

# Curriculum Vitae

## PROF. ING. ANTONIO GAGLIANO

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### EDUCATION

- MSc (Laurea) in Civil Engineering with full marks and honors (1991)
- *PhD in Environmental Applied Physics, University of Palermo (1998) – Title of thesis : “Utilization of a three-dimensional fluid dynamic code for the study of the dispersion of gas pollutant in atmosphere*

### EMPLOYMENT AND CAREER

- Assistant Professor of Building Physics and Environmental Applied Physics (ssd IIND07-B) at University of Catania (2001)
- **Associated Professor** of Building Physics and Environmental Applied Physics (ssd IIND07-B1) at University of Catania (2020)
- National habilitation as full professor of Building Physics and Environmental Applied Physics (S.C. 09/IND-07) (2020).

### TEACHING

Since 2001 he has been teacher of the academic courses of Environmental Applied Physics, Buildings Energy Efficiency and Environmental Control Techniques at the University of Catania

- Teaching in the National Photovoltaic Doctorate' course (Solar Intermittency and Storage)
- Teaching at the enabling courses for Competent Technicians in Acoustics (TCA).
- Teaching in the Master RISANAMENTO AMBIENTALE DI AREE INQUINATE PER LA TRANSIZIONE ECOLOGICA (2022)
- Teaching in training courses with professional associations ( Order of Engineers of Catania)
- Teaching at the summer school “Riqualificazione Sismo-Energetica degli Edifici Storici: Il Caso Studio delle Abitazioni Eoliane” organized by the University of Catania and the Order of Engineers of the Province of Catania (2022)

### ACADEMIC AND SERVICE ACTIVITIES

- Member of the Academic Senate of the University of Catania (from 2012 to 2016)
- Scientific Manager of the Laboratory of Applied and Building Physics of the Department of Electrical, Electronic and Computer engineering ( from 2005 up to now)
- Member of the Academic Board of the Ph.D course " Systems Engineering, Energy, Information Technology And Telecommunications– " - University of Catania ( from 2017 up to now)
- Member of the Board of “Joint Studies Committee (CPDS)” of the DIEEI ( from 2020 up to now)
- Member of the Board of the Department of Engineering Electric, Electronic and informatics ( from 2017 to 2020)
- Secretary of the Council of the Master Degree in Engineering for Environment and Territory at UniCT ( from 2017 to 2020)
- President of Commission for the final examination of the PhD in ENERGY at the University of Palermo-(2024)
- President of Commission for the final examination of the Doctorate In Materials Science And Nanotechnology Cycle - XXXV –(2022)
- President of Commission for a research grant for research activity on “Piattaforma Italiana Accelerata per i Materiali per l’Energia (Italian Energy Materials Acceleration Platform – IEMAP), -Mission Innovation program – contest promoted by the CNR-IMM of Catania (2023)
- Commission Member for the competition of Associated Professor promoted by the University of Palermo (2024)
- Commission Member for the admission to the National Photovoltaic PhD (Diagnostic and Management) promoted by University of Salerno (2023)
- Commission Member for the competition of Associated Professor promoted by the University of oTorino (2022)
- Commission Member for the admission to the PhD of Systems Engineering, Energy, Information Technology And Telecommunications promoted by University of Catania ( 2021) and (2024)
- Commission Member for the competition of one fixed-term research (RTDA) promoted by the University of Calabria (2022)
- Commission Member for the competition of one open-ended (RTI) promoted by the of University of Cagliari (2006)
- Commission Member for the competition of one open-ended (RTI) promoted by the University of Calabria (2005)
- President/Member of Commission for research grants, contracts, scholarship promoted by the University of Catania ( from 2005 up to now)
- Tutor of Ph.D. students of the PhD courses in: Systems Engineering, Energy, Information Technology And Telecommunications (2); Defense against natural risks and ecological transition of built environment (1), National Doctorate Photovoltaics(2)
- Co -Tutor of a PhD Students at the Mohammed First University- Oujda (Morocco)

- Supervisor of more than 60 Thesis of Master Degree ( from 2005 up to now)
- Scientific supervisor for more than 20 research contracts, scholarship, and research grant activated within research projects
- Reviewers for Italian Scientific Evaluation (REPRISE)
- Member of expert AVA

## INTERNATIONAL ACTIVITIES AND COMMITMENTS

- Visiting Professor at the University of Lleida from February 25th to May 28 th, 2019
- Visiting Professor at the University of University de Corse Pascal Paoli from 16 to 21th September 2019
- Scientific Responsible for the Erasmus Learning Agreement between UniCt and University of Valladolid
- Scientific Responsible for the Erasmus Learning Agreement between UniCt and Technical University di Creta
- Scientific Responsible for the Erasmus Agreement between UniCt and University of Lleida
- Scientific Responsible for the Erasmus Learning Agreement Student Mobility for Traineeships between UniCt and the University de Corse Pascal Paoli
- Commission Member for the PhD final examination at the University of Juan( Spain), 2019
- Commission Member for the PhD final examination at the University of Oujda( Morocco), 2021
- Deputy Member of the Selection Committee of the competition to fill the position of Tenure-Eligible Lecturer, recruit teaching and research staff with code UdL-LE-120035, for the profile of Architectural Constructions
- Representative of Unict activities for the bachelor in Sustainable Building Engineering in the framework of the European University for Customised Education ( Eunice project)
- Participant at the IEA Task 60 “APPLICATION OF PVT COLLECTORS AND NEW SOLUTIONS IN HVAC SYSTEMS”
- Participant at IEA Task 15 “PHOTOVOLTAIC POWER SYSTEMS PROGRAMME”
- Member of the Horizon 2020 Expert Group on Economic and Societal Impact of Research and Innovation. EC
- Member of Expert Group on Ambient Air Quality EPBD and Energy Efficiency Directive.
- Member of the Scientific Council of the Provincial Energy Agency of Enna ( from 2006 to 2010)

### GENERAL-CHAIR AT INTERNATIONAL CONFERENCES

- Co-general chair at the conference ICEERE 2022 ( Saida)

### MEMBER OF THE SCIENTIFIC COMMITTEE AT INTERNATIONAL/NATIONAL CONFERENCES:

- Sustainability in Energy and Buildings (2011-2016, 2018-2024),
- Renewable Energies and Power Quality (2011-up to now);
- Sustainable design and manufacturing KES.SDM (2021 - up to now)
- Mediterranean Green Energy Forum (2015),
- International Conference on New Energy and Sustainable Development, NESD 2017, ICEERE (2018.2020,2022);
- SDEWES conference ( 2018-2024)
- 50° AIA CONGRESS (2024)

### - MEMBER OF THE SCIENTIFIC ADVISORY BOARD AT INTERNATIONAL CONFERENCES :

- International Renewable Energy Congress (2011-2016, 2018-2022),
- Health Risk ( 2011-2014);
- 1st North American Conference on Sustainable Development of Energy, Water and Environment Systems(2024)

