

Curriculum Vitae

Dionysia Kolokotsa

January 2024

Table of Contents

Contents

1	General Information.....	3
2	Education.....	3
3	Professional Experience.....	4
4	Teaching experience.....	5
4.1	Teaching Lectures.....	5
4.2	Thesis supervisor.....	7
4.2.1	PhD Thesis Supervisor.....	7
5	Research Experience.....	7
5.1	International Research Projects.....	7
5.1.1	Project Coordinator.....	7
5.1.2	Project Team Leader.....	8
5.1.3	Researcher.....	8
5.2	National Research Projects.....	9
5.2.1	Project Coordinator.....	9
5.2.2	Team Leader.....	9
5.2.3	Researcher.....	9
5.3	Conferences and Invited speeches.....	10
5.3.1	Member of Scientific Committees.....	10
5.3.2	Invited and Keynote Speaker in Conferences and Lectures.....	11
6	Editor, Reviewer and Evaluator.....	13
6.1	Editor of scientific publications.....	13
6.2	Reviewer of Scientific Journals.....	13
6.3	Reviewer of Books.....	13
6.4	Evaluator.....	13
7	Publications.....	14
7.1	Thesis.....	14
7.2	Books.....	14
7.3	Book Chapters.....	14
7.4	Publications in Scientific Journals.....	16
7.5	Publications in Conference Proceedings.....	23
7.6	Conference Publications with abstract review.....	29
8	Publications' metrics.....	32
9	Rankings.....	33

1 General Information

Name	Dionysia (Denia) Kolokotsa
Background	Physicist, PhD
Current Position	Professor, Dean of School of Environmental Engineering, Technical University of Crete
E-MAIL	dkolokotsa@tuc.gr deniako@gmail.com
Website	www.ember.tuc.gr http://www.chenveng.tuc.gr/index.php?option=com_content&view=article&id=194:kolokotsa-en&lang=en
Research Interests	<ul style="list-style-type: none">• Energy Management in the Built Environment• Zero Carbon Built Environment• Integration of renewables in buildings and smart grids• Solar energy applications• Sustainable Cities and Communities• Smart Cities and Nature Based Solutions• Urban heat island and climate change

2 Education

2001	Doctor of Philosophy <i>Department of Electronics and Computer Engineering Technical University of Crete</i> Title: ‘Design and Implementation of an Integrated Intelligent Building Indoor Environment Management System using Fuzzy Logic, Advanced Decision Support Techniques, Local Operating Network capabilities and Smart Card Technology’
1995	Master of Science Environmental design and engineering in Architecture <i>Bartlett School of Graduate Studies University College London (UCL)</i>
1994	Master of Science

Meteorology – Environmental Physics
Physics Department
National and Kapodestrian University of Athens

1991 **BSc in Physics**

Physics Department
National and Kapodestrian University of Athens

3 Professional Experience

1.2022-10.2024 **Independent Expert for New European Bauhaus, Knowledge Platform Development Sustainability and Economy Main Area**
Joint Research Center, European Commission, Italy

9.2021-8.2024 **Dean of School**
School of Chemical and Environmental Engineering
Technical University of Crete

2.2012-3.2021 **Chair of the Board of Directors**

European Cool Roofs Council
<http://coolroofcouncil.eu/>

2.2017- **Visiting Professor**

International Hellenic University

11-2020- **Full Professor**

School of Chemical and Environmental Engineering
Technical University of Crete

12-2016- **Associate Professor**
10.2020

School of Environmental Engineering
Technical University of Crete

2-2011-12.2016 **Assistant Professor**

School of Environmental Engineering
Technical University of Crete

2002-2011	Assistant Professor <i>Department of Natural Resources and Environment</i> <i>Technological Educational Institute of Crete</i>
2002-2006	Research Associate <i>Telecommunication Systems Institute (TSI)</i> <i>Technical University of Crete</i>
1999-2002	Adjunct Professor <i>Department of Natural Resources and Environment</i> <i>Technological Educational Institute of Crete</i>
1997-2004	Research Associate <i>Department of Electronics and Computer Engineering</i> <i>Technical University of Crete</i>
1995-1996	Consultant for wind farms projects in Greece <i>Euroen-ITA AE</i> <i>Rokas S.A.</i>

4 Teaching experience

4.1 Teaching Lectures

1997-1999	Seminars' tutor in the field of: <ul style="list-style-type: none"> • Operation and Maintenance of Wind Turbines <i>CPD– Centre of Professional Development KEA</i> <i>Rethymnon -Crete</i> • Renewable Energy and Energy Efficiency <i>CPD– Centre of Professional Development</i> <i>Heraklion -Crete</i> • Energy efficiency technologies in existing systems <i>Technical University of Crete</i> • Marketing-Multimedia <i>Technical University of Crete</i>
1999-2001	Laboratory tutor of the Course “ Physics” <i>Department of Natural Resources and Environment</i> <i>Technological Educational Institute of Crete</i>

2000-2002	<p>Laboratory tutor of the following courses:</p> <ul style="list-style-type: none"> • Signals and Systems • Technology and Applications of Fuzzy Logic. • Linear Systems. • Robotics <p><i>Department of Electronics and Computer Engineering</i> <i>Technical University of Crete</i></p>
2002-2005	<p>Main tutor as teaching associate of the following courses:</p> <ul style="list-style-type: none"> • Methods and Applications of Automation and Control in Industrial Systems (7th semester) • Electronic Systems for Energy Management (8th semester and postgraduate level) <p><i>Department of Electronics and Computer Engineering</i> <i>Technical University of Crete</i></p>
2002 – 2010	<p>Main tutor of the following courses:</p> <ul style="list-style-type: none"> • Renewable Energy Sources I (5th semester). • Renewable Energy Sources II (6th semester). • Energy and Economics (4th semester). • Design and Development of Renewable Energy Projects (7th semester) • Quality Control of Energy and Environmental Systems (8th semester). • Passive Solar Systems (selective course in the 10th semester). • Energy Management (selective course in the 9th semester) <p><i>Department of Electronics and Computer Engineering</i> <i>Technical University of Crete</i></p>
2006 and 2008	<p>Lecture in: Assessment and Applications of Smart Buildings</p> <p><i>European Master in Renewable Energy</i> <i>National and Kapodestrian University of Athens</i></p>
2010-	<p><u>Postgraduate Courses:</u></p> <ul style="list-style-type: none"> • Advanced studies on Energy Efficiency and Environmental quality in the Built Environment • Sustainable Energy Systems • Smart Energy systems and Integrated design in the Built Environment (PhD Course) <p><u>Undergraduate Courses:</u></p> <ul style="list-style-type: none"> • Environmental Meteorology and Air Quality Models (5th semester) • Optimization of Environmental Systems (6th semester)

-
- Technologies for Energy and Environment (6th semester)
 - Building Energy Efficiency (8th semester)
 - Field Studies I&II
- School of Environmental Engineering
Technical University of Crete*
-

2013-2014 Ventilation Courses
Sustainable energy design of buildings and built environment
<http://elearn.elke.uoa.gr/elearn/index.php>
National and Kapodestrian University of Athens

2017-2019 Postgraduate Courses in:

- Smart Buildings
- Smart Cities

International Hellenic University

4.2 Thesis supervisor

4.2.1 PhD Thesis Supervisor

1. Papantoniou S. (2015) Development of intelligent control algorithms for energy management targeting to the zero energy buildings. **Completed**
2. Gobakis K. (2018) Development of intelligent materials for the built environment, School of Environmental Engineering, Technical University of Crete. **Completed.**
3. Kampelis N. (2019) Smart communities and smart grids. School of Environmental Engineering, Technical University of Crete. **Completed.**
4. Vasilakopoulou K. (2022) Intelligent Daylighting: Development and Optimization of light pipes with embedded low energy electric lighting systems, School of Environmental Engineering, Technical University of Crete. **Completed.**
5. Mavrigiannaki A. (2022) Zero energy communities and integrated design. School of Environmental Engineering, Technical University of Crete. **Completed.**
6. Lilli. K. Nature Based Solutions for sustainable urbanisation of cities. **Ongoing.**
- 7.

5 Research Experience

5.1 International Research Projects

5.1.1 Project Coordinator

1. 2020-2025: VARCITIES VISIONARY NATURE BASED ACTIONS FOR HEATH, WELL BEING & RESILIENCE IN CITIES
Research and Innovation (Horizon 2020)
2. 2015-2019: Smart Grids Energy Management Staff MSCA-RISE-2014: Marie Skłodowska-Curie

Research and Innovation Staff Exchange (Horizon RISE)

1. 2016-2019: Development of a multi-stakeholder dialogue platform and Think tank to promote innovation with Nature based solutions, ThinkNature. Horizon Coordination and Support Actions.
3. 2013-2014. Development of optimization and control algorithms for the LEAF micro-grid community. Funded by Loccioni Group Srl. www.loccioni.it
4. 2010-2013: Participation in the management team of the FP7 project PEBBLE (www.pebble-fp7.eu)
5. 2005-2007: Development of an interactive vocational Web training tool for the take-off of the buildings DIRECTIVE 2002/91/EC (Intelligent Energy Europe)
Technological Educational Institute of Crete

5.1.2 Project Team Leader

1. 2022-2025:PROBONO:The Integrator-centric approach for realising innovative energy efficient buildings in connected sustainable green neighbourhoods, Innovation Action, Horizon 2020.
2. 2021-2025: JustNature: Activation of NATURE-based solutions for a JUST low carbon transition. Innovation Action, Horizon 2020
1. 2018-2019: Sydney Third City: Climate change and energy demand in Sydney 2050, University of New South Wales.
2. 2017-2020: RECO2ST: Residential Retrofit assessment platform and demonstrations for near zero energy and CO2 emissions with optimum cost, health, comfort and environmental quality. Research and Innovation Action, Horizon 2020.
3. 2017-2020: ERANETMED DESign of DESalination systems based on optimal usage of multiple Renewable Energy Sources, ERANETMED
4. 2017-2020 SAVES 2: Students Achieving Valuable Energy Savings, Horizon 2020.
5. 2015-2018: Horizon Research and Innovation Action. Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology, H2020-EE-2015-1-PPP.
6. 2012-2015: web-based enerGy management system foR the optimization of the EnErgy coNsumption in Hospitals Green@Hospital, <http://www.greenhospital-project.eu/>
7. 2008-2011: Promotion of cool roofs in EU – Intelligent Energy Europe (www.coolroofs-eu.eu) Technological Educational Institute of Crete

5.1.3 Researcher

1. 2009-2010: sustainaBle uRban plannIng Decision support accountinG for urban mEtabolism
National Kapodestrian University of Athens
2. 2006-2007: Energy'regio
Region of Crete, Energy Centre
3. 2002-2004: SMART-ACCELERATE - ACCELERATION OF SMART BUILDINGS' TECHNOLOGIES AND MARKET PENETRATION (SAVE 4.1031)
Telecommunication Systems Institute (TSI)
Technical University of Crete
4. 2000-2003: LEONARDO SMART-BE Developing distance training courses for SMART Buildings Energy Management (EL/B/P/2000/114146)

Technical University of Crete

5. 2000: Dissemination of the advanced control technologies for isolated power systems with increased RES (Renewable Energy Systems penetration (DIS-1625-1998-THERMIE)

National Technical University of Athens

6. 1997-2001: BUILTECH: Combining smart card and local operating network technologies with advanced decision support techniques to develop an intelligent industrial energy management system for buildings

Technical University of Crete

7. 1997: Quality control for household applications by on-line evaluation of mechanical defects-MEDEA (SMT4952016)

Technical University of Crete

8. 1996: Climate Technology Strategy within Competitive Energy Markets (JOS3950008)

National Technical University of Athens

9. 1992-1994: PASCOOL (CT2 – 0013)

National Kapodestrian University of Athens

5.2 National Research Projects

5.2.1 Project Coordinator

1. 2013-2015: Camp-it: Development of an innovative energy management system for university campuses, funded by the General Secretariat of Research and Technology, Ministry of Education, Greece.
2. 2013: Development of Sustainable Energy Action Plan for Komotini and Soufli in collaboration with ETAM S.A.
3. 2012-2013: Innovative materials for the Built Environment
Special account of Research-Technical University of Crete
4. 2004-2007: Archimedes I EF-THERMO Development of energy management systems for greenhouses, Ministry of Education, Technological Educational Institute of Crete.

