CURRICULUM VITAE OF ANNA LAURA PISELLO, Ph. D

Associate Professor of Applied Physics at University of Perugia, Italy

National qualification as Full Professor of Environmental Applied Physics

PhD in Energy Engineering

Visiting research appointment at Princeton University

ERC StG grantee

Master Degree in Building Engineering

Professional Engineer - Civil and Environmental Engineering

LEED Green Associate

Married, mother of Leone - 3 year old.

Personal data of Anna Laura Pisello

Date of birth May 3rd, 1985

Position: Associate professor of Environmental Applied Physics, RTD-B with the national qualification as associate professor

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

University of Perugia,

Via G. Duranti 63

06125, Perugia (Italy)

Visiting research associate at Princeton University

Princeton, NJ, USA.

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http://eaplab.eu

Bibliometry Information (starting from 2011, updated on January 2021):

H index by Google Scholar: 42 – Number of citations: 5527, H index by Scopus: 38 – Number of citations: 4435



EDUCATIONAL and RESEARCH WORKING BACKGROUND

2022-present National qualification as Full professor of Environmental Applied Physics

2021-present Associate Professor in Environmental Applied Physics, Department of Engineering Perugia, Italy

- European Research Council StG grantee since 2021.
- Main research focus: smart and innovative materials for energy efficient and comfortable built environment; microclimate analysis and mitigation; building energy simulation and human-building interaction; thermal-energy storage; renewable energies.
- Founder and PI of the Environmental Applied Physics Lab at the Department of Engineering, University of Perugia www.eaplab.eu.
- Lecturing Professor of Applied Physics (Fisica Tecnica) and Building Energy Systems at the Architectural Engineering school (Academic Years from 2017-2018, until today)
- Principal investigator of national and international projects (Horizon 2020 projects see section below)
- Member of the PhD board of professors in Energy and Sustainable Development, advisor of more than 10 PhDs.
- Associate Editor of Solar Energy (Elsevier), Member of the Editorial board of Energy and Buildings (Elsevier), Member of the Editorial board of Nature Scientific Reports (Springer Nature).
- Positively evaluated through the National Professorship Qualification (ASN) as Associate Professor in Applied Physics 09/C2 in 2016.

2018-2021 RTD B type - Professor in Environmental Applied Physics, Department of Engineering Perugia, Italy

- Main research focus: smart and innovative materials for energy efficient and comfortable built environment; microclimate analysis and mitigation; building energy simulation and human-building interaction; thermal-energy storage; renewable energies.
- Responsible scientist of the Environmental Applied Physics Lab at the Department of Engineering, University of Perugia www.eaplab.eu.
- Lecturing Professor of Applied Physics (Fisica Tecnica) at the Architectural Engineering school (Academic Years 2017-2018, 2018-2019)
- Principal investigator of national and international projects (Horizon 2020 projects see section below)
- Member of the PhD board of professors in Energy and Sustainable Development, advisor of more than 5 PhDs.

2018-2019 Visiting research associate, Princeton University

NJ, USA

- Scientific coordinator of the bilateral agreement between Princeton University and University of Perugia
- Co-advisor of visiting PhD students and co-PI of research projects about smart materials for the built environment and microclimate in urban heat islands.

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



- Responsible scientist of the Environmental Applied Physics Lab at the Department of Engineering, University of Perugia.
- Lecturing Professor of Applied Physics (Fisica Tecnica) at the Architectural Engineering school (Academic Year 2016-2017)
- Lecturing Professor of Environmental Applied Physics (Fisica Tecnica Ambientale) at the Medicine School (Academic Year 2015-2016)

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

Perugia, Italy

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

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.

2010-2012 Research visiting scholar, CUNY

New York City, NY, USA

Building performance lab (Prof. Bobker's Lab)

 Main Research Focus: building dynamic simulation; occupancy behavior and human-building interaction for energy efficiency.

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

Licensed Building Engineer by Italian Institute of Engineers

Registration code: A-3248 from May 2010

2016-present FONDAZIONE PER L'ISTRUZIONE AGRARIA IN PERUGIA

(Agriculture foundation of University of Perugia)

Perugia, Italy

General Coordinator of a Green Building Council – Historic Building certification and related activities' project concerning the first building certified in the world with this protocol.

 Elaboration of GBC HB certification, dynamic simulation modelling (score 17/17), integrated design coordination for the property of the historical building, building thermal-energy dynamic simulation.

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, building thermal-energy 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

Trento, 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.

ACADEMIC AWARDS

- 1. **ERC (European research Council) award** for the Starting Grant competition in 2021, as principal investigator.
- 2. MetroLivEnv conference 2022 Best Paper award (May 2022)
- 3. Youngest woman to be included into Top Italian Scientists topitalianscientists.org from 2021.
- 4. ERC (European research Council) finalist for the Starting Grant competition in 2020, as principal investigator.
- 5. **Invited author** for elaborating **review articles** in Solar Energy, Building and Environment, Wiley Energy and Environment, Renewable and sustainable energy reviews, Annual Reviews of Materials Research
- 6. 2017-2018

Top downloaded article in "Wiley Interdisciplinary Reviews: Energy and Environment"

7 April 2017

Annual award for your researchers (younger than 42 years old) for the **best publication 2016** at University of Perugia.

