CURRICULUM VITAE OF DR. ANNA LAURA PISELLO

Assistant professor of Applied Physics at University of Perugia, Italy PhD in Energy Engineering



LEED Green Associate

Master Degree in Building Engineering

Professional Engineer

Personal data of Anna Laura Pisello

Date of birth May 3rd, 1985

Position Assistant professor of Applied Physics

Office Department of Engineering (University of Perugia, Italy) @CIRIAF - Interuniversity research center

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web http://scholar.google.it/citations?user=yKLQuV8AAAAJ&hl=it

http://www.researchgate.net/profile/Anna_Laura_Pisello/publications/

https://unnipg.academia.edu/AnnaLauraPisello

http://orcid.org/0000-0002-4527-6444

Bibliometry Information (starting from 2011):

- H index by Google Scholar: 17

H index by Scopus: 14

EDUCATIONAL and RESEARCH WORKING BACKGROUND

2014-present Assistant Professor in Applied Physics, Department of Engineering

Perugia, Italy

- Professor of Applied Physics (Fisica Tecnica) at the Architectural Engineering school (Academic Year 2016-2017)
- Professor of Environmental Applied Physics (Fisica Tecnica Ambientale) at the Medicine School (Academic Year 2015-2016)
- Main Teaching and research activity in the field of building physics:

Thermal-energy plants for buildings,

energy efficiency in buildings,

dynamic thermal-energy simulation,

indoor-outdoor microclimate continuous monitoring (also for artworks' preservation purpose)

building energy and environmental certification,

life cycle assessment,

lighting and thermal indoor-outdoor comfort,

new materials and techniques for building retrofits and new constructions (cool materials, PCMs, etc.),

innovative and smart materials and passive techniques for building energy saving,

urban heat island and its countermeasures,

net zero energy buildings and settlements,

inter-building effects.

2013-present Post-doc research fellow - University of Perugia

Perugia, Italy

 Main Research Focus: buildings energy efficiency, building dynamic simulation, building envelope materials and optimization, urban environment, building thermal-energy monitoring, cool and green roofs.

2012 Research visiting scholar, Virginia Tech University

Blacksburg, Virginia, USA

Project Network Dynamics Lab (Dr. Taylor's Lab)

 Main Research Focus: buildings network energy dynamic simulation, evaluation of derivative Inter-Building impact on indoor thermal performance.

2010-2012 Research visiting scholar, Columbia University

New York City, NY, USA

Project Network Dynamics Lab (Dr. Taylor's Lab)

 Main Research Focus: buildings network energy dynamic simulation, evaluation of derivative Inter-Building impact on indoor thermal performance.

2009-2013 PhD student in Energy Engineering, University of Perugia

Perugia, Italy

- Main Research Focus:
 - Buildings energy efficiency assessment through building dynamic simulation analysis, also considering the Inter-building effect;
 - buildings' energy dynamic simulation;
 - envelope reflectance assessment (albedo impact) as innovative strategy for improving indoor comfort and reducing building environmental impact;
 - microclimate and meteorological in field monitoring of advanced technologies neighborhoods and calibration of numerical models.
- Buildings' energy consultant and construction designer in urban planning initiatives aimed at improving environmental quality, supported by Planning Commission at "Central Park New City", PG, Italy.
- Winner of the competition for the assignment of a 3-years PhD scholarship.
- Winner of the national grant competition 2010 for the research project BAIO "Environmental comfort indoor and outdoor" supported by Fondazione Cassa di Risparmio di Perugia, Italy (private bank foundation).
- Principal contributor to the following activities related to energy&buildings:
 - Albedo Project, supported by Italian Environmental Ministry (www.albedocontrol.it);
 - ABCD: Albedo, green Buildings, global warming Control, Desertification, supported by Italian Environmental Ministry;
 - BAIO project: Indoor And Outdoor Building comfort, supported by Cassa di Risparmio di Perugia Foundation, winner project 2011;
 - BOMA project: Building energy Operation Management and Automation, supported by Italian Environmental Ministry;

2010-2012 Visiting graduate research assistant, Columbia University

New York, U.S.A.

Project Network Dynamics Lab (Dr. Taylor's Lab)

- Main Research Focus (1): buildings network energy efficiency and thermal behavior assessment through dynamic simulation, evaluation of derivative Inter-Building impact on indoor thermal performance.
- Main Research Focus (2): study of possible innovative strategies for reducing energy use improving occupants' awareness about energy and environmental issue.
- Selected by the Honors Center of Italian Universities H2CU for supporting her International academics activities.

2011-2012 Visiting graduate research assistant, Baruch College

New York, U.S.A.

Building Performance Lab (Dr. Bobker's Lab)

- Main Research Focus (1): building energy efficiency and optimization strategies by enhanced solutions
 of operations & management. Evaluation of innovative control systems to the Vertical Campus Baruch
 City College building in Manhattan, NYC (dynamic simulation, model calibration, in field monitoring)
- Main Research Focus (2): buildings' commissioning and thermal-energy dynamic simulation of complex multifunction buildings;
- Selected by the Honors Center of Italian Universities H2CU for supporting her International academics activities.

2009 Master Degree in Building Engineering

Milan, Italy

Polytechnic University of Milan Building Engineering

Summa cum laude

GPA: 4.0/4.0 (top one percent of students nationally)

- Defended thesis on the structural dynamic analysis to evaluate seismic performance of precast industrial buildings.
- Main focuses: Integrated building design and architectural technology; Building physics
 (thermodynamics, acoustics, illuminating engineering); Energetic systems and environmental suitability;
 Building energy equipment theory and design; Construction materials; Structural design; Seismic
 building analysis and adapting, Architecture history and city planning; Project finance and management;
 Urban design and city planning.

2008 Bachelor of Science in Building Engineering

Milan, Italy

Polytechnic University of Milan Building Engineering

GPA: 4.0/4.0 (top one percent of students nationally)

- Defended thesis on the structural dynamic behavior and seismic contemporary theories.
- Main focuses: Integrated building design; Building structural analysis and design; Building physics (thermodynamics, acoustics, illuminating engineering); Building elements technologies; Construction materials; Contemporary building history; Buildings pathology and diagnostics.

2003 Scientific Diploma, Scientific Lyceum "G. Galilei"

Perugia, Italy

100/100 cum laude

GPA: 4.0/4.0 (top one percent of students nationally)

 Main subjects: mathematics, physics, international history, philosophy, Italian literature, chemistry, biology, English as a second language, English literature, International art (painting, architecture, sculpture).

PROFESSIONAL EXPERIENCE

Registration code: A-3248 from May 2010

2013-present FONDAZIONE PER L'ISTRUZIONE AGRARIA IN PERUGIA

(Agriculture foundation of University of Perugia)

Perugia, Italy

Coordinator of a LEED certification and related activities' project.

 Elaboration of LEED certification, integrated design coordination for the property of the historical building, dynamic simulation.

2012-2013 TECNEXUM GmbH

Essen, Germany

Technology, innovative solutions and development consultant

Coordinator of Italian scientific projects concerning new envelope sustainable solutions for buildings

- Ideation and management of research projects
- Management of commercial activity of sustainable solutions for buildings in Italian and European market
- Data analysis and results' elaboration for research reports and sales promotion
- Communications with clients and Institutions
- International management of project partnership.

2013-present University of Perugia

Perugia, Italy

Technology, innovative solutions and development consultant

Manager and principal investigator of innovative solution for green buildings

- International management of project partnership in the United States and in Europe
- Consulting for start-up companies in the energy field
- Life Cycle Assessment evaluations
- Optimization of innovative materials and technologies for building energy saving
- Monitoring systems and smart control of building operations
- Energy audit and commissioning
- Ideation and management of new research projects
- Data analysis and results' elaboration for research reports and sales promotion
- Communications with clients and Institutions

2011-present GBCI – Green Building Council Italia

Italy

Scientific committee for LEED for Existing Building and LEED for Historical Buildings

- National referent for the Energy and Atmosphere category in the development of the new protocol LEED for Historic Buildings
- National cooperation to implement Italian LEED GBCI protocols
- Selected to be official framer in accredited GBCI courses

2009-2012 University of Perugia

Perugia, Italy

Biomass Research Center

PhD in Energy Engineering

- Building thermal-energy dynamic simulation.
- Sustainability assessment and LEED protocol implementation.

