

CURRICULUM VITAE

Athanassios A. Argiriou
Physicist, D.E.A. (M.Sc.), Ph.D.

Professor of Atmospheric & Environmental Physics
Department of Physics, Laboratory of Atmospheric Physics, University
of Patras, Greece

December, 2020

GENERAL INFORMATION

PERSONAL DATA

NAME	Athanasios ARGIRIOU
DATE OF BIRTH	27 December 1960
PLACE OF BIRTH	Athens, Greece
MARITAL STATUS	Married – 2 children

HOME ADDRESS

Aritis 36B, GR-264 42 Patras, Greece

BUSINESS ADDRESS

University of Patras,
Department of Physics, Section of Applied Physics,
GR-265 00 Patras, Greece.
tel:+30 261099 6078
e-mail: athanarg@upatras.gr,

STUDIES

- 1983 PHYSICS DEGREE, UNIVERSITY OF PATRAS
- 1984 D.E.A. ENERGETIQUE, INSTITUT NATIONAL POLYTECHNIQUE DE GRENOBLE.
- 1987 DOCTORAT TRANSFERT THERMIQUES UNIVERSITE DE PROVENCE (AIX MARSEILLE I).

PARTICIPATION TO ASSOCIATIONS

- Union of Greek Physicists
- Hellenic Meteorological Society

FOREIGN LANGUAGES

- GREEK (Mother language)
- FRENCH (Fluently)
- ENGLISH (Proficiency Degree)

PROFESSIONAL EXPERIENCE

1983 - 1984

Graduate student at Institut National Polytechnique de Grenoble.

1984 - 1987

Graduate Student at the Laboratory Systemes Energetiques et Transferts Thermiques (SETT),
Universite de Provence.

1987 - 1992

Freelance consultant on energy building physics.

1990 - 1991

Professor of Fluid Mechanics Lab, Technical Institute of Piraeus.

1991

Contractor as an expert of the Centre for Renewable Energy Sources.

1992 - 2002

Research associate of the University of Athens - Dept. of Applied Physics.

1994 - 2003

Researcher at IMPAE-NOA.

Department of Physics – School of Natural Sciences – University of Patras

Assistant Professor of Atmospheric and Environmental Physics (2003), Assistant Professor with
tenure (2007), Associate Professor (2009), Professor (2014).

Other positions

- Reviewer for the evaluation of research proposals at the Greek Secretariat of Research and Technology.
- Member of the jury for the evaluation of D.E.A. projects at the Ecole Nationale Supérieure des Travaux Publics de l'Etat, Lyon, France.
- Member of the Technical Committee of the Third European Architectural Ideas Competition on Passive Cooling organised by the European Commission, (DG XII) in 1994.
- Reviewer for the journals “Aerosol and Air Quality Research”, “Atmospheric Environment”, “Atmospheric Research”, “Climate Dynamics”, “Energy & Buildings”, “Energy – The International Journal”, “Environmental Modelling and Software”, “Environmental Technology”, “Global Nest”, “Hydrology Research”, “International Journal of Green Energy”, “International Journal of Systems Science”, “Journal of Environmental Management”, “Journal of Hydrology”, “Journal of the Air & Waste Management Association”, “Mathematical Problems in Engineering”, “Meteorological Applications”, “Renewable Energy”, “Science of the Total Environment”, “Simulation Modelling: Practice and Theory”, “Solar Energy”, “The Energy Journal”, “Water, Air and Soil Pollution”.
- Member since 2008 of the Editorial Advisory Board of the international scientific journal «The Open Hydrology Journal» (<http://www.bentham.org/open/tohydj/index.htm>).
- Reviewer for the international conference “Building Simulation ‘97” organized by the International Building Performance Simulation Association.

- Member of the scientific committee of the Conference “Renewable Energy & Environmental Technologies” organized by the Interuniversity Renewable Energies Network (RENES-net), Athens, 2000.
- Member of the jury of a Ph.D. degree at the Fondation Universitaire Luxembourgeoise, Belgium.
- Member of the Technical Committee 35 «Solar Energy» of the Hellenic Standardisation Organisation.
- Reviewer of research projects for the Ecole Polytechnique Federale de Lausanne.
- Representative of the Hellenic Standardisation Organisation to the Technical Committee 312 of the European Standardisation Organisation.
- Reviewer of research proposals for the 6th Framework program of the European Commission (Call Identifier FP6-2002-TREN-1 Area Sustainable Energy Systems), April 2003.
- Reviewer of research proposals for the for the Hellenic Ministry for Education (Heraklitos call) (2003).
- Evaluator of research proposals for the for the Hellenic Secretariat for Research & Technology (2003).
- Evaluator of research proposals for the for the Hellenic Ministry for Education (Pythagoras call) (2004).
- Member of the Technical Committee of the International Conference on Space Technology, 24-26 August 2009, Thessaloniki, Greece.
- Evaluator of research proposals for the Research Promotion Foundation of the Republic of Cyprus (2009, 2011).
- Organizer of the 10th International Conference on Meteorology – Climatology – Atmospheric Physics, Patras, Greece, 25 – 28 May 2011.
- Evaluator of research proposals for the 7th Framework program of the European Commission (Call Identifier FP7-ENERGY.2011.4.1-2 Low/Medium temperature solar thermal systems for industrial process heat) May 2011.
- Evaluator of research proposals for ENPI CBC MED Strategic Projects, in the field of Thermal Solar Power, October 2011.
- Evaluator of research proposals for the Republic of Romania (2012).
- Evaluator of research proposal for the programs «Collaboration between Greece and China» and «Continuous Learning Program for the Universities» (2012).
- Member of the scientific committee of the 11th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2012, Athens, Greece, 29 May – 1 June, 2012.
- Organizer of the International Workshop on the Impact of Maritime Activities on the Air Quality of Port Cities of Patras and Brindisi, Thessaloniki, Greece, January 30-31, 2014. Organized in the frame of the CESAPO project (ETCP GREECE – ITALY 2007-2013).
- Evaluator of research proposals for the call H2020-LCE-2014-1 - Solar thermal technologies (contract #: CT-EX2002B019057-105).
- Member of the scientific committee of the 12th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2014, Heraklion, Greece, 29 – 31 May, 2014.
- Member of the scientific committee of the 10th National Conference on Renewable Energy Sources, Thessaloniki, Greece, November 26 – 27, 2014.
- President of the organizing committee of the Intelligent Transportation Systems and Smart Cities 2014 Conference, organized by the University of Patras, Department of Civil Engineering, in cooperation with ITS Hellas-Hellenic Intelligent Transport Systems, Patras, Greece, November 19 – 22, 2014.

- Member of the scientific committee of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2016, Thessaloniki, Greece, 19 – 21 September, 2016.
- Member of the working group on higher education of the New Democracy party (member of the European People's Party), April 2016.
- Certified as an Open and Distance Learning tutor, by the Hellenic Open University, July 2016.
- Member of the scientific committee of the 15th International Conference on Environmental Science and Technology (CEST2017), August 31 – September 2 2016, Rhodes, Greece.
- Member of the organizing committee of the International Conference on Smart Cities and Mobility as a Service, Patras, Greece, 7-8 December 2017.
- National Representative of the General Secretariat for Research and Development of Greece at the National Network on Climate Change and its Consequences, February 2020.

Major administrative offices at the University of Patras

- Head of the Laboratory of Atmospheric Physics, Department of Physics (2006 - 2016).
- Head of the Section of Applied Physics, Department of Physics (2010 – 2011, 2015-2016).
- Deputy Chair of the Department of Physics (2011 – 2013).
- Director of the Graduate Studies Program, Department of Physics (2012 – 2013, 2015 - 2019).
- Head of the Department of Physics (2013 - 2015)

RESEARCH EXPERIENCE

I started my research activities during the year 1981 - 1982 with my diploma thesis at the Second Laboratory of Physics of the University of Patras, Greece. The subject of this thesis was the experimental study of underground heat storage, by means of earth-to-air heat exchangers.

After that I participated to the research projects listed below:

1. Perspectives of the development of the renewable energy sources in Greece.

Period	1982 – 1983
Collaboration with	Laboratory Physics II - University of Patras (Greece)
Financed by	Hellenic Ministry of National Economy
Position	Researcher

2. Experimental study of the isothermal diffusion of humidity in concrete.

Period	1983 – 1984
Collaboration with	Institut de Mecanique de Grenoble (France)
Financed by	Centre National de la Recherche Scientifique
Position	Researcher

3. Measurements using infrared thermography - Calibration and signal processing. Application to the validation of a numerical model describing the thermal behaviour of the absorber of a concentrating solar collector.