3. 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.

9. 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.

10. October, 2014

IC2UHI Award: Best paper award at the 3rd International Conference on Countermeasures to Urban Heat Island in Venice, Italy, 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.

11. 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.

12. 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.

Selected LECTURING EXPERIENCE

- Lecturer of Designing environmental comfort: from the material to the urban scale, at Laboratorio del costruire sostenibile 2020. VIII edizione. Lucca
- Lecturer of Building energy performance and systems (Building physics and energy plants) at the Engineering school of University of Perugia. Degree in Architectural Engineering. Department of Engineering. Academic Years 2020-current.
- Lecturer of Applied Physics (Building Physics and energy systems) at the Engineering school of University of Perugia.
 Degree in Architectural Engineering. Department of Engineering. Academic Years 2018-current.
- Lecturer of Impianti (Energy systems) at the Engineering school at the Engineering school of University of Perugia. Degree in Architectural Engineering. Department of Engineering. Academic Years 2016-17 and 2017-18.
- Lecturer of Toward near zero energy buildings at the PhD class at University of Perugia, Italy in the PhD schools of Energy and sustainable development. Academic year 2016-2017.
- Lecturer of Thermal-energy adaptive dynamics: from the material to the inter-building scale at the PhD class at University of Perugia, Italy in the PhD schools of Energy and sustainable development. Academic year 2016-2017.
- Lecturer of *Impianti (Energy systems)* at the Engineering school. Degree in Architectural Engineering. Department of Engineering. Academic Year 2016-2017.
- Lecturer 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.
- Lecturer of Applied Physics for building technicians, in the Academic Years 2013-14, 2014-15, 2015-16.
- Lecturer 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.
- 2016: Invited teacher of PCM in climatic chamber at the 3rd INNOSTORAGE PhD training school on "Experimental
 apparatus for measurement" at University of Lleida, Spain.
- 2015: Invited teacher of Urban materials reflectivity cold roofs at the PhD Summer School of "Building physics in urban environments" hosted by the International Association of Building Physics. Politecnico di Torino, June 2015.
- Lecturer 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 and/or ORGANIZER/CHAIRMAN IN INTERNATIONAL SEMINARS, WORKSHOPS, OR SCIENTIFIC TRAINING SCHOOLS

- Title: Multi-domain environmental comfort: definitions, first studies and experimental facilities towards new interpretation models, at the Invited seminar Graduate School Specialized in Climate Change, Kyung Hee University (co-chaired, coorganized), December 2021, online, South Korea, USA, Italy, within the framework of the workshop "INVESTIGATING HUMAN COMFORT THROUGH MULTI-DOMAIN STUDIES IN THE BUILT ENVIRONMENT" INVITED SEMINAR at the gradate school specialized in Climate Change, at Kyung Hee University.
- 2. Title: Experiments and theories for understanding and improving indoor/outdoor wellbeing towards urban resilience to microclimate change, Civil Engineering and Geo-Environment Laboratory, University of Lille, December 2021.
- 3. Title: Urban resilience in a changing world: energy, safety and wellbeing challenges. President of the scientific committee and lecturer of the 3rd Summer school by H2CU on World heritage studies at New York University, CUSP research centre, NY, USA (July-August 2019).
- 4. Title: On buildings shedding their skin in urban systems: a multidisciplinary and multidomain approach for energy efficiency and environmental comfort in indoors and outdoors. April 2018. Princeton University, NJ, USA.
- 5. Title: The urban heat island effect. International IEREK summer school on "Advanced urban planning and design". 8-25 July 2017. Campus X. Rome.
- 6. Title: PCMs in a Climatic Chamber, at the International training school 3rd edition on Experimental apparatus for measurement. October 2016. University of Lleida, Spain.
- 7. Title: From the material to the inter-building scale: Investigating new perspectives for energy efficient and comfortable cities. Berkeley Lab Lawrence Berkeley National Laboratory, March 30th, 2017.
- 8. Title: Wellbeing in indoor and outdoor environment: from the material to the inter-building scale in urban areas. Princeton University, April 3rd, 2017.
- 9. Title: Green Urban Energy Regeneration: Heat Island Mitigation and Inter-Building Effects. At the International summer school organized by IEREK in Rome, 2017.
- 10. Title: Energy efficiency and environmental sustainability in historical buildings. At the International summer school organized by H2CU by Fordham University and H2CU research centre, July 2017.
- 11. 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.
- 13. Title: Energy efficiency in buildings and wellbeing in urban areas. Research Lectures of the Environmental Engineering Department, May 2015. Technical University of Crete (Greece).
- 14. Title: Thermal-energy performance analysis of historic buildings. 19-12-2014. Municipality of Tivoli (Italy)
- 15. Title: Materials and methods to improve energy performance in urban areas. University of Lleida (Spain). 20-11-2014.
- 16. Title: Materials and methods to improve energy performance of buildings and cities. Worcester Polytechnic Institute. 30-04-2014.
- 17. 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.
- 18. 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.



- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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 HOSTING INSTITUTION REPRESENTATIVE AND SCIENTIFIC ORGANIZER OF THE FOLLOWING INTERNATIONAL SEMINARS AND CONFERENCES

- 1. Plenary meeting of International Energy Agency Annex 79 (IEA EBC Annex 79 Occupant-Centric Building Design and Operation), University of Perugia, Italy (September 2019).
- 2. EXERGY NILAN Training school entitled "Soluzioni Impiantistiche su misura per edifici NZEB" at University of Perugia (September 2020).
- 3. Conference given by Dr. Alvaro de Gracia, University of Lleida, "Energy efficiency and new protocols for historic buildings results of REHIB Marie Curie Cofund Project (2019)
- 4. Conference given by Professor Elie Bou-Zeid, Princeton University, dal titolo "Cities in the 21st century: the nexus of the climate, water and energy challenges" (11-10-2016)
- Conference given by Professor Hashem Akbari, Concordia University, dal titolo "Advances in Heat Island Countermeasures Technologies" (24-10-2017)
- Conference given by Professor John Boland, University of South Australia, dal titolo "Probabilistic forecasting of renewable energy sources" (02-09-2016)
- 7. Conference given by Professor Ke Xing, University of South Australia, dal titolo "Integrated Carbon Metrics for Urban Precincts: Modelling and Scenario Analysis" (28-06-2016)
- 8. Conference given by Professor Luisa F. Cabeza, Università di Lleida, dal titolo "How to prepare a H2020 EU project" (15-01-2018)
- 9. Conference given by Professor Luisa F. Cabeza, Università di Lleida, dal titolo "Thermal Energy Storage: Possibilities and Outlook" (20-01-2018)
- 10. Conference given by Dr. Riccardo Paolini, University of New South Wales, dal titolo "Local climate change and overheating mitigation in Australian cities" (20-12-2017)

ACTIVITY AS CHAIRMAN, INVITED SPEAKER, PLENARY or KEYNOTE SPEAKER, MEMBER OF THE SCIENTIFIC COMMITTEE

- Keynote invited speaker of the round table at the MetroLivEnv International conference entitled "What's next? Directions of technological research for the living and built environment presenting real experiences in multi-disciplinary projects and generating active networking by the participants" (2022 IEEE INTERNATIONAL WORKSHOP ON METROLOGY FOR LIVING ENVIRONMENT).
- Invited keynote speaker at the 38th national AICARR conference entitled "Building and energy systems for the future climate", with a lecture entitled "Environmental wellbeing and energy efficiency in urban heat islands: measurements, models and new strategies for risk mitigation" (Milan, June 2022)
- Co-organizer and chairman of the special session at the 2022 IEEE INTERNATIONAL WORKSHOP ON METROLOGY FOR LIVING ENVIRONMENT (Maggio 2022, Cosenza) entitled "MULTI-DOMAIN MEASUREMENTS FOR PERSONALIZED COMFORT MANAGEMENT IN BUILDINGS".