5.2.2 Team Leader

1. 2007-2009: Development of a decision support system for energy audit and benchmarking in buildings
Special account of Research-Technical University of Crete
2. 2005-2007: EPEAEK Archimedes II Development of a platform for testing the electric devices under low quality grid connections –PLATEIS Technological Educational Institute of Crete
3. 2004-2006: Pythagoras Development of educational material for indoor environmental quality, Technological Educational Institute of Crete, funded by the Ministry of Education.

5.2.3 Researcher

1. 2003-2006: Integrated systems for e-management of Indoor Environment and Energy in Buildings_General Secretariat of Research and Technology, Ministry of Education, Greece.
Telecommunication Systems Institute (TSI)
Technical University of Crete
2. 2003: Techno-economic assessment of desalination system using the dissipated heat of the Linoperamata Iraklion energy generation plant (Contract 11 1973)
Technical University of Crete
3. 2002-2003: SPINOFFS: Promotion of a smart node for energy management in buildings. Funded by General Secretariat of Research and Technology, Ministry of Education, Greece.
Telecommunication Systems Institute (TSI)
Technical University of Crete
4. 2002: Techno-economic assessment of hydro storage system in order to maximize the wind generated electricity of 25 MW wind farms in Crete.
Achladia Wind Farm and Technical University of Crete. Funded by General Secretariat of Research and Technology
General Secretariat of Research and Technology, Ministry of Education, Greece.
5. 1999: EPEAEK: Development of a postgraduate course for advanced technologies
Technical University of Crete. Funded by Ministry of Education.
6. 1998-2000: EPEAEK: Distant learning courses in Renewable Energy Systems
Technical University of Crete. Funded by Ministry of Education.

5.3 Conferences and Invited speeches

5.3.1 Member of Scientific Committees

1. International Workshop on Energy Performance and Environmental Quality of Buildings Conference, Milos 2005.
2. 1st International Conference on Passive and Low Energy Cooling (Palenc) 2005.
3. 28th AIVC CONFERENCE-2nd International Conference on Passive and Low Energy Cooling (Palenc) 2007.
4. The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes 29-30 September 2010.
5. Co-chair of the Organising Committee and Scientific Committee of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
6. Member of the Technical Committee for Zero Energy Buildings in the Intelligent Energy Europe Project ZEMEDS, 2014-2015, www.zemedes.eu/
7. Member of the Technical Committee for the European Cool Roofs Council, 2013-2017.
8. Member of the Organising Committee and Scientific Committee for the 3rd International Conference on Countermeasures to Urban Heat Islands, Venice 2014.
9. Member of the Organizing Committee and Scientific Committee for the 4th International Conference on Countermeasures to Urban Heat Islands, Singapore 2016.
10. Member of the Scientific Committee of the 3rd ACM International Conference on Systems for Energy-Efficient Built Environments (BuildSys), Stanford CA, USA, 2016.

11. Member of the Scientific Committee of the International Conference on Sustainability in Energy and Buildings SEB-17 Chania, Greece 5, 6, 7 July 2017.
12. Member of the Scientific Committee of the 4th ACM International Conference on Systems for Energy-Efficient Built Environments (BuildSys 2017), November 8-9, 2017, Delft, The Netherlands.
13. Member of IEREK - International Experts for Research Enrichment and Knowledge Exchange.
14. Member of Cost Action on Energy Poverty in Europe.
15. Member of the Organizing Committee and Scientific Committee for the 5th International Conference on Countermeasures to Urban Heat Islands, India 2019.
16. Member of the Organising Committee of 11th International Conference on Sustainability in Energy and Buildings (SEB19) 03-05 July 2019, Budapest, Hungary.
17. Bronze Member of KES International
18. Member of EU Energy Poverty Observatory
<https://www.energypoverty.eu/members/denia-kolokotsa>
19. Member of GIB-Foundation SURE Stakeholders Council since 2019.
20. Member of Eurac Scientific Council, Italy since 2020.
21. Member of the Organizing Committee and Scientific Committee for the 6th International Conference on Countermeasures to Urban Heat Islands, Adelaide, 2023.
22. Member of EURO HEPA Working Group: European network for the promotion of health-enhancing physical activity promotion since 2023.

5.3.2 *Invited and Keynote Speaker in Conferences and Lectures*

1. for energy installations TEE Eastern Crete, Heraklion, December 2004.
2. **D. Kolokotsa**. Matrix tool: A method for the assessment of smart buildings, TEE Eastern Crete, Heraklion, January 2005.
3. G. Sutherland, **D. Kolokotsa**, G. Stavrakakis, S. Karatassou, M. Santamouris. A Matrix Tool for Assessing the Performance of Intelligent Buildings. **Keynote speech**, 1st International Conference on Passive and Low Energy Cooling (Palenc) 2005, 19-21 May 2005.
4. **D. Kolokotsa**. Matrix tool: A method for the assessment of smart buildings, TEE Western Chania, June 2006.
5. **D. Kolokotsa**. The necessity of a dynamic vocational training tool for the uptake of the EPDB- the EEED project. 8th REHVA World Congress Clima 2005, Lausanne 9-12 October 2005.
6. **D. Kolokotsa**. Electronic Energy Buildings Directive: The project, aims and objectives. Workshop 1, 9th REHVA World Congress Clima 2007, Helsinki, 10-14 June 2007.
7. **D. Kolokotsa**. Electronic Energy Buildings Directive. EU Sustainable Energy Week, Brussels, 30 January 2008.
8. **D. Kolokotsa**. The Energy Performance Buildings Directive-Aims and Objectives. Int. Conference “Ecology + Environment + Architecture”, Athens, 10-13 April 2008.
9. **D. Kolokotsa**. Integrated Concepts and Solar Architecture in Different Climates. ICLEI EUROPEAN CONVENTION. Cities in Europe 2020 – Enhance sustainability now!” Brussels, Belgium, 12-14 September 2011.
10. **D. Kolokotsa**. Green Roofs for the Built Environment. 6th International Conference Enertech 2011, Athens 29/9/2011-2/10/2011.
11. **D. Kolokotsa**. Smart Cities Panel Initiative, CEN/CENELEC, Brussels, 5 December 2012.

12. **D. Kolokotsa.** Developments in Cool and Reflective Materials, CIBSE Natural Ventilation Group Summer Seminar, : Passive Building Technology in Practice, Friday 21st June 2013
13. **D. Kolokotsa** Welcome speech and Summing up of the Cool Roofs Track, Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs’ - 1st venticool, Energy conservation technologies for mitigation and adaptation in the built environment: the role of ventilation strategies and smart materials, 25-26 September 2013, Athens, Greece
14. **D. Kolokotsa.** Keynote speaker for the Role of Cool Materials and the European Cool Roofs Council. 3rd International Conference on Countermeasures to Urban Heat Islands, Venice 2014.
15. **D. Kolokotsa.** Solutions and Countermeasures to Urban Heat Islands in European Cities: The role of Cool Materials and Green Infrastructure. Milan 2015.
16. **D. Kolokotsa.** The role of smart grids in zero energy buildings and communities. «Be Part of the Future» | Deep Energy Renovation | Conference and Workshop, Chania 2015.
17. **D. Kolokotsa.** The role of Nature Based Solutions in Climate Change Mitigation and Adaptation, 4th International Conference on Countermeasures to Urban Heat Islands, Singapore 2016.
18. **D. Kolokotsa.** Keynote speaker on How Smart Grids will affect the Built Environment. International Conference on Sustainability in Energy and Buildings SEB-17 5, 6, 7 July 2017, Chania, Greece.
19. **D. Kolokotsa.** Invited speaker on Energy Management in the Built Environment: From zero energy settlements to sustainable urbanisation through nature based solutions. MIT-ASHRAE Student Chapter, 5 September 2017, Massachusetts Institute of Technology, USA.
20. **D. Kolokotsa.** Invited speaker on cool materials in Europe: challenges and perspectives for the future. European Coil Coating Association, 51Autumn Congress, 27-28 November 2017. Brussels. Belgium.
21. **D. Kolokotsa.** Invited speaker for the main conclusions from the 3 Taskforces in the EU projects clustering, International Conference on “Nature-Based Solutions: From Innovation to Common-use (NBS 2017)”, 24-26/10/2017, Tallin, Esthonia.
22. **D. Kolokotsa.** Invited Speaker for “Bucharest Forum on Nature-Based Solutions. Rethinking the Nature of Cities”, 2-3/10/2019, Bucharest, Romania.
23. **D. Kolokotsa.** Invited speaker in Concordia University for Smart Communities and Cities. 17 April 2018.
24. **D. Kolokotsa.** Invited Speaker in CEN/CENELEC/ETSI sector forum on smart and sustainable cities and communities on ZERO PLUS project outcomes Stockholm, 25 September 2018.
25. **D. Kolokotsa.** Invited speaker in University of New South Wales for Smart Cities, 4 December 2018, Sydney, Australia.
26. **D. Kolokotsa.** Invited Speaker in CEN/CENELEC/SFEM sector forum on Energy Management on ZERO PLUS project outcomes 19 March 2019, Brussels, Belgium.
27. **D. Kolokotsa.** Design and implementation of a Web-GIS monitoring platform for zero energy settlements and districts. Invited Speaker in 6th Jeffrey Cook Workshop in Desert Architecture November 25-26, 2019 Ben-Gurion University of the Negev, Marcus Family Campus, Beer-Sheva, Israel
28. **D. Kolokotsa.** Invited Speaker in Heat & Habitat in Cities Symposium H2CS - The 9 - 10 December, 2019, University of Adelaide, Australia.
29. **D. Kolokotsa. Invited Speaker at HEPA Conference, KU Leuven, 2023.**

6 Editor, Reviewer and Evaluator

6.1 Editor of scientific publications

1. 2021-today, Editor-in-Chief, Solar Energy Advances, ISES, Elsevier.
2. 2017-2022. Editor Energy and Buildings, Elsevier.
3. 2015-2017. Editor in Chief Advances in Building Energy Research, Taylor and Francis.
4. Member of Editorial Board of Scientific Reports, Nature.
5. Member of Editorial Board of Discover Energy, Nature.
6. Member of Editorial Board of Energies, MDPI.
7. Member of Editorial Board of Urban Science, and Energies MDPI AG.
8. Section Board Member Processes, MDPI.
9. Subject Editor , Plos Climate.
10. Member of Editorial Board of Renewable Energy, Elsevier.
11. Guest Associate Editor for Interdisciplinary Climate Studies, Frontiers.
12. Guest Editor of the Special Issue “Energy Management of Institutional Buildings”, Energy and Buildings, Elsevier.
13. Guest Editor of the Special Issue “Zero Energy Buildings Concepts and Applications”, Advances in Building Energy Research Journal, Taylor and Francis.
14. Guest Editor of the Special Issue “Heat Island Mitigation Technologies for the Urban Environment”, International Journal of Low Carbon Technologies, Oxford University Press.
15. Guest Editor of the Special Issue “Advanced technologies for energy efficiency in buildings”, International Journal of Sustainable Energy, Taylor and Francis.
16. Guest Editor of the Special Issue on Fuel Poverty in Urban Areas, Sustainable Cities and Society, Elsevier.