### ORGANIZATION AND COORDINATION OF SPECIAL SESSIONS AT INTERNATIONAL CONFERENCES:

- Conference Mediterranean Green Energy Forum- Session: Impact of innovative integrated solar technologies on the energy performance of buildings ( 2013) ;
- Conference ICRPQ - Session: Net Zero Energy Building, at (from 2013-up to now), ,
- Conference Sustainability in Energy and Buildings- Session: The contribute of building integrated solar technologies to achieve the challenge of NET Zero Energy Building (2015),
- Conference Sustainability in Energy and Buildings- Session: Measuring and mitigating the Urban Heat Island effect; (2017)
- Conference Sustainability in Energy and Buildings- Session: Mitigation technologies to counter climate change and urban heat island effect and to improve comfort in urban environment; (2019)
- Conference Sustainability in Energy and Buildings- Session: Innovative use of solar resources for the enhancement of the Building energy self-sufficiency (2023)
- Conference SDEWES 2023 - Session: The role of solar energy technologies in the future energy systems under climate change constraints Session Energy system analysis

### SESSION's CHAIRMAN AT NATIONAL/INTERNATIONAL CONFERENCES:

- Conference ICRPQ - Session: Net Zero Energy Building,(2013)
- Conference IREC - Session: “Solar Thermal Energy”; (2012, 2014,2015)
- Conference IREC - Session: “Towards Zero Carbon Building “; ( 2015)

- -Conference Sustainability in Energy and Buildings- Session: “The contribute of building integrated solar technologies to achieve the challenge of NET Zero Energy Building”; (2015),
- Conference UIT 2018 – Session: “Heat transfer and efficiency, in energy system, environmental technologies, and buildings (part II) “ (2018)
- Conference 13<sup>th</sup> SDEWES – Session: Advanced energy conversion systems”; , (2018)
- Conference Sustainability in Energy and Buildings- Session: “Mitigation technologies to counter climate change and urban heat island effect and to improve comfort in urban environment; (2019),
- Conference 15<sup>th</sup> SDEWES – Session: Renewable energy resources ; (2020)
- Conference ICEERE - Session: Energy-Renewable Energy; at 2020,
- Conference ICEERE Session: General Session. (2022)
- -Conference Sustainability in Energy and Buildings- Session: “Innovative use of solar resources for the enhancement of the Building energy self-sufficiency (2023)
- CONFERENCE AIA- Session: “Acustica dei materiali e dei sistemi edilizi” (2024)

#### REVIEWER OF INTERNATIONAL JOURNALS:

African Journal of Environmental Science and Technology , Automation in Construction, Building and Environment, Buildings , Energy and Building, Energy, Energy Conversion and Management, Energy Efficiency, Engineering Science and Technology an International Journal, Energy and Environment, Environmental Science and Pollution Research, International Journal of Heat and Mass transfer, International Journal of Thermal Science , International Journal of Geo-information, International Journal of Sustainable Energy, Journal of Environmental and Public Health, Journal of Computational Environmental Sciences , Journal Of Building Engineering Progress in Computational Fluid Dynamics, Renewable Energy , Sustainable Cities and Society, Sustainability, Transportation Research Part A: Policy and Practice, Urban Forestry & Urban Greening ,

#### EDITORIAL'S ACTIVITY

##### JOURNAL AND BOOK EDITOR

- Edelweiss Applied Science and Technology
- Proceedings of the 3rd International Conference on Electronic Engineering and Renewable Energy Systems, Springer 2023 eBook ISBN 978-981-19-6223-3; Print ISBN 978-981-19-6222-6

##### MEMBER OF THE EDITORIAL BOARD IN INTERNATIONAL JOURNALS

- Energies ,
- AIMS Energy,
- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects,
- Frontiers in built environment,
- The Open Civil Engineering Journal,
- African Journal of Environmental Science And Technology;
- TECNICA ITALIANA-Italian Journal of Engineering Science;
- Progress in Energy & Fuels;
- International journal of Architectural Engineering Technology (IJAET) Avanti Publishers

##### GUEST EDITOR OF SPECIAL ISSUES IN INTERNATIONAL JOURNAL

- “Multiplicity, Modelling, Optimisation and Innovative Applications of Renewable Energy Sources” published in Renew. Energy Technology (IJRT)", Inderscience Enterprises 2014),
- Renewable Energy systems for a zero carbon emission society published in Energy and Building (2015),
- Hybrid Solar Photovoltaic/Thermal Technology for Agrivoltaic and Aquavoltaic Applications ( Energies-2022)
- Green Architectures and Infrastructures for the Urban Environment ( Sustainability-2022)
- Lightweight Architecture Technologies for Smarter Cities ( Sustainability)
- Advancements in Built Environment Research in Changing Climates (Frontiers in built environment)

#### REVIEWER of RESEARCH PROJECTS:

- UoB Research grant for University of Balamand (Lebanon)
- Progetto di ricerca industriale e/o sviluppo sperimentale – Regione Piemonte, financed by “FONDO EUROPEO DI SVILUPPO REGIONALE P.O.R. 2007 – 2013”
- Progetto Global@Venice A Research and Training for Global Challenges Cofund Fellowship Programme

#### AWARD AND RECOGNITIONS

- Best Paper Award “Technical and economic perspective for repowering of micro hydro power plants: A case study of an early XX century power plant “ at the conference SEB14;
- Best Paper Award for “ Effect of glazing type on the performance of a Trombe wall in Tunisia” at the IREC 2015 conference
- Best Poster Award for “Experimental analysis of the performances of ventilated photovoltaic facades” at the conference ICREPQ 2022;

- Certificate of Merit for “Assessment of the downward longwave radiation through experimental and numerical investigations”
- Keynote speaker at the conference Sustainability in Energy and Buildings in Lisbon ( 2015)
- Key note speaker at the conference ICEERE 2022 – Saida Morocco (2022)
- Invited Speaker at international conferences ( 13th SDEWES 2018, 14th SDEWES 2019, 15th SDEWES 2020).
- Invited Speaker at the “Seminare Energie Renouvelables, Batiment Et Reseaux Electriques” 26 September 2019
- Recognition of Outstanding Contribution in Reviewing from the following journals Energy and Building, Building and Environment, Sustainable Cities and Society, Energy Conversion And Management, Renewable Energy
- Admitted to the MIUR program for the financing of the basic research activities ( FIRB 2017/2018)
- Key Analysis Expert for European Polytechnical University (Bulgaria).
- Award for the research titled “Technological newness on the productive process of construction material utilizing industrial waste” by the University of Catania (1999).
- Fellow of the Wessex Institute of Technology
- Affiliate to the Council National of Research CNR –IMM (Istituto per la microelettronica e microsistemi) section of Catania ( 2020)

## PATENT

SISTEMA SOLARE PVT TRIGENERATIVO AD ALTA EFFICIENZA - patent EP4056922 (A1) — 2022-09-14,

## MEMBER OF NATIONAL AND INTERNATIONAL SCIENTIFIC ASSOCIATIONS

- Society of African Journal Editors
- Solar Heat Europe’ Taskforce on PVT (SHE)
- Renewable Heating & Cooling - European Technology Platform (RHC)
- Association Marocaine de Thermique (AMT)
- KES International
- “National association for the thermal and acoustic insulation (ANIT) - Honorary member
- Interdepartmental Center of Excellence for the Acceleration of Harm Reduction (CoEHAR)
- Interdepartmental Center for the Community Engagement (CuRE).
- Member of the Scientific Committee of the Inter-university Research Center on Pollution from Physical Agents (CIRIAF)
- Italian Air conditioning heating and refrigerating engineers (AICARR),
- Italian association of acoustic (AIA),
- Associazione della Fisica Tecnica Italiana ( FTI),
- International Building Performance Simulation Association (IBPSA Italy)
- International Association of Building Physics, (IABP)
- Rete Nazionale sul Fotovoltaico