Period	1984 – 1987
Collaboration with	Universite de Provence (France)
Financed by	Centre National de la Recherche Scientifique
Position	Researcher

4. Potential of using solar energy in the brick manufacturing process.

Period	1987 – 1988
Collaboration with	PROTECHNA LTD
Financed by	PYRAMOS BRICK MANUF. – CYPRUS
Position	Researcher

5. Thermal analysis of an appartments building in Athens.

Period	1988
Collaboration with	EKTENEPOL
Financed by	European Union (EU) - CAMUR PROGRAMME
Position	Researcher

6. Thermal analysis, daylighting and passive cooling of a hotel complex in Crete.
 Period 1988
 Collaboration with MELETITIKI LTD – ALEX TOMBAZIS & ASSOCIATES
 Financed by E.U. DG XII - JOULE PROGRAMME - PROJECT BUILDING 2000
 Position Researcher
7. Investigation of the Greek energy market.
 Period 1988 – 1992
 Collaboration with Hellenic Productivity Center
 Financed by Hellenic Ministry for Industry, Research and Technology
 Position Researcher
8. Thermal and daylight analysis of the atrium of the atrium of the Medical School of the University of Ioannina.
 Period 1988
 Collaboration with University of Ioannina
 Financed by E.U. DG XII - JOULE PROGRAMME - PROJECT BUILDING 2000
 Position Researcher
9. Daylight analysis of the atrium of the atrium of the Medical School of the University of Ioannina.
 Period 1988
 Collaboration with University of Ioannina
 Financed by E.U. DG XVII, DEMONSTRATION PROJECT SE 537/83.
 Position Researcher
10. Energy savings in public and commercial buildings.
 Period 1988 – 1992
 Collaboration with Greek Productivity Centre
 Financed by Hellenic Ministry for Industry, Research and Technology
 Position Researcher
11. Thermal analysis of a passive solar kindergarten in Pedini - Ioannina.
 Period 1990
 Collaboration with E. Stournas Triantis Architecture Cabinet
 Financed by EU, DG XVII, Demonstration project SE 127/88.
12. The European building simulation code E.S.P. and comparison of it's results to other simulation tools.
 Period 1990
 Collaboration with Technical Institute of Piraeus.
 Financed by Technical Institute of Piraeus.
 Position Researcher
13. PASSYS Project - Model Validation and Development sub-group.
 Period 1989 – 1992
 Collaboration with PROTECHNA LTD
 Financed by EU, DG XII JOULE PROGRAMME, Contract no. JOUE-0022-C (GDF)
 Position Researcher
14. PASSYS - Test Site Management.

Period 1991 – 1992
Collaboration with IMPAE – NOA / CRES
Financed by EU, DG XII JOULE PROGRAMME, Contract no. JOUE-0022-C (GDF)
Position Researcher

15. Technical and economical evaluation of the passive solar systems and hybrid technologies available today in the European Union for passive cooling of buildings.

Period 1990 – 1991
Collaboration with CRES
Financed by CRES - EU, VALORIN PROGRAMME
Position Researcher

16. Passive cooling for buildings - PASCOOL.

Period 1992 – 1994
Collaboration with University of Athens - Dept. of Applied Physics
Financed by EU-DG XII, JOULE II programme (Contract No JOU2-CT92-0013)
Position Researcher

17. Monitoring of the atrium of the Philosophical School of the University of Ioannina.

Period 1992 – 1994
Collaboration with Technical Service of the University of Ioannina
Financed by EU-DG XVII (Demonstration project no : SE 537/83).
Position Researcher

18. Installation of low energy consuming agricultural greenhouses.

Period 1992 – 1994
Collaboration with ARCHIMEDES-GEFOSAT-PROTECHNA LTD
Financed by DG XVII THERMIE PROJECT (Contract No SE 434/92).
Position Researcher

19. PAPAGEORGIU Hospital.

Period 1992 – 1995
Collaboration with MELETITIKI LTD - Alex Tombazis & Associates.
Financed by DG XII Solar House project (Contract no JOU2-CT92-0024).
Position Researcher

20. Contribution to the authoring of the bioclimatic guide of CRES.

Period 1992 – 1993
Collaboration with CRES
Financed by CRES
Position Researcher

21. In situ study of passive solar components COMPASS - PASLINK project.

Period 1993 – 1994
Collaboration with BBRI Belgium, IMPAE - NOA
Financed by EU-DG XII (Contract JOU2-CT92-0216)
Position Researcher

22. Creation of an educational structure for energy efficiency in buildings.

Period 1993 – 1994

- | | |
|--------------------|---|
| Collaboration with | University of Athens - Dept. of Applied Physics |
| Financed by | EU-DG XVII SAVE programme (Contract SAVE 4.1031/92-052) |
| Position | Researcher |
23. Creation of an electronic database for the calculation of thermal bridges in buildings.
- | | |
|--------------------|---|
| Period | 1993 – 1995 |
| Collaboration with | BBRI Belgium, University of Athens - Dept. of Applied Physics |
| Financed by | EU-DG XVII SAVE programme (Contract SAVE 4.1031/93-12) |
| Position | Researcher |
24. Creation of a software for the calculation of the optical and thermal properties of window systems (the WIS project).
- | | |
|--------------------|---|
| Period | 1993 – 1995 |
| Collaboration with | TNO Netherlands - University of Athens - Dept. of Applied Physics |
| Financed by | EU-DG XII JOULE programme (Contract JOU2-CT94-0373) |
| Position | Researcher |
25. Large Scale Solar Heating
- | | |
|--------------------|---|
| Period | 1995 – 1996 |
| Collaboration with | Stenbeis - Transferzentrum Rationelle Energienutzung und Solartechnik – Stuttgart - National Observatory Athens |
| Financed by | E.U., DG XII APAS Programme, Contract RENA CT94-0057 |
| Position | Researcher |
26. Cooling potential of natural heat sinks of the southern European Countries (SINK project).
- | | |
|--------------------|--|
| Period | 1995 – 1997 |
| Collaboration with | University of Seville - University of Athens - Dept. of Applied Physics. |
| Financed by | E.U., DG XVII, ALTENER programme Contract 4.1030/A/94-88 |
| Position | Researcher |
27. Creation of educational material for the use of daylighting techniques in buildings.
- | | |
|--------------------|---|
| Period | 1995-1997 |
| Collaboration with | National Observatory of Athens |
| Financed by | E.E., DG XVII, ALTENER programme Contract 4.1030/Z/95-094 |
| Position | Scientist in Charge |
28. Set up of a laboratory for calibration of meteorological instrumentation
- | | |
|--------------------|---|
| Period | 1995-1998 |
| Collaboration with | National Observatory of Athens |
| Financed by | Hellenic Secretariat of Research and Technology |
| Position | Scientist in Charge |
29. Solar Control - Integrated Approach to Solar Control Techniques
- | | |
|--------------------|--|
| Period | 1996-1999 |
| Collaboration with | CONPHOEBUS, (IT) - National Observatory Athens |
| Financed by | E.E., DG XV, JOULE programme Contract JOR3-CT96-0113 |
| Position | Scientist in Charge |
30. Development of the dynamic simulation in solar bioclimatic architecture to the climates of Southern Europe by a network of conceptors and teachers.
- | | |
|--------|-----------|
| Period | 1996-1998 |
|--------|-----------|

Collaboration with GEFOSAT, FR - National Observatory Athens
Financed by E.E., DG XVII, ALTENER programme Contract (Not available yet)
Position Scientist in Charge

31. Design, realisation, tests, comparative analysis of low electric consumption PV cooling systems.

Period 1996-1999
Collaboration with COSTIC, FR – National & Kapodistrian University of Athens
Financed by E.E., DG XII, JOULE programme Contract (JOR3-CT96-0100)
Position Researcher

32. European Large Scale Heating Network.

Period 1997-1999
Collaboration with Chalmers Technical University, Sweden - National Observatory Athens
Financed by E.E., DG XVII, THERMIE programme Contract (DIS-1164-97-SE)
Position Scientist in Charge

33. Laboratory for Calibration of Meteorological Instrumentation

Period 1997-1999
Collaboration with National Observatory Athens
Financed by Hellenic Secretariat for Research and Technology. (Contract 96EIIY 46^E)
Position Scientist in Charge

34. Development and test of modern control techniques applied to solar buildings.

Period 1998-1999
Collaboration with I.S.F.H., Germany - National Observatory Athens
Financed by E.E., DG XII, JOULE programme Contract (JOE3-CT97-0076)
Position Scientist in Charge

36. Study and development of heating / cooling systems using renewable energy.

Period 1998-2000
Collaboration with National Observatory of Athens
Financed by E.E., DG XII, JOULE programme Contract (JOR3-CT97-0181)
Position Scientist in Charge

37. International obligations of the Hellenic Republic deriving from the protocols related to the conventions for transboundary air pollution and preparation of the survey infrastructure.