6.2 Reviewer of Scientific Journals

1. Renewable Energy, Solar Energy, Energy and Buildings, Building and Environment, Wind Engineering & Industrial Aerodynamics, Energy, Applied Energy, Renewable and Sustainable Energy Reviews, Energy for Sustainable Development, Urban Forestry and Urban Planning, Automation in Construction, Information Sciences, Elsevier.
2. MDPI,
3. IEEE Transactions on Smart Grid.
4. International Journal of Ambient Energy, Intelligent Buildings International, international Journal of Sustainable Energy, Advances in Building Energy Research, Taylor and Francis.
5. International Journal of Low-Carbon Technologies, Oxford University Press.
6. ASHRAE Transactions.

6.3 Reviewer of Books

Review of books for Elsevier, Taylor and Francis, Springer, World Scientific, EarthScan and Bentham Publishers, KLABS.

6.4 Evaluator

7. Reviewer and Evaluator of the Intergovernmental Panel for Climate Change (IPCC) Report for the WGII AR5 Government, 2013-2014.

8. Independent Expert, Reviewer for the European Commission, DG Energy for FP7, CONCERTO, Horizon 2020, Horizon Europe, projects.
9. Evaluator of Research Proposals in Saudi Arabia, Kazakhstan, Estonia, Hungary, The Netherlands, Switzerland, Luxembourg, Hong Kong.
10. Evaluator of Research and Innovation Proposals for the General Secretariat for Research and Technology in Greece.
11. Evaluator of European RESEARCH Council, European Commission.
12. Member of Evaluation Committee Best Paper Award, Energy and Buildings, Elsevier
13. Member of Evaluation Committee for Marie Curie Fellowships.

7 Publications

7.1 Thesis

- PhD Thesis

D. Kolokotsa: Design and Implementation of an Integrated Intelligent Building Indoor Environment Management System using Fuzzy Logic, Advanced Decision Support Techniques, Local Operating Network capabilities and Smart Card Technology.

Technical University of Crete, 2001.

- Postgraduate theses

D. Kolokotsa: Daylighting in buildings: Myth or reality.

MSc in Architecture

Bartlett School of Graduate Studies, University College London, 1995.

D. Kolokotsa: Night radiative cooling of buildings

Environmental Physics

Physics Department

National and Kapodestrian University of Athens

7.2 Books

- B1. D. Kolokotsa, M. Santamouris, H. Akbari, Eds “Cool Materials for the Built Environment”, Bentham Science, 2013.
- B2. T. Nikolaou, D. Kolokotsa, G. Stavrakakis, A. Apostolou, Managing Indoor Environments and Energy in Buildings with Integrated Intelligent Systems, Springer, 2015.
- B3. M. Santamouris, D. Kolokotsa, Eds “Urban Climate Mitigation Techniques”, Taylor and Francis, 2016.
- B4. Co-author of the book: Pollution and Indoor Environmental Quality for Buildings, SELKA - 4M, 2007. (in Greek)

7.3 Book Chapters

- B5. G. Guarracino, **D. Kolokotsa**, V. Geros. Advanced control systems for energy and environmental performance of buildings. Chapter in the book: Solar Thermal Technologies for Buildings, The state of the art, Part of the BEST (Buildings, Energy & Solar Technology) series, James and James Publishers, UK, 2003.

- B6. K. Dalamagidis, **D. Kolokotsa**. Reinforcement Learning for Building Environmental Control. Chapter in the book: Reinforcement Learning Theory and Applications, I-Tech Education and Publishing, ISBN 978-3-902613-14-1, 2007.
- B7. C. Diakaki, **D. Kolokotsa**. Life Cycle Assessment of Buildings. Chapter in the book Sustainable Building Engineering, James and James Publishing, EarthScan, 2008.
- B8. **D. Kolokotsa**, M Santamouris, A Synnefa, T Karlessi, Passive Solar Architecture, *in* Comprehensive Renewable Energy, Volume 3, ELSEVIER, 2012 (doi:10.1016/B978-0-08-087872-0.00320-6).
- B9. **D. Kolokotsa**, V. Dimitriou, A. Synnefa, Modelling Cool Materials' Properties, *in* Cool Materials for the Built Environment, Bentham Science, 2013.
- B10. M. Kolokotroni, **Denia Kolokotsa**, *in* Energy and Environmental Aspects of Cool Materials, *in* Cool Materials for the Built Environment, Bentham Science, 2013.
- B11. K. Vasilakopoulou, **D. Kolokotsa**, and M. Santamouris Cities for Smart Environmental and Energy Futures: Urban Heat Island Mitigation Techniques for Sustainable Cities, *In* Energy Systems Series, Eds. P. Pardalos, S. Rassia, Springer, UK, 2013.
- B12. K. Vasilakopoulou, **D. Kolokotsa**, and M. Santamouris. The contribution of bioclimatic architecture in the improvement of outdoor urban spaces, Editor(s):Napoleon Enteria, Aliakbar Akbarzadeh *in* Solar Energy Sciences and Engineering Applications, CRC Press, 2013
- B13. M. Santamouris, **D. Kolokotsa**. Urban micro climates: mitigating urban heat stress, *in* Low Carbon Cities Transforming Urban Systems, Edited by Steffen Lehmann, Routledge, Earthscan Series on Sustainable Design, 2015.
- B14. **D. Kolokotsa**, Office Buildings/Commercial Buildings: Trends and Perspectives, *in* Energy Performance of Buildings Energy Efficiency and Built Environment in Temperate Climates, Edited by S. Boemi and M. Santamouris, Springer 2016.
- B15. Cristalli, C., Standardi, L., **Kolokotsa, D.**, Papantoniou, S., 2016. 15 - The use of algorithms for light control BT - Start-Up Creation. Woodhead Publishing, pp. 375–395. doi:http://dx.doi.org/10.1016/B978-0-08-100546-0.00015-7
- B16. Santamouris, M., **Kolokotsa, D.**, 2016. Passive cooling of buildings: Present and future needs: Recent progress on passive cooling convective technologies, *Advanced Environmental Wind Engineering*.
- B17. **D. Kolokotsa**, J. Yang, SE, Lee. 2018. Energy Management in University Campuses *in* Comprehensive Energy Systems 1ed, Elsevier.
- B18. **D. Kolokotsa**, 2018. On the Future Energy Efficiency of Air Conditioning, *in* Cooling Energy Solutions for Buildings and Cities edited by Mat Santamouris (University of New South Wales, Australia), World Scientific
- B19. Santamouris, M., **Kolokotsa, D.-D.** Urban microclimates Low Carbon Cities Transforming Urban Systems, Edited by Steffen Lehman, Earthscan Routledge, pp. 282-292.
- B20. **Kolokotsa D.**, Yang J., Pantazaras A. (2020) Energy Efficiency and Conservation Consideration for the Design of Buildings for Hot and Humid Regions. In: Enteria N., Awbi H., Santamouris M. (eds) Building in Hot and Humid Regions. Springer, Singapore
- B21. Kampelis, N., Kolokotsa, D. Smart Zero-energy buildings and communities for smart grids (2022) Smart Zero-Energy Buildings and Communities for Smart Grids, pp. 1-289. ISBN: 978-1-119-90219-5Wiley-ISTE.
- B22. Kolokotsa, D., Kampelis, N., Mavrigiannaki, A., Gentilozzi, M., Paredes, F., Montagnino, F.M., Venezia, L. Integration of energy storage in smart communities and

- smart grids (2022) Smart Zero-Energy Buildings and Communities for Smart Grids, pp. 221-262.
- B23. Kolokotsa, D., Pignatta, G., Ulpiani, G. Nearly Zero-Energy and Positive-Energy Buildings: Status and Trends (2022) Technologies for Integrated Energy Systems and Networks, pp. 239-273.
- B24. Kolokotsa, D., Santamouris, M., Yun, G.Y. 3.19 - Passive Solar Architecture
- B25. (2022) Comprehensive Renewable Energy, Second Edition: Volume 1-9, 1-3, pp. 725-741.
- B26. Polydoros, A., Cartalis, C., Santamouris, M., Kolokotsa, D. Use of landscape metrics for the mitigation of the surface urban heat island effect in Mediterranean cities
- B27. (2022) Global Urban Heat Island Mitigation, pp. 95-108.

7.4 Publications in Scientific Journals

- J1. D. Kolokotsa, K. Kalaitzakis, G. Stavrakakis, et al. Local Operating Networks technology aiming to improve building energy management system performance satisfying the users' preferences. International Journal of Sustainable Energy (formerly International Journal of Solar Energy) 21, 2-3, pp. 219-242, 2001.
- J2. D. Kolokotsa, D. Tsiavos, G. Stavrakakis, K. Kalaitzakis, E. Antonidakis. Advanced fuzzy logic controllers design and evaluation for buildings' occupants' thermal - visual comfort and indoor air quality satisfaction. Energy and Buildings, 33, 6 pp. 531-543, 2001.
- J3. D. Kolokotsa, K. Kalaitzakis, E. Antonidakis, G. S. Stavrakakis. Interconnecting smart card system with PLC controller in a Local Operating Network to form a distributed Energy Management and Control System for Buildings. Energy Conversion and Management, 43, pp. 119-134, 2002.
- J4. D. Kolokotsa, G. Stavrakakis, K. Kalaitzakis, D. Agoris. Genetic algorithms optimised fuzzy controller for the indoor environmental management in buildings implemented using PLC and local operating networks. Engineering Applications in Artificial Intelligence, 15, 5, pp. 417-428, 2002.
- J5. D. Kolokotsa. Comparison of the performance of fuzzy controllers for the management of the indoor environment. Building and Environment Journal, 38, 12, pp. 1439-1450, 2003.
- J6. D. Kolokotsa, K. Niachou, V. Geros, K. Kalaitzakis, G. Stavrakakis, M. Santamouris. Implementation of an Integrated Indoor Environment and Energy Management System. Energy and Buildings, 37, pp.93-99, 2005.
- J7. D. Kolokotsa, G. Saridakis, A. Pouliezios, G.S. Stavrakakis. Design and installation of an advanced EIB™ fuzzy indoor comfort controller using Matlab™. Energy and Buildings 38, 9, pp. 1084-1092, 2006.
- J8. E. Koutroulis, D. Kolokotsa, A. Potirakis, K. Kalaitzakis. Methodology for Optimal Sizing of Stand-Alone Photovoltaic/Wind-Generator Systems Using Genetic Algorithms. Solar Energy, 80, pp. 1072-1088, 2006.
- J9. D. Kolokotsa, G. Sutherland, G. Stavrakakis, S. Karatassou, M. Santamouris. A Matrix Tool for Assessing the Performance of Intelligent Buildings. Management of Environmental Quality, an International Journal, 18, 1, pp. 36-49, 2007.
- J10. K. Dalamagidis, D. Kolokotsa, K. Kalaitzakis, G.S. Stavrakakis. Reinforcement learning for energy conservation and comfort in buildings. Building and Environment, 42, 7, pp. 2686-2698, 2007.