- Plenary speaker at the first European Workshop on Radiative Cooling with a lecture entitled "New solutions for urban heat island mitigation: the role of transient materials into the built environment"
- Invited keynote speaker entitled "New solutions for urban heat island mitigation: the role of transient materials into the built environment" at the C2M, Workshop, Sustainable material for energy storage solutions, San Sebastian, February 2022.
- Invited plenary speaker entitled "Roadmapping the role of cool materials to mitigate urban heat island for citizens' wellbeing" at 2nd Global Experts Meet on Materials Science & Engineering (GEMMSE-22), June 16-18, 2022 in Rome Italy.
- Invited Keynote speaker entitled "A View of Urban Resilience to Climate Change, Human-centered approach for improving indoor wellbeing and outdoor urban resilience to climate change" at the 4th editions of the Future and Smart Cities (FSC) and Resilient and Responsible Architecture & Urbanism (RRAU) conferences together with the 7th Edition of the Earth Observation for Environmental Changes (EOEC) & 9th edition of the Geo-information Technologies for Natural Disaster Management (GiT4NDM) conference, (December 2021, online)
- Invited Chairman and Workshop coordinator at the international conference International Symposium on Heating, Ventilation and Air-conditioning ISHVAC 20201 entitled (7 December 2021, online)
- Invited Keynote speaker entitled "Human-centered multi-domain environmental comfort: the new generation of experiments and theories for understanding and improving indoor wellbeing and outdoor urban resilience to climate change" XII ENCAC 2021, XVI ENCAC 2020 Tocantins – Brazil, October 20th.
- Invited Keynote speaker entitled "Human-centered multiphysics approach for improving livability in urban areas: the role of smart materials and novel metrics for cities resilience to anthropogenic environmental forcing" at nanotech France 2021, France, online.
- Invited plenary speaker entitled "Environmental sustainability and human comfort in buildings: two key factors influencing livability and real estate market in smart post-Covid cities" at CINPAR (pre) 2021, Brazil, online.
- Invited plenary speaker entitled "Microclimate change mitigation for cultural heritage resilience: wearable sensing
 environmental techniques for investigating outdoor comfort, heritage conservation and energy saving in the built
 environment." at the Brazilian Congress on building pathology CBPAT (on line), Brazil August 2020.
- Invited plenary "lighting speaker" entitled "The human perspective in smart and resilient cities of the future: novel comfort
 assessment techniques with and for society" at the Cool Building Solution Collaborative meeting (worldwide) organized by
 Berkeley Lab (via web) September 2020.
- Invited plenary speaker at the annual international (worldwide) Alliance annual workshop by Global Cool Cities Alliance (GCCA) entitled "Microclimate mapping by means of interrelated sensing methods in urban heat islands: solutions for urban resilience and citizens' wellbeing" (via web) November 2020.
- Invited plenary speaker at IAQVEC 2019 International conference for the final summary speech. Bari, Italy (September 2019).
- Member of the international programme committee of the 13th International Conference on Sustainability in Energy and Buildings (SEB21) September 2021, Split, Croatia.
- Plenary invited speaker at Cool Building Collaborative update meeting (online from Berkeley, USA) at Laurence Berkeley National Lab. Sept. 30th 2020
- Invited Rilem Work group member at the TC 422 namely TES (Thermal Energy Storage in Cementitious Composites)
- Invited plenary speaker (closing speech) at IAQVEC 2019 International conference for the final summary speech. Bari, Italy (September 2019).
- Chairman and member of the local organizing committee of Building Simulation 2019 International Conference, Rome, Italy (September 2019).
- Hosting institution and leading member from the organizing institution at 3rd Annex 79 meeting by IEA EBC, University of Perugia, Italy (2019)
- Member of the International Scientific committee, Eurotherm Conference, University of Lleida (2019)
- Member of the scientific and organizing committee at HERACLES Horizon 2020 project winter school, University of Perugia, Italy (2019)
- Member of the International Scientific committee, Enerstock 2018, Kukurova University, Turkey (2018)
- Member of the International Scientific committee, International Conference of Urban Heat Island IC2UHI, IIIT India (2019)
- Member of the International Scientific committee, Building Simulation, Rome (2019)
- Member of the International Scientific Advisory Board, SDEWES Dubrovnik (2019)
- Member of the International Scientific Advisory Board, SDEWES Palermo, Italy (2018)



- Member of the scientific committee and moderator of the International conference "Noon to noon with energy and environmental challenges". University of Perugia, February 2018. With prof. Luisa Cabeza and prof. Franco Cotana.
- Member of the International Programme committee at SEB 2018 (Australia Golden Coast 2018)
- Plenary invited speaker at 10° Congreso Nacional Ingeniería Termodinámica (Lleida, 28 al 30 de Junio de 2017) Plenary presentation (V288) Are we able to take advantage of envelope dynamics for improving building thermal-energy efficiency and urban wellbeing?
- Member of the International committee, Session Chair (invited organizer) at Sustainability in Energy and Buildings, SEB-17
 Crete, Greece July 2017. Title: IS06: Cool and green solutions for urban heat island mitigation and energy efficiency in
 buildings, co-chaired by prof. Denia Kolokotsa.
- Member of the International committee, Chairman and presenter at the 8th International Conference on Sustainability in Energy and Buildings (SEB 2016) in Turin, Italy - 11-13 September 2016
- Moderator, plenary speacker at the conference opening session at the Green Urbanism Conference (12 October / 14
 October 2016 Roma, Italy) organized by IEREK https://www.ierek.com/events/international-conference-green-urbanism/
- Moderator, plenary speaker, speaker of the final 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 CONFERENCE PRESENTATIONS (OF SCIENTIFIC PEER-REVIEWED PAPERS)

- 2022 IEEE INTERNATIONAL WORKSHOP ON METROLOGY FOR LIVING ENVIRONMENT
- national AICARR conference entitled "Building and energy systems for the future climate",
- IC2UHI 2019 COUNTERING URBAN HEAT ISLAND (UHI) AND CLIMATE CHANGE THROUGH MITIGATION AND ADAPTATION December 2019, IIT, Hyderabhad, India.
- 3rd meeting of Annex 79 by IEA (University of Perugia, Italy), September 2019.
- IAQVEC 2019 Healthy Nearly Zero Energy Buildings, (Politecnico di Bari, Italy) September 2019.
- 2nd meeting of Annex 79 by IEA (University of Texas, San Antonio), March 2019.
- Noon to Noon 2018, University of Perugia (Italy), January 2018.
- SDEWES 2018, Palermo (Italy), October 2018.