Period 1999
Collaboration with National & Kapodistrian University of Athens – Dept. of Physics
Financed by Hellenic Ministry for the Environment, Public Works & Urban Planning
Position Researcher

38. Design of an integrated system for continuous monitoring of VOC's emissions due to the use of organic solvents and from gasoline storage and measures for their reduction in Bulgaria.

Period 2000
Collaboration with National & Kapodistrian University of Athens – Dept. of Physics
Financed by Hellenic Ministry for the Environment, Public Works & Urban Planning

- | | |
|----------|------------|
| Position | Researcher |
|----------|------------|
39. Isotopic composition of precipitation in the Mediterranean Basin in relation to air circulation patterns and climate.
- | | |
|--------------------|---|
| Period | 2000-2003 |
| Collaboration with | National Observatory of Athens |
| Financed by | International Atomic Energy Agency (Contract # 11319) |
| Position | Scientist in Charge |
40. Investigation and definition of a reference methodology for the creation of Typical Meteorological Years for Hellenic cities.
- | | |
|--------------------|--|
| Period | 2000 |
| Collaboration with | National Observatory of Athens |
| Financed by | Center for Renewable Energy Sources – Greece |
| Position | Scientist in Charge |
41. Study of indoor air quality and thermal comfort at the Athens Hellenicon Air Terminal.
- | | |
|--------------------|---|
| Period | 2001 |
| Collaboration with | National Observatory of Athens |
| Financed by | National & Kapodistrian University of Athens – Dept. of Physics |
| Position | Scientist in Charge |
42. Isotopic composition of precipitation in the Mediterranean Basin in relation to air circulation patterns and climate.
- | | |
|--------------------|---|
| Period | 2003-2004 |
| Collaboration with | University of Patras |
| Financed by | International Atomic Energy Agency (Contract # 11319) |
| Position | Scientist in Charge |
43. Intelligent technologies for energy efficiency and comfort in buildings
- | | |
|--------------------|--|
| Period | 01/01/2005 – 31/12/2005 |
| Collaboration with | Higher Technical Educational Institute of Piraeus |
| Financed by | Hellenic Ministry for Education – ARCHIMEDES Program |
| Position | Researcher |
44. Development of an expert system for the automatic classification of weather maps
- | | |
|--------------------|--|
| Period | 01/10/2005 – 30/09/2008 |
| Collaboration with | University of Patras |
| Financed by | Hellenic General Secretariat for Research – PENED Program 2003 |
| Position | Scientist in charge |
45. Solar air conditioning of buildings using a continuous operation absorption cooler
- | | |
|--------------------|--|
| Period | 01/10/2005 – 30/09/2008 |
| Collaboration with | National Technical University of Athens |
| Financed by | Hellenic General Secretariat for Research – PENED Program 2003 |
| Position | Researcher |
46. Pilot study on the development and application of geostatistical tools to map the variability of the isotopic composition of water in the Mediterranean.
- | | |
|--------|-------------------------|
| Period | 15/09/2006 – 14/09/2008 |
|--------|-------------------------|

- | | |
|--------------------|----------------------------------|
| Collaboration with | University of Patras |
| Financed by | IAEA (Contract # 13931) |
| Position | Scientist in Charge & Researcher |
47. Advances in homogenization methods of climate series: an integrated approach (HOME).
 Period 1/5/2007 – 30/4/2011
 Collaboration with University of Patras
 Financed by European Commission (COST – European Science Foundation)
 Position Researcher
48. Stable isotopes in biospheric – atmospheric – earth system research (COST Action ES0806 - SIBAE).
 Period 5/2009 – 4/2013
 Collaboration with University of Patras
 Financed by European Commission (COST – European Science Foundation)
 Position Scientist in Charge & Researcher
49. Methods for extraction and digital processing of environmental signals and images – Application on the automated classification of weather maps.
 Period 2/2010 – 1/2013
 Collaboration with University of Patras (Scientist in charge)
 Financed by Research Committee of the University of Patras – Karatheodori grants program.
50. Contribution of Emission Sources on the Air quality of the Port-cities in Greece and Italy (ETCP GREECE – ITALY 2007-2013).
 Period 11/2011 – 05/2014
 Collaboration with University of Patras (Scientist in charge & Coordinator)
 Financed by European Commission (European Territorial Cooperation Program Greece - Italy 2007 – 2013) & Hellenic Ministry of Finance
51. Pollution monitoring of ship emissions: an integrated approach for harbors of the Adriatic basin - Poseidon (ETC 2007-2013, MED Maritime Integrated Projects).
 Period 06/2014 – 05/2015
 Collaboration with University of Patras (Scientist in charge)
 Financed by European Commission – ERDF MED Program & Hellenic Ministry of Finance
52. Solar Collectors with Static Concentrators, for solar thermal applications at intermediate to medium temperatures - SCoSCo (Bilateral cooperation between Greece and Germany).
 Period 05/2018 –
 Collaboration with University of Patras (Scientist in charge)
 Financed by Hellenic Secretariat for Research and Development
53. Global Monitoring of Nitrogen Isotopes in Atmospheric Waters (International Atomic Energy Agency Coordinated Research Project F32008 – Contract #22879/R0).
 Period 06/2018 – 05/2021
 Collaboration with University of Patras (Scientist in charge)

54. Comparative study of changing climate indexes between China and Greece based on daily homogenized daily observations – CLIMEX (Bilateral Research & Technology Cooperation Program between Greece and China – Hellenic General Secretariat for Research and Development).
Period 01/2019 – 12/2021
Collaboration with University of Patras (Scientist in charge)

SCIENTIFIC PUBLICATIONS

(Number of citations (self-citations excluded): > 2,870, h-index 27, source: www.scopus.com as of December 6th, 2020)

Theses

1. A. Argiriou, *Etude experimentale de la diffusion isotherme d'humidite dans un mortier de ciment normal*, Memoire de D.E.A., Institut National Polytechnique de Grenoble, 1984.
2. A. Argiriou, *La mesure en thermographie infrarouge, calibration et traitement du signal: application a la validation d'une modelisation numerique, en regime instationnaire, d'un convertisseur thermique de l'energie solaire sous concentration de type THEK2*, These de Doctorat de l'Universite de Provence, 1987.

Publications in peer reviewed journals

1. A. Arconada, **A. Argiriou**, F. Papini, R. Pasquetti, *La mesure par thermographie Infrarouge: Calibration et traitement du signal*, Journal of Modern Optics, Vol. 34, No. 10, pp. 1327-1335, 1987.
2. **A. Argiriou**, A. Arconada, P. Gallet, F. Papini, R. Pasquetti, M. Audibert, *Measurement of brightness concentration distribution in the focal zone of a focusing solar collector with an infrared camera*, Solar Energy, Vol. 41, No. 3, pp. 267-271, 1988.
3. R. Pasquetti, **A. Argiriou**, F. Papini, *Methodes d'identification et d'exploitation de la sequence de ponderation d'un dispositif d'acquisition d'images thermographiques infrarouges*, Journal of Modern Optics, Vol. 35, No. 10, pp. 1689-1698, 1988.
4. R. Pasquetti, **A. Argiriou**, F. Papini, A. Arconada, M. Audibert, *Thermal study of the receiver of a focusing solar collector using infrared thermography*, Solar Energy, Vol. 43, No. 1, pp.45-56, 1989.
5. M. Santamouris, D. Papaioannou, **A. Argiriou**, G. Stavrakakis, *Technical and economical comparison between solar water heaters using electrodeposited chrome selective coating and selective paints*, Energy Convers. Mgmt., Vol. 30, No. 4, pp.421-431, 1990.
6. A. Tombazis, **A. Argiriou** and M. Santamouris, *Performance evaluation of passive and hybrid cooling components for a hotel complex*, Int. J. Solar Energy, 1990, Vol. 9, pp. -12.
7. G. Agas, T. Matsaggos, M. Santamouris and **A. Argiriou**, *On the use of atmospheric heat sinks for heat dissipation*, Energy & Buildings, 1991, Vol. 17, pp.321-329.
8. A. Tzaferis, D. Liparakis, M. Santamouris and **A. Argiriou**, *Analysis of the accuracy and sensitivity of eight models to predict the performance of earth to air heat exchangers*, Energy & Buildings, Vol. 18, pp. 35 - 43, 1992.
9. **A. Argiriou**, M. Santamouris, C. Balaras, and S. Jeter, *Potential of radiative cooling in southern Europe*, Int. J. Solar Energy, Vol. 50, No 3, pp. 197-204, 1993.