- Research projects developer and manager.
- Managed research project and experimental activity regarding local climate and energy monitoring in residential buildings, to validate numerical models.
- Managed the research project "Environmental comfort indoor and outdoor" after winning the public competition promoted by Bank Foundation of Perugia, Italy.
- Managed of project BOMA Building Operation Management and Automation, for improving energy
 efficiency of existing buildings through buildings' operations, with the final aim of realizing a softwarehardware support for designers.
- Participated as envelope and energy designer in the Central Park New City project: energy saving and environmental study of a new Low Carbon City, Perugia, Italy.
- Participated in international project activity regarding "AlbedoControl" strategy against global warming.
- Participated in international research projects as "ABCD: Albedo, green Buildings, global warming Control and Desertification" involving University of Perugia, Italy, Italian Environmental Ministry, Tunisia Government and Energy Department.
- Participated in several research projects and experimental activities regarding building energy monitoring and assessments.
- Participated in several EEOCI Research Project: "Energy Efficiency Optimization of Ceramic Industry".
- Collaborated in teaching Engineering physics, Building equipment, Environmental law, and Urban planning administration.
- Collaborated and provided highly specialized lectures to engineering students regarding building energy plants design, efficiency strategies assessment, buildings' envelope improvement, and buildings' energy efficiency law evolution and implementation into design procedures.
- Supervised engineering doctors and Ph.D. students in undertaking research and experimental activity and in managing thesis works and final dissertations.

2008-2009 Italcostruzioni S.p.A.

Perugia, Italy

General Contractor

Executive Integrated Designer, project manager

- Project manager and integrated designer.
- Main skills: architectural design, building envelope technology design, building yard designer and yard activities planner.

2008-2009 Polytechnic University of Milan - Building Engineering

Milan, Italy

Building Engineering school, Structural Engineering Department

International research project developer

Participated in RELUIS Research Project in Seismic Engineering with the task to study and evaluate
modeling procedures for describing the industrial buildings seismic behavior, in cooperation with
Professor Alessandro Palermo and Giandomenico Toniolo, Dept. of Structural Engineering, Polytechnic
University of Milan, Italy.

2007-2008

Polytechnic University of Milan - Building Engineering

Milan, Italy

Structural Engineering Department

Assistant teacher

 Cooperated in teaching Structural Design in cooperation with Professor Alessandro Palermo and Giandomenico Toniolo, Dept. of Structural Engineering, Polytechnic University of Milan, Italy.

LANGUAGES

- Italian native speaker
- English excellent
- Spanish elementary

RESEARCH AWARDS

1. June 2016

IC2UHI Conference Award: "Outstanding Urban Heat Island Group of Researchers Award in recognition of continuously conducting research and outreach in urban heat island related topics" at the 4th International Conference on Countermeasures to Urban heat Islands. National University of Singapore 30-31 May and 1 June 2016.

2. October, 2014

AIPT Award: Award of the Italian Association of thermal-physical properties with the paper "Thermal-physical assessment of innovative roof systems for application in historic buildings" by A.L. Pisello, presented at the AIPT 2014 – Terni, Italy.

3. October, 2014

IC2UHI Award: Best paper award at the 3rd International Conference on Countermeasures to Urban Heat Island in Venice, Itally, for the paper "EXPERIMENTAL ANALYSIS OF THE THERMAL-OPTICAL PROPERTIES OF POLYURETHANE WATERPROOF LIQUID MEMBRANES FOR COOL ROOF APPLICATION" by A.L. Pisello, V.L. Castaldo, G. Pignatta, F. Cotana. Prize for the unique experimental approach for the UHI countermeasures.

4. May, 2013

H2CU Award per Energy Engineering in recognition of having contributed to H2CU academic and scientific excellence in the U.S.A. with her outstanding achievement in the field of Energy Engineering, earned at the Istituto Italiano di Cultura del Consolato Italiano a New York, USA.

5. July, 2013

Selected as the best idea to be presented at **MED Solutions** - The UN SDSN Center for Mediterranean Hosted by the University of Siena. First Siena Solutions Conference: Sustainable Development Solutions for the Mediterranean Region for the presentation "ALBEDO CONTROL AND COOL ROOFS AS A STRATEGY TO MITIGATE GLOBAL WARMING IN ECONOMICAL CRISIS PHASE" by F. Cotana, F. Rossi, V. Coccia, A. L. Pisello given in Siena, Italy.

TEACHING EXPERIENCE

- Teacher of *Impianti (Energy plants)* at the Engineering school. Degree in Architectural Engineering.
 Department of Engineering. Academic Year 2016-2017.
- Teacher of Environmental Applied Physics under the framework of the program: Prevention and safety in working places. Degree in Prevention techniques in the environment and in working places.
 Department of Experimental Medicine. Academic Year 2015-2016.
- Teacher of Applied Physics for building technicians, in the Academic Years 2013-14, 2014-15, 2015-16.

- Teacher of PhD class at University of Perugia, Italy in the PhD schools of 1. Energy Engineering and 2. Energy and sustainable development. Title of the course: Thermal-energy efficiency in buildings in the Academic Year 2014-2015.
- Teacher of PhD class at Politecnico di Milano, Italy in the Inter-doctoral Ph.D. course with Title Urban MicroClimate mitigation with Building Envelopes: Performance and Design in the Academic Year 2014-2015.
- Teaching associate (co-teacher) of Energy plants of buildings and renewable sources of energy at the faculty of Engineering, graduate students of Architectural engineering. Academic years: 2010-11, 2011-12, 2012-13, 2013-14.
- Teaching associate (co-teacher) of Applied physics at the faculty of Engineering, graduate students of Mechanical engineering. Academic years: 2010-11, 2011-12.
- Teacher in several post-lauream courses of *Energy efficiency in buildings, New materials for building energy efficiency, Innovative construction technologies* since 2011.
- Teacher of Green Building Council Italy courses for LEED exam preparation since 2012.

ACTIVITY AS INVITED LECTURER IN INTERNATIONAL SEMINARS

- 1. Title: New materials for thermal energy storage in buildings. Invited research speaker at the Polytechnic Institute of Research and Innovation in Sustainability INSPIRES, 19 July 2016. Escola Politècnica Superior (EPS), University of Lleida, Spain.
- Title: Innovative materials for energy saving and improving thermal comfort in the built environment. Invited research speaker at the Polytechnic Institute of Research and Innovation in Sustainability – INSPIRES, June 2015. Escola Politècnica Superior (EPS), University of Lleida, Spain.
- 3. Title: Energy efficiency in buildings and wellbeing in urban areas. Research Lectures of the Environmental Engineering Department, May 2015. Technical University of Crete (Greece).
- Title: Thermal-energy performance analysis of historic buildings. 19-12-2014. Municipality of Tivoli (Italy)
- Title: Materials and methods to improve energy performance in urban areas. University of Lleida (Spain). 20-11-2014.
- Title: Materials and methods to improve energy performance of buildings and cities. Worcester Polytechnic Institute. 30-04-2014.
- Title: Energy opportunities from water resources: first results of multipurpose research in Italian territory. Unesco Chair «Water Resources Management and Culture» Inaugural Meeting 11 MARZO 2014. University for Foreigners of Perugia - Palazzo Gallenga Sala Goldoniana.
- 8. Title: New Strategies for Performance Analysis and Optimization for Energy Efficiency in Buildings. Sponsored by H2CU International research center. October 23rd, 2013 @ La Sapienza University of Rome. Italy.
- Title: Energy Efficiency of Buildings: New Strategies for Performance Analysis and Optimization. Sponsored by NYU Poly, Department of Civil and Environmental Engineering. 16-10-2013 @ NYU Poly in New York.
- 10. Title: Impact of inter-building effects on the accuracy of building energy performance predictions: the role of urban morphology, meso-climate context, and place-based affiliation networks. Co-sponsored by EARTH SYSTEM AND ENVIRONMENTAL ENGINEERING PROGRAM, NOAA-CREST, CIUS BUILDING PERFORMANCE LAB. May 10th, 2013 @ CUNY New York City.
- Title: Impact of inter-building effects on the accuracy of building energy performance predictions: the
 role of urban morphology, meso-climate context, and place-based affiliation networks. Sponsored by
 H2CU International research center. May 17th, 2013 @ Italian Cultural Institute in New York.
- 12. Title: Impact of inter-building effects on the accuracy of building energy performance predictions: the role of urban morphology, meso-climate context, and place-based affiliation networks. Sponsored by Civil Engineering Networks Dynamics Lab. May 13th, 2013 @ Virginia Tech, Blacksburg, VA, USA.