- J11. D. Kolokotsa. Artificial Intelligence in Buildings: A Review on the Application of Fuzzy Logic. *Advances in Building Energy Research*, James and James Publisher, 1, pp. 29-54, 2007.
- J12. M. Santamouris, C. Pavlou, A. Synneffa, K. Niachou and D. Kolokotsa. Recent Progress on Passive Cooling Techniques, *Advanced Technological Developments to Improve Survivability Levels in Low Income Households*. *Energy and Buildings*, 39, 7, pp. 859-866, 2007.
- J13. M. Santamouris, A. Synneffa, D. Kolokotsa, V. Dimitriou, K. Apostolakis. Passive cooling of the built environment - use of innovative reflective materials to fight heat island and decrease cooling needs. *International Journal of Low Carbon Technologies*, 3, 2, pp. 71-82, 2008.
- J14. C. Diakaki, E. Grigoroudis, D. Kolokotsa. Towards a multi-objective optimization approach for improving energy efficiency in buildings. *Energy and Buildings*, 40, 9, pp.1747-1754, 2008
- J15. M. Santamouris, A. Synneffa, M. Assimakopoulos, I. Livada, K. Pavlou, M. Papaglastra, N. Gaitani, C. Pavlou, D. Kolokotsa, V. Assimakopoulos. Experimental investigation of the air flow and indoor carbon dioxide concentration in classrooms with intermittent natural ventilation. *Energy and Buildings*, 40, 10, pp. 1833-1843, 2008.
- J16. D. Kolokotsa, C. Diakaki, E. Grigoroudis, G. Stavrakakis, K. Kalaitzakis. Decision support methodologies on the energy efficiency and energy management in buildings. *Invited Paper to appear in Advances in Building Energy Research, James and James Publishers, EarthScan, 2009*.
- J17. T.G. Nikolaou, D. Kolokotsa, I. Skias and G. Stavrakakis. Asset and operational benchmarking for office buildings in Greece. *International Journal of Sustainable Energy*, 27, 4, pp. 1-15, 2008.
- J18. D. Kolokotsa, A. Pouliezios, G. Stavrakakis, C. Lazos. Predictive control techniques for energy and indoor environmental quality management in buildings. *Building and Environment*, Volume 44, Issue 9, pp. 1850-1863, 2009.
- J19. E. Koutroulis, D. Kolokotsa, G. Stavrakakis. Optimal Design and Economic Evaluation of a Battery Energy Storage System for the Maximization of the Energy Generated by Wind Farms in Isolated Electric Grids. *WIND ENGINEERING*, 33, NO. 1, pp. 55–81, 2009
- J20. D.Kolokotsa, A. Psomas, E. Karapidakis. Urban heat island in Southern Europe. The case study of Chania, Crete. *Solar Energy*, 83, Issue 10, pp.1871-1883, 2009.
- J21. T. Nikolaou, I. Skias, D. Kolokotsa, G. Stavrakakis, Virtual Building Dataset for energy and indoor thermal comfort benchmarking of office buildings in Greece, *Energy and Buildings*, 41, 12, , pp.1409-1416, 2009.
- J22. D. Kolokotsa, G. Saridakis, K. Dalamagkidis, S. Dolianitis, I. Kaliakatsos, Development of an intelligent indoor environment and energy management system for greenhouses, *Energy Conversion and Management*, 51, 1, pp.155-168, 2010.
- J23. E. Koutroulis, D. Kolokotsa, Design optimization of desalination systems power-supplied by PV and W/G energy sources, *Desalination*, 258, Issues 1-3, pp.171-181, 2010
- J24. Diakaki, C., Grigoroudis, E., Kabelis, N., Kolokotsa, D., Kalaitzakis, K., & Stavrakakis, G. (2010). A multi-objective decision model for the improvement of energy efficiency in buildings. *Energy*, 35(12), 5483-5496.
- J25. Nikolaou, T., Kolokotsa, D., & Stavrakakis, G. (2011). Review on methodologies for energy benchmarking, rating and classification of buildings. *Advances in Building Energy Research*, 5(1), 53-70.

- J26. Spanaki, A., Tsoutsos, T., & Kolokotsa, D. (2011). On the selection and design of the proper roof pond variant for passive cooling purposes. *Renewable and Sustainable Energy Reviews*, 15(8), 3523-3533.
- J27. Kolokotsa, D., Rovas, D., Kosmatopoulos, E., & Kalaitzakis, K. (2011). A roadmap towards intelligent net zero- and positive-energy buildings. *Solar Energy*, 85(12), 3067-3084.
- J28. Gobakis, K., Kolokotsa, D., Synnefa, A., Saliari, M., Giannopoulou, K., & Santamouris, M. (2011). Development of a model for urban heat island prediction using neural network techniques. *Sustainable Cities and Society*, 1(2), 104-115.
- J29. Kolokotsa, D., Diakaki, C., Papantoniou, S., & Vlissidis, A. (2012). Numerical and experimental analysis of cool roofs application on a laboratory building in Iraklion, Crete, Greece. *Energy and Buildings*, 55, 85-93.
- J30. Kolokotsa, D., Maravelaki-Kalaitzaki, P., Papantoniou, S., Vangeloglou, E., Saliari, M., Karlessi, T., & Santamouris, M. (2012). Development and analysis of mineral based coatings for buildings and urban structures. *Solar Energy*, 86(5), 1648-1659.
- J31. Kolokotsa, D., Tsoutsos, T., & Papantoniou, S. (2012). Energy conservation techniques for hospital buildings. *Advances in Building Energy Research*, 6(1), 159-172.
- J32. Nikolaou, T. G., Kolokotsa, D. S., Stavrakakis, G. S., & Skias, I. D. (2012). On the application of clustering techniques for office buildings' energy and thermal comfort classification. *IEEE Transactions on Smart Grid*
- J33. Spanaki, A., Kolokotsa, D., Tsoutsos, T., & Zacharopoulos, I. (2012). Theoretical and experimental analysis of a novel low emissivity water pond in summer. *Solar Energy*, 86(11), 3331-3344
- J34. Niki Papadaki, Sotiris Papantoniou and Dionysia Kolokotsa. (2012) Parametric study of the energy performance of double-skin facades in climatic conditions of Crete, Greece *International Journal of Low-Carbon Technologies*, 0, 1–9.
- J35. Santamouris, M., & Kolokotsa, D. (2013). Passive cooling dissipation techniques for buildings and other structures: The state of the art. *Energy and Buildings*, 57, 74-94.
- J36. Diakaki, C., Grigoroudis, E., & Kolokotsa, D. (2013). Performance study of a multi-objective mathematical programming modelling approach for energy decision-making in buildings. *Energy*, 59, 534-542.
- J37. Kapsomenakis, J., Kolokotsa, D., Nikolaou, T., Santamouris, M., & Zerefos, S. C. (2013). Forty years increase of the air ambient temperature in Greece: The impact on buildings. *Energy Conversion and Management*, 74, 353-365.
- J38. Kolokotsa, D., Santamouris, M., & Zerefos, S. C. (2013). Green and cool roofs' urban heat island mitigation potential in European climates for office buildings under free floating conditions. *Solar Energy*, 95, 118-130.
- J39. Santamouris, M., Paravantis, J. A., Founda, D., Kolokotsa, D., Michalakakou, P., Papadopoulos, A. M., . . . Servou, E. (2013). Financial crisis and energy consumption: A household survey in Greece. *Energy and Buildings*, 65, 477-487.
- J40. Kapetanakis, I. A., Kolokotsa, D., & Maria, E. A. (2014). Parametric analysis and assessment of the photovoltaics' landscape integration: Technical and legal aspects. *Renewable Energy*, 67, 207-214.
- J41. Maragkogiannis, K., Kolokotsa, D., Maravelakis, E., & Konstantaras, A. (2014). Combining terrestrial laser scanning and computational fluid dynamics for the study of the urban thermal environment. *Sustainable Cities and Society*,
- J42. Mastrapostoli, E., Karlessi, T., Pantazaras, A., Kolokotsa, D., Gobakis, K., & Santamouris, M. (2014). On the cooling potential of cool roofs in cold climates: Use of

- cool fluorocarbon coatings to enhance the optical properties and the energy performance of industrial buildings. *Energy and Buildings*, 69, 417-425.
- J43. Skoulika, F., Santamouris, M., Kolokotsa, D., & Boemi, N. (2014). On the thermal characteristics and the mitigation potential of a medium size urban park in Athens, Greece. *Landscape and Urban Planning*, 123, 73-86.
- J44. Spanaki, A., Kolokotsa, D., Tsoutsos, T., & Zacharopoulos, I. (2014). Assessing the passive cooling effect of the ventilated pond protected with a reflecting layer. *Applied Energy*, 123, 273-280.
- J45. Vasilakopoulou, K., Synnefa, A., Kolokotsa, D., Karlessi, T., Santamouris, M. Performance prediction and design optimisation of an integrated light pipe and artificial lighting system (2014) *International Journal of Sustainable Energy*, . Article in Press.
- J46. Gobakis, K., Kolokotsa, D., Maravelaki-Kalaitzaki, N., Perdikatsis, V., Santamouris, M. (2015). Development and analysis of advanced inorganic coatings for buildings and urban structures. *Energy and Buildings*, 89, pp. 196-205.
- J47. Tsilini, V., Papantoniou, S., Kolokotsa, D.-D., Maria, E.-A. (2015) Urban gardens as a solution to energy poverty and urban heat island. *Sustainable Cities and Society*, 14 (1), pp. 323-333.
- J48. Provata, E., Kolokotsa, D., Papantoniou, S., Pietrini, M., Giovannelli, A., Romiti, G. (2015) Development of optimization algorithms for the Leaf Community microgrid *Renewable Energy*, 74, pp. 782-795.
- J49. Pyloudi, E., Papantoniou, S., Kolokotsa, D. (2015) Retrofitting an office building towards a net zero energy building *Advances in Building Energy Research*, 9 (1), pp. 20-33.
- J50. Papanicolas, C., Lange, M.A., Fylaktos, N., Montenon, A., Kalouris, G., Fintikakis, N., Fintikaki, M., Kolokotsa, D., Tsirbas, K., Pavlou, C., Vasilakopoulou, K., Santamouris, M. (2015) Design, construction and monitoring of a near-zero energy laboratory building in Cyprus *Advances in Building Energy Research*, 9 (1), pp. 140-150.
- J51. Santamouris, M., Cartalis, C., Synnefa, A., Kolokotsa, D., (2015). On the impact of urban heat island and global warming on the power demand and electricity consumption of buildings—A review. *Energy and Buildings* 98, 119–124.
- J52. Santamouris, M., Kolokotsa, D., (2015). On the impact of urban overheating and extreme climatic conditions on housing, energy, comfort and environmental quality of vulnerable population in Europe. *Energy and Buildings* 98, 125–133.
- J53. Papantoniou, S., Kolokotsa, D., Kalaitzakis, K. Building optimization and control algorithms implemented in existing BEMS using a web based energy management and control system (2015) *Energy and Buildings*, 98, pp. 45-55.
- J54. Kolokotsa, D., Santamouris, M. Review of the indoor environmental quality and energy consumption studies for low income households in Europe (2015) *Science of the Total Environment*, 536, pp. 316-330.
- J55. Papantoniou, S., Kolokotsa, D., Kalaitzakis, K., Cesarini, D.N., Cubi, E., Cristalli, C. Adaptive lighting controllers using smart sensors (2016) *International Journal of Sustainable Energy*, 35 (6), pp. 537-553.
- J56. Efthymiou, C., Santamouris, M., Kolokotsa, D., Koras, A. Development and testing of photovoltaic pavement for heat island mitigation (2016) *Solar Energy*, 130, pp. 148-160.
- J57. Kolokotsa, D. The role of smart grids in the building sector (2016) *Energy and Buildings*, 116, pp. 703-708. *Invited Open Access Paper for Engineering Advances*
- J58. Mastrapostoli, E., Santamouris, M., Kolokotsa, D., Vassilis, P., Venieri, D., Gompakis, K. On the ageing of cool roofs: Measure of the optical degradation, chemical and