- 72º congresso nazionale ATI, "GESTIONE INTELLIGENTE E OTTIMALE DEI SISTEMI ENERGETICI" INTELLIGENT AND OPTIMAL MANAGEMENT OF ENERGY SYSTEMS, Lecce, 6-8 SETTEMBRE 2017.
- 10º Congreso Nacional Ingeniería Termodinámica Lleida, Spain. 28-30 June 2017
- OB-17 Joint IEA EBC Annex 66 and 69 Symposium on Occupant Behaviour and Adaptive Thermal Comfort. DTU Denmark, May 2017.
- SPIE 2017 conference on Applied technologies for nondestructive evaluation, structural health monitoring, advanced materials, and engineered biorobotics. Portland, USA, March 2017.
- 17th CIRIAF Conference of Energy-environmental sustainability and structural retrofit of cultural heritage in Perugia, Italy.
 April 2017.
- 8th International Conference on Sustainability in Energy and Buildings (SEB 2016) in Turin, Italy 11-13 September 2016.
- 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 September.
- 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:

- Associate editor of Solar Energy, Elsevier I.F. 5.74
- Editor of Energy and Buildings, Elsevier I.F. 5.88.
- Member of the editorial board of Nature Scientific Reports, Springer Nature I.F. 4.5.
- Member of the editorial board of Building Simulation: An International Journal. Springer
 I.F. 3.75
- Guest Editor for the Collection at Nature Scientific Reports: Guest Edited Collection on Smart Cities
- Leading quest editor of a Special Issue "Energy Storage for Building Applications" in Energy and Buildings.
- Leading guest editor of the Special Issue ""District and urban-level energy efficient building communities" in Energy and Buildings.
- Leading guest editor of a Special Issue ""Progress in Solar Energy or PSE" special issue entitled "Multiphysics performance
 of advanced skins in indoor and outdoor built environment" in Solar Energy journal"



- Associate editor of International Journal of Science and Technology: Material & Chemical, Technology Origin Publishing Limited (open access)
- Guest editor of the special issue "Women for Sustainable Energy" in Sustainability journal, MPDI.
- Member of the editorial board of Energy Efficiency (Springer) I.F. 1.96.
- Member of the editorial board of Sustainability (MPDI) I.F. 2.6.
- Member of the editorial board section editor for 'Inventions and Innovation in Physical Research' of Inventions Journal in the Section Board for 'Inventions and Innovation in Physical Research' (MPDI)
- Member of the editorial board of Research International Journal of Energy & Environmental Sciences MSD Publications by Online Publishing Journals
- Leading guest editor of special issue "Environmental Sustainability, Planning and Energy Efficiency in Energy Communities" in Sustainability journal – MDPI – I.F. 2.6
- Co-Guest editor of the special issue "PCM applications for Buildings" for Sustainable Energy Technologies and Assessments (Elsevier) I.F. 3.4
- Co-Guest editor of the special issue "Thermal Energy Storage" in Solar Energy (Elsevier) I.F. 4.018
- Member of the editorial board of Energy Research & Social Science (Elsevier) I.F. 3.8
- Leading guest editor of the special issue "Environmental Sustainability, Planning and Energy Efficiency in Energy Communities" in Sustainability journal – MDPI – I.F. 2.6
- Leading guest editor of the special issue "Women for Sustainable Energy" in Sustainability journal MDPI I.F. 2.6
- Co-editor of the Elsevier International scientific book "Second Edition___Eco-efficient Materials for Mitigating Building Cooling Needs: Design, Properties and Applications-Second Edition" (Elsevier)
- Co-editor of the international scientific book "Resilient and Responsible Smart Cities" by Springer Nature editing.
- Member of the editorial board of Current Smart Materials (Bentham Science)
- Member of the editorial board of Green Energy and Sustainability (GES) by PIVOT Science publication corp.
- 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
- Editorial Advisory Board Member of "Current Alternative Energy" journal, Bentham Science
- Co-Guest editor of the 17th CIRIAF Conference Special Issue in Sustainability (MPDI) journal. Title: 17th CIRIAF National Congress—Energy–Environmental Sustainability and Seismic Retrofit of Built Heritage, deadline: October 2017 – IF: 1.789
- Guest Editor of the Special Issue "Recent Advances in Smart Materials for the Built Environment" in Materials Open Access Materials Science Journal (MPDI Publishing)
- 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)
- Member of the editorial board of International Journal of Applied Engineering Research (IJAER) (Research India Publications)
- Member of the editorial board of International Journal of Energy Science (Science and Engineering Publishing Company)
- Member of the editorial board of Energy Science & Engineering (Society of Chemical Industry and John Wiley & Sons, Ltd) IF: 2.172
- Guest editor in the Special Issue "Building Energy Performance Modelling and Simulation" in the Modelling and Simulation in Engineering Journal (Hindawi Publishing Corporation)
- Member of the editorial board of Asian Journal of Energy Transformation and Conservation (Pak Publishing Group)