ACTIVITY AS CHAIRMAN AND INVITED SPEAKER

- Moderator, plenary speaker, speaker of the conference summary at the IC2UHI 2016 in Singapore.
 COUNTERING URBAN HEAT ISLAND (UHI) AND CLIMATE CHANGE THROUGH MITIGATION AND ADAPTATION 30-31 MAY 1 JUNE 2016 | STEPHEN RIADY CENTRE, UNIVERSITY TOWN, NUS.
- Organizer of the session "Research perspectives in termal-energy storage" Chairman: prof. Luisa F. Cabeza, Universitat de Lleida, Spain at the 16th CIRIAF conference in Assisi, Italy. April 2016 by Luisa F. Cabeza, F. Cotana, A.L. Pisello.
- Invited speaker at the International Conference "Freshwater and Culture Water Resources Management and Culture Padiglione KIP Interna@onal School EXPO Milano 2015 October 6-7 organized by the UNESCO Chair in Water Resources Management and Culture 2015. Title: Water: a key player in building energy efficiency and in determining microclimate wellbeing.
- Invited speaker at the 36th AIVC Conference 'Effective ventilation in high performance buildings', Madrid 23rd-24th September 2015.
- Organizer of the session "Italian alliance for innovative building skin solutions and "cool" materials" at the 15th CIRIAF conference in Perugia, Italy. April 2015 by F. Cotana, F. Rossi, A.L. Pisello.
- Invited speaker at UNESCO and WATER: UNESCO Chair in Water Resources Management and Culture. University for Foreigners, Perugia, Italy. 2014, March 11st.
- Invited speaker (paid) at 44th International Congress and Exhibition on HVAC&R Integrated Design and Healthy Zero CO2 Emission Buildings Belgrade, 4th–6th December 2013.
- Chairman at 2013 AIVC TightVent Cool Roof's venticool Conference. Athens, September 25th 26th.
- CLIMA 2013. Presentation of an original paper. June 17th, 2013. Prague. Session title: Long oral presentation session- The role of cool materials in the urban context.
- Program Technical Committee participant at 3rd ScienceOne International Conference on Environmental Sciences ICES 2014, January 2014, Dubai.
- Conference Co-chair at Third International Conference on Countermeasures to Urban Heat Island, Venice, October 13-15, 2014.
- Chairman at 6th International Conference on Applied Energy ICAE2014. Taipei, Taiwan. May 2014.

NATIONAL AND INTERNATIONAL MEETING PRESENTATIONS

- IC2UHI 2016 COUNTERING URBAN HEAT ISLAND (UHI) AND CLIMATE CHANGE THROUGH MITIGATION AND ADAPTATION 30-31 MAY • 1 JUNE 2016 | STEPHEN RIADY CENTRE, UNIVERSITY TOWN, NUS. Singapore.
- INNOSTORAGE Conference. February 16-18, 2016 Ben-Gurion University of the Negev, Beer-Sheva, Israel. Session chairman and presenter.
- International Conference on Sustainable Design, Engineering & Construction 2015. Chicago, USA. May 2015
- 7th International Conference on Applied Energy. Abu Dhabi. March 2015.
- 3rd International Conference on Countermeasures to Urban Heat Island. October 2014. Venice, Italy.
- 6th International Conference on Applied Energy. Taipei, Taiwan. June 2014.
- 14th CIRIAF National Congress. Energy, Environment and Sustainable Development Perugia, Italy.
 April 4-5, 2014
- 49th International Conference by AICARR. HISTORICAL AND EXISTING BUILDINGS. DESIGNING
 THE RETROFIT. An overview from energy performances to indoor air quality. Roma 2014, 26th 28th
 February.
- 44th INTERNATIONAL CONGRESS & EXHIBITION ON HEATING, REFRIGERATION AND AIR CONDITIONING. Belgrade, Sava Center, December 4–6.

- AIVC conference in 2013 in Athens, Greece, 25-26 September 2013
- 2013 AIVC TightVent Cool Roof's venticool Conference. Athens, September 25-26.
- 68 Congresso Nazionale Associazione Termotecnica Italiana. Bologna, 11-13 Settembre.
- CLIMA 2013. Presentation of an original paper. June 17th, 2013. Prague.
- Seminar at Virginia Tech, VA to the PhD School of Civil Engineering, 2013, May 12th.
- Event co-sponsored by Earth System and Environmental Engineering program NOAA-CREST, Cius, Building Performance Lab. 2013, May 10th.
- SEBUA 2012 Conference: Sustainable Energy in Buildings and Urban Areas, 2012, October 14th-20th, Kusadasi, Turkey.
- ATI Conference, 2012, September 13th -17th, Trieste, Italy.
- Winter Simulation Conference (WSC) on Simulation for a Sustainable World 2011, December 11th -14th – Phoenix, Arizona.
- 48th Aicarr International Conference on Energy refurbishment of existing buildings which solutions for an integrated System: Envelope, Plant, Control – 2011, September 22nd -23rd – Baveno, Italy.
- 3rd International Conference on Applied Energy 2011, May 16th -18th Perugia, Italy.
- ATI Conference, 2010, September 13th -17th, Cagliari, Italy.
- Summer School of Applied Physics, 2010, July 5th -9th, Benevento, Italy.

ACTIVITY AS MEMBER OF EDITORIAL BOARD

International Journals:

- Editor in chief of the Environmental Sciences and Sustainable Development Journal (IEREK-Elsevier) http://www.ierek.com/press/index.php/ESSD/about/editorialTeam
- Associate editor of the American Journal of Engineering and Applied Science (Science Publications) http://thescipub.com/journals/ajeas/editors
- Leading guest editor of the Special Issue "Smart Materials for Low Carbon Applications" in the International Journal of Low-Carbon Technologies - 2016 (Oxford University Press)
- International Journal of Applied Engineering Research (IJAER) (Research India Publications)
- International Journal of Energy Science (Science and Engineering Publishing Company)
- Energy Science & Engineering (Society of Chemical Industry and John Wiley & Sons, Ltd)
- Guest editor in the Special Issue "Building Energy Performance Modelling and Simulation" in the Modelling and Simulation in Engineering Journal (Hindawi Publishing Corporation) Scientific international associations:
- Member of the IEREK scientific committee

ACTIVITY AS REFEREE

International Journals:

- Applied Energy, Elsevier
- Energy and Buildings, Elsevier
- Energy, Elsevier
- Solar Energy, Elsevier
- Energy Efficiency, Springer
- Computers, Environment and Urban Systems, Elsevier
- Journal of Building Engineering, Elsevier
- Landscape and Urban Planning, Elsevier
- Sustainable Cities and Society, Elsevier
- Urban Climate, Elsevier
- International Journal of Low-Carbon Technologies, Oxford Journals
- British Journal of Applied Science & Technology, SCIENCEDOMAIN international (SDI)
- Solar energy, Elsevier

- Smart and Sustainable Built Environment, Emerald
- Energy Research & Social Science, Elsevier
- Advances in Research, SCIENCEDOMAIN international
- Mathematical Problems in Engineering, Hindawi Publishing Corporation
- Materials, MPDI Publishing
- Management of Environmental Quality: An International Journal, Emerald Publishing
- Smart and Sustainable Built Environment, Emerald Publishing
- Sustainability, MPDI
- Energies, MPDI
- Sensors, MPDI
- Many others.

International Conference:

- SEB Conference 2016.
- CIRIAF conference 2015 and 2016
- ISES Solar World Congress 2015
- ICSDEC 2015, Chicago, USA
- ICAE 2014, Taiwan
- 25th ECOS 2012 Conference. Perugia, Italy.
- ICAE 2015, Abu Dhabi.
- 3rd IC2UHI, Venice, Italy
- ICSDEC 2015, Chicago, USA.