- biological analysis and assessment of the energy impact (2016) *Energy and Buildings*, 114, pp. 191-199.
- J59. Akbari, H., Cartalis, C., Kolokotsa, D., Muscio, A., Pisello, A.L., Rossi, F., Santamouris, M., Synnefa, A., Wong, N.H., Zinzi, M., 2016. Local climate change and urban heat island mitigation techniques – the state of the art. *Journal of Civil Engineering and Management* 22, 1–16.
- J60. Akbari, H., Kolokotsa, D., 2016. Three decades of urban heat islands and mitigation technologies research. *Energy and Buildings* 133. doi:10.1016/j.enbuild.2016.09.067
- J61. Papantoniou, S., Kolokotsa, D.-D., 2016. Prediction of outdoor air temperature using neural networks: Application in 4 European cities. *Energy and Buildings* 114.
- J62. Gobakis, K., Kolokotsa, D., 2017. Coupling Building Energy Simulation Software with Microclimatic simulation for the evaluation of the impact of urban outdoor conditions on the energy consumption and indoor environmental quality. *Energy and Buildings*, Volume 157, Pages 101-115,
- J63. ISSN 0378-7788, Gobakis, K., Mavrigiannaki, A., Kalaitzakis, K., Kolokotsa, D.-D., 2017. Design and development of a Web based GIS platform for zero energy settlements monitoring. *Energy Procedia* 134, 48–60. doi:10.1016/j.egypro.2017.09.598
- J64. Kampelis, N., Ferrante, A., Kolokotsa, D., Gobakis, K., Standardi, L., Cristalli, C., 2017a. Thermal comfort evaluation in HVAC Demand Response control, in: *Energy Procedia*. doi:10.1016/j.egypro.2017.09.587
- J65. Kampelis, N., Gobakis, K., Vagias, V., Kolokotsa, D., Standardi, L., Isidori, D., Cristalli, C., Montagnino, F.M., Paredes, F., Muratore, P., Venezia, L., Dracou, M.K., Montenon, A., Pyrgou, A., Karlessi, T., Santamouris, M., 2017b Evaluation of the performance gap in industrial, residential & tertiary near-Zero energy buildings. *Energy Build.* 148. doi:10.1016/j.enbuild.2017.03.057
- J66. Kolokotsa, D. 2017 Smart cooling systems for the urban environment. Using renewable technologies to face the urban climate change. *Solar Energy*, 154, pp. 101-111.
- J67. Karlessi, T., Kampelis, N., Kolokotsa, D., Santamouris, M., Standardi, L., Isidori, D., Cristalli, C., 2017. The Concept of Smart and NZEB Buildings and the Integrated Design Approach, in: *Procedia Engineering*. doi:10.1016/j.proeng.2017.04.294
- J68. Mavrigiannaki, A., Kampelis, N., Kolokotsa, D., Marchegiani, D., Standardi, L., Isidori, D., Cristalli, C., 2017. Development and testing of a micro-grid excess power production forecasting algorithms. *Energy Procedia* 134, 654–663. doi:10.1016/j.egypro.2017.09.583
- J69. Nikolaidis, N.P., Kolokotsa, D., Banwart, S.A., 2017. Nature-based solutions: Business. *Nature* 543. doi:10.1038/543315
- J70. Vasilakopoulou, K., Kolokotsa, D., Santamouris, M., Kousis, I., Asproulis, H., Giannarakis, I., 2017. Analysis of the experimental performance of light pipes. *Energy Build.* 151. doi:10.1016/j.enbuild.2017.06.061
- J71. Yang, J., Mohan Kumar, D.L., Pyrgou, A., Chong, A., Santamouris, M., Kolokotsa, D., Lee, S.E. Green and cool roofs' urban heat island mitigation potential in tropical climate (2018) *Solar Energy*, 173, pp. 597-609.
- J72. Santamouris, M., Ban-Weiss, G., Osmond, P., Paolini, R., Synnefa, A., Cartalis, C., Muscio, A., Zinzi, M., Morakinyo, T.E., Ng, E., Tan, Z., Takebayashi, H., Sailor, D., Crank, P., Taha, H., Pisello, A.L., Rossi, F., Zhang, J., Kolokotsa, D. Progress in urban greenery mitigation science – assessment methodologies advanced technologies and impact on cities (2018) *Journal of Civil Engineering and Management*, 24 (8), pp. 638-671.

- J73. Kolokotsa, D.-D., Giannariakis, G., Gobakis, K., Giannarakis, G., Synnefa, A. and Santamouris, M. (2018) ‘Cool roofs and cool pavements application in Acharnes, Greece’, *Sustainable Cities and Society*, 37. doi: 10.1016/j.scs.2017.11.035.
- J74. Kampelis, N., Tsekeri, E., Kolokotsa, D., Kalaitzakis, K., Isidori, D., Cristalli, C; Development of demand response energy management optimization at building and district levels using genetic algorithm and artificial neural network modelling power predictions (2018) *Energies*, 11 (11)
- J75. Kolokotsa, D., Vagias, V., Fytraki, L. and Oungrinis, K. (2018) ‘Energy analysis of zero energy schools: the case study of child’s asylum in Greece’, *Advances in Building Energy Research*, pp. 1–12. doi: 10.1080/17512549.2018.1488612.
- J76. Kampelis, N., Sifakis, N., Kolokotsa, D., Gobakis, K., Kalaitzakis, K., Isidori, D., Cristalli, C. HVAC optimization genetic algorithm for industrial near-zero-energy building demand response (2019) *Energies*, 12 (11), art. no. 2177, .
- J77. Giamalaki, M., Kolokotsa, D. Understanding the thermal experience of elderly people in their residences: Study on thermal comfort and adaptive behaviors of senior citizens in Crete, Greece (2019) *Energy and Buildings*, 185, pp. 76-87.
- J78. Kolokotsa, D, Kampelis, N, Mavrigiannaki, A, et al. On the integration of the energy storage in smart grids: Technologies and applications. *Energy Storage*. 2019; 1:e50. <https://doi.org/10.1002/est2.50>
- J79. Kampelis, N., Papayiannis, G.I., Kolokotsa, D., Galanis, G.N., Isidori, D., Cristalli, C., Yannacopoulos, A.N. An integrated energy simulation model for buildings (2020) *Energies*, 13 (5), art. no. 1170.
- J80. Tsekeri, E., Kolokotsa, D., Santamouris, M. On the association of ambient temperature and elderly mortality in a Mediterranean island – Crete (2020) *Science of the Total Environment*, 738, art. no. 139843.
- J81. Martinelli, A.; Kolokotsa, D.-D.; Fiorito, F. Urban Heat Island in Mediterranean Coastal Cities: The Case of Bari (Italy). *Climate* **2020**, 8, 79.
- J82. Kolokotsa, D., Lilli, A.A., Lilli, M.A., Nikolaidis, N.P. On the impact of nature-based solutions on citizens’ health and wellbeing (2020) *Energy and Buildings*, 229, art. no. 110527.
- J83. Fernandez, F.; Germinario, S.; Basile, R.; Montagno, R.; Kapetanaki, K.; Gobakis, K.; Kolokotsa, D.; Lagou, A.M.; Dania, P.; Enna, M.T.; Mangiapane, M.; Maravelaki, P.-N. Development of Eco-Friendly and Self-Cleaning Lime-Pozzolan Plasters for Bio-Construction and Cultural Heritage. *Buildings* 2020, 10, 172.
- J84. A. Mavrigiannaki, G. Pignatta, M. Assimakopoulos, M. Isaac, R. Gupta, D. Kolokotsa, M. Laskari, M. Saliari, I.A. Meir, S. Isaac, Examining the benefits and barriers for the implementation of Net Zero Energy settlements, *Energy and Buildings*, 2020, 110564, ISSN 0378-7788, <https://doi.org/10.1016/j.enbuild.2020.110564>.
- J85. Panagiotakis, E., Kolokotsa, D., Chrysoulakis, N. Evaluation of nature-based solutions implementation scenarios, using urban surface modelling (2021) *Green Energy Sustain*, 1, pp. 1-42.
- J86. Lygerakis, F., Kampelis, N., Kolokotsa, D. Knowledge Graphs’ Ontologies and Applications for Energy Efficiency in Buildings: A Review (2022) *Energies*, 15 (20), art. no. 7520, .
- J87. Kolokotsa, D., Lilli, K., Gobakis, K., Mavrigiannaki, A., Haddad, S., Garshasbi, S., Mohajer, H.R.H., Paolini, R., Vasilakopoulou, K., Bartesaghi, C., Prasad, D., Santamouris, M. Analyzing the Impact of Urban Planning and Building Typologies in Urban Heat Island Mitigation (2022) *Buildings*, 12 (5), art. no. 537, .