Scientific international associations:

- Member of the IEREK scientific committee
- Member of CIRIAF scientific council
- Member of ATI Italian association of Thermal Technics
- Member of AICARR (Italian association of air conditioning, refrigeration and heating systems)
- Member of IBPSA Italy
- Member of RILEM Technical Committee



ACTIVITY AS REFEREE

International Journals:

- Applied Energy, Elsevier
- Nature Energy, Springer
- Energy research and social science, Elsevier
- Construction and building materials, Elsevier
- Energy and Buildings, Elsevier
- Renewable Energy, 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:

- IAQVEC 2019
- Building Simulation 2019
- SDEWES 2018 and 2019
- ECOS 2016 and ECOS 2017 International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.
- SEB Conference 2017 (member of the International Programme committee)
- SEB Conference 2016 (member of the International Programme committee)
- 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 IN INTERNATIONAL CONFERENCES



- Member of the Scientific advisory board of 15th Conference on Sustainable Development of energy water and environment system SDEWES at Cologne (Germany), September 2020.
- IC2UHI International conference on countermeasures against UHI Hyderabad, India, December 2019.
- Building Simulation 2019, Rome, Italy, September 2019.
- 3rd Annex 79 Meeting, Hosting and organizing institution, University of Perugia, Italy, September 2019
- Eurotherm Seminar 2019, May 2019. University of Lleida, Spain
- Leading scientific committee member of the 3rd International Summer School on World Heritage studies on "Urban resilience in a changing world: energy, safety and wellbeing challenges. New York University, CUSP research centre, NY, USA (July-August 2019).
- Member of the Scientific and Organizing Committee at the International conference "Noon to noon with energy and environmental challenges". University of Perugia. February 2018.
- Member of the Scientific advisory board of 1st Asia Pacific Conference on Sustainable Development of energy water and environment system SDEWES, Australia Gold coast. April 2020.
- Member of the Scientific advisory board of 14th Conference on Sustainable Development of energy water and environment system SDEWES at Dubrovnik, October 2019.
- Member of the Scientific advisory board of 2nd Latin America Conference on Sustainable Development of energy water and environment system SDEWES, Buenos Aires, Argentina, February 2020.
- Member of the scientific committee of the 14th International Conference on Energy Storage. April 2018. Adana, Turkey.
- Overseas Member of the European Advanced Materials Congress (EAMC) Committee, EAMC, August 2017, Stockholm, Sweden.
- Member of the scientific committee and session organized at the SEB 2017 Sustainability in Energy and Buildings, conference, July 2017, Crete, Greece.
- Member of the conference committee at the International Conference on the Finite Volume Method: Applications and Numerics. American University of Beirut, July 11-14, 2018. Beirut, Lebanon.
- MEMBER OF THE SCIENTIFIC COMMITTEE European Advanced Materials Congress (EAMC) organized by International Association of Advanced Materials and VBRI Sverige AB during 22 - 24 August 2017, Stockholm, Sweden
- Member of the scientific committee at the SEB 2018 Sustainability in Energy and Buildings conference, June 2018, Goald cost, Australia.
- Member of the Organizing Committee of the 17th CIRIAF National Congress—Energy–Environmental Sustainability and Seismic Retrofit of Built Heritage. Perugia, Italy – April 2017.
- Member of the Scientific and organization committee of Sustainability in Energy and Buildings, SEB-17 Crete, Greece July 2017
- Member of the Scientific and organization committee of Sustainability in Energy and Buildings, SEB-16 Turin, Italy 11-13
 September 2016
- Co-Organizer of the dedicated 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.
- Member of the scientific committee of the 3rd International conference on countermeasures to the urban heat island.
 Venice, Italy
- Co-Organizer of the dedicated Session fr the 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).
- Member of the scientific committee of the 14th IEA ECES (Energy Conservation through Energy Storage) Stock Conference – 2018 at Cukurova University, Turkey.