ACTIVITY AS Member of the scientific and organizing committee

International Conference:

- Sustainability in Energy and Buildings, SEB-16 Turin, Italy 11-13 September 2016
- Session "Research perspectives in thermal-energy storage" at the 16th CIRIAF conference in Assisi, Italy. April 2016 by Luisa F. Cabeza, F. Cotana, A.L. Pisello.
- 3rd International conference on countermeasures to the urban heat island. Venice, Italy
- Constitution of the Italian Alliance for Innovative Building Skin Solutions and "Cool" within the 15th CIRIAF National Congress. Environmental footprint and sustainable development. Perugia, Italy. April 2015
- Member of the organizing committee of the CIRIAF conference in both 2015 and 2016 (15th and 16th editions).

NATIONAL AND INTERNATIONAL RESEARCH PROJECT

- EU funded project in Horizon 2020 framework. Call H2020-DRS-2015. Name of the proposal: HEritage Resilience
 Against CLimate Events on Site. Proposal number: 700395. Proposal acronym: HERACLES. Topic: DRS-11-2015.
 Type of action: RIA. 2016-2019 Task leader.
- 2. <u>EU funded project in *Horizon 2020* f</u>ramework. Call H2020-EE-2015-1-PPP. Name of the proposal: Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology. Proposal number: 678407. Proposal acronym: ZERO-PLUS. Topic: EE-02-2015. Type of action: IA. 2015-2019 Task leader and reference proposal contact.
- 3. <u>EU funded project in *Horizon 2020* framework.</u> Call H2020-LCE-2014-2. Name of the proposal: PhD on Innovation Pathways for TES. Proposal number: 657466, Project acronym: INPATH-TES. Topic: LCE-20-2014. Type of action: CSA. 2015-2018. Task leader and reference proposal contact.
- 4. CHAMAELEON RISE Marie Curie project, positively evaluated for two times within the framework of Marie Curie RISE call in 2014 and 2015, but not allowed to funding by the EC.

- 5. Programma CIRIAF per l'UNESCO "Chair Water Resource Management and Culture".
- 6. UMBRA ARTIS: Tecnologie impiantistiche di monitoraggio e protezione delle opere d'arte e degli ambienti ipogei (in Italian). Energy technologies for monitoring and protecting artworks and subterranean environment.
- 7. GREEN POST, Green Alternative Postal Vehicle Project (EIE-07/119/S12.466271).
- 8. Energy efficiency in buildings through passive innovative strategies in building envelopes. 2012-14. 3. PC2M, Phase Cool Change materials. 2012-present.
- 9. MUSAE Life+ project, Municipalities Subsidiary for Actions on Energy, Env_it, 016, 2013.
- RENAISSANCE CIVITAS+, Testing Innovative Strategies For Clean Urban Transport For Historic European Cities, FP7-SST-2007- 20121120.
- 11. ABCD Albedo, Building green, Control of global warming and Desertification. Supported by Italian Ministry of Environment.
- 12. BAIO: Indoor and Outdoor thermal comfort. Supported by private banking foundation Fondazione Cassa di Risparmio di Perugia, Call 2011.
- 13. TIAR: Tower hydraulic-Architectural-energetic. Supported by the Italian Ministry of Agriculture.
- 14. Green BOMA: Green Building Operation, Management, and Automation. Innovative solutions for energy saving based on the operation management. Enel and Italian Ministry of Economy and Finance.
- 15. SCER (Development of a new system for air-conditioning in buildings in urban areas with renewable energy sources)
- 16. ELIOS–Envelope Layers for Interactive Optimized Systems. Selected by Italian Ministry of Environment as strategic proposal @Greening Camp competition.
- 17. DAIKIN group: optimization of cooling systems through cool roof installation and monitoring. Supported by Daikin Chemicals and Tecnexum company.
- 18. CVR cooperation convention to implement innovative envelope high performance materials. Supported by CVR industries.
- 19. TECNEXUM: optimization of optical energy properties of coatings for chiller envelope.
- 20. TECNEXUM: analysis of the solar reflection index in dynamic thermal-energy calculation.
- 21. Institutional convention between CRB and Italian Ministry of the Environment, with titll "Recupero e valorizzazione energetica di biomasse legnose".
- 22. Institutional convention between Italian Ministry of the Environment, University of Perugia and Foundation for the Agricultural Education (FIA) with title "Riqualificazione energetica della Rocca di Casalina".

MENTORSHIP AND CO-MENTORSHIP EXPERIENCE

Master Degree

- 1. Benedetta Pioppi, University of Perugia, Italy (2016-17)
- 2. Alessandro Buffi, University of Perugia, Italy (2016-17)
- 3. Silvia Biagetti, University of Perugia, Italy (2015-16)
- 4. Alessandro Pio Fiorelli, University of Perugia, Italy (2015-16)
- 5. Marco Colleluori, University of Perugia, Italy (2015-16)
- Martina Picchi, University of Perugia, Italy (2015)
- 7. Claudia Fabiani, University of Perugia, Italy (2014-15)
- 8. Ilaria Pigliautile, University of Perugia, Italy (2014-15)
- 9. Giovanna Sanna, University of Perugia, Italy (2013-15)
- 10. Valeria Berellini, University of Perugia, Italy (2013-14)
- 11. Francesca Lia, University of Perugia, Italy (2013-14)
- 12. Serena Sensi, University of Perugia, Italy (2013-14)
- 13. Cristina Piselli, University of Perugia, Italy (2013-14)
- 14. Giorgia Agostinelli, University of Perugia, Italy (2013-14)
- 15. Veronica Castaldo, Polytechnic University of Milan, Italy (2012-present)
- 16. Jessica Romanelli, University of Perugia, Italy (2012-13)
- 17. Roberto Barone, University of Perugia, Italy Baruch College, NYC (2010-2011)

- 18. Vanessa Romagna, University of Perugia, Italy Baruch College, NYC (2010-2011)
- 19. Massimo Palombo, University of Perugia, Italy (2010-2011)
- 20. Tania Ghilardi, University of Perugia, Italy (2010)
- 21. Emanuele Chiodini, University of Perugia, Italy (2012-13)

PhD in "Energy Engineering" and "Energy and Sustainable Development" at University of Perugia, Italy

- Claudia Fabiani (2015- on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- Nastaran Makaremi (2015-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- Gloria Pignatta (2012-2015), PhD in "Energy Engineering" at University of Perugia, Italy
- Veronica Lucia Castaldo (2013-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- Cristina Piselli (2014-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- Federica Rosso (2013-on going), PhD in "Engineering of Architecture and Urbanistics" at University of Rome La Sapienza, Italy
- Yilong Han (2014-on going), PhD –BioBuild fellow at Virginia Tech, USA.
- Several visiting scholars for 3-to-6 month visiting periods in Univ. of Perugia, Italy.

PUBLICATIONS

Original Journal Papers:

- Pisello, A.L., Castaldo, V.L., Piselli, C., Fabiani, C., Cotana, F. How peers' personal attitudes affect indoor microclimate and energy need in an institutional building: results from a continuous monitoring campaign in summer and winter conditions, Energy and Buildings, Available online 19 May 2016, ISSN 0378-7788, doi:10.1016/j.enbuild.2016.05.053.
- 2. Pisello, A.L., Castaldo, V.L., Fabiani, C., Cotana, F. Investigation on the effect of innovative cool tiles on local indoor thermal conditions: Finite element modeling and continuous monitoring (2016) Building and Environment, 97, pp. 55-68. DOI: 10.1016/j.buildenv.2015.11.038
- 3. Han Y., Taylor J.E., **Pisello A.L**. Exploring mutual shading and mutual reflection inter-building effects on building energy performance, Applied Energy, Available online 14 November 2015, doi: 10.1016/j.apenergy.2015.10.170.
- 4. Gabriele Comanducci · Filippo Ubertini · Nicola Cavalagli · **Anna Laura Pisello** · Annibale Luigi Materazzi · Franco Cotana . Environmental effects on natural frequencies of the San Pietro bell tower in Perugia, Italy, and their removal for structural performance assessment. Accepted May 2016. Mechanical Systems and Signal Processing.
- 5. F. Asdrubali, F. Bianchi, F. Cotana, F. D'Alessandro, M. Pertosa, A.L. Pisello, S. Schiavoni. Experimental thermo-acoustic characterization of innovative common reed bio-based panels for building envelope. (2016) Building and Environment, 102, pp. 217-229. DOI: 10.1016/j.buildenv.2016.03.022