- J88. Koutroulis, E., Petrakis, G., Agou, V., Malisovas, A., Hristopulos, D., Partsinevelos, P., Tripolitsiotis, A., Halouani, N., Ailliot, P., Boutigny, M., Monbet, V., Allard, D., Cuzol, A., Kolokotsa, D., Varouchakis, E., Kokolakis, K., Mertikas, S. Site selection and system sizing of desalination plants powered with renewable energy sources based on a web-GIS platform (2022) *International Journal of Energy Sector Management*, 16 (3), pp. 469-492.
- J89. Asdrubali, F., Guattari, C., Roncone, M., Baldinelli, G., Gul, E., Piselli, C., Pisello, A.L., Presciutti, A., Bianchi, F., Pompei, L., Mattoni, B., Bisegna, F., Kolokotsa, D., Tsekeri, E., Assimakopoulos, M.-N., Efthymiou, C., Barmparesos, N., Lechowska, A., Schnotale, J., Aletta, F., Berardi, U; A Round Robin Test on the dynamic simulation and the LEED protocol evaluation of a green building (2022) *Sustainable Cities and Society*, 78, art. no. 103654, .
- J90. Wong, N.H., Tan, C.L., Kolokotsa, D.D., Takebayashi, H. 7202836613;37087871400;36337762700;7003768325; Greenery as a mitigation and adaptation strategy to urban heat (2021) *Nature Reviews Earth and Environment*, 2 (3), pp. 166-181.
- J91. Kampelis, N., Sifakis, N., Kolokotsa, D., Gobakis, K., Kalaitzakis, K., Isidori, D., Cristalli, C. HVAC Optimization Genetic Algorithm for Industrial Near-Zero Energy Building Demand Response (2021) *Smart Buildings, Smart Communities and Demand Response: Volume 8*, 8, pp. 65-93.
- J92. Ntouros, V., Kampelis, N., Senzacqua, M., Karlessi, T., Assimakopoulos, M.-N., Kolokotsa, D., Cristalli, C. Smart Meter Awareness in Italy, Ancona (2021) *Green Energy and Technology*, pp. 47-66.
- J93. Mavrigiannaki, A., Pignatta, G., Assimakopoulos, M., Isaac, M., Gupta, R., Kolokotsa, D., Laskari, M., Saliari, M., Meir, I.A., Isaac, S Examining the benefits and barriers for the implementation of net zero energy settlements (2021) *Energy and Buildings*, 230, art. no. 110564, ., .
- J94. Lygerakis, F., Kampelis, N., Kolokotsa, D. Knowledge Graphs' Ontologies and Applications for Energy Efficiency in Buildings: A Review (2022) *Energies*, 15 (20), art. no. 7520, .
- J95. Kolokotsa, D., Lilli, K., Gobakis, K., Mavrigiannaki, A., Haddad, S., Garshasbi, S., Mohajer, H.R.H., Paolini, R., Vasilakopoulou, K., Bartesaghi, C., Prasad, D., Santamouris, M. Analyzing the Impact of Urban Planning and Building Typologies in Urban Heat Island Mitigation (2022) *Buildings*, 12 (5), art. no. 537, .
- J96. Koutroulis, E., Petrakis, G., Agou, V., Malisovas, A., Hristopulos, D., Partsinevelos, P., Tripolitsiotis, A., Halouani, N., Ailliot, P., Boutigny, M., Monbet, V., Allard, D., Cuzol, A., Kolokotsa, D., Varouchakis, E., Kokolakis, K., Mertikas, S. Site selection and system sizing of desalination plants powered with renewable energy sources based on a web-GIS platform (2022) *International Journal of Energy Sector Management*, 16 (3), pp. 469-492.
- J97. Chantzis, G., Antoniadou, P., Symeonidou, M., Kyriaki, E., Giama, E., Oxyzidis, S., Kolokotsa, D., Papadopoulos, A. Evaluation of Methods for Determining Energy Flexibility of Buildings (2022) *Green Energy Sustain*, 2, p. 6.
- J98. Asdrubali, F., Guattari, C., Roncone, M., Baldinelli, G., Gul, E., Piselli, C., Pisello, A.L., Presciutti, A., Bianchi, F., Pompei, L., Mattoni, B., Bisegna, F., Kolokotsa, D., Tsekeri, E., Assimakopoulos, M.-N., Efthymiou, C., Barmparesos, N., Lechowska, A., Schnotale, J., Aletta, F., Berardi, U. A Round Robin Test on the dynamic simulation and the LEED

protocol evaluation of a green building (2022) *Sustainable Cities and Society*, 78, art. no. 103654,

- J99. Mihalakakou, G., Souliotis, M., Papadaki, M., Menounou, P., Dimopoulos, P., Kolokotsa, D., Paravantis, J.A., Tsangrassoulis, A., Panaras, G., Giannakopoulos, E., Papaefthimiou, S. Green roofs as a nature-based solution for improving urban sustainability: Progress and perspectives (2023) *Renewable and Sustainable Energy Reviews*, 180, art. no. 113306, .
- J100. Heshmat Mohajer, H.R., Ding, L., Kolokotsa, D., Santamouris, M. On the Thermal Environmental Quality of Typical Urban Settlement Configurations (2023) *Buildings*, 13 (1), art. no. 76
- J101. Mahmoud, I., Morello, E., Bisello, A., Kolokotsa, D. Augmented Nature-Based Solutions: A Possible Taxonomy of Technologies “in” and “for” Urban Greening Strategies (2024) *Green Energy and Technology*, pp. 125-139.
- J102. Kolokotsa, D.; Lilli, A.; Tsekeri, E.; Gobakis, K.; Katsiokalis, M.; Mania, A.; Baldacchino, N.; Polychronaki, S.; Buckley, N.; Micallef, D.; et al. The Intersection of the Green and the Smart City: A Data Platform for Health and Well-Being through Nature-Based Solutions. *Smart Cities* **2024**, *7*, 1-32. <https://doi.org/10.3390/smartcities7010001>

7.5 Publications in Conference Proceedings

- C1. D. Kolokotsa, K.Kalaitzakis, G.Stavarakakis, et al. Advanced decision support techniques in combination with smart card and local operating network technologies for intelligent energy management in buildings. Proceedings of the 2nd European Conference on Energy Performance and Indoor Climate in Buildings (EPIC) and 3rd International Conference on Indoor Air Quality, Ventilation and energy conservation in buildings, Lyon, November 19-22, 1998.
- C2. D. Kolokotsa, G. Stavarakakis, D. Agoris. Optimized Fuzzy Controller for Indoor Comfort Control and Energy Management in Buildings Implemented with PLC and Local Operating Networks (LON) Technology. Proceedings of the IASTED International Conference on Computer Science and Technology, Cancun, Mexico, May 19-21, 2003.
- C3. D. Kolokotsa, Z. Liao, K. Kalaitzakis, G. Stavarakakis, A. Pouliezos, E. Antonidakis, T. Tsoutsos, V. Geros, M. Santamouris. Smart energy management in the built environment. E-Proceedings of the International Conference Protection and Restoration of the Environment VII, Mykonos, June 28 July 1, 2004.
- C4. G. Sutherland, D. Kolokotsa, G. Stavarakakis, S. Karatassou, M. Santamouris. A Matrix Tool for Assessing the Performance of Intelligent Buildings. Proceedings of the 1st International Conference on Passive and Low Energy Cooling (Palenc), May 19-21 2005.
- C5. T. Nikolaou, E. Maria, P. Zalimidis, D. Kolokotsa. Recent market assessment and legal framework for BEMS in Greece. Proceedings of the 1st International Conference on Passive and Low Energy Cooling (Palenc), May 19-21, 2005.
- C6. D. Kolokotsa, A. Pouliezos, G. Stavarakakis. Sensor fault detection in building energy management systems. Proceedings of the 5th International Conference on Technology and Automation (ICTA), Thessaloniki, October 15-16, 2005.
- C7. D. Kolokotsa, A. Pouliezos, G. Stavarakakis. Sensor fault detection in building energy management systems. Proceedings of the International Conference on Intelligent Systems and Software Engineering (ISKE), Shanghai, China April 6-7, 2006. (*Appeared*

- in Dynamics of continuous discrete and impulsive systems-Series B-Applications & Algorithms* 13, Suppl. S, 13, pp. 221-225, 2006).
- C8. M. Papaglastra, M. Santamouris, G. Michalakakou, D. Matthopoulos, A. Geranios, A. Papadopoulos, G. Stavrakakis, I. Deligiannakis, D. Kolokotsa, E. Giama, A. Aristotelis, V. Tsezos, T. Nikolaou, E. Doulka, E. Mouriki. Pythagoras project: Development of an innovative training package on Indoor Environment Quality. Proceedings of the 4th International Conference on Energy Performance and Indoor Climate (EPIC) in Buildings, 27th International Conference of the Air Infiltration and Ventilation Centre (AIVC), Lyon, November 20-22, 2006.
- C9. A.Katsamaki, D.Kolokotsa, G. Saridakis, V. Geros, M. Santamouris, E. Bozonnet, F. Allard, O. Seppanen, N. Zografakis, C.Stefanou, M. Prenner, E. Bluemel, R. Bassi, N. Kaloyanov, L.Radulov. An Interactive Vocational Training Tool for the Energy Performance Buildings Directive. Proceedings of 4th International Conference on Energy Performance and Indoor Climate (EPIC) in Buildings, 27th International Conference of the Air Infiltration and Ventilation Centre (AIVC), Lyon, November 20-22, 2006.
- C10. S. Dolianitis, D. Kolokotsa, N. Kalitsounakis and N. Zografakis. Building Energy Management Systems in building's retrofit using power lines. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C11. D. Kolokotsa, G. Saridakis, O.Fenekos, A.Karagounakis, D.Tsoukakis. e-EPBD: A distance Training Tool for the Energy Performance Buildings Directive. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C12. T. Nikolaou, G. Stavrakakis, I. Skias, D. Kolokotsa. Assessment of shading contribution in the energy performance improvement of office buildings in Athens using TRNSYS simulation. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C13. M. Papaglastra, M. Santamouris, E. Mouriki, A. Geranios, G. Michalakakou, D. Matthopoulos, I. Deligiannakis, V. Tsezos, E. Doulka, A. Papadopoulos, E. Giama, A. Aristotelis, G. Stavrakakis, T. Nikolaou, D. Kolokotsa, S. Kephelopoulos, A. Katsoyiannis. Pythagoras: An Innovative Training Package on Indoor Environment Quality. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C14. G. Saridakis, D. Kolokotsa, M. Santamouris, State of the art on macroscopic models for the determination of thin films optical properties. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C15. A. Tsave, T. Nikolaou, D. Kolokotsa, D. Dasenakis and N. Zografakis. Energy Performance and Energy Rating Procedures of buildings in Southern Europe. Proceedings of the 2nd International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C16. G. Baryiannis, G. Stavrakakis, T. Nikolaou, D. Kolokotsa. TRNDB: A web database and website for storage and process of building energy analysis data. Proceedings of the 2nd

- International Conference on Passive and Low Energy Cooling (PALENC) and 28th Air Infiltration and Ventilation Centre (AIVC) Conference, Crete, September 27-29, 2007.
- C17. J. Chatzakis, H. Rigakis, M. Vogiatzaki, N. Lyberakis, M. Manitis, G. Liodakis, D. Kolokotsa, E. Antonidakis. Control system for testing electrical appliances. Proceedings of the 10th IASTED International Conference on Intelligent Systems and Control, Cambridge Massachusetts, USA, November 19-21, 2007.
- C18. D. Kolokotsa, T. Nikolaou, I. Skias, G. Stavrakakis, Comparison of asset and operational rating for office buildings' energy performance-A case study in Athens Greece. Proceedings of the International Conference on the Restoration and Protection of the Environment IX, Kefalonia, June 29-July 3, 2008
- C19. D. Kolokotsa, M. Papaglastra, et al. An innovative training package for indoor environmental quality. Proceedings of the International Conference on the Restoration and Protection of the Environment IX, Kefalonia, June 29-July 3, 2008.
- C20. I. Mitsios, D. Kolokotsa, G. Stavrakakis, K. Kalaitzakis, A. Pouliezios. Developing a control algorithm for CEN indoor environmental criteria – addressing air quality, thermal comfort and lighting. Proceedings of the 17th Mediterranean Conference on Control and Automation, MED'09 Thessaloniki, June 24-26, 2009.
- C21. D. Kolokotsa, E. Maria. The energy performance buildings' Directive 2002/91/EC and the Greek transposition. Proceedings of the 11th International Conference on Environmental Science and Technology, Chania September 3-5, 2009.
- C22. A.Spanaki, T.Tsoutsos, D.Kolokotsa. Parametric study of roof pond with gunny bags in the cooling season. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C23. M.Tsitoura, T.Tsoutsos, D.Kolokotsa. Comfort conditions in urban open spaces in Crete. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C24. T.Daras, D.Kolokotsa, M.Efpaxia, I.Apostolakis. Examination of parameters for the energy performance of school buildings in the region of Chania. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C25. G. Papadimitriou, T.Nikolaou, D.Kolokotsa, P.Skittides, G.Stavrakakis, T.Tsoutsos. The benchmarking of Greek office buildings using clustering techniques. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C26. M.Kolokotroni, M.Santamouris, A.Synnefa, H.Akbari, M.Zinzi, D.Kolokotsa, P.Perdikis, J.Kolokotsa. Cool roof technology in Europe: Description of a handbook. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C27. D.Kolokotsa, A.Pouliezios, M.Zinzi, A.Synnefa, M.Santamouris. Development of a toolkit for the evaluation of energy performance of cool materials in the EU region. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C28. A.Spanaki, T.Tsoutsos, D.Kolokotsa. Review of the parameters affecting the selection of a roof pond variant for cooling purposes. Proceedings of The joint 3rd Palenc, 5th EPIC and 1st Cool Roofs Conference, Rhodes, September 29-30, 2010.
- C29. K. Maragogiannis, D. Kolokotsa, E. Maria. Study of Night Ventilation Efficiency in Urban Environment: Technical and Legal aspects. In Proceedings of Energy Resources 2011, the 52nd International Scientific Conference of Riga Technical University, Latvia, 10 October 2011.