10. **A. Argiriou**, D. Asimakopoulos, C. Balaras, E. Daskalaki, A. Lagoudi, M. Loizidou, M. Santamouris, and I. Tselepidaki, *On the energy consumption and indoor air quality in office and hospital buildings in Athens, Hellas*, Energy Convers. Mgmt, Vol. 35, No 5, pp. 385-394, 1994.
11. M. Santamouris, **A. Argiriou** and M. Vallindras, *Design and operation of a low energy consumption passive solar agricultural greenhouse*, Solar Energy, Vol. 52, No 5, pp. 371-378, 1994.
12. M. Santamouris, **A. Argiriou**, E. Daskalaki, C. Balaras and A. Gaglia, *Energy characteristics and savings potential in office buildings*, Solar Energy, Vol.52., No 1, p.p. 59 - 66, 1994.
13. M. Santamouris, E. Daskalaki, C. Balaras, **A. Argiriou** and A. Gaglia, *Energy performance and energy conservation in health care buildings, in Hellas*, Energy Convers. Mgmt, Vol. 35, No. 4, pp. 293-305, 1994.
14. M. Santamouris, E. Dascalaki, C. Balaras, **A. Argiriou** and A. Gaglia, *Energy consumption and the potential for energy conservation in school buildings, in Hellas*, Energy, Vol. 19, No 6, pp. 653-660, 1994.
15. **A. Argiriou**, M. Santamouris and D. Assimakopoulos, *Assessment of the radiative cooling potential of a collector using hourly weather data*, Energy, Vol. 19, No 8, pp. 879-888, 1994.
16. M. Santamouris and **A. Argirou**, *Renewable energies and energy conservation technologies for buildings in Southern Europe*, Int. J. Solar Energy, Vol. 15, pp. 69-79, 1994.
17. N. Klitsikas, M. Santamouris, **A. Argiriou**, D.N. Asimakopoulos and A. I. Dounis, *Performance of an indirect evaporative cooler in Athens*, Energy & Buildings, Vol. 21, No 1, pp. 55-63, 1994.
18. A. D. I. Dounis, C. C. Lefas, and **A. Argiriou**, *Knowledge based vs classic control in solar building designs*, Applied Energy, 50, 281 - 292, 1995.
19. A.I. Dounis, D.E. Manolakis and **A. Argiriou**, *A fuzzy rule-based approach to achieve visual comfort conditions*, International Journal of Systems Science, 26,7,1349-1361, 1995.
20. M. Santamouris, **A. Argiriou**, D. Asimakopoulos, N. Klitsikas, A. Dounis, *Heat and Mass Transfer through Large Openings by Natural Convection*, Energy and Buildings, No 23, 1- 8, 1995.
21. M. Santamouris, G. Mihalakakou, **A. Argiriou** and D.N. Asimakopoulos, *On the performance of buildings coupled with earth-to-air heat exchangers*, Solar Energy, Vol. 54, No. 6, 375-380, 1995.
22. E. Dascalaki, M. Santamouris, **A. Argiriou**, C. Helmis, D. Asimakopoulos, C. Papadopoulos, A. Soilemes, *Predicting single side natural ventilation rates in buildings*, Solar Energy, Vol. 55, No 5, pp. 327-341, 1995.
23. G. Mihalakakou, M. Santamouris, D. Asimakopoulos and **A. Argiriou**, *On the ground temperature below buildings*, Solar Energy, Vol. 55, No 5, pp.355-362, 1995.
24. M. Santamouris, G. Mihalakakou, C.A. Balaras, **A. Argiriou**, D. Assimakopoulos, M. Vallindras, *Use of buried pipes for energy conservation in cooling of agricultural greenhouses*, Solar Energy, Vol. 55, No 2, 111-124, 1995.
25. A.I. Dounis, M.J. Santamouris, C.C. Lefas and **A. Argiriou**, *Design of a fuzzy environment comfort system*, Energy and Buildings, 22, 81-87, 1995.
26. M. Santamouris, C. A. Balaras, E. Dascalaki, **A. Argiriou**, A. Gaglia, *Energy conservation and retrofitting potential in Hellenic hotels*, Energy & Buildings, 24, 65-75, 1996.
27. E. Dascalaki, M. Santamouris, **A. Argiriou**, C. Helmis, D.N. Asimakopoulos, K. Papadopoulos, and A. Soilemes, *On the combination of air velocity and flow measurements in single sided natural ventilation configurations*, Energy & Buildings, Vol. 24, 155-165, 1996.
28. M. Santamouris, G. Mihalakakou, **A. Argiriou** and D. N. Asimakopoulos, *On the efficiency of night ventilation techniques for thermostatically controlled buildings*, Solar Energy, Vol. 56, No 6, 479-483, 1996.

29. M. Santamouris, G. Mihalakakou, C.A. Balaras, J.O. Lewis, M. Vallindras and **A. Argiriou**, *Energy conservation in greenhouses with buried pipes*, Energy, Vol. 21, No 5, 353-360, 1996.
30. K. H. Papadopoulos, A. T. Soilemes, C. G. Helmis, D. N. Asimakopoulos, **A. Argiriou** and E. Dascalaki, *A triple hot wire system for indoor air flow measurements*, Journal of Solar Energy Engineering, Vol. 118, 141-145, 1996.
31. **A. Argiriou**, *CHSPSS Systems in Greece: Test of simulation software and analysis of typical systems*, Solar Energy, Vol. 60, Nos 3/4, 1997.
32. **A. Argiriou**, N. Klitsikas, C. A. Balaras, D. N. Asimakopoulos, *Active solar space heating of residential buildings in Northern Hellas - A case study*, Energy and Buildings, 26, 215-221, 1997.
33. D. Dalianis, D. Petassis, M. Santamouris, **A. Argiriou**, C. Cartalis and D.N. Asimakopoulos, *Social cost of electricity generation in Greece*, Renewable Energy, Vol. 12, No 3 pp. 281-289, 1997.
34. M. Santamouris & **A. Argiriou**, *Passive Cooling of Buildings - Results of the PASCOOL Project*, Intl. Journal Solar Energy, Vol. 19, pp. 9-13, 1997.
35. M. Santamouris & **A. Argiriou**, *Future research in passive cooling*, Intl. Journal Solar Energy, Vol. 19, pp. 199-211, 1997.
36. C.A. Balaras, M. Santamouris, D.N. Asimakopoulos, **A.A. Argiriou**, G. Paparsenos, A. Gaglia, *Energy Policy and Action Plan for Renewable Energy Sources (RES), for the Hellenic Islands of the North Aegean Region*, Energy, Vol. 24, 335-350, 1998.
37. **A. Argiriou**, S. Lykoudis, S. Kontoyannidis, C.A. Balaras, D.N. Asimakopoulos, M. Petrakis, P. Kassomenos, *Comparison of methodologies for TRY generation using 20 years data for Athens Greece*, Solar Energy, Vol 66, No 1, pp. 33-45, 1999.
38. C.A. Balaras, K. Droutsas, D.N. Asimakopoulos, **A.A. Argiriou**, *EPIQR surveys of apartment buildings in Europe*, Energy & Buildings, Vol. 31, pp. 111-128, 2000.
39. C.A. Balaras, K. Droutsas, **A.A. Argiriou**, D.N. Asimakopoulos, *Potential for energy conservation in apartment buildings*, Energy & Buildings, Vol. 31, pp. 143-154, 2000.
40. **A. A. Argiriou**, I. Bellas-Velidis, C. A. Balaras, *Development of a neural network controller for solar buildings*, Neural Networks, Vol. 13, pp. 811-820, 2000.
41. M. Santamouris, N. Papanikolaou, I. Livada, I. Koronakis, C. Georgakis, **A. Argiriou**, D. N. Asimakopoulos, *On the impact of urban climate on the energy consumption of buildings*, Solar Energy, Vol 70, No 3, pp. 201 –216, 2001.
42. **A.A. Argiriou**, I. Bellas-Velidis, C.A. Balaras, A. Dounis, *Use of artificial neural networks for predicting the heating requirements of single family houses*, International Journal of Knowledge – Based Intelligent Engineering Systems, Vol. 5, No. 4, 2001.
43. C.A. Balaras, K. Droutsas, **A.A. Argiriou**, K. Wittchen, *Assesment of energy and natural resources conservation in office buildings using TOBUS*, Energy & Buildings, 34, 135-154, 2002.
44. C.A. Balaras, **A.A. Argiriou**, *Infrared thermography for building diagnostics*, Energy & Buildings, 34, 171-184, 2002.
45. **A.A. Argiriou**, C.A. Balaras, S.P. Lykoudis, *Single-sided ventilation of buildings through shaded large openings*, Energy, 27, 93-115, 2002.
46. **A.A. Argiriou**, S. Mirasgedis, *The solar thermal market in Greece – Review and perspectives*, Renewable & Sustainable Energy Reviews, 7, 397-418, 2003.
47. A.V. Spyridonos, **A.A. Argiriou**, J.K. Nickoletatos, *Thermal storage efficiencies for two saltless solar ponds*, Solar Energy, 75(3): 207-216, 2003.
48. **A. A. Argiriou**, I. Bellas-Velidis, M. Kummert, P. Andre, *A neural network controller for hydronic heating systems of solar buildings*, Neural Networks, 17(3), 427-440, 2004.