- 6. Rosso, F., Jin, W., **Pisello, A.L.**, Ferrero, M., Ghandehari, M. Translucent marbles for building envelope applications: Weathering effects on surface lightness and finishing when exposed to simulated acid rain (2016) Construction and Building Materials, 108, pp. 146-153. DOI: 10.1016/j.conbuildmat.2016.01.041
- A.L. Pisello, E. Fortunati, S. Mattioli, S. Mattioli, L.F. Cabeza, C. Barreneche, J.M. Kenny, F. Cotana. Innovative cool roofing membrane with integrated phase change materials. Energy and Buildings, Volume 112, 15 January 2016, Pages 40-48, ISSN 0378-7788, http://dx.doi.org/10.1016/j.enbuild.2015.11.061.
- Han Y., Taylor J.E., Pisello A.L. Exploring mutual shading and mutual reflection inter-building effects on building energy performance. Applied Energy Available online 14 November 2015. doi:10.1016/j.apenergy.2015.10.170
- H. Akbari, C. Cartalis, D. Kolokotsa, A. Muscio, A.L. Pisello, F. Rossi, M. Santamouris, A. Synnefa, N. Hien Wong, M. Zinzi. Local climate change and urban heat island mitigation techniques the state of the art. Journal of Civil Engineering and Management. 22(1), 2016. Doi: 10.3846/13923730.2015.1111934
- A.L. Pisello, Castaldo V.L., Pignatta G., Cotana F. Integrated numerical and experimental methodology for thermalenergy analysis and optimization of heritage museum buildings. Building Services Engineering Research and Technology. October 15, 2015. doi: 10.1177/0143624415609910.
- 11. F. Rosso, W. Jin, **A.L. Pisello**, M. Ferrero, M. Ghandehari. Translucent marbles for building envelope applications: weathering effects on surface lightness and finishing when exposed to simulated acid rain. Construction & Building Materials. Construction and Building Materials, Volume 108, 1, 2016.
- 12. F. Asdrubali, A.L. Pisello, F. D'Alessandro, F. Bianchi, C. Fabiani, M. Cornicchia, A. Rotili, Experimental and numerical characterization of innovative cardboard based panels: Thermal and acoustic performance analysis and life cycle assessment, Building and Environment, Available online 5 September 2015, doi: 10.1016/j.buildenv.2015.09.003.
- 13. F. Cotana, G. Cavalaglio, A. L. Pisello, M. Gelosia, D. Ingles and E. Pompili, Sustainable Ethanol Production from Common Reed (Phragmites australis) through Simultaneuos Saccharification and Fermentation. Sustainability 2015, 7(9), 12149-12163; doi:10.3390/su70912149
- 14. F. Ascione, A.L. Pisello, Eco-efficient Materials for Mitigating Building Cooling Needs CSE-City Safety Energy, 2015.
- 15. Han Y., Taylor J.E., **Pisello A.L.** Toward mitigating urban heat island effects: Investigating the thermal-energy impact of bio-inspired retro-reflective building envelopes in dense urban settings. Energy and Buildings 2015, 102, 380-389.
- 16. **Pisello A.L.**, Pignatta G., Castaldo V.L., Cotana F. The Impact of Local Microclimate Boundary Conditions on Building Energy Performance. Sustainability 2015, 7 (7), 9207-9230.
- 17. **Pisello A.L.**, A. Petrozzi, V.L. Castaldo, F. Cotana, 2015. On an innovative integrated technique for energy refurbishment of historical buildings: thermal-energy, economic and environmental analysis of a case study. Applied Energy. Accepted for publication on May 2015. doi:10.1016/j.apenergy.2015.05.061
- 18. **Pisello, A.L.**, Castaldo, V.L., Pignatta, G., Cotana, F., Santamouris, M. Experimental in-lab and in-field analysis of waterproof membranes for cool roof application and urban heat island mitigation (2016) Energy and Buildings, 114, pp. 180-190. DOI: 10.1016/j.enbuild.2015.05.026
- 19. V.L. Castaldo, V. Coccia, F. Cotana, G. Pignatta, A.L. Pisello, F. Rossi. Thermal-energy analysis of natural "cool" stone aggregates as passive cooling and global warming mitigation technique. Urban Climate Journal. Accepted for publication on May 2015. doi:10.1016/j.uclim.2015.05.006
- 20. **Pisello A.L.**, 2015. Experimental analysis of cool traditional solar shading systems for residential buildings. Energies 2015, 8(3), 2197-2210; doi:10.3390/en8032197

- 21. **Pisello A.L.**, 2015. Thermal-energy analysis of roof cool clay tiles for application in historic buildings and cities. Sustainable Cities and Society. doi:10.1016/j.scs.2015.03.003
- 22. **Pisello A.L.**, Piselli C., Cotana F., 2015. Thermal-physics and energy performance of an innovative green roof system: the cool green roof. Solar Energy 2015, 116, 337-356
- 23. **Pisello A.L.**, Piselli C., Cotana F. Influence Of Human Behavior On Cool Roof Effect For Summer Cooling. Building and Environment 2015, 88, 116-128. DOI: 10.1016/j.buildenv.2014.09.025.
- 24. **Pisello A.L.**, Asdrubali F., 2014. Human-based energy retrofits in residential buildings: a cost-effective alternative to traditional physical strategies. Accepted. Applied Energy APEN5473. DOI: 0.1016/j.apenergy.2014.07.049
- 25. Bianchi, F.; **Pisello, A.L.**; Baldinelli, G.; Asdrubali, F. Infrared Thermography Assessment of Thermal Bridges in Building Envelope: Experimental Validation in a Test Room Setup. Sustainability 2014, 6, 7107-7120.
- 26. **Pisello A.L.**, Pignatta G., Castaldo V.L., Cotana F., 2014. Experimental Analysis of Natural Gravel Covering as Cool Roofing and Cool Pavement. Sustainability 2014, 6, 4706-4722; doi:10.3390/su6084706.
- 27. Rosso F., **Pisello A.L.**, Ferrante M., Cotana F., 2014. Integrated Thermal Energy Analysis Of Innovative Translucent White Marble For Building Envelope Application. Sustainability. doi:10.3390/su6085439
- 28. Cotana F., **Pisello A.L.**, Moretti E., Buratti C., 2014. Multipurpose characterization of glazing systems with silica aerogel: In-field experimental analysis of thermal-energy, lighting and acoustic performance. Buildings and environment. DOI: 10.1016/j.buildenv.2014.06.014.
- 29. **Pisello A.L.**, Cotana F., Nicolini A., Buratti C., 2014. Effect of dynamic characteristics of building envelope on thermal-energy performance in winter conditions: in field experiment. Energy and Buildings, Vol. 80, pp. 218–230. DOI: 10.1016/j.enbuild.2014.05.017.
- 30. **Pisello A.L.**, Rossi F., Cotana F., 2014, Summer and winter effect of innovative cool roof tiles on the dynamic thermal behavior of buildings. Energies. Vol. 7, pp. 2343-2361. DOI: 10.3390/en7042343
- 31. **Pisello A.L.**, Castaldo V.L., Taylor J.E., Cotana F., 2014, Expanding Inter-Building Effect Modeling to Examine Primary Energy for Lighting. Energy and Buildings. DOI: 10.1016/j.enbuild.2014.02.081
- 32. **Pisello A.L.**, 2014. Optic-Energy Performance of Innovative and Traditional Materials for Roof Covering in Commercial Buildings in Central Italy. Advanced Materials Research. Vol. 884, pp. 685-688. DOI: 10.4028/www.scientific.net/AMR.884-885.685
- 33. **Pisello A.L.**, Santamouris M., Cotana F., 2013. Active cool roof effect: impact of cool roofs on cooling system efficiency. Advances in Building Energy Research. Vol. 7, Issue 2, pp. 209-221. DOI: 10.1080/17512549.2013.865560.
- 34. Bonamente, E., Rossi, F., Coccia, V., **Pisello, A.L.**, Nicolini, A., Castellani, B., Cotana, F., (...), Santamouris, M. An energy-balanced analytic model for urban heat canyons: comparison with experimental data. Advances in Building Energy Research Vol. 7(2), pp. 222 234, 2013. DOI: 10.1080/17512549.2013.865561
- 35. **Pisello A.L.**, Cotana F., 2014. The thermal effect of an innovative cool roof on residential buildings in Italy: Results from two years of continuous monitoring. Energy and Buildings Vol. 69, pp 154-164, DOI: 10.1016/j.enbuild.2013.10.031
- Rossi F., Pisello A.L., Nicolini A., Filipponi M., Palombo M., 2014. Analysis of retro-reflective surfaces for urban heat island mitigation: a new analytical model. Applied Energy Vol. 114, pp. 621-631, 2014. DOI: 10.1016/j.apenergy.2013.10.038.