## PRINCIPAL INVESTIGATOR AND PARTICIPATION IN RESEARCH PROJECTS

- Principal Investigator of the Research Project MENTOR financed by the Piano della Ricerca “Piaceri” of University of Catania from 2020 up to now.
- Principal Investigator in the University Research Project (PRA 2012) of the University of Catania "Analysis of construction techniques and technologies for the construction of zero energy buildings
- Scientific manager for the DIEEI in the Research Project EWAS (An early WArning System for cultural heritage) financed by the Italian PNR ( National Program of Research) 2015-2020.
- Scientific Manager ( from 2016 to 2021) in the Research Project “FCCS” ( Continue Façade with integrated Solar Collector) financed by POR Sicilia ( 2013-2015);
- Scientific Manager (from 2016 to 2021) in the Research Project “BIO4BIO” Energetic and Biomolecular enhancement of residual biomass of the agribusiness and fisheries financed by PON ( 2013-2015) –
- Participant in the Research project Energy and Seismic Affordable renovation solution” (Grant Agreement 893135) – CUP E69E20000770006 financed by HORIZN 2020 ( 2024 up to now)
- Participation in the Regional Research Project “Archicart Lifehosue” financed by POR FERS Sicilia ( 2022 up to now);
- Participation in the National Research Project PRIN 2020 “ Holistic Monitoring and Diagnostic Tool for Photovoltaic Generators (HOTSPHOT)”
- Member of the Project Team in the Erasmus+ Project VVITA “Modernizing Learning and Teaching for Architecture through Smart and Long-lasting Partnerships leading to sustainable and inclusive development strategies to Vitalize Heritage Villages through Innovative Technologies” (2019-21)
- Participation in the Research Project “PRIN 2009” Metodologie innovative per la riqualificazione energetica dell’edilizia nell’areale etneo (New methodologies for energy improvement in building construction in the Etna area)” financed by MIUR ( 2009-2012)
- Participation in the research project "ICARO - Development of a semi-distributed system for the diagnostics and monitoring of photovoltaic panels" funded by the PO FESR 2007/2013 - Line of intervention 4.1.1.1
- Participation in the Research Project “PRIN 2015” La ricerca per i PAES: una piattaforma per le municipalità partecipanti al Patto dei Sindaci (Research for SEAP: a platform for municipalities taking part in the Covenant of Mayors) financed by MIUR ( 2017-2020)

- Participation in the Research Project “The integration of PV and PVT systems into building in the Mediterranean Area: numerical and experimental study on efficiency and building compatibility “ financed by University of Catania ”- FIR (2014-2015)
- Participation in the Research Project “Assessment of novel tools for mapping the energy demand of urban districts and for planning appropriate optimization and mitigation strategies” financed by the Department of Electrical , Electronics and Computer Engineering of University of Catania ( 2017-2019).

## INTERNATIONAL PARTNERSHIP

- Collaboration in drafting the research project “NEW CONCEPT OF FLOATING SOLAR ENERGY HARVESTING - FPVSAIL . submitted to the HORIZON-EIC-2024-PATHFINDEROPEN-01 in Partnership with BLUEWISE MARINE LIMITED (IE) , SolarMarine Energy Ltd (IE), Kinetic Hydro Ltd(UK), Morek Engineering Ltd(UK)- 2024
- Collaboration in drafting the research project “Solar rooftops for sustainable development. Advances for smart distributed power generation. in Partnership with Escuela Politécnica Superior de Jaén - Departamento: Departamento de Ingeniería Electrónica y Automática - University of Jean (2024)
- Collaboration in drafting the research project “NEW CONCEPT OF FLOATING SOLAR ENERGY HARVESTING - FPVSAIL . submitted to the HORIZON-CL5-2021-D3-03 in Partnership with BLUEWISE MARINE LIMITED (IE) , SolarMarine Energy Ltd (IE), UPSOLAR FLOATING SRL (IT), Koiné multimedia di SCMC & c sas (IT); Global Maritime AS (NO) THE QUEEN'S UNIVERSITY OF BELFAST (UK), Morek SEAFLEX AB(SE); Elissavet Panagiotidou kai sia EE(EL); MARINE INSTITUTE (IE); NOVA INNOVATION LTD (UK)- 2022
- Collaboration in drafting the Research Project Thermal-electrical analyses of inorganic CsPbI3 perovskite PV solar cells in hot climates submitted at Bando per la selezione di Progetti comuni di ricerca .Accordo di cooperazione scientifica CNR / Centre National pour la Recherche Scientifique et Technique (CNRST), Marocco – in Partnership with Renewable Energy, Embedded System and Data Processing Laboratory ( ERSETI) and CNR\_IMM ITALIA (2023)
- Collaboration in drafting the research project “Photovoltaic self-consumption in small and medium-sized companies in Andalusia. Contribution to Distributed Generation in Partnership with Escuela Politécnica Superior de Jaén - Departamento: Departamento de Ingeniería Electrónica y Automática - University of Jean (2022)
- Collaboration in drafting the Research Project “An innovative plant based on floating photovoltaic thermal FPV/T for co-production of fresh water, electricity, and green hydrogen- Italy Egypt call - in Partnership with Department of Mechanical Power Engineering, Faculty of Engineering, Port-Said University (2022)
- Collaboration in drafting the Research Project “Performance enhancement of PVT system through the exploitation of innovative nanofluid technology” submitted at Bando per la selezione di Progetti comuni di ricerca .Accordo di cooperazione scientifica CNR / Centre National pour la Recherche Scientifique et Technique (CNRST), Marocco – in Partnership with Renewable Energy, Embedded System and Data Processing Laboratory ( ERSETI) and CNR\_IMM ITALIA (2021)
- Collaboration in drafting the Research Project Key Enabling Lab Italia Malta (KELIM) submitted to the INTERREG V-A -Malta Italy in Partnership with MITA Innovation Hub (MIH) Maltalab The voice Language School, Rosolini Municipality (SR), Noto Municipality (SR),
- Collaboration in drafting the Research Project “Hybrid renewable energy and water storage systems for the rural built environment in coastal zones” submitted to the 7th EU RTD Framework Programme ERANETMED Energy and Environment (Call identifier RQ2-2016) in partnership with University of Valladolid (Spain), Aristotle University of Thessaloniki (Greece), HBNCR (Egypt), IUAV ( Italy), Université Saint Esprit de Kaslik (Lebanon), Mohamed Premier University and University Sidi Mohamed Ben Abdellah (Morocco), Aix-Marseille University LSIS – (France)
- Collaboration in drafting the Research Project “Reverse Osmosis Desalination Driven by Vertical Axis Wind Turbines for Coastal Rural Zones submitted to the ERANETMED2-72-041, HEWS-RBE (2016)in partnership with University of Malta
- Collaboration in drafting the Research Project “Monitoring and diagnostics of photovoltaic modules and experimental analysis” submitted to the Galileo Program 2015-2016 in partnership with University of Université De Picardie Jules Verne
- Collaboration in drafting of Research Project “Integrate photovoltaic (PV) systems into plug-in electrical (PEV) and hybrid (PHEV) vehicles” in partnership with University of Université De Picardie Jules Verne submitted at the Galileo Program 2012-2013
- Collaboration as External Expert in the study” DEFINE URBAN SUSTAINABILITY” conducted by the Research Methodology Group, of Wageningen University (The Netherlands)