NATIONAL AND INTERNATIONAL RESEARCH PROJECT

Principal investigator or co-PI for University of Perugia of the following European Projects:



- EU funded project in Horizon Europe framework. Call: ERC-2021-STG, Topic: ERC-2021-STG, Type of Action: HORIZON-ERC (HORIZON ERC Grants), Proposal number: SEP-210736113, Title: the new generation of scalable urban HEat isLand mitigatIOn by means of adaptive photoluminescent radiative cooling Skins, Proposal acronym: HELIOS, Duration: 2021-2026.
- EU funded project in Horizon 2020 framework. Call: H2020-LC-SC3-2018-2019-2020 (BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY) Topic: LC-SC3-EC-1-2018-2019-2020 Type of action: CSA, Proposal number: 890345, Proposal acronym: NRG2peers. Title: Towards a new generation of EU peer-to-peer Energy Communities facilitated by a gamified platform – UNIPG Scientific responsible person, Task leader and participant contact. Duration: 2020-2023.
- 3. <u>EU funded project in *Horizon 2020* framework.</u> Call H2020-LCE-2016-2017 (COMPETITIVE LOW-CARBON ENERGY). Proposal number: 792210. Proposal acronym: GeoFit. Title: Deployment of novel GEOthermal systems, technologies and tools for energy efficient building retrofitting UNIPG Scientific responsible person, Task leader and participant contact. Duration: 2018-2023.
- EU funded project in Horizon 2020 framework. Call H2020-LCE-2016-2017 (COMPETITIVE LOW-CARBON ENERGY). Proposal number: 764025-2. Proposal acronym: SWS-HEATING. Title: Development and Validation of an Innovative Solar Compact Selective-Water-Sorbent-Based Heating System – UNIPG Scientific responsible person, Task leader and participant contact. Duration: 2018-2023.
- EU funded project in Horizon 2020 framework. Call H2020-MSCA-ITN-2017. Proposal acronym: SAFERUP. Title: Sustainable, Accessible, Safe, Resilient and Smart Urban Pavements. Type of action: MSCA-ITN-ETN (European Training Networks) CIRIAF Scientific responsible person, Task leader and Early Stage Researcher advisor. Duration: 2018-2022.
- EU funded project in Horizon 2020 framework. Call H2020- Fast Track to Innovation 2016. Name of the proposal: COLD ENERGY – Subcontracting unit task leader. Duration: 2017-2018.
- 7. <u>EU funded project in *Horizon 2020* f</u>ramework. 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 Task leader. Duration: 2016-2019.
- EU funded project in Horizon 2020 framework. 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. Duration: 2015-2019.
- EU funded project in Horizon 2020 framework. 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. Duration: 2014-2018.
- 10. 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.

Principal investigator or co-PI for University of Perugia of the following National Projects:

- 11. UNIPG principal investigator for the project NEXT.COM (Towards the NEXT generation of multiphysics and multidomain environmental COMfort models: theory elaboration and validation experiment) supported by the Ministry of Research through PRIN 2017 (2019-2023)
- 12. CIRIAF Program for UNESCO Chair "Water Resource Management and Culture".
- 13. COLO ARTE for energy conservation in historic buildings and preservation of cultural heritage
- 14. CIRIAF Principal investigator for the project SMART BRICK (Novel strain sensing nano-composite clay brick enabling self-monitoring masonry structures) supported by the Ministry of Research through PRIN 2015 (ended in 2019)
- 15. 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.
- 16. GREEN POST, Green Alternative Postal Vehicle Project (EIE-07/119/S12.466271).
- 17. Energy efficiency in buildings through passive innovative strategies in building envelopes. 2012-14. 3. PC2M, Phase Cool Change materials. 2012-present.
- 18. MUSAE Life+ project, Municipalities Subsidiary for Actions on Energy, Env_it, 016, 2013.
- 19. RENAISSANCE CIVITAS+, Testing Innovative Strategies For Clean Urban Transport For Historic European Cities, FP7-SST-2007- 20121120.