- 37. **Pisello A.L.**, Castaldo V., Poli T., Cotana F., 2014. "Simulating buildings' thermal-energy performance at urban scale: evaluation of Inter-Building Effect in different urban configurations". Journal of Urban Technology. Vol. 21 (1) 2014 DOI:10.1080/10630732.2014.884386.
- 38. Xu X., Taylor J.E., **Pisello A.L.**, 2014. Network synergy effect: establishing a synergy between building network and peer network energy conservation effects. Energy and Buildings; 68, Part A: 312–320.
- Cotana F., Rossi F., Nicolini A., Filipponi M., Pisello A.L., 2013. "Energetic Analysis of Solar-Supplied Processes for Methane, Biogas and Wood Chip Production". Advanced Materials Research. Vol. 772 (2013) pp 720-724; doi:10.4028/www.scientific.net/AMR.772.720
- Pisello A.L., Cotana F., Nicolini A., Brinchi L., 2013. "Development of Clay Tile Coatings for Steep-Sloped Cool Roofs". Energies. Vol. 6(8), pp. 3637-3653; doi:10.3390/en6083637.
- 41. **Pisello A.L.**, Bobker M., Cotana F, 2012. "A Building Energy Efficiency Optimization Method by Evaluating the Effective Thermal Zones Occupancy". Energies. Vol. 5, pp. 5257-5278 (2012). DOI:10.3390/en5125257.
- 42. **Pisello A.L.**, Taylor J.T., Xu X., Cotana F., 2012. "Inter-Building Effect: modeling the impact of a network of buildings on the energy performance of single building". Building and environment. Vol. 58 (2012), pp. 37-45. DOI:10.1016/j.buildenv.2012.06.017
- 43. Xu X., Taylor J.E., **Pisello A.L.**, Culligan P., 2012. "The impact of place-based affiliation networks on energy conservation: An holistic model that integrates the influence of buildings, residents and the neighborhood context". Energy and buildings. (2012), DOI: 10.1016/j.enbuild.2012.09.013
- 44. **Pisello A.L.**, Xu X., Taylor J.T., Cotana F., 2012. "Network of buildings' impact on indoor thermal performance". SASBE Smart and Sustainable Built Environment" International Journal. Vol. 1, Iss: 1, pp. 73-86. DOI: 10.1108/20466091211227061
- 45. **Pisello A.L.**, Goretti M., Cotana F., 2011. "A method for assessing buildings' energy efficiency by dynamic simulation and experimental activity". Applied energy, Vol. 97, pp. 419-429, DOI:10.1016/j.apenergy.2011.12.094.
- 46. Cotana F, **Pisello A.L.**, 2011, "Un metodo per la valutazione del comportamento termico in regime dinamico degli edifici. Parte 1: formulazione" (In Italian). "A Method to Evaluate the Building Thermal Dynamic Behavior. Part I: Formulation". La Termotecnica. Vol.1(2011), pp. 53-59.
- 47. Cotana F, **Pisello A.L.**, 2011, "Un metodo per la valutazione del comportamento termico in regime dinamico degli edifici. Parte 2: casi di studio" (In Italian) "A Method to Evaluate the Building Thermal Dynamic Behavior. Part II: Case studies". La Termotecnica. Vol.2(2011), pp. 50-57.
- 48. Cotana F., Rossi F., Filipponi M., **Pisello A.L.**, 2010, "Progetto "Albedo control": una risposta sostenibile al riscaldamento globale" (In Italian) "Albedo-Control project: a sustainable strategy against global warming". Ambiente e Sicurezza. Vol.5(2010), pp. 48-58.

Papers in Conference Proceedings published in Scopus indexed journals:

- F.Asdrubali, A.L. Pisello, F. D'Alessandro, F. Bianchi, M. Cornicchia. Innovative cardboard based panels with recycled materials from the packaging industry: thermal and acoustic performance analysis. Energy Procedia 78 (2015) 321– 326.
- 50. **A.L. Pisello**, Castaldo V.L., Piselli C., Pignatta G., Cotana G. Combined thermal effect of cool roof and cool façade on a prototype building. Energy Procedia 78 (2015) 1556–1561.

- 51. **Pisello A.L.**, Cotana F., 2015. Thermal-energy and environmental impact of cool clay tiles for residential buildings in Italy. International Conference on Sustainable Design, Engineering and Construction. Procedia Engineering.
- 52. Rosso F., **Pisello A.L.**, Pignatta G., Castaldo V.L., Piselli C., Cotana F., Ferrero M., 2015. Outdoor thermal and visual perception of natural cool materials for roof and urban paving. International Conference on Sustainable Design, Engineering and Construction. Procedia Engineering.
- 53. **Pisello A.L.**, Cotana F., 2015. Experimental and numerical study on thermal performance of new cool clay tiles in residential buildings in Europe. The 7th International Conference on Applied Energy ICAE2015. Energy Procedia.
- 54. **Pisello A.L.**, Cotana F., Brinchi L., 2013. On a cool coating for roof clay tiles: development of the prototype and thermal-energy assessment. Energy Procedia: 45: 453-462.
- 55. Cotana, F., Belardi P., Manciola, P., Tamagnini, C., Materazzi, A.L., Fornaciari, M., Petrozzi, A., **Pisello, A. L.** et al. TIAR: Renewable energy production, storage and distribution; a new multidisciplinary approach for the design of rural facility. Energy Procedia; 45: 323-332.
- 56. Cotana F., Petrozzi A., Coccia V., Cavalaglio G., **Pisello A.L.**, Merico M.C., Pertosa M., Moretti E., 2013. An innovative small sized anaerobic digester integrated in historic building Energy Procedia 45 (2014) 333 341
- 57. **Pisello A.L.**, Petrozzi A., Castaldo V.L., Cotana F., Energy refurbishment of historical buildings with public function: parametric optimization and pilot case proposal. Vol. 61. Energy Procedia, 2014.
- 58. Bonamente E., Merico M.C., Pignatta G., Pisello A.L., Cotana F., Environmental impact of industrial prefabricated buildings: Carbon and Energy Footprint analysis based on an LCA approach. Vol. 61. Energy Procedia, 2014.
- 59. Boarin P., Guglielmino D., **Pisello A.L.**, Cotana F., Sustainability assessment of historic buildings: lesson learnt from an Italian case study through LEED® rating system. Vol. 61. Energy Procedia, 2014.
- 60. Cotana F., Petrozzi A., Cavalaglio G., Coccia V., **Pisello A.L.**, A batch digester plant for biogas production and energy enhancement of organic residues from collective activities. Vol. 61. Energy Procedia, 2014.
- 61. Cotana, F., Petrozzi, A., **Pisello, A.L.**, Coccia, V., Cavalaglio, G., Moretti, E. 2013. An innovative small sized anaerobic digester integrated in historic building. Energy Procedia; 45: 333-341.
- 62. Cotana, F., Belardi P., Manciola, P., Tamagnini, C., Materazzi, A.L., Fornaciari, M., Petrozzi, A., **Pisello, A. L.** et al. TIAR: Renewable energy production, storage and distribution; a new multidisciplinary approach for the design of rural facility. Energy Procedia; 45: 323-332.

Papers in Conference Proceedings:

- Anna Laura Pisello, Veronica Luicia Castaldo, Cristina Piselli, Claudia Fabiani and Franco Cotana. Can we assume
 that peers behave the same? Results from a continuous monitoring campaign in an office building. CLIMA 2016
 International conference. Aalborg (Denmark), May 2016.
- Simona D'Oca, Stefano Corgnati, Anna Laura Pisello and Tianzhen Hong. Introduction to an occupant behavior motivation survey framework CLIMA 2016 International conference. Aalborg (Denmark), May 2016.
- 3. **A.L. Pisello**, E. Fortunati, C. Fabiani, S. Mattioli, F. Dominici, L. Torre, L.F. Cabeza, F. Cotana. On the PCMs' effect for optimizing cool membrane weathering resistance. CIRIAF International Conference, Perugia 2016 (April).