49. **A.A. Argiriou**, S.P. Lykoudis, C.A. Balaras, D.N. Asimakopoulos, *Experimental study of an earth-to-air heat exchanger coupled to a photovoltaic system*, Journal of Solar Energy Engineering, 126(1), 620-625, 2004.
50. **A.A. Argiriou**, P.A. Kassomenos, S.P. Lykoudis, *On the methods for the delimitation of seasons*, Water, Air, and Soil Pollution: Focus 4:65-74, 2004.
51. **A.A. Argiriou**, C.A. Balaras, S. Kcntoyiannidis, E. Michel, *Numerical simulation and performance of a low capacity solar assisted absorption heat pump coupled with a subfloor system*, Solar Energy 79(3), 290-301, 2005.
52. M. Kummert, P. Andre, A.A. Argiriou, Comparing control strategies using experimental and simulation results: methodology and application to heating control of passive solar buildings, HVAC & R Research special issue, 12:3a, 718-737.
53. **A.A. Argiriou**, S. Lykoudis, *Isotopic composition of precipitation in Greece*, Journal of Hydrology, 327(3-4):486-495, 2006.
54. D. Katsanos, K. Lagouvardos, V. Kotroni, **A.A. Argiriou**, Combined analysis of rainfall and lightning data produced by mesoscale systems in the central and eastern Mediterranean, Atmospheric Research, 83(1), 55-63, 2007.
55. S. Lykoudis and **A.A. Argiriou**, Gridded dataset of the stable isotopic composition of precipitation over the Eastern and Central Mediterranean, J. Geophys. Res., 112, D18107-D18305, 2007.
56. D.K. Katsanos, K. Lagouvardos, V. Kotroni, **A.A. Argiriou**, The relationship of lightning activity with microwave brightness measurements and spaceborn reflectivity profiles in the Central and Eastern Mediterranean, Journal of Applied Meteorology and Climatology, 46, 1901-1912, 2007.
57. Kotsiantis, S., Kostoulas, A., Lykoudis, S., **Argiriou**, A., Menagias, K. (2008) Using data mining techniques for estimating minimum, maximum and average daily temperature values, Int J Math, Phys Eng Sci, 1 (1), pp. 16-20.
58. N. Mazarakis, V. Kotroni, K. Lagouvardos, **A.A. Argiriou**, (2008) Storms and Lightning Activity in Greece during the Warm Periods of 2003–2006, Journal of Applied Meteorology and Climatology 47, 3089-3098.
59. Mazarakis, N, Kotroni, V., Lagouvardos, K., **Argiriou**, A. (2009) The sensitivity of numerical forecasts to convective parametrization during the warm period and the use of lightning data as an indicator for convective occurrence. Atmospheric Research 94 (4): 704-714.
60. Lykoudis S., Kostopoulou E., **Argiriou A. A.**, (2010) Stable isotopic signature of precipitation under various synoptic classifications, Physics and Chemistry of the Earth, 35, (9-12), 530-535.
61. Spyridon P Lykoudis; **Athanasios A Argiriou**; Elissavet Dotsika (2010) Spatially interpolated time series of $\delta^{18}\text{O}$ in Eastern Mediterranean precipitation, Global and Planetary Change, 71 (3-4), pp. 150-159. doi: 10.1016/j.gloplacha.2009.09.004
62. S.P. Lykoudis, **A.A. Argiriou** (2010) Temporal trends in the stable isotope composition of precipitation: a comparison between the eastern Mediterranean and central Europe, Theor. Appl. Climatol., 105:199-207, doi 10.1007/s0074-010-0384-6 (<http://rdcu.be/mUZ4>)
63. Dounis, A.I., Tiropanis, P., **Argiriou**, A., Diamantis, A. (2011) Intelligent control system for reconciliation of the energy savings with comfort in buildings using soft computing techniques. Energy and Buildings, 43 (1) pp. 66 – 74.
64. Tsiotas, G., **Argiriou A. A.** (2011) An Efficient Approach to Spatiotemporal Analysis and Modeling of Air Pollution Data, Journal of Agricultural, Biological, and Environmental Statistics 16(3):371-388. doi: 10.1007/s13253-011-0057-7 (<http://rdcu.be/mUZY>)

65. Mazarakis, N., Kotroni, V., Lagouvardos, K., **Argiriou, A.A.**, Anderson, C.J. (2011) The sensitivity of warm period precipitation forecasts to various modifications of the Kain-Fritsch convective parameterization scheme. Nat. Hazards Earth Syst. Sci., **11** (5) pp. 1327 - 1339.
66. A. D. Koussis, K. Mazi, S. Lykoudis, **A. A. Argiriou** (2012) Reverse flood routing with the inverted Muskingum storage routing scheme. Nat. Hazards Earth Syst. Sci., **12**, 217-227 doi:10.5194/nhess-12-217-2012.
67. Athanassios Zagouras, **Athanassios A. Argiriou**, Helena A. Flocas, George Economou, Spiros Fotopoulos (2012) An advanced method for classifying atmospheric circulation types based on prototypes connectivity graph, Atmospheric Research, **118**:180-192.
68. Mamara A. **A. A. Argiriou**, E. Anadranistakis (2013) Homogenisation of mean monthly temperatures for Greece. International Journal of Climatology, **33** (12):2649-2666.
69. Athanassios Zagouras, **Athanassios A. Argiriou**, George Economou, Spiros Fotopoulos, Helena A. Flocas (2013) Weather maps classification over Greek domain based on isobaric line patterns, Theoretical and Applied Climatology, **114**(3):691-704. (<http://rdcu.be/mU0d>)
70. A. Zagouras, A. Kazantzidis, E. Nikitidou, **A. A. Argiriou** (2013), Determination of measuring sites for solar irradiance based on cluster analysis of satellite – derived cloud estimations, Solar Energy, **97**:1-11.
71. Mamara A. **A. A. Argiriou**, E. Anadranistakis (2014) Detection and Correction of Inhomogeneities in Greek Climate Temperature Series. International Journal of Climatology, **34** (10): 3024-3043.
72. M.C. Kotti, **A.A. Argiriou**, A. Kazantzidis (2014) Estimation of direct normal irradiance from measured global and corrected diffuse horizontal irradiance. Energy, **70**:382-392 (<http://dx.doi.org/10.1016/j.energy.2014.04.012>)
73. V. Salamalikis, **A.A. Argiriou**, E. Dotsika (2015) Stable isotopic composition of atmospheric water vapor in Patras, Greece: A concentration weighted trajectory approach. Atmospheric Research, **152**:93-104. (<http://dx.doi.org/10.1016/j.atmosres.2014.02.021>) (<http://rdcu.be/mUZ6>)
74. A. Karagiannidis, A. Poupkou, T. Giannaros, C. Giannaros, D. Melas, **A. Argiriou** (2015) The air quality of a Mediterranean urban environment and its relation to major meteorological parameters. Water, Air & Soil Pollution, **226**:2239, DOI 10.1007/s11270-014-2239-8.
75. E. Galanaki, V. Kotroni, K. Lagouvardos, **A. Argiriou** (2015) A ten-year analysis of the cloud-to-ground lightning activity over the Eastern Mediterranean region. Atmospheric Research, **166**(1):213-222.
76. V. Salamalikis, **A.A. Argiriou**, E. Dotsika (2016) Isotopic modeling of the sub-cloud evaporation effect in precipitation. Science of the Total Environment, **544**: 1059-1072.
77. V. Salamalikis, **A.A. Argiriou**, E. Dotsika (2016) Periodicity analysis of $\delta^{18}\text{O}$ in precipitation over Central Europe: Time–frequency considerations of the isotopic ‘temperature’ effect. Journal of Hydrology, **534**:150-163.
78. E. Galanaki, Flaounas E., V. Kotroni, K. Lagouvardos, **A. Argiriou** (2016) Lightning activity in the Mediterranean: quantification of cyclones contribution and relation to their intensity. Atmospheric Science Letters **17**(9):510-516. (DOI: 10.1002/asl.685)
79. A. Mamara, **A.A. Argiriou**, M. Anadranistakis (2016) Recent trend analysis of mean air temperature in Greece based on homogenized data. **Theor. Appl. Climatol.** **126**:543-573. (<http://rdcu.be/mUZV>)
80. E. Merico, A. Gambaro, **A. Argiriou**, A. Alebic-Juretic, E. Barbaro, D. Cesari, L. Chasapidis, S. Dimopoulos, A. Dinoi, A. Donato, C. Giannaros, E. Gregoris, A. Karagiannidis, A.G. Konstandopoulos, T. Ivošević, N. Liora, D. Melas, B. Mifka, I. Orlic, A. Poupkou, K. Sarovic, A. Tsakis, R. Giua, T. Pastore, A. Nocioni, D. Contini (2017) Atmospheric impact of ship traffic in four Adriatic-Ionian port-cities: Comparison and harmonization of different approaches. Transportation Research Part D **50**: 431–445. (<http://dx.doi.org/10.1016/j.trd.2016.11.016>)