- C30. S. Papantoniou, D. Kolokotsa, A. Pouliezos, Neuro-fuzzy model based predictive algorithm for environmental management of buildings, In Proceedings of 3rd International Conference on Industrial and Hazardous Waste Management, Chania, 12-14 September 2012.
- C31. K. Gobakis, C. Lykas, D. Kolokotsa, G. Stavrakakis, Application of advanced clustering methods in a GIS based forest fire risk assessment tool, In Proceedings of 3rd International Conference on Industrial and Hazardous Waste Management, Chania, 12-14 September 2012.
- C32. P. Foutrakis, S. Papantoniou, Kostas Kalaitzakis, and D. Kolokotsa Development of a smart sensor for controlling artificial lights and venetian blinds, in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C33. E. Provata, D. Kolokotsa. Energy saving and indoor air quality in office buildings. in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
- C34. E. Pyloudi, S. Papantoniou, D. Kolokotsa, Retrofitting an office building towards a net zero energy building (NZEB). in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
- C35. E. Mastrapostoli, M. Santamouris, D. Kolokotsa, V. Perdikatsis, D. Venieri, K. Gompakis, numerical and experimental analysis of the aging of the cool roofs for buildings in Greece. in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C36. Chrysanthi Efthymiou, Mat Santamouris, Denia Kolokotsa, Andreas Koras, development and testing of photovoltaic pavement for heat island mitigation in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C37. Ariadni Vasilomichelaki, Kolokotsa Dionysia, Kalaitzakis Kostas Development of an Innovative Energy Management System for University Campuses, in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C38. Konstantina Vasilakopoulou, Afroditi Synnefa, Dionysia Kolokotsa, Theoni Karlessi, Mattheos Santamouris, Development of an algorithm for predicting the performance and optimizing the design of an energy efficient lighting system, in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C39. A. Spanaki, D. Kolokotsa, T. Tsoutsos, I. Zacharopoulos. The effect of a novel roof pond to the indoor air temperature for passive cooling in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C40. Konstantinos Gobakis, Dionysia Kolokotsa, Noni Maravelaki-Kalaitzakis, Stratos Lionakis, Vasilios Perdikatsis, Mattheos Santamouris. Development and analysis of inorganic coating for energy saving for buildings, in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C41. Afroditi Synnefa, Alexandros Pantazaras, Mat Santamouris, Emmanuel Bozonnet, Max Doya, Michele Zinzi, Alberto Muscio, Antonio Libbra, Chiara Ferrari, Valentina Coccia, Federico Rossi, Denia Kolokotsa. Interlaboratory comparison of cool roofing material measurement methods in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece

- C42. S.Papantoniou, D.Kolokotsa, K. Kalaitzaki, D.N.Cesarini, E. Cubi and C.Cristalli A development of a lighting controller using smart sensors, in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
- C43. M. Santamouris, J. A. Paravantis, D. Founda, D. Kolokotsa, G. Michalakakou, A.M. Papadopoulos Fuel poverty and the financial crisis: a household survey in Greece in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
- C44. V. Tsilini, S. Papantoniou, D. Kolokotsa and M. Efpraxia Urban gardens: as a solution to energy poverty and urban heat island Greece in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece.
- C45. A. Synnefa, M. Stathopoulou, N. Adaktylou, D. Kolokotsa, K. Gobakis, M. Santamouris, N. Chrysoulakis, C. Cartalis, A case study of sustainable urban planning with the use of a decision support system in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C46. A. Spanaki, D. Kolokotsa, T. Tsoutsos, I. Zacharopoulos, Experimental analysis of small scale roof ponds, protected by a variety of materials in different positions in regard to water level in Proc of Joint Conference 34th AIVC- 3rd TightVent- 2nd Cool Roofs' - 1st venticool, 25-26 September 2013, Athens, Greece
- C47. Dionysia Kolokotsa, Mattheos Santamouris, Energy Poverty in Europe: Challenges for energy efficiency 5th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA2014) Chania, Crete, Greece on July 7-9, 2014.
- C48. Papantoniou, S., & Kolokotsa, D, Prediction of outdoor air temperature using Neural Networks; application in 4 European cities. In Third International conference on Countermeasures to Urban Heat Island, Venice 2014.
- C49. C. Georgatou, D. Kolokotsa, K. Kalaitzakis, S. Papantoniou, K. Gombakis, N. Kampelis, D.Manolis, M. Santamouris, K. Vasilakopoulou, Integrated Smart Indoor-Outdoor Web based energy management system for university campuses, Ökosan '15 Conference on high quality retrofit and redensification with timber construction systems, AEE INTEC 17-19.6.2015.
- C50. A. Saranti, D. Kolokotsa, Konstantinos-Alketas Oungrinis Geometric focalization of sunrays: Residential building applications, 10th Conference on Advanced Building Skins, Bern, 2015.
- C51. Gobakis, K., Papantoniou, S., Georgatou, C., Kampelis, N., Kolokotsa, D., Kalaitzakis, K., Vasilakopoulou, K., Santamouris, M.: "Integrated Smart Indoor – Outdoor Web based Energy Management System for a university campus", 14th International Conference on Sustainable Energy Technologies, Nottingham 25-27 August 2015.
- C52. T. Karlessi, N. Kampelis, D. Kolokotsa, M. Assimakopoulos, Mat Santamouris Towards sustainable and smart communities: integrating energy efficient technologies into buildings through a holistic approach, Improving Energy Efficiency in Commercial Buildings and Smart Communities (IEECB&SC'16) Frankfurt, Germany, 16 - 18 March 2016.
- C53. K. Gobakis, D. Kolokotsa, Coupling Building Energy Simulation Software with Computational Fluid Dynamics for the evaluation of the impact of urban outdoor conditions on the energy consumption and indoor environmental quality, 4th International Conference on Countermeasures to Urban Heat Island, Singapore 30-31 May and 1 June 2016.

- C54. C. Georgatou, D. Kolokotsa, K. Kalaitzakis, S.C. Zerefos, J. Kapsomenakis, M. Santamouris, Long-term prediction of temperature data for the assessment of future energy trends, 4th International Conference on Countermeasures to Urban Heat Island, Singapore 30-31 May and 1 June 2016.
- C55. E. Tsirintoulaki, D. Kolokotsa, K. Gompakis, N. Kampelis. Impact assessment of natural ventilation on thermal comfort levels in sustainable residential buildings, 38th AIVC conference "Ventilating healthy low-energy buildings" 13 and 14 September 2017 in Nottingham (UK)
- C56. N. Kampelis, C. Cristalli, A. Ferrante, K. Gobakis, D. Kolokotsa, L. Standardi Thermal comfort evaluation in HVAC Demand Response control, 9TH International Conference on Sustainability and Energy in Buildings, Chania Crete 5-7 July 2017.
- C57. A. Mavrigiannaki, D. Isidori, N. Kampelis, D. Kolokotsa, D. Marchegiani, Laura Standardi Development and testing of a micro-grid excess power production forecasting algorithms, 9TH International Conference on Sustainability and Energy in Buildings, Chania Crete 5-7 July 2017.
- C58. D. Kolokotsa, K. Gobakis, A. Mavrigiannaki, K. Kalaitzakis Design and development of a Web based GIS platform for zero energy settlements monitoring, 9TH International Conference on Sustainability and Energy in Buildings, Chania Crete 5-7 July 2017.
- C59. A. Lilli, D. Kolokotsa, Analysis of an earth tube heat exchanger for the Technical University of Crete's buildings. 11th Conference for Renewable Energy Sources, Thessaloniki, 11-14 March 2018.
- C60. J. Yang, Yuan Luo, Kwok Wai Tham, D. Kolokotsa, P. Anand Sensed data for optimizing IEQ and energy consumption of a floor in a Tropical Building, The 15th Conference of the International Society of Indoor Air Quality & Climate (ISIAQ) Philadelphia, PA, USA, July 22 to 27, 2018
- C61. Meir, I.A., Isaac, S., Kolokotsa, D., Gobakis, K., Pignatta, G. 6603983838;23396961500;36337762700;42161195600;56331396900; Towards Zero Energy Settlements - A brief note on commissioning and POE within the EU ZeroPlus Settlements (2020) IOP Conference Series: Earth and Environmental Science, 410 (1), art. no. 012038,
- C62. Angeliki Mavrigiannaki, Nikos Kampelis, Dionysia Kolokotsa, Filippo Paredes, Luca Venezia, Fabio Montagnino, Development of ANN algorithms for forecasting Fresnel thermal power production AN INTEGRATED DESIGN APPROACH FOR PLANNING THE MEASUREMENT AND VERIFICATION OF ZERO ENERGY SETTLEMENTS International Conference on Innovative Applied Energy IAPE '19, Oxford, United Kingdom, 14-15 March 2019.
- C63. Katerina Lilli, Dionysia Kolokotsa, Bucharest Forum on Nature-Based Solutions. Rethinking the Nature of Cities, Horizon 2020 initiative organized by ThinkNature, Bucharest, Romania, 2-3 October 2019.
- C64. K. Gobakis, D. Kolokotsa. Effect of ageing on the physical and energy aspect of smart cool materials, Accepted paper at the 5th edition of the International conference on Durability of Building Materials and Components. Barcelona, 2020.
- C65. I. Kaza, D. Founda, C. Giannakopoulos, and D. Kolokotsa. Long-term trends in heating and cooling degree days at Mediterranean cities, in the context of climate change, EGU General Assembly, On-line, 4–8 May 2020
- C66. E. Tsekeri, K. Gobakis, D. Xilas, D. Kolokotsa, M. Kolokotroni, Francisco José Sánchez de la Flor, Angeliki Mavrigiannaki On the Impact of Highly Reflective Materials on Thermal Comfort and Energy Efficiency. Conference "IAQ 2020: Indoor Environmental

Quality Performance Approaches Transitioning from IAQ to IEQ", Athens, 41st AIVC - ASHRAE IAQ, 14-16 September 2020.