- 4. **A.L. Pisello**, A. D'Alessandro, C. Fabiani, F. Ubertini, L.F. Cabeza, F. Cotana. Thermal characterization of a new macroencapsulated matrix-type PCM as additive for cement-based materials. CIRIAF International Conference, Perugia 2016 (April).
- 5. **A.L. Pisello**, C. Fabiani, G. Cavalaglio, A. Nicolini, M. Barbanera, F. Cotana. Sustainable new brick and insulation panel from mineralization of stranded driftwood residues. CIRIAF International Conference, Perugia 2016 (April).
- G. Pignatta, A.L. Pisello, F. Cotana. Environmental analysis of innovative and sustainable cool skins for building roofs. CIRIAF International Conference, Perugia 2016 (April).
- 7. **A.L. Pisello**, C. Piselli, G. Pignatta, C. Fabiani, F. Ubertini, F. Cotana, M. Santamouris. Net Zero Energy settlements in Europe: first findings of the Zero-Plus Horizon 2020 project. CIRIAF International Conference, Perugia 2016 (April).
- 8. F. Rosso, **A.L. Pisello**, W. Jin, M. Ghandehari, F. Cotana, M. Ferrero. Experimental analysis of marble building envelope degradation caused by acid rain: optic characteristics and color change. CIRIAF International Conference, Perugia 2016 (April).
- A.L. Pisello, V.L. Castaldo, C. Piselli, I. Pigliautile, F. Cotana. Combined experimental and numerical assessment for investigating the impact of different boundary conditions on local microclimate. CIRIAF International Conference, Perugia 2016 (April).
- 10. G. Cavalaglio, M. Gelosia, S. D'Antonio, A. Nicolini, A.L. Pisello, M. Barbanera, F. Cotana. Lignocellulosic ethanol production from the recovery of stranded driftwood residues. CIRIAF International Conference, Perugia 2016 (April).
- 11. F. Cotana, C. Buratti, M. Barbanera, G. Cavalaglio, D. Foschini, A. Nicolini, A. L. Pisello. Driftwood biomass in Italy: estimation and characterization. CIRIAF International Conference, Perugia 2016 (April).
- 12. **A.L. Pisello**, V.L. Castaldo, F. Cotana, Y. Han, J.E. Taylor. Inter-Building Effects: the state of art for investigating buildings' thermal-energy performance in urban areas. CIRIAF International Conference, Perugia 2016 (April).
- 13. **A.L. Pisello**, E. Fortunati, S. Mattioli, C. Barreneche, F. Dominici, C. Piselli, V.L. Castaldo, L.F. Cabeza, F. Cotana, L. Torre, J.M. Kenny, Multipurpose characterization of cool roof membrane with paraffin based PCM inclusion. INNOSTORAGE Conference. Israel, 2016.
- 14. **A.L. Pisello**, L.F. Cabeza, F. Cotana, How cool roofs interact with PCMs: investigating thermal-energy behavior of a cool roof membrane with paraffin based PCM inclusion. AIVC Conference, Madrid 2015.
- 15. Anna Laura Pisello*1, Luisa F. Cabeza2, Franco Cotana, F. Asdrubali, A.L. Pisello, F. D'Alessandro, F. Bianchi, M. Cornicchia. Innovative cardboard based panels with recycled materials from the packaging industry: thermal and acoustic performance analysis. 6th International Building Physics Conference, IBPC 2015, At Turin, Italy
- 16. **A.L. Pisello**, Castaldo V.L., Piselli C., Pignatta G., Cotana G. Combined thermal effect of cool roof and cool façade on a prototype building. 6th International Building Physics Conference, IBPC 2015.
- 17. **Pisello A.L.**, Cotana F., 2015. Thermal-energy and environmental impact of cool clay tiles for residential buildings in Italy. International Conference on Sustainable Design, Engineering and Construction. Chicago USA 10-13 May 2015.
- 18. Rosso F., **Pisello A.L.**, Pignatta G., Castaldo V.L., Piselli C., Cotana F., Ferrero M., 2015. Outdoor thermal and visual perception of natural cool materials for roof and urban paving. International Conference on Sustainable Design, Engineering and Construction. Chicago USA 10-13 May 2015.
- 19. **Pisello A.L.**, Cotana F., 2015. Experimental and numerical study on thermal performance of new cool clay tiles in residential buildings in Europe. The 7th International Conference on Applied Energy ICAE2015. Abu Dhabi 2015.

- 20. Pisello A. L., V. L. Castaldo, G. Pignatta, F. Cotana. Evaluation of the thermal-energy performance of naturally "cool" gravel covering for cool roof and cool pavement application: a case study. IC2UHI Venice, Italy, October 13-15, 2014.
- 21. Pisello A. L., V. L. Castaldo, G. Pignatta, F. Cotana. Experimental analysis of the thermal-optical properties of polyurethane waterproof liquid membranes for cool roof application. IC2UHI Venice, Italy, October 13-15, 2014.
- 22. **Pisello A.L.**, Castaldo V.L., Cotana F., Dynamic thermal-energy performance analysis of a prototype building with integrated phase change materials. ATI 2014 69° Milano, Italy, September 10-12, 2014.
- Cotana F., Cavalaglio G., Coccia V., Pisello A.L., Petrozzi A., Gelosia M., Simultaneous saccharification and fermentation of common reed (Phragmites Australis) at high solid loading. World Lake Conference. Perugia, Italy. September 1-5, 2014.
- 24. Petrozzi A., Pisello A.L., Cavalaglio G., Coccia V., Gelosia M., Castaldo V.L., Pertosa M., Energy enhancement of marsh reed as biofuel for thermal boiler. World Lake Conference. Perugia, Italy. September 1-5, 2014.
- 25. **Pisello A.L.**, Coccia V., Cavalaglio G., Di Francesco S., Aquino A., Petrozzi A., Water heat pumps using water from lakes. State of the art and case study. World Lake Conference. Perugia, Italy. September 1-5, 2014.
- 26. **Pisello A.L.**, Castaldo V.L., Pignatta G., Cotana F., The effect of lake microclimate on thermal-energy behavior of building. World Lake Conference. Perugia, Italy. September 1-5, 2014.
- 27. Petrozzi A., Di Francesco S., **Pisello A.L.**, Aquino A., A new model for photovoltaics integration with hydropower: a case study. World Lake Conference. Perugia, Italy. September 1-5, 2014.
- 28. **Pisello A.L.**, Petrozzi A., Castaldo V.L., Cotana F., Energy refurbishment of historical buildings with public function: parametric optimization and pilot case proposal. The 6th International Conference on Applied Energy ICAE2014.
- 29. Bonamente E., Merico M.C., Pignatta G., **Pisello A.L.**, Cotana F., Environmental impact of industrial prefabricated buildings: Carbon and Energy Footprint analysis based on an LCA approach. The 6th International Conference on Applied Energy ICAE2014.
- 30. Boarin P., Guglielmino D., **Pisello A.L.**, Cotana F., Sustainability assessment of historic buildings: lesson learnt from an Italian case study through LEED® rating system. The 6th International Conference on Applied Energy ICAE2014.
- 31. Cotana F., Petrozzi A., Cavalaglio G., Coccia V., **Pisello A.L.**, A batch digester plant for biogas production and energy enhancement of organic residues from collective activities. The 6th International Conference on Applied Energy ICAE2014.
- 32. **Pisello, A.L.**, Castaldo V.L., Pignatta G., Cotana, F., Experimental analysis of natural gravel covering as cool roof and cool pavement. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 33. Moncada Lo Giudice G., Bianchi F., **Pisello A.L.**, Baldinelli G., Asdrubali F., Infrared thermography assessment of thermal bridges in building envelope: experimental validation in a test room setup. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 34. Pertosa M., Pisello, A.L., Castaldo V.L., Cotana, F., Environmental sustainability concept applied to historic buildings: the experience of LEED international protocol in the stable of Sant'Apollinare fortress in Perugia. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 35. Rosso F., **Pisello A.L.**, Cotana F., Ferrero M., Integrated thermal-energy analysis of innovative translucent white marble for building envelope application. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 36. **Pisello A.L.**, Castaldo V.L., Castellini I., Cotana F., Experimental evaluation of the indoor thermal environment of an Italian historical subterranean museum space. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 37. Cotana F., Barbanera M., **Pisello A.L.**, Castaldo V.L., Castellini I., Strategie di impiego del materiale ligneo depositato sugli arenili. 14th CIRIAF National Congress. Perugia, Italy. April 4-5, 2014.
- 38. **Pisello A.L.**, Cotana F., 2014. Thermal-energy performance of high reflective tiles in historic buildings. AICARR International conference. Rome, Italy, 26th 28th February.