- ABCD Albedo, Building green, Control of global warming and Desertification. Supported by Italian Ministry of Environment.
- BAIO: Indoor and Outdoor thermal comfort. Supported by private banking foundation Fondazione Cassa di Risparmio di Perugia, Call 2011.
- 22. TIAR: Tower hydraulic-Architectural-energetic. Supported by the Italian Ministry of Agriculture.
- 23. 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.
- 24. SCER (Development of a new system for air-conditioning in buildings in urban areas with renewable energy sources)
- 25. ELIOS–Envelope Layers for Interactive Optimized Systems. Selected by Italian Ministry of Environment as strategic proposal @Greening Camp competition.
- 26. DAIKIN group: optimization of cooling systems through cool roof installation and monitoring. Supported by Daikin Chemicals and Tecnexum company.
- CVR cooperation convention to implement innovative envelope high performance materials. Supported by CVR industries.
- 28. TECNEXUM: optimization of optical energy properties of coatings for chiller envelope.
- 29. TECNEXUM: analysis of the solar reflection index in dynamic thermal-energy calculation.
- 30. Institutional convention between CRB and Italian Ministry of the Environment, with titll "Recupero e valorizzazione energetica di biomasse legnose".
- 31. 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. Alessio Guastalveglia, University of Perugia, Italy (2019-20)
- 2. Tiziano Bettelli, University of Perugia, Italy (2019-20)
- 3. Patrizia Mariani, University of Perugia, Italy (2018-19)
- 4. Filippo Vittori, University of Perugia, Italy (2018-19)
- 5. Alessio Guastalveglia, University of Perugia, Italy (2018-19)
- 6. Augusto Gavagni, University of Perugia, Italy (2018-19)
- 7. Chiara Chiatti. University of Perugia. Italy (2018-19)
- 8. Martina Carrabs, University of Perugia, Italy (2018-19)
- 9. Miriana Bianchi, University of Perugia, Italy (2018-19)
- 10. Beatrice Bicchierini. University of Pisa. Italy (2017-18)
- 11. Lorenzo Diciotti, University of Pisa, Italy (2017-18)
- 12. Marika Agabitini, University of Perugia, Italy (2017-18)
- 13. Giacomo Lombardi, University of Perugia, Italy (2017-18)
- 14. Brigitta Santini, University of Perugia, Italy (2017-18)
- 15. Livia Granieri, University of Perugia, Italy (2017-18)
- 16. Andrea Fancelli, University of Perugia, Italy (2017-18)
- 17. Giulia Orlandini, University of Perugia, Italy (2017-18)
- 18. Giulia Pespani, University of Perugia, Italy (2016-17)
- 19. Marta Cardinali, University of Perugia, Italy (2016-17)
- 20. Benedetta Pioppi, University of Perugia, Italy (2016-17)
- 21. Alessandro Buffi, University of Perugia, Italy (2016-17)
- 22. Silvia Biagetti, University of Perugia, Italy (2015-16)
- 23. Alessandro Pio Fiorelli, University of Perugia, Italy (2015-16)
- 24. Marco Colleluori, University of Perugia, Italy (2015-16)
- 25. Martina Picchi, University of Perugia, Italy (2015)



- 26. Claudia Fabiani, University of Perugia, Italy (2014-15)
- 27. Ilaria Pigliautile, University of Perugia, Italy (2014-15)
- 28. Giovanna Sanna, University of Perugia, Italy (2013-15)
- 29. Valeria Berellini, University of Perugia, Italy (2013-14)
- 30. Francesca Lia, University of Perugia, Italy (2013-14)
- 31. Serena Sensi, University of Perugia, Italy (2013-14)
- 32. Cristina Piselli, University of Perugia, Italy (2013-14)
- 33. Giorgia Agostinelli, University of Perugia, Italy (2013-14)
- 34. Veronica Lucia Castaldo, Polytechnic University of Milan, Italy (2012-present)
- 35. Jessica Romanelli, University of Perugia, Italy (2012-13)
- 36. Roberto Barone, University of Perugia, Italy Baruch College, NYC (2010-2011)
- 37. Vanessa Romagna, University of Perugia, Italy Baruch College, NYC (2010-2011)
- 38. Massimo Palombo, University of Perugia, Italy (2010-2011)
- 39. Tania Ghilardi, University of Perugia, Italy (2010)
- 40. Emanuele Chiodini, University of Perugia, Italy (2012-13)

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

- 1. Veronica Martin Gnecco (2021-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 2. Elena Tarpani (2021-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 3. Silvia Cavagnoli (2021-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 4. Carolina Santini (2021-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 5. Roberta Cureau (2020-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 6. Chiara Chiatti (2019-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 7. Filippo Vittori (2019-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 8. Fabiana Landi (2018-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy.
- 9. Laura Boquera, (2018-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy cotutelled by University of Lleida
- 10. Joan Tarragona (2018-2021), cotutelled by University of Lleida.
- 11. Marta Chafer, (2018-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 12. Benedetta Pioppi (2017-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 13. Ilaria Pigliautile (2016-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 14. Jessica Romanelli (2016-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 15. Claudia Fabiani (2015- on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 16. Nastaran Makaremi (2015-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 17. Gloria Pignatta (2012-2015), PhD in "Energy Engineering" at University of Perugia, Italy
- 18. Veronica Lucia Castaldo (2013-2017), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 19. Cristina Piselli (2014-on going), PhD in "Energy and Sustainable Development" at University of Perugia, Italy
- 20. Federica Rosso (2013-2017), PhD in "Engineering of Architecture and Urbanistics" at University of Rome La Sapienza, Italy
- 21. Yilong Han (2014-2016), PhD -BioBuild fellow at Virginia Tech, USA.
- 22. Several visiting scholars for 3-to-6 month visiting periods in Univ. of Perugia, Italy.

LANGUAGES

- Italian native speaker
- English excellent
- Spanish good

RELEVANT PUBLICATIONS



Original Journal Papers:

- Meoni, A., Fabiani, C., D'Alessandro, A., Pisello, A.L., Ubertini, F.Strain-sensing smart bricks under dynamic environmental conditions: Experimental investigation and new modeling(2022) Construction and Building Materials, DOI: 10.1016/j.conbuildmat.2022.127375
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