, Consumless Project.

2012 **First Prize: at the "Competition of ideas, through an open procedure, anonymously and in a single phase, for the acquisition of an idea proposal for the realization of the service architectures of the Expo Milano 2015 Site"** with Studio Molteni e Liverani.

2010 **Fourth Prize: Competition Nuovo Palazzo Uffici per la Provincia di Parma**, CCDP Centro Cooperativo di Progettazione, Responsabile G. Chiesa

2010 **Housing Contest Directory of projects for high performance and low cost residential buildings**, Admission of the project to the directory, PATERLINI COSTRUZIONI SPA, Studio Bdfm Snc, Arch. Maurizio Borghi

2006 **Second Prize: Competition for the Redevelopment of Ex-Ticosa Area**, Studio Caputo & Partners, Responsible: G. Chiesa

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Date 04 May 2021

Signature