- 39. **Pisello, A.L.**, Petrozzi, A., Castaldo V.L., Cotana, F., On an innovative integration strategy of renewable energy system in historic build-ing with public function. AICARR International conference. Rome, Italy, 26th 28th February.
- 40. F.Rossi, A.Nicolini, E.Bonamente, **A.L.Pisello**, V.Coccia, B.Castellani, E.Morini, "A scale model for the Urban Canyon Effect quantification: preliminary data analysis", International Sustainable Built Environment Conference, Doha, Qatar, 28-30 January 2014.
- 41. **Pisello A.L.** 2013. ENERGY EFFICIENCY OF BUILDINGS AT INTER-BUILDING SCALE: REVIEW OF STRATEGIES FOR PERFORMANCE ANALYSIS AND OPTIMIZATION. Proceedings of the 2013 Winter Simulation Conference. 44th INTERNATIONAL CONGRESS & EXHIBITION ON HEATING, REFRIGERATION AND AIR CONDITIONING. Belgrade, Sava Center, December 4–6.
- 42. **Pisello A.L.**, Taylor J.T., Cotana F., 2013. Simulating the effect of urban morphology on indoor thermal behavior: an Italian case study. Proceedings of the 2013 Winter Simulation Conference. December 8-11. Washington DC.
- 43. Cotana F., Petrozzi A., Di Francesco S., Manciola P., Biscarini C., Nardi F., Nicolini A., Pisello A.L., Coccia V., Cavalaglio G., Merico M.C. 2013. Environmental hydraulics rural tower for the energy production and accumulation from renewable sources. International Conference on Applied Energy ICAE 2013, Jul 1-4, Pretoria, South Africa.
- 44. Cotana F., Rossi F., Coccia V., Pisello A.L., Bonamente E., Petrozzi A., Cavalaglio G., 2013. Albedo control as an effective strategy to tackle global warming: a Tunisian case study. International Conference on Applied Energy ICAE 2013, Jul 1-4, Pretoria, South Africa.
- 45. **Pisello A.L.**, Santamouris M., Cotana F., 2013. On the analysis of cool roofs for cooling system efficiency. 2013 AIVC TightVent Cool Roof's venticool Conference. Athens, September 25-26.
- 46. Rossi F., Cotana F., Coccia V., **Pisello A.L.**, Bonamente E., Palombo M., Pignatta G., Morini E., 2013. Modelling of urban canyon: analytical and experimental remarks. 2013 AIVC TightVent Cool Roof's venticool Conference. Athens, September 25-26.
- 47. **Pisello A.L.**, Cotana F., Brinchi L., 2013. On a cool coating for roof clay tiles: development of the prototype and thermal-energy assessment. 68 Congresso Nazionale Associazione Termotecnica Italiana. Bologna, 11-13 Settembre.
- 48. Cotana F.,; **Pisello A.L.**, et al., 2013. TIAR: Renewable energy production, storage and distribution; a new multidisciplinary approach for the design of rural facility. 68 Congresso Nazionale Associazione Termotecnica Italiana. Bologna, 11-13 Settembre.
- 49. Cotana F., Petrozzi A., Coccia V., Cavalaglio G., **Pisello A.L.**, Merico M.C., Pertosa M., Moretti E., 2013. An innovative small sized anaerobic digester integrated in historic building. 68 Congresso Nazionale Associazione Termotecnica Italiana. Bologna, 11-13 Settembre.
- 50. F. Cotana, A. Petrozzi, V. Coccia, M. Gelosia, G. Cavalaglio, A. L. Pisello. AN INNOVATIVE BIO-DIGESTER FOR BIOGAS PRODUCTION AND ENERGETIC ENHANCEMENT IN A LITTLE SIZED ENGINE. European Biomass Conference and Exhibition (EU BC&E). Hamburg 23-23 June 2013.
- 51. **Pisello A.L.**, Rossi F., Cotana F., 2012. "On the impact of cool roofs in Italian residential buildings: experimental assessment of summer and winter performance". Proceedings of International Conference Sustainable Energy in Buildings and Urban Areas, October 14-20, Kusadasi, Turkey.
- 52. **Pisello A.L.**, Rossi F., Cotana F., 2012. "Thermophysical impact of reflecting roof tiles: year-round continuous monitoring" (In Italian: "Impatto termo fisico di tegole riflettenti: monitoraggio in continuo estivo ed invernale"). Proceedings of ATI Conference, September 13-17, Trieste, Italy.
- 53. **Pisello A.L.**, Thiemann A., Santamouris M., Cotana F., 2012. "Analysis of a cool roof system for reducing cooling loads and improving cooling system efficiency". Rehva International Conference CLIMA 2013, June 16-19, Prague.

- 54. **Pisello A.L.**, Rossi F., Cotana F., 2011. "Increasing roof albedo: a retrofitting strategy for buildings and environment". Proceedings of 48th International AICARR Conference on Energy Retrofitting of Existing Buildings 22-23 September Baveno, Italy.
- 55. **Pisello A.L.**, Goretti M., Cotana F., 2011. "Building energy efficiency assessment by integrated strategies: dynamic simulation, sensitivity analysis and experimental activity". Proceedings of Third International Conference on Applied Energy 16-18 May 2011 Perugia, Italy.
- 56. Cotana F, **Pisello A.L.**, 2010, "Sul comportamento termico di edifici residenziali al variare della configurazione architettonica" (in Italian), "Buildings thermal behavior analysis varying architectural layout". Proceedings of ATI Conference, September 13-17, Cagliari, Italy.
- 57. **Pisello A.L.**, 2010, "Sul comportamento termico in regime dinamico di edifici passivi: ruolo della configurazione architettonica e dell'involucro edilizio" (In Italian) "Dynamic thermal behavior of free-running buildings: architectural layout and envelope design role". Poster presentation. Summer School of Applied Physics, July 5-9, Benevento, Italy.
- 58. Xu X., **Pisello A.L.**, Taylor J. E., 2011. "Inter-Building Energy Efficiency simulation with occupants networks". Proceedings of the 2011 Winter Simulation Conference 11-14 December 2011 Phoenix, Arizona.
- 59. F. Cotana, A. Petrozzi, V. Coccia, M. Gelosia, G. Cavalaglio, A. L. Pisello, 2013. "An innovative bio-digester for biogas production and energetic enhancement in a little size engine". International Biomass Conference. June 2013, Copenhagen.

Chapters in books:

- 1. **A.L. Pisello**, F. Cotana, M. Filippi, E. Fabrizio, 2012. "Introduction to the thermoenergy dynamic simulation of buildings. D. Residential building" (In Italian: "Introduzione alla simulazione termoenergetica dinamica degli edifici. D. Edificio residenziale"). Chapter in a book. Published by Editoriale Delfino, pp. 119-125.
- 2. **A.L. Pisello**, F. Cotana, 2013. "Existing Buildings' Energy Upgrade: An Economical and environmentally Sustainable Opportunity". Chapter in a book "Corporate Sustainability", pp. 265-280. Springer Editions.
- 3. **A.L. Pisello**, Book: Eco-efficient materials for mitigating building cooling needs. Chapter 10. High albedo roof coatings for reducing building cooling needs. Woodhead Elsevier Publishing.
- 4. **A.L. Pisello**, R. Paolini, M.V. Diamanti, E. Fortunati, V.L. Castaldo, L. Torre. NANO AND BIOTECH BASED MATERIALS FOR ENERGY BUILDING EFFICIENCY, Chapter 7. Nano-tech based cool materials for building energy efficiency.
- A.L. Pisello, F. Rosso. "Natural Materials for Thermal Insulation and Passive Cooling Application" in Key Engineering Materials Vol. 666 (2016) pp 1-16 (2016) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/KEM.666.1
- S.P. Corgnati, F. Cotana, S. D'Oca, A.L. Pisello, F. Rosso. "A cost-effective human based energy retrofitting approach". Cost-Effective Energy Efficient Building Retrofitting: Materials, Technologies, Optimization and Case Studies. Editors: F.Pacheco Torgal et al. Elsevier publishing.