## THIRD MISSION ACTIVITIES

Scientific Manager of the research agreement between University of Catania and Comune di Catania for the study “xxxxxxxxxxxxx “ (2024)

Scientific Manager of the research agreement between University of Catania and Vincenzo Bellini Theatre for the Study for the lighting refurbishment of the Vincenzo Bellini Theatre in Catania” (2023)

Scientific Manager of the research agreement between University of Catania and Randazzo Municipality for the development of the SEAP of Randazzo City (Sicily)

Scientific Manager of the research agreement between University of Catania and Istituto Autonomo Case Popolari (Autonomous social housing institution) IACP Catania, for the “Implementation of the Experimental Program envisaged in the residential building interventions to be carried out in the “Boschigliolo” Neighborhood of the Caltagirone municipality “

Scientific Manager of the research agreement between University of Catania and Bronte Municipality for the “Implementation of the Experimental Program envisaged in the residential building interventions to be carried out in the “Sciarotta” Neighborhood of the Bronte municipality”

Scientific Manager of the research agreement between University of Catania and Raddusa Municipality for Implementation of the Experimental Program envisaged in the residential building interventions to be carried out in the San Nicola Neighborhood of the Raddusa municipality”

Scientific Manager of the research agreement between University of Catania and IACP Enna for the “Study of technical feasibility for the construction of a low temperature heating system powered by solar energy”

- Scientific Manager of the Framework agreement with the start-up GB Innovative Project Consulting s.r.l

- Consultant for many Public and Private firms and institutions,

APEA (Agency for the Energy and Environment of the Enna's province), IACP ( Autonomous social housing institution of Catania and Enna) various Municipalities (Caltagirone, Bronte, Piazza Armerina, Catania etc) and industrial enterprise (Bonatti, Enel Green Power).

#### **AREAS OF SCIENTIFIC RESEARCH**

- Buildings Energy Efficiency
- Building Acoustic
- Environmental Acoustic
- Environmental Air Quality (EAQ)
- Air Pollution
- Renewables Energy ( solar thermal, photovoltaic, wind, biomasses )
- Energy Policy
- HVAC plants
- Fluid dynamic analysis of ventilated structures
- Heat transfer and thermal comfort

Catania, 05/06/2024

Prof.ing. Antonio Gagliano



## Publications (2005 –today)

- S Margoum, B Hajji, C El Fouas, O El Manssouri, S Aneli, A Gagliano Prediction of Electrical Power of Ag/Water-Based PVT System Using K-NN Machine Learning Technique Digital Technologies and Applications: Proceedings of ICDTA'23, Fez, Morocco
- S Margoum, C El Fouas, B Hajji, S Aneli, MG Tina, A Gagliano Modelling and performances assessment of a nanofluids-based PV/T hybrid collector, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (2023)
- S Margoum, C El Fouas, H Bakkay, S Aneli, A Gagliano, G Mannino Study Effect of Nanofluids on the Performance Enhancement of PV/T Collector, Proceedings of the 3rd International Conference on Electronic Engineering 2023
- C El Fouas, M Hajji, O El Manssouri, H Bakkay, A Gagliano, GM Tina  
Performances Comparison of PV/T Solar Plants with Roll-Bond and Sheet-and-Tube Absorbers  
Proceedings of the 3rd International Conference on Electronic Engineering ...2023
- S Aneli, A Gagliano, H Bakkay, G Mannino, GM Tina  
Energy Performances of a Photovoltaic Thermal Plant Using Different Coolant Nanofluid  
Proceedings of the 3rd International Conference on Electronic Engineering ...2023
- S Cascone, A Gagliano A Novel Laboratory Procedure to Determine Thermal Conductivity of Green Roof Substrates Sustainability in Energy and Buildings 2022, 66-75, 1, 2023
- S Cascone, A Gagliano Recycled agricultural plastic waste as green roof drainage layer within the perspective of ecological transition for the built environment Journal of Cleaner Production 380, 135032
- GM Tina, S Aneli, A Gagliano Technical and economic analysis of the provision of ancillary services through the flexibility of HVAC system in shopping centers Energy 258, 124860 7 2022
- L Marletta, G Evola, R Arena, A Gagliano Are subsidies for thermally-driven solar-assisted cooling systems consistent? A critical investigation for Southern Italy Energy Reports 8, 7751-7763 2 2022
- N Martelo, M Antxustegi, E Corro, M Baloch, R Volpe, A Gagliano, Use of residual lignocellulosic biomass for energetic uses and environmental remediation through pyrolysis Energy Storage and Saving 1 (3), 129-1351 2022
- S Aneli, A Gagliano, GM Tina, GG Ilis, H Demir, Effectiveness and constraints of using PV/Thermal collectors for heat-driven chillers, Applied Thermal Engineering 210, 118330 6 2022
- F Favazza, A Gagliano, M Mangiameli, G Mussumeci, Remote sensing to analyse Urban Heating Island. A case study from Catania (Sicily), AIP Conference Proceedings 2425 (1), 280002 2022
- M Mangiameli, G Mussumeci, A Gagliano Evaluation of the Urban Microclimate in Catania Using Multispectral Remote Sensing and GIS Technology, Climate 10 (2), 18 2 2022
- N Martelo, A Gagliano, A Fichera, R Volpe, M Antxustegi, R Llano-Ponte, . Modelling and simulation of a residual lignocellulosic biomass pyrolysis pilot plant Computer Aided Chemical Engineering 51, 547-552
- Tina, G.M., Scavo, F.B., Aneli, S., Gagliano, A., Assessment of the electrical and thermal performances of building integrated bifacial photovoltaic modules, Journal of Cleaner Production, 2021, 313, 127906
- Aneli, S., Arena, R., Gagliano, A., Numerical simulations of a PV module with phase change material (PV-PCM) under variable weather conditions, International Journal of Heat and Technology, 2021, 39(2), pp. 643–652
- El Manssouri, O., Hajji, B., Tina, G.M., Gagliano, A., Aneli, S., Electrical and thermal performances of Bi-fluid PV/thermal collectors, Energies, 2021, 14(6), 1633
- Detommaso, M., Gagliano, A., Marletta, L., Nocera, F., Sustainable urban greening and cooling strategies for thermal comfort at pedestrian level, Sustainability (Switzerland), 2021, 13(6), 3138
- Agrifoglio, A., Fichera, A., Gagliano, A., Volpe, R., Energy analysis of a micro-cogeneration unit fed by biogas as a function of pyrolysis operating parameters, Comptes Rendus Chimie, 2021, 24
- El Fouas, C., El Manssouri, O., Hajji, B., Tina, G.M., Gagliano, A. Study and modeling of energy performance of PV/T solar plant for hydrogen production, Lecture Notes in Electrical Engineering, 2021, 681, pp. 879–891
- Cascone, S., Gagliano, A., Nocera, F., Rapisarda, R., Sciuto, G., Sustainable Housing Units for Emergency: Innovative Materials and Construction Techniques, Smart Innovation, Systems and Technologies, 2021, 203, pp. 407–417
- Aneli, S., Gagliano, A., Tina, G.M., Hajji, B., Analysis of the energy produced and energy quality of nanofluid impact on photovoltaic-thermal systems, Lecture Notes in Electrical Engineering, 2021, 681, pp. 739–745
- El Manssouri, O., El Fouas, C., Hajji, B., Tina, G.M., Gagliano, A., Mass flow rates effect on the performance of PV/T bi-fluid hybrid collector (single and simultaneous modes), Lecture Notes in Electrical Engineering, 2021, 681, pp. 869–878
- Bontempo Scavo, F., Tina, G.M., Gagliano, A., Nizetić, S. An assessment study of evaporation rate models on a water basin with floating photovoltaic plants, International Journal of Energy Research, 2021, 45(1), pp. 167–188
- Scavo, F.B., Tina, G.M., Gagliano, A., Merlo, L., Bizzarri, F. the evaporation rate in reservoir partially covered by floating photovoltaic plants 11th International Renewable Energy Congress, IREC 2020, 2020, 9310401
- Tina, G.M., Bontempo Scavo, F., Aneli, S., Gagliano, A. , A novel building ventilated façade with integrated bifacial photovoltaic modules: Analysis of the electrical and thermal performances, 2020 5th International Conference on Smart and Sustainable Technologies, SpliTech 2020, 2020,
- El Fouas, C., Hajji, B., Gagliano, A., Tina, G.M., Aneli, S. Numerical model and experimental validation of the electrical and thermal performances of photovoltaic/thermal plant, Energy Conversion and Management, 2020, 220, 112939