81. A. Mamara, M. Anadranistakis, **A.A. Argiriou**, T. Szentimrey, T. Kovacs, A. Bezes, Z. Bihari (2017) High resolution air temperature climatology for Greece for the period 1971 – 2000. *Meteorol. Appl.* 24: 191-205 (<http://onlinelibrary.wiley.com/doi/10.1002/met.1617/full>).
82. A. Gaglia, S. Lykoudis, **A. A. Argiriou**, C. A. Balaras, E. Dialynas (2017) Energy Efficiency of PV panels under real outdoor conditions – An experimental assessment in Athens, Greece. *Renewable Energy* 101: 236-243 (<https://doi.org/10.1016/j.renene.2016.08.051>).
83. Gaglia, A.G., Tsikaloudaki, A.G., Laskos, C.M., Dialynas, E.N., **Argiriou, A.A.** (2017) The impact of the energy performance regulations' updated on the construction technology, economics and energy aspects of new residential buildings: The case of Greece. *Energy and Buildings* 155: 225-237 (doi: 10.1016/j.enbuild.2017.09.008).
84. Droutsa, K.G., Balaras, C.A, Daskalaki, E.G., Kontoyiannidis, S., **Argiriou, A.A.** (2018) Energy use intensities for asset rating of Hellenic non-residential buildings. : *Glob. J. Energ. Technol. Res. Updat.* 15, 19-36 (<http://www.avantipublishers.com/downloads/gjetruv5a3/>)
85. Gaglia, A.G., Dialynas, E.N., **Argiriou, A.A.**, Kostopoulou, E., Tsiamitros, D., Stimoniaris, D., Laskos, K.M. (2019) Energy performance of European residential buildings: Energy use, technical and environmental characteristics of the Greek residential sector – energy conservation and CO₂ reduction. *Energy and Buildings* 183:86-104 (doi: 10.1016/j.enbuild.2018.10.042).
86. X. Qiu, M. Zhang, S. Wang, J. Evaristo, **A. A. Argiriou**, R. Guo, R. Chen, H. Meng, C. Che, D. Qu (2019) The test of the ecohydrological separation hypothesis in a dry zone of the northeastern Tibetan Plateau. *Ecohydrology*, 2019, 12(3): e2077. (<https://doi.org/10.1002/eco.2077>)
87. X. Qiu, M. Zhang, S. Wang, **A. A. Argiriou**, R. Chen, H. Meng and R. Guo (2019) Water Stable Isotopes in an Alpine Setting of the Northeastern Tibetan Plateau. *Water*, 11(4), 770 (doi:10.3390/w11040770)
88. Mengyu Shi, Shengjie Wang, **Athanasios A. Argiriou**, Mingjun Zhang, Rong Guo, Rong Jiao, Jingjing Kong, Yaning Zhang, Xue Qiu and Su'e Zhou (2019) Stable Isotope Composition in Surface Water in the Upper Yellow River in Northwest China. *Water*, 11, 967 (doi:10.3390/w11050967)
89. Rong Guo, Shengjie Wang, Mingjun Zhang, **Athanasios A. Argiriou**, Xuemei Liu, Bo Su, Xue Qiu, Rong Jiao, Mengyu Shi, Su'e Zhou and Yaning Zhang (2019) Stable Hydrogen and Oxygen Isotope Characteristics of Bottled Water in China: A Consideration of Water Source. *Water*, 11, 1065 (doi: 10.3390/w11051065)
90. Cunwei Che, Mingjun Zhang, **Athanasios A. Argiriou**, Shengjie Wang, Qinqin Du, Peipei Zhao and Zhuanzhuan Ma (2019) The Stable Isotopic Composition of Different Water Bodies at the Soil–Plant–Atmosphere Continuum (SPAC) of the Western Loess Plateau, China. *Water*, 11, 1742 (doi:10.3390/w11091742)
91. **A. A. Argiriou**, A. Mamara, E. Dimadis (2019) Homogenization of the Hellenic cloud cover time series - Preliminary results, *Croatian Meteorological Journal*, 53, 43-54.
92. WANG Liwei, ZHANG Mingjun, WANG Shengjie, **Athanasios A. ARGIRIOU**, WANG Gaofei, Vasileios SALAMALIKIS, SHI Mengyu, JIAO Rong, 2020. Stable Isotope Signatures and Moisture Transport of a Typical Heavy Precipitation Case in the Southern Tianshan Mountains. *Chinese Geographical Science*, 30(1): 180–188. <https://doi.org/10.1007/s11769-019-1091-6>.
93. K. Zioutas, A. Argiriou, H. Fischer, S. Hofmann, M. Maroudas, A. Pappa, Y.K. Semertzidis (2020) Stratospheric temperature anomalies as imprints from the dark Universe. *PHYS DARK UNIVERSE*, 28, 100497. <https://doi.org/10.1016/j.dark.2020.100497>
94. Qinqin Du, Mingjun Zhang*, Shengjie Wang, **Athanasios A. Argiriou**, Cunwei Che, Peipei Zhao, Zhuanzhuan Ma, Pengyan Su (2020) Plant water resource partitioning and xylem-to-leaf

- deuterium enrichment in Lanzhou City, Northwest China. *Water Supply*, 20(3): 1127-1140
<https://doi.org/10.2166/ws.2020.045>
95. Fenli Chen, Mingjun Zhang, **Athanassios A. Argiriou**, Shengjie Wang, Xin Zhou and Xueyuan Liu (2020) Deuterium Excess in Precipitation Reveals Water Vapor Source in the Monsoon Margin Sites in Northwest China. *Water* 12(12): 3315, <https://doi.org/10.3390/w12123315>
96. Yudong Shi, Shengjie Wang, Mingjun Zhang, **Athanassios A. Argiriou**, Rong Guo, Yang Song and Xiaofan Zhu (2020) Isoscape of $\delta^{18}\text{O}$ in precipitation of the Qinghai-Tibet Plateau: Assessment and improvement. *Water* 12: 3392, <https://doi.org/10.3390/w12123315>