- C67. Chantzis, G., Antoniadou, P., Symeonidou, M., Giama, E., Oxizidis, S., Kolokotsa, D., Papadopoulos, A.M. Demand side flexibility potential and comfort performance of non-residential buildings (2021) *Journal of Physics: Conference Series*, 2069 (1), art. no. 012151, .
- C68. Lilli, A.; Tsekeri, E.; Gobakis, K.; Kolokotsa, D. EURECA-PRO Conference on Responsible Consumption and Production 2022. 19-21/10/2022, Leon, Spain. "Enhancing Nature Based Solutions by incorporating digital innovation and infrastructure in Chania."
- C69. Lilli, A.; Tsekeri, E.; Gobakis, K.; Kolokotsa, D. Smart and Sustainable Planning for Cities and Region (SSPCR). 19-22/7/2022, Bolzano, Italy. "Enhancing Nature Based Solutions by incorporating digital innovation and infrastructure in Chania".
- C70. Tsekeri, E.; Lilli, A.; Katsiokalis, M.; Gobakis, K.; Kolokotsa, D. 7th International Conference on Smart and Sustainable Technologies (SpliTech). 5-8/7/2022, Bol, Croatia. "On the integration of nature-based solutions with digital innovation for health and wellbeing in cities, pp. 1-6, doi: 10.23919/SpliTech55088.2022.9854269."
- C71. Nikos Kampelis; Filippou Lygerakis; Dionysia Kolokotsa, Towards the development of a knowledge graph based decision support framework for Green Building Neighborhoods, 6th International Conference on Countermeasures to Urban Heat Islands, 4-7th December 2023
- C72. Katsiokalis, M., Tsekeri, E., Lilli, A., Gobakis, K., Kolokotsa, D., Mania, K. GoNature AR: Air Quality & Noise Visualization Through a Multimodal and Interactive Augmented Reality Experience (2023) IMX 2023 - Proceedings of the 2023 ACM International Conference on Interactive Media Experiences, pp. 366-369. **BEST DEMO PAPER AWARD!**
- C73. Thodoris M. Chytis; Nikolaos Kampelis; Filippou Lygerakis; Dionysia Kolokotsa and Nikolaos A. Diangelakis, Occupant Behaviour optimisation towards thermal comfort and energy efficiency in the Built Environment, International Conference of Net Zero Carbon Built Environment, 2024

7.6 Conference Publications with abstract review

- CA1. D. Kolokotsa, G.Stavrakakis, K.Kalaitzakis, D.Tsiavos. Fuzzy control for Improved Buildings Energy Management Systems. Proceedings (abstracts) of European Symposium on Intelligent Techniques. ESIT 99, Chania 3-4 June 1999.
- CA2. E. Antonidakis, K. Papastergiou, K. Kalaitzakis, E. Koutroulis, D. Kolokotsa. Energy Management System Design Considerations aiming towards 100% RES Energy Supplied Communities. Proceedings of the International Conference on Renewable Energies for Islands Towards 100% RES supply, Chania, June 14-16, 2001.
- CA3. D. Kolokotsa, G. Stavrakakis, K. Kalaitzakis, A. Pouliezos, E. Loukis. Optimisation of a fuzzy controller using genetic algorithms for the indoor comfort control in buildings. Proceedings (abstracts) of the European Workshop on Intelligent Forecasting, Diagnosis and Control (IFDICON), and European Workshop on Service Humanoid & Robots (SERVICEROB), Santorini June 25-27, 2001.
- CA4. D. Kolokotsa, G. Stavrakakis. Small residential wind turbines in the urban environment. Proceedings of the 3rd Mediterranean Conference on Power Generation, Transmission

and Distribution and Energy Conversion (MEDPOWER 2002), Athens November 4-6, 2002.

- CA5. E. Theodoridou, D. Kolokotsa, V. Geros, M. Santamouris. Validation and testing of passive cooling techniques for a pilot building in Chania Crete Greece. Proceedings of the International Conference on RES for island, tourism & water, Crete, May 26-28 2003.
- CA6. D. Kolokotsa, K. Kalaitzakis G. Stavrakakis. Advanced Artificial Neural Networks for Short-term Load Forecasting. Proceedings of the International Conference on RES for island, tourism & water, Crete, May 26-28 2003.
- CA7. E. Tripolitakis, D. Kolokotsa, K. Kalaitzakis, G. Stavrakakis. Study and Implementation of a Fuzzy PD Thermal Comfort Controller for Embedded Fieldbus Systems Applications. WSEAS Conference on ELECTRONICS, CONTROL & SIGNAL PROCESSING (Published in WSEAS Transactions on Circuits and Systems, 9, 3, pp. 2051-2057, 2004), Rethymnon Crete, October 24-26, 2004.
- CA8. G. Saridakis, D. Kolokotsa, M.R. Irving. Development of an Intelligent Indoor Environment and Energy Management System for Greenhouses, Conference on Sustainable Energy, Brasov, Romania July 7-9, 2005.
- CA9. K. Dalamagidis, G. Saridakis, D. Kolokotsa. Development of Simulation Algorithms for Control Scheme Optimization in Greenhouses. E-Proceedings of the scientific conference DYNASTE, Athens, October 12-15, 2005.
- CA10. G. Saridakis, K. Dalamagidis, D. Kolokotsa, G.S. Stavrakakis, E. Koutroulis, K. Kalaitzakis, E. Antonidakis, J. Chatzakis, I. Kaliakatsos. Development of a Greenhouse Model with an Intelligent Indoor Environment and Energy Management System for Greenhouses. WSEAS Conference on Energy Environment Ecosystems and Sustainable Development, Athens, July 10-15, 2006 (appeared in WSEAS Transactions on Environment and Development, 2, 5, pp. 690-697, 2006).
- CA11. D. Kolokotsa, G. Stavrakakis, S. Kaminaris, V. Geros, M. Santamouris, M. Kitrinakis, S. Tripolitsiotis, N. Bakonikolas, G. Konstantopoulos. E-Building: A software platform for energy auditing and management of buildings. Proceedings of the International Workshop on Energy Performance and Environmental Quality of Buildings (EPEQUB), Milos Greece, 2006.
- CA12. G. Saridakis, D. Kolokotsa, S. Dolianitis. Development of an Intelligent Indoor Environment and Energy Management System for Greenhouses using a Fuzzy Logic Controller and LonWorks® protocol. Proceedings of the International Workshop on Energy Performance and Environmental Quality of Buildings (EPEQUB), Milos Greece, July 2006.
- CA13. P.N. Christias, D. Kolokotsa. A web application serving queries on renewable energy sources and energy management topics database built on JSP technology. Proceedings of the International Workshop on Energy Performance and Environmental Quality of Buildings (EPEQUB), Milos Greece, July 2006.
- CA14. M. Papaglastra, M. Santamouris, E. Mouriki, G. Michalakakou, D. Matthopoulos, I. Deligiannakis, V. Tsezos, E. Doulka, A. Geranios, A. Papadopoulos, E. Giama, A. Aristotelis, G. Stavrakakis, T. Nikolaou, D. Kolokotsa. Pythagoras project: Development of an innovative training package on Indoor Environment Quality. Proceedings of the International Workshop on Energy Performance and Environmental Quality of Buildings (EPEQUB), Milos Greece, July 2006.

- CA15. G. Kafetzis, P. Patelis, E. Tripolitakis, G. Stavrakakis, D. Kolokotsa, K. Kalaitzakis. PID controller tuning and implementation aspects for building thermal control, WSEAS Transactions on Circuits and Systems 5, 7, pp. 1016-1020, 2006.
- CA16. D. Deligiorgi, D. Kolokotsa, T. Papakostas, E. Mantou. Analysis of the Wind Field at the Broader Area of Chania, Crete. The 3rd IASME / WSEAS International Conference on ENERGY, ENVIRONMENT, ECOSYSTEMS and SUSTAINABLE DEVELOPMENT, July 27-29, 2007.
- CA17. Y.A. Katsigiannis, G.A. Saridakis, E.S. Karapidakis, and D. Kolokotsa, Organization of Virtual Classrooms as a Means for Disseminating the European Parliament Directive on the Energy Performance of Buildings. Proceedings of the 5th International Conference on New Horizons in Industry, Business and Education (NHIBE 2007), Rhodes Island, Greece, August 30-31, 2007.
- CA18. G. Kafetzis, P. Patelis, D. Kolokotsa, Stavrakakis G.S. Java Software Platform for Energy and Environmental Buildings Management. Proceedings of the 6th International Conference on Electrical Engineering, ICEENG, Cairo, May 27-29, 2008.
- CA19. T. Nikolaou, D. Kolokotsa, G. Stavrakakis, I. Skias. Building energy performance evaluation according to Greek Law 3661/08. Comparison between measured and calculated approach. Proceedings of the 3rd International Conference on Renewable Energy Sources and Energy Efficiency, ENERTECH, 2008 Athens 20-23 November 2008.
- CA20. E. Koutroulis, G. Stavrakakis, D. Kolokotsa. Optimal design and evaluation of a battery energy storage system for the exploitation of the rejected energy generated by wind farms in isolated electric grids. Proceedings of the 3rd International Conference on Renewable Energy Sources and Energy Efficiency, ENERTECH, Athens 20-23 November 2008.
- CA21. A. Synnefa, M. Santamouris, D. Kolokotsa. Promotion of Cool Roofs in the EU-The Cool Roofs Project. 2nd International Conference on Countermeasures to Urban Heat Islands (SICCUHI) Berkeley, California, September 21-23, 2009.
- CA22. M. Zinzi, E. Bozonnet, M. Kolokotroni, D. Kolokotsa, M. Santamouris, A. Synnefa Technical advances in the EU-Cool Roof project, EUROSUN Conference, Graz Austria, September 28 – October 1, 2010.
- CA23. D. Kolokotsa. Integrated Concepts and Solar Architecture in Different Climates. ICLEI EUROPEAN CONVENTION. Cities in Europe 2020 – Enhance sustainability now! Brussels, Belgium, 12-14 September 2011.
- CA24. D. Kolokotsa. Green Roofs for the Built Environment. 6th International Conference Enertech 2011, Athens 29/9/2011-2/10/2011.

8 Publications' metrics

Scopus 7998 citations /h-index=48

Google Scholar 9970 citations /h-index=43 /h10-index=68

ISI 6256 /h-index=43.

9 Awards and Distinctions

1. Five highly cited papers according to ISI

2. The article:

Kolokotsa, D., Rovas, D., Kosmatopoulos, E., & Kalaitzakis, K. (2011). A roadmap towards intelligent net zero- and positive-energy buildings. *Solar Energy*, 85(12), 3067-3084.

was on the list of the Top 25 hottest articles for 2011, 2012 in *Solar Energy*.

3. The article:

Santamouris, M., & Kolokotsa, D. (2013). Passive cooling dissipation techniques for buildings and other structures: The state of the art. *Energy and Buildings*, 57, 74-94.

was on the list of the Top 25 hottest articles for 2014 in *Energy and Buildings*.

4. The articles:

Akbari, H., Kolokotsa, D., 2016. Three decades of urban heat islands and mitigation technologies research. *Energy and Buildings* 133. doi:10.1016/j.enbuild.2016.09.067

Kolokotsa, D. The role of smart grids in the building sector (2016) *Energy and Buildings*, 116, pp. 703-708. Invited Open Access Paper for *Engineering Advances*




at the Top most cited articles since 2016

5. 2021 Excellence Award of the Technical University of Crete

10 Rankings

1. AD Scientific Index 2024

Total 1 scientist List without CERN, Statistical Data etc. Sort by last 6 years H Index

AD Scientific Index - World Scientists Rankings - 2024									H INDEX		
<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	Name <i>i</i>	Country	University / Institution	Subject	Total	Last 6 year	Last 6 year/total	
University / Institution	Country	Region	World								
15	681	36,938	103,147	 Denia Kolokotsa	 Greece	 Technical University of Crete	Technical Crete Energy efficiency built environment energy management	43	36	0.837	

1

2. Stanford List

Number 59176 in the ranking list of the most cited scientists for all disciplines and per discipline and for all years as published by Stanford University. Stanford University in 2023.

Number 702 in the ranking list of the most cited scientists for the Energy-Building&Construction sector, Stanford University 2023

Number 20,240 in the ranking list of the most cited scientists for all disciplines and per discipline and for year 2022 as published by Stanford University