Valastro, S., Smecca, E., Sanzaro, S., ...Gagliano, A., Alberti, A. Improved electrical and structural stability in HTL Analysis of the energy performance of an Opaque Ventilated Façade under winter and summer weather conditions

Gagliano, A., Aneli, S., Solar Energy, 2020, 205, pp. 531–544-Free perovskite solar cells by vacuum curing treatment Energies, 2020, 13(15), 3953

Valastro, S., Smecca, E., Sanzaro, S., Deretzis, I., La Magna, A., Numata, Y., Jena, A.K., Miyasaka, T., Gagliano, A., Alberti, A., Full Efficiency Recovery in Hole-Transporting Layer-Free Perovskite Solar Cells With Free-Standing Dry-Carbon Top-Contacts, (2020) Frontiers in Chemistry, 8, DOI: 10.3389/fchem.2020.00200

Calvagna, S., Gagliano, A., Greco, S., Rodonò, G., Sapienza, V., Innovative multidisciplinary methodology for the analysis of traditional marginal architecture, (2020) Sustainability (Switzerland), 12 (4), DOI: 10.3390/su12041285

Bontempo Scavo, F., Tina, G.M., Gagliano, A., Nižetić, S., An assessment study of evaporation rate models on a water basin with floating photovoltaic plants, (2020) International Journal of Energy Research, DOI: 10.1002/er.5170

Gagliano, A., Nocera, F., Cicero, A., Marletta, L., Evola, G., Mitigation of environmental noise in urban streets through lightweight transparent screens, (2020) Noise Mapping, 7 (1), pp. 57-73, DOI: 10.1515/noise-2020-0005, DOI: 10.1007/978-981-32-9868-2\_41

Detommaso, M., Cascone, S., Gagliano, A., Nocera, F., Sciuto, G., Cool roofs with variable thermal insulation: UHI mitigation and energy savings for several Italian cities, (2020) Smart Innovation, Systems and Technologies, 163, pp. 481-492.

Gagliano, A., Aneli, S., Nocera, F. Analysis of the performance of a building solar thermal facade (BSTF) for domestic hot water production (2019) Renewable Energy, 142, pp. 511-526. DOI:10.1016/j.renene.2019.04.102

Gagliano, A., Tina, G.M., Nocera, F., Grasso, A.D., Aneli, S. Description and performance analysis of a flexible photovoltaic/thermal (PV/T) solar system. (2019) Renewable Energy, pp. 144-156. DOI: 10.1016/j.renene.2018.04.057

Cascone, S., Gagliano, A., Poli, T., Sciuto, G. Thermal performance assessment of extensive green roofs investigating realistic vegetation-substrate configurations (2019) Building Simulation, 12 (3), pp. 379-393. DOI:10.1007/12273-018-0488

Gagliano, A., Tina, G.M., Aneli, S., Nižetić, S. Comparative assessments of the performances of PV/T and conventional solar plants. (2019) Journal of Cleaner Production, 219, pp. 304-315. DOI: 10.1016/j.jclepro.2019.02.038

Cascone, S., Coma, J., Gagliano, A., Pérez, G. The evapotranspiration process in green roofs: A review. (2019) Building and Environment, 147, pp. 337-355. DOI: 10.1016/j.buildenv.2018.10.024

Fichera, A., Gagliano, A., Nocera, F., Pagano, A., Volpe, R., Bisegna, F. Application of a Geographical Information System to Plan Energy Policy at a Neighborhood Scale Proceedings - (2018) IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018. DOI: 10.1109/IEEEIC.2018.8493723

Pompei, L., Mattoni, B., Bisegna, F., Nardecchia, F., Fichera, A., Gagliano, A., Pagano, A. Composite Indicators for Smart Campus: Data Analysis Method Proceedings - (2018) IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018. DOI: 10.1109/IEEEIC.2018.8493893

Nocera, F., Gagliano, A., Detommaso, M. Energy performance of cross-laminated timber panel (X-Lam) buildings: A case study. (2018) Mathematical Modelling of Engineering Problems, 5 (3), pp. 175-182. DOI: 10.18280/mmep.050307

Distefano, D.L., Gagliano, A., Naboni, E., Sapienza, V., Timpanaro, N. Thermophysical characterization of a cardboard emergency kit-house (2018) Mathematical Modelling of Engineering Problems, 5 (3), pp. 168-174. DOI: 10.18280/mmep.050306

Moschella, A., Gagliano, A., Faro, A.L., Mondello, A., Salemi, A., Sanfilippo, G. A methodology for an integrated approach for seismic and energy refurbishment of historic buildings in Mediterranean area (2018) Sustainability (Switzerland), 10 (7). DOI: 10.3390/su10072448

Gagliano, A., Nocera, F., Bruno, M., Blanco, I. Effectiveness of thermodynamic adaptive equilibrium models for modeling the pyrolysis process. (2018) Sustainable Energy Technologies and Assessments, 27, pp. 74-82. DOI: 10.1016/j.seta.2018.03.006

Cascone, S., Catania, F., Gagliano, A., Sciuto, G. A comprehensive study on green roof performance for retrofitting existing buildings. (2018) Building and Environment, 136, pp. 227-239. DOI: 10.1016/j.buildenv.2018.03.052

Antonio, A., Alberto, F., Gagliano, A., Luciano, F. Prediction of biomass pyrolysis plant products. (2018) (European Biomass Conference and Exhibition Proceedings, (26thEUBCE), pp. 1131-1136.