Communications in peer reviewed international conferences

1. M. Santamouris, P. Yianoulis, R. Rigopoulos, A. Argyriou, S. Kesaridis, *Use of the heat surplus from a greenhouse for soil heating*, ENERGEX '82 Conference Proceedings Vol. I/II, pp. 391-397, Canada, 1982.
2. M. Santamouris, I. Kaouris, R. Rigopoulos, A. Argyriou, *Prediction of the latitudinal and monthly variation of atmospheric ozone transmittance in northern hemisphere*, Solar World Congress Proceedings, pp. 2251-2256, Perth, Australia, 1983.
3. A. Argyriou, A. Arconada, F. Papini, R. Pasquetti, *Validation de modeles numeriques par thermographie infrarouge*, *Congres National de Genie des Procedes*, Vol. 1, No 4, pp. 356-361, Nancy, France, September 1987.
4. A. Argyriou, R. Pasquetti, F. Papini, A. Arconada, M. Audibert, *Modelling of a THEK type parabolic dish collector - Experimental validation using infrared thermography*, ISES Solar World Congress, Hamburg, R.F.A., September 1987.
5. F. Papini, A. Arconada, A. Argyriou, P. Gallet, R. Pasquetti, A. Ropke, *Analysis of infrared thermography measurements*, Workshop on Optical Property Measurement Techniques, JRC Ispra, Italy, October 1987.
6. M. Santamouris, M. Vallindras, A. Argyriou, *Energy data analysis of village of Apiranthos, Naxos, Greece*, International Congress on New Energy Sources for Local Development, Naxos, Greece, 1988.
7. M. Santamouris, P. Koronakis, G. Stavrakakis, E. Triantis, A. Argyriou, *PASSYS - Greek participation*, Proc. Euroforum on New Energies, Saarbrucken, 1988.
8. A. Tombazis, M. Santamouris, A. Argyriou, *Architectural design and energy study of a tourist complex using passive solar cooling techniques*, ISES Solar World Congress, Kobe, Japan, 1989.
9. A. Tombazis, A. Argyriou, M. Santamouris, *Thermal and visual study of a hotel complex using passive cooling components*, 2nd European Conference on Architecture, Paris, December 1989.
10. E.S. Triantis, M. Santamouris, A. Argyriou and M. Vallindras, *Integrated bioclimatic design of a rural daycare centre in Greece*, 2nd European Conference on Architecture, Paris, December 1989.
11. M. Santamouris and A. Argyriou, *Earth to air heat exchanger for passive cooling of buildings. Validation of tools and results from two application projects*, International Conference on Evolution of External Perimetral Components in Bioclimatic Architecture, ISES Italian Section, Milan, March 5-6, 1990.
12. M. Santamouris, A. Argyriou, *Possibilities of radiative cooling in Greece*, World Renewable Energy Congress Proceedings, Reading, UK, 1990.
13. G. Sourys, P. Koronakis, M. Santamouris, A. Argyriou, V. Tsoukalas, *Validity testing of selected simplified design tools and development of a simple correlation model for heating season assessment of a typical Mediterranean house based on ESP simulation results*, PLEA '91 Conference Proceedings: Architecture and Urban Space, S. Alvarez et al. (eds), 1991.
14. M. Santamouris, G. Agas, T. Matsagos, A. Argyriou and K. Theofylaktos, *Performance evaluation of buildings associated with earth to air heat exchangers. The cooling potential*, PLEA '91 Conference Proceedings: Architecture and Urban Space, S. Alvarez et al. (eds), pp. 637-642, 1991.
15. A. Argyriou, C. Balaras, E. Daskalaki, A. Gaglia, G. Goudelas, K. Moustiris, M. Santamouris, M. Vallindras, *Energy audits in public and commercial buildings in Greece*, 3rd European Symposium: Soft Energy Action at the Local Level, 1992.
16. A. Argyriou, C. Balaras, E. Daskalaki, A. Gaglia, G. Goudelas, K. Moustiris, M. Santamouris, M. Vallindras, *A survey of indoor air quality in office buildings in Athens, Greece*, International

- Conference Quality of Indoor Environment Proceedings, p.p. 587-595, Athens, 28-30 April 1992.
17. A. Argiriou, *The contribution of identification methods to the Model Validation Work of the PASSYS programme*, "Workshop on parameter identification methods and physical reality", JRC ISPRA, October 1992.
 18. M. Santamouris, E. Triantis and A. Argiriou, *Passive solar demonstration buildings in Greece*, Proc. IEEC Conference Energy and Buildings, Toronto, 1992.
 19. M. Santamouris, E. Dascalaki, C. Balaras, A. Argiriou and A. Gaglia, *Performance assessment and the potential for energy conservation and the use of alternative energy sources in buildings*, Proceedings 3rd European Conference on Architecture, C.E.C., 17-21 May, Florence, Italy, p.p. 518-521, 1993.
 20. M. Santamouris and A. Argiriou, *The CEC PASCOOL project*, Proceedings 3rd European Conference on Architecture, C.E.C., 17-21 May, Florence, Italy, p.p. 88-90, 1993.
 21. E.S. Triantis, M. Santamouris, A. Argiriou, and M. Vallindras, *Thermal performance evaluation of a passive solar atrium in Greece*, Proceedings 3rd European Conference on Architecture, C.E.C., 17-21 May, Florence, Italy, p.p. 618-621, 1993.
 22. C. Balaras, M. Santamouris, E. Daskalaki, A. Argiriou, D. Asimakopoulos and M. Loizidou, *Indoor air quality and health symptoms in town halls in Athens, Hellas*, Proceedings of the 6th International Conference on Indoor Air Quality and Climate, July 4-8, Helsinki, Finland, p.p. 315-320, 1993.
 23. A. Argiriou & M. Santamouris, *Passive Cooling in Hotels*, Invited paper, European Seminar on Advanced Systems of Passive and Active Climatisation, CEC DG XVII, June 3-4, Barcelona, 1993.
 24. C. Balaras, E. Dascalaki, M. Santamouris, A. Argiriou, A. Gaglia, *Energy audits in health care buildings and interventions for energy conservation*, Proc. International Conference on Health Care Buildings, Berlin, 1993.
 25. M. Santamouris, E. Dascalaki, A. Argiriou, C. Balaras, A. Gaglia, *Energy consumption and the potential for energy conservation and the use of alternative energy sources in office buildings*, Proc. ISES Solar World Congress, Budapest, August 1993.
 26. A. Argiriou, D.N. Asimakopoulos, E. Daskalaki, C.G. Helmis, K.H. Papadopoulos, M. Santamouris, A. T. Soilemes, *Single-Side Ventilation of Buildings*, CIB-ISIAQ-HAS "Healthy Buildings '94", 22 - 25 August 1994, Budapest.
 27. A. Argiriou, D. N. Asimakopoulos, E. Dascalaki, C. Helmis, C. Papadopoulos, M. Santamouris and A. Soilemes, *Description and analysis of single side ventilation experiments*, Proc. European Conference on Energy Performance and Indoor Climate in Buildings, 24 - 26 November, Lyon, Vol. 1, p.p. 220 - 225.
 28. A. Tombazis, N. V. Baker, B. Everett, A. Argiriou and D. Mantas, *The bioclimatic design of the general teaching hospital in Thessaloniki, Greece*, Proc. European Conference on Energy Performance and Indoor Climate in Buildings, 24 - 26 November, Lyon, Vol. 2, p.p. 560 - 563.
 29. N. Klitsikas, M. Santamouris, A. Argiriou and D. N. Asimakopoulos, *Thermal analysis of evaporative cooling systems in Greece*, Proc. European Conference on Energy Performance and Indoor Climate in Buildings, 24 - 26 November, Lyon, Vol. 2, p.p. 628 - 633.
 30. E. Dascalaki, M. Santamouris, A. Argiriou, C. Helmis, D.N. Asimakopoulos, K. Papadopoulos, and A. Soilemes, *Predicting single-side natural ventilation rates in buildings*, 2nd International Conference on Indoor Air Quality, Ventilation and Energy Conservation In Buildings, 10-12 May 1995, Montreal, Canada.
 31. A. Lagoudi, M. Bruant, A. Argiriou, E. Dascalaki, M. Santamouris, M. Loizidou, D. Asimakopoulos, *Comfort in office buildings in Greece*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.