Cascone, S., Catania, F., Gagliano, A., Sciuto, G. Energy performance and environmental and economic assessment of the platform frame system with compressed straw. (2018) Energy and Buildings, 166, pp. 83-92. DOI: 10.1016/j.enbuild.2018.01.035

Gagliano, A., Nocera, F., Bruno, M. Simulation Models of Biomass Thermochemical Conversion Processes, Gasification and Pyrolysis, for the Prediction of the Energetic Potential. (2018) Advances in Renewable Energies and Power Technologies, 2, pp. 39-85. DOI: 10.1016/B978-0-12-813185-5.00002-4

Gagliano, A., Nocera, F., Tina, G. Performances and economic analysis of small photovoltaic–electricity energy storage system for residential applications. (2018) Energy and Environment . Article in Press. DOI: 10.1177/0958305X18787313

Cirami, S., Evola, G., Gagliano, A., Margani, G. Thermal and Economic Analysis of Renovation Strategies for a Historic Building in Mediterranean Area. (2017). Buildings, 7 (3). DOI: 10.3390/buildings7030060

Gagliano, A., Nocera, F. Analysis of the performances of electric energy storage in residential applications, (2017) International Journal of Heat and Technology, 35 (Special Issue 1), pp. S41-S48 , DOI:10.18280/ijht.35Sp0106



Nocera, F., Gagliano, A., Evola, G., Marletta, L., Faraci, A., The Kyoto Rotation Fund as a policy tool for climate change mitigation: The case study of an Italian school, (2017) *International Journal of Heat and Technology*, 35 (Special Issue 1), pp. S159-S165, DOI: 10.18280/ijht

Evola, G., Gagliano, A., Marletta, L., Nocera, F., Controlled mechanical ventilation systems in residential buildings: Primary energy balances and financial issues, (2017) *Journal of Building Engineering*, 11, pp. 96-107. DOI: 10.1016/j.job.2017.04.010

Gagliano, A., Detommaso, M., Nocera, F., Assessment of the green roofs thermal dynamic behavior for increasing the building energy efficiencies, (2017) *Smart Innovation, Systems and Technologies*, 67, pp. 37-59, DOI: 10.1007/978-3-319-52076-6,

Gagliano, A., Nocera, F., Bruno, M., Cardillo, G., Development of an Equilibrium-based Model of Gasification of Biomass by Aspen Plus, (2017) *Energy Procedia*, 111, pp. 1010-1019, DOI: 10.1016/j.egypro.2017.03.264

Gagliano, A., Giuffrida, S., Nocera, F., Detommaso, M., Energy efficient measure to upgrade a multistory residential in a nZEB, (2017) *AIMS Energy*, 5 (4), pp. 601-624, DOI: 10.3934/energy.2017.4.601

Evola, G., Gagliano, A., Fichera, A., Marletta, L., Martinico, F., Nocera, F., Pagano, A., UHI effects and strategies to improve outdoor thermal comfort in dense and old neighbourhoods, (2017) *Energy Procedia*, 134, pp. 692-701. DOI: 10.1016/j.egypro.2017.09.589

Gagliano, A., Nocera, F., Aneli, S. Computational Fluid Dynamics Analysis for Evaluating the Urban Heat Island Effects. (2017) *Energy Procedia*, 134, pp. 508-517. DOI: 10.1016/j.egypro.2017.09.557

Gagliano, A., Liuzzo, M., Margani, G., Pettinato, W. Thermo-hygrometric behaviour of Roman thermal buildings: the "Indirizzo" Baths of Catania (Sicily). (2017) *Energy and Buildings*, 138, pp. 704-715. DOI: 10.1016/j.enbuild.2016.12.011

Detommaso, M., Evola, G., Gagliano, A., Marletta, L., Nocera, F. Thermal performance of innovative building envelope systems in mediterranean climate. (2017). *Building Simulation Applications*, 2017-February, pp. 77-85.

Gagliano, A., Nocera, F., Detommaso, M., Spataru, C. A geographic information method for managing urban energy use. (2017) *Proceedings of the Institution of Civil Engineers: Engineering Sustainability*, 170 (1), pp. 19-32. DOI: 10.1680/jensu.15.00052

Evola, G., Fichera, A., Gagliano, A., Marletta, L., Nocera, F., Pagano, A., Palermo, V. Application of a Mapping tool to Plan Energy Saving at a Neighborhood Scale (2016) *Energy Procedia*, 101, pp. 137-144. DOI:10.1016/egypro.2016.11.018

Gagliano, A., Nocera, F., Aneli, S., Thermodynamic analysis of ventilated façades under different wind conditions in summer period, (2016) *Energy and Buildings*, 122, pp. 131-139, DOI: 10.1016/j.enbuild.2016.04.035

Tina, G.M., Gagliano, A. (2016) An improved multi-layer thermal model for photovoltaic modules 2016 *International Multidisciplinary Conference on Computer and Energy Science, SpliTech 2016*, DOI: 10.1109/SpliTech.2016.7555927

Gagliano, A., Nocera, F., Patania, F., Moschella, A., Detommaso, M., Evola, G., Synergic effects of thermal mass and natural ventilation on the thermal behaviour of traditional massive buildings, (2016) *International Journal of Sustainable Energy*, 35 (5), pp. 411-428. DOI: 10.1080/14786451.2014.910517

Gagliano, A., Nocera, F., Patania, F., Bruno, M., A numerical model to characterize the producer gas composition by the pyrolysis process, (2016) *IREC 2016 - 7th International Renewable Energy Congress*, art. no. 7478885, DOI: 10.1109/IREC.2016.7478885

Nocera, F., Gagliano, A., Patania, F., Bruno, M., Scirè, S., Slow pyrolysis kinetics of apricots stones by thermogravimetric analysis, (2016) *IREC 2016 - 7th International Renewable Energy Congress*, art. no. 7478945, DOI: 10.1109/IREC.2016.7478945

Gagliano, A., Detommaso, M., Nocera, F., Berardi, U., The adoption of green roofs for the retrofitting of existing buildings in the Mediterranean climate (2016) *International Journal of Sustainable Building Technology and Urban Development*, 7 (2), pp. 116-129, DOI: 10.1080/2093761X.2016.1172279

Gagliano, A., Nocera, F., Patania, F., Bruno, M., Castaldo, D.G., A robust numerical model for characterizing the syngas composition in a downdraft gasification process (2016) *Comptes Rendus Chimie*, 19 (4), pp. 441-449, DOI: 10.1016/j.crci.2015.09.019

Patania, F., Gagliano, A., Nocera, F., Antonio, A., Result and considerations of the survey on noise coming from railway running in Urban area (2016) *ICSV 2016 - 23rd International Congress on Sound and Vibration: From Ancient to Modern Acoustics*

Gagliano, A., Nocera, F., Detommaso, M., Evola, G., Thermal behavior of an extensive green roof: Numerical simulations and experimental investigations, (2016) *International Journal of Heat and Technology*, 34 (Special Issue 2), pp. S226-S234. DOI: 10.18280/ijht.34S206

Evola, G., Marletta, L., Gagliano, A., Nocera, F., Peci, D., Energy balances and payback time for controlled mechanical ventilation in residential buildings, (2016) *International Journal of Heat and Technology*, 34 (Special Issue 2), pp. S315-S322. DOI: 10.18280/ijht.34S218

Gagliano, A., Nocera, F., Patania, F., Bruno, M., Scirè, S., Kinetic of the pyrolysis process of peach and apricot pits by TGA and DTGA Analysis (2016) *International Journal of Heat and Technology*, 34 (Special Issue 2), pp. S553-S560. DOI: 10.18280/ijht.34S250

Gagliano, A., Nocera, F., Cicero, A., Cascio Gioia, M., Proposals and analysis of the effects of acoustic corrections in a modern church (2015) *Building Acoustics*, 22 (3-4), pp. 143-162.

Gagliano, A., Nocera, F., D'Amico, A., Spataru, C., Geographical information system as support tool for sustainable Energy Action Plan (2015) *Energy Procedia*, 83, pp. 310-319, DOI: 10.1016/j.egypro.2015.12.185

Gagliano, A., Berardi, U., Nocera, F., Salerno, N., Influence of natural ventilation on the thermal behavior of a massive building (2015) *Energy Procedia*, 78, pp. 1287-1292 DOI: 10.1016/j.egypro.2015.11.142

Gagliano, A., Nocera, F., Cicero, A., Gioia, M.C., Agrifoglio, A. Analysis and acoustic correction of a contemporary Italian church (2015) *Energy Procedia*, 78, pp. 1623-1628, DOI: 10.1016/j.egypro.2015.11.240

Gagliano, A., Detommaso, M., Nocera, F., Evola, G., A multi-criteria methodology for comparing the energy and environmental behavior of cool, green and traditional roofs (2015) *Building and Environment*, 90, pp. 71-81, DOI: 10.1016/j.buildenv.2015.02.043

Petralia, S., Castagna, M.E., Cappello, E., Puntoriero, F., Trovato, E., Gagliano, A., Conoci, S. A miniaturized silicon based device for nucleic acids electrochemical detection (2015) *Sensing and Bio-Sensing Research*, 6, pp. 90-94. DOI:10.1016/sbsr.2015.09.006

Patania, F., Gagliano, A., Nocera, F., Cannavò, S., Control of the concentration of radon in the air of the underground tunnels of Sidra Ltd. (applied research: Step one) (2015) *WIT Transactions on Ecology and the Environment*, 198, pp. 229-241, DOI: 10.2495/AIR150191,

Mohamed, L., Dehmani, L., Gagliano, A. Effect of glazing type on the performance of a Trombe wall in Tunisia (2015) 2015 6th International Renewable Energy Congress, IREC 2015, art. no. 7110881

Gagliano, A., Nocera, F., Detommaso, M., Patania, F., Design solutions for reducing the energy needs of residential buildings (2015) 2015 6th International Renewable Energy Congress, IREC 2015, art. no. 7110898, DOI: 10.1109/IREC.2015.7110898,

Gagliano, A., Nocera, F., Patania, F., Detommaso, M., Bruno, M., Evaluation of the performance of a small biomass gasifier and micro-CHP plant for agro-industrial firms (2015) *International Journal of Heat and Technology*, 33 (4), pp. 145-154 DOI: 10.18280/ijht.330418

Tina, G.M., Grasso, A.D., Gagliano, A. Monitoring of solar cogenerative PVT power plants: Overview and a practical example. (2015) *Sustainable Energy Technologies and Assessments*, 10, pp. 90-101. DOI: 10.1016/j.seta.2015.03.007

Nocera, F., Gagliano, A., Evola, G., Gioia, M.C., Acoustic quality of a tensile membrane structure used as a lecture hall, and proposals for its improvement (2014) *Building Acoustics*, 21 (4), pp. 287-304

Patania, F., Gagliano, A., Nocera, F., Galesi, A., The increase of carbon dioxide in the atmosphere and its possible negative effects on the biosphere and mankind (2014) *WIT Transactions on Ecology and the Environment*, 191, pp. 1483-1492, DOI: 10.2495/SC141252

Gagliano, A., Patania, F., Nocera, F., Signorello, C., Assessment of the dynamic thermal performance of massive buildings (2014) *Energy and Buildings*, 72, pp. 361-370, DOI: 10.1016/j.enbuild.2013.12.060

La Rosa, A.D., Recca, A., Gagliano, A., Summerscales, J., Latteri, A., Cozzo, G., Cicala, G. Environmental impacts and thermal insulation performance of innovative composite solutions for building applications (2014) *Construction and Building Materials*, 55, pp. 406-414. DOI:10.1016/conbuildmat.2014.01.05

Patania, F., Gagliano, A., Nocera, F., Cicero, A., Evaluation of the acoustic performance of a theatrical space set up in a restored Latomia in Ragusa Iblea (2014) *INTERNOISE 2014 - 43rd International Congress on Noise Control Engineering: Improving the World Through Noise Control*

Gagliano, A., Tina, G.M., Nocera, F., Patania, F., Technical and economic perspective for repowering of micro hydro power plants: A case study of an early XX century power plant (2014) *Energy Procedia*, 62, pp. 512-521, DOI: 10.1016/j.egypro.2014.12.413

Gagliano, A., Nocera, F., Patania, F., Contino, A., A procedure for the characterization of the solar-weighted reflectance of mirrored reflectors (2014) *IREC 2014 - 5th International Renewable Energy Congress*, art. no. 6826916, DOI: 10.1109/IREC.2014.6826916

Gagliano, A., Patania, F., Nocera, F., Galesi, A., Performance assessment of a solar assisted desiccant cooling system (2014) *Thermal Science*, 18 (2), pp. 563-576, DOI: 10.2298/TSCI120526067G

Costanzo, V., Evola, G., Marletta, L., Gagliano, A. Proper evaluation of the external convective heat transfer for the thermal analysis of cool roofs (2014) *Energy and Buildings*, 77, pp. 467-477. DOI:10.1016/enbuild.2014.03.064

Gagliano, A., Nocera, F., Patania, F., Detomaso, M., Sapienza, V., Deploy energy-efficient technologies in the restoration of a traditional building in the historical center of Catania (Italy) (2014) *Energy Procedia*, 62, pp. 62-71, DOI: 10.1016/j.egypro.2014.12.367

Gagliano, A., Detommaso, M., Nocera, F., Patania, F., Aneli, S., The retrofit of existing buildings through the exploitation of the green roofs - A simulation study (2014) *Energy Procedia*, 62, pp. 52-61. Cited 6 times, DOI: 10.1016/j.egypro.2014.12.366

Costanzo, V., Evola, G., Gagliano, A., Marletta, L., Nocera, F., Study on the application of cool paintings for the passive cooling of existing buildings in mediterranean climates (2013) *Advances in Mechanical Engineering*, 2013, art. no. 413675, DOI: 10.1155/2013/413675

Gagliano, A., Nocera, F., Patania, F., Capizzi, A., Assessment of micro-wind turbines performance in the urban environments: An aided methodology through geographical information systems (2013) *International Journal of Energy and Environmental Engineering*, 4 (1), pp. 1-14, DOI: 10.1186/2251-6832-4-43

Gagliano, A., Patania, F., Nocera, F., Capizzi, A., Galesi, A., GIS-based decision support for solar photovoltaic planning in urban environment (2013) *Smart Innovation, Systems and Technologies*, 22, pp. 865-874, DOI: 10.1007/978-3-642-36645-1\_77

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Analysis of acoustic climate on board public transport (2013) *WIT Transactions on Biomedicine and Health*, 16, pp. 3-10, DOI: 10.2495/EHR130011

Tina, G.M., Arcidiacono, F., Gagliano, A. Intelligent sun-tracking system based on multiple photodiode sensors for maximisation of photovoltaic energy production (2013) *Mathematics and Computers in Simulation*, 91, pp. 16-28. DOI:10.1016/.matcom.2012.07.020

Gagliano, A., Nocera, F., Patania, F., Capizzi, G., A case study of Energy Efficiency Retrofit in social housing units (2013) *Energy Procedia*, 42, pp. 289-298, DOI: 10.1016/j.egypro.2013.11.029

Tina, G.M., Gagliano, A., Nocera, F., Patania, F. Photovoltaic glazing: Analysis of thermal behavior and indoor comfort (2013) *Energy Procedia*, 42, pp. 367-376, DOI: 10.1016/j.egypro.2013.11.037

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Caserta, J., The dynamic lighting into the working environment (2012) *International Journal of Design and Nature and Ecodynamics*, 7 (4), pp. 394-408, DOI: 10.2495/DNE-V7-N4-394-408

Bonanno, F., Capizzi, G., Gagliano, A., Napoli, C. Optimal management of various renewable energy sources by a new forecasting method (2012) *SPEEDAM 2012 - 21st International Symposium on Power Electronics, Electrical Drives, Automation and Motion*, art. no. 6264603, pp. 934-940, DOI:10.1109/SPEEDAM.2012.6264603

Gagliano, A., Patania, F., Nocera, F., Ferlito, A., Galesi, A. Thermal performance of ventilated roofs during summer period (2012) *Energy and Buildings*, 49, pp. 611-618, DOI: 10.1016/j.enbuild.2012.03.007

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Thermal comfort analysis of public transport passengers in Catania (2012) *WIT Transactions on Ecology and the Environment*, 157, pp. 327-338, DOI: 10.2495/AIR120291

Gagliano, A., Patania, F., Capizzi, A., Nocera, F., Galesi, A., A proposed methodology for estimating the performance of small wind turbines in urban areas (2012) *Smart Innovation, Systems and Technologies*, 12, pp. 539-548, DOI: 10.1007/978-3-642-27509-8\_45

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Thermal comfort in operating rooms: A case study (2011) *WIT Transactions on Biomedicine and Health*, 15, pp. 105-114, DOI: 10.2495/EHR110101

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Development of the solar cooling in the Mediterranean area (2011) *PLEA 2011 - Architecture and Sustainable Development, Conference Proceedings of the 27th International Conference on Passive and Low Energy Architecture*, pp. 639-644.

Patania, F., Gagliano, A., Nocera, F., Ferlito, A., Galesi, A., Energy Analysis of Ventilated Roof (2011) *Smart Innovation, Systems and Technologies*, 7, pp. 15-23, DOI: 10.1007/978-3-642-17387-5\_2

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Caserta, J., The dynamic lighting technique in indoor architecture (2011) *WIT Transactions on the Built Environment*, 121, pp. 3-12, DOI: 10.2495/LIGHT110011

Patania, F., Gagliano, A., Nocera, F., Ferlito, A., Galesi, A., Energy analysis of ventilated roof (2011) *Sustainability in Energy and Buildings - Results of the 2nd International Conference on Sustainability in Energy and Buildings, SEB'10*, pp. 15-23.

Patania, F., Gagliano, A., Nocera, F., Galesi, A., The noise pollution in nature protected area of the pergusa lake (2011) *International Journal of Design and Nature and Ecodynamics*, 6 (1), pp. 52-67, DOI: 10.2495/DNE-V6-N1-52-67

Patania, F., Gagliano, A., Nocera, F., Galesi, A., The pollution of water resources and interventions to mitigate and control environmental impact (2011) *WIT Transactions on Ecology and the Environment*, 153, pp. 299-309, DOI: 10.2495/WS110271

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Urban transport and noise impact: A preventive applied research to control noise impact of new road to be build in Catania province (2010) *39th International Congress on Noise Control Engineering 2010, INTER-NOISE 2010*, 4, pp. 3263-3272.

Patania, F., Gagliano, A., Nocera, F., Ferlito, A., Galesi, A., Thermofluid-dynamic analysis of ventilated facades (2010) *Energy and Buildings*, 42 (7), pp. 1148-1155, DOI: 10.1016/j.enbuild.2010.02.006

Patania, F., Gagliano, A., Caponetto, R., Nocera, F., Galesi, A., A Neural Network model for the estimation of bioclimatic indexes (2010) *WIT Transactions on Ecology and the Environment*, 136, pp. 237-247, DOI: 10.2495/AIR100211

Patania, F., Gagliano, A., Galesi, A., Nocera, F., Proposal to improve the acoustic quality of the main hall of Catania University (2009) *16th International Congress on Sound and Vibration 2009, ICSV 2009*, 2, pp. 1039-1047

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Intervention of acoustic correction to improve speech quality of two conference halls in a Sicilian historical building (XVI sec.) (2009) *38th International Congress and Exposition on Noise Control Engineering 2009, INTER-NOISE 2009*, 6, pp. 3786-3794

Patania, F., Gagliano, A., Nocera, F., Galesi, A., The application of GIS to air quality analysis in Enna City (Italy) (2009) *WIT Transactions on Ecology and the Environment*, 123, pp. 75-86, DOI: 10.2495/AIR090071

Patania, F., Gagliano, A., Nocera, F., Galesi, A., Air quality in street canyons: A case study (2009) *WIT Transactions on Ecology and the Environment*, 123, pp. 3-15, DOI: 10.2495/AIR090011

Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., The environmental impact of urban transport: A case study for a new road in Catania province (2007) *WIT Transactions on the Built Environment*, 96, pp. 699-709, DOI: 10.2495/UT070661

Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., The case of atmospheric pollution using production waste in a building materials factory: An applied industrial case (2007) *WIT Transactions on Biomedicine and Health*, 11, pp. 13-23, DOI: 10.2495/EHR070021

Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., Urban transport and noise impact: A preventive applied research to control noise impact of new road to be build in Catania Province (2007) *14th International Congress on Sound and Vibration 2007, ICSV 2007*, 5, pp. 3798-3805.

Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., Termine, R., The sound impact of anthropic noise on wildlife reserves: An applied research for Pergusa lake (2007) *Turkish Acoustical Society - 36th International Congress and Exhibition on Noise Control Engineering, INTER-NOISE 2007 ISTANBUL*, 6, pp. 3757-3766.

Patania, F., Gagliano, A., Nocera, F., Pellegrino, I., Clean energy saving: Applied research into Etna's water supply systems in Catania, Italy (2007) *WIT Transactions on Ecology and the Environment*, 105, pp. 35-42, DOI: 10.2495/ESUS070041

- Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., Experimental research about gaseous emissions coming from multi-floor parks: A real case in Taormina (Italy) (2006) WIT Transactions on the Built Environment, 89, pp. 633-642, DOI: 10.2495/UT060611
- Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., Railway noise in urban area: A real case study in catania city (2006) 13th International Congress on Sound and Vibration 2006, ICSV 2006, 2, pp. 1607-1614
- Patania, F., Gagliano, A., Nocera, F., Galesi, A., D'Amico, A., An applied research to forecast the trend of air pollution in particular geometries of streets: The real case of urban canyon (2006) WIT Transactions on Ecology and the Environment, 86, pp. 33-44, DOI: 10.2495/AIR06004
- Patania, F., Gagliano, A., Nocera, F., Incompleteness of the Urban Traffic Plan in preliminary studies of environmental impact: The real case of "urban canyons" (2005) WIT Transactions on the Built Environment, 77, pp. 417-428
- Patania, F., Gagliano, A., Nocera, F., Borzi, A., Acoustical diagnosis of existing auditorium through computer modelling: An applied study case (2005) International Congress on Noise Control Engineering 2005, INTERNOISE 2005, 4, pp. 3184-3193