32. N. Klitsikas, C. Balaras, A. Argiriou, M. Santamouris, *Comfort field studies in the frame of PASCOOL in Athens, Hellas*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.
33. A. Argiriou, S. Alvarez, M. Santamouris, N. Klitsikas, *Linking natural cooling techniques with buildings: The EC Altener project SINK*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.
34. M. Santamouris, V. Geros, N. Klitsikas, A. Argiriou, *SUMMER: A computer tool for passive cooling applications*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.
35. A. Argiriou, M. Santamouris, *Creation of an educational book on Natural Cooling Techniques*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.
36. A. Tombazis, N. Baker, B. Everett, A. Argiriou, D. Mandas, *The bioclimatic design of the General Teaching Hospital in Thessaloniki, Greece*, Proc. International Symposium Passive Cooling of Buildings, 19-20 June 1995, Athens, Greece.
37. M. Santamouris, A.A. Argiriou, C.A. Balaras, *Developments on Passive Cooling in Buildings - Results from Recent Research*, ASHRAE Transactions, Vol. 103, 1997.
38. A.A. Argiriou, C.A. Balaras, D.N. Asimakopoulos, *Perspectives of implementing active solar heating systems in Hellenic residential buildings*, Proc. of The European Congress on Renewable Energy Implementation, Athens, 5-7 May, 1997, pp. 686-694.
39. E. Michel, N. Martin, A.A. Argiriou, Y. Siri, A. Mine, *Design, realisation, tests, comparative analysis of low electric consumption PV cooling systems*, 14th European Photovoltaic Solar Energy Conference, Barcelona, 30 June - 4 July 1997.
40. C. A. Balaras, D.N. Asimakopoulos, A. Argiriou, K. Droutsas, *Retrofitting of an office building for energy conservation in heating, cooling and lighting, and for improved indoor conditions*, 28 Congress on HVAC Systems, Belgrade, 3-4 December 1997.
41. C.A. Balaras, D.N. Asimakopoulos, A.A. Argiriou, A. Tombazis, M. Bruant, *Retrofitting of a Neo-Classic Office Building for Energy Conservation and Improved Indoor Conditions*, REBUILD 2nd European Conference, Florence, 1-3 April, 1998.
42. I. Bellas-Velidis, A.A. Argiriou, C.A. Balaras, S. Kontoyannidis, *Predicting Energy Demand of Single Solar Houses Using Artificial Neural Networks*, Proc. EUFIT'98, Aachen, 1998.
43. G. Tsiropoula & A. Argiriou, *Estimation of a "clear" sky atmosphere using ground and satellite measurements of the solar radiation*, Proc. Solar Cycle & Terrestrial Climate, 25-30 September 2000, Tenerife.
44. Balaras CA, Argiriou AA, Kontoyiannidis S, *Solar assisted absorption heat pump coupled with floor heating and cooling*, World Conf. CLIMA 2000, Napoli, 15-18 September 2001.
45. Balaras CA, Dascalaki E, Argiriou AA, Gaglia A, *HVAC systems and indoor conditions in Hellenic hospital operating rooms*, ASHRAE TRANSACTIONS, Vol. 108, Part 2, pp. 23-28, ASHRAE Summer Meeting, June 22-26, Honolulu, Hawaii, USA, (2002).
46. Argiriou A.A., Kassomenos P., Lykoudis S., *On the methods for the delimitation of seasons*, Proc. Int. Conf. "Protection and Restoration of the Environment VI", Skiathos, July 1-5, 2002, pp. 1149-1156.
47. Koussis A.D., Mazi K., Lykoudis S., Argiriou A.A., *Groundwater contamination: Identification of source signal by time-reverse mass transport computation and filtering*. EGS-AGU-EUG Joint Assembly 2003, Nice, France, April, 2003.
48. C.A. Balaras, A.A. Argiriou, E. Michel, H.M. Henning, *Recent Activities on Solar Air-Conditioning*. ASHRAE TRANSACTIONS, Vol. 109, Part 1, pp. 251-260, ASHRAE Annual Winter Meeting, January 26-29, Chicago, USA, (2003).

49. Katsanos D., Lagouvardos K., Defer E., Kotroni V., **Argiriou A.** *Correlation of Lightning Activity with Brightness Temperatures in the Mediterranean Sea*, European Geosciences Union General Assembly 2005, Vienna, Austria, 24 - 29 April 2005.
50. Kummert M, Andre P, **Argiriou A.**, *Performance comparison of heating control strategies combining simulation and experimental results*, IBPSA Conference, 2005.
51. **A.A. Argiriou**, C.A. Balaras, *Integration of small size solar assisted air-conditioning in buildings*, *Proc. Int. Conf. On the "Integration of the renewable energy systems in the buildings structures"*, pp.15-21, Patras, Greece, 7-10 July, 2005.
52. **D. Katsanos**, K. Lagouvardos, E. Defer, V. Kotroni and A. Argiriou, "Correlation of lightning activity with brightness temperatures and radar reflectivity profiles in the Mediterranean". *Proc. 7th Plinius Conference on Mediterranean Storms*, Rethymnon, Greece, 5 – 7 October 2005.
53. **A.A. Argiriou**, S. Lykoudis, *Isotopic composition of precipitation in Greece – Past and present data*, *Proc. International Workshop on Isotopic Effects in Evaporation – Revisiting the Craig – Gordon Model, four decades after its Formulation*, pp. 14-17, Pisa, Italy, 3-5 May 2006.
54. Kotsiantis S., Kostoulas A., Lykoudis S., **Argiriou A.**, Menagias K., 2006, *Filling Missing Temperature Values in Weather Data Banks*, 2nd IEE International Conference on Intelligent Environments, 5-6 July, Athens, Greece, Vol 1, 327-334.
55. Kotsiantis S., Kostoulas A., Lykoudis S., **Argiriou A.**, Menagias K., *A Hybrid Data Mining Technique for Estimating Mean Daily Temperature Values*, 64th Meeting of the European Working Group on "Multiple Criteria Decision Aiding", 28-30 September 2006, Larissa, Greece, CD Proceedings.
56. Lykoudis S., **Argiriou A.**, *Tendencies of stable isotopic content of rainfall in Central and Eastern Mediterranean*, *Proc. Climate Change and the Middle East: Past, Present and Future*, pp. 46-56, Istanbul, Turkey, November 20-23, 2006.
57. Mazarakis N., Kotroni V., Lagouvardos C., **Argiriou A.**, *Investigation of the role of different convective parametrization schemes on the prediction of summer precipitation events over Greece*, *Proc. 9th Plinius Conference on Mediterranean Storms*, Varena, Italy, 10 – 13 September 2007.
58. Lykoudis S., **Argiriou A.**, *Spatially interpolated isotopes in Eastern Mediterranean precipitation*, European Science Foundation MedCLIVAR programme workshop: "Oxygen isotopes as tracers of the Mediterranean climate variability: linking past, present and future". **Invited talk**, Pisa, June 11-13 2008.
59. A Saltamavros, A Tsekouras, P Mylonas, E Lampropoulou, NA Georgopoulos, **A Argiriou** and KB Markou, *The influence of Ultraviolet (UV) radiation on seasonal variations of the male reproductive axis*, Proc. The Endocrine Society's 90th Annual Meeting, June 15 - 18 in San Francisco, California, 2008.
60. Lykoudis S., Kostopoulou E., **Argiriou A.**, *Stable isotopic signature of precipitation under various synoptic classifications*, *Advances in weather and circulation type classifications & applications*, COST 733 Mid-term Conference, 22-25 October 2008, Krakow, Poland.
61. N. Mazarakis, V. Kotroni, K. Lagouvardos, **A. Argiriou**, *The sensitivity of warm season quantitative precipitation forecasts to modifications of the Kain – Fritsch parametrization scheme*, *Proc. 11th Plinius Conference on Mediterranean Storms*, 7-11 September 2009, Barcelona, Spain.
62. Saltamavros AD., Tsekouras A., Mylonas P., Labropoulou E., Georgopoulos NA., Kazantzidis A., **Argiriou A.**, Markou KB, Bais A.F. The seasonal variation of ultraviolet radiation result in changes of human serum bone turnover markers. XIX Congress of the Carpathian Balkan Geological Association, September 23-26, 2010, Thessaloniki, Greece.
63. C.V. Chrysikopoulos, I.D. Manariotis, V. Sygouni, A. Vantarakis, **A. Argiriou**, H.K. Karapanagioti, J. Vakros, M. Kornaros, C.A. Paraskeva, and S. Dailianis. Interuniversity

- network for biocolloid fate and transport in environmental systems “BIOMET”. Protection and Restoration of the environment X, 5 – 9 July 2010, Corfu, Greece.
64. A. D. Koussis, K. Mazi, S. Lykoudis, **A. Argiriou**, Reverse flood routing with the inverted Muskingum storage routing scheme. 12th Plinius Conference on Mediterranean Storms. 1 – 4 September 2010, Corfu, Greece.
 65. T. Zagouras, **A. Argiriou**, Application of affinity propagation clustering on meteorological data, COST Action 733 - Harmonisation and application of weather type information classifications in Europe - Final Workshop, Vienna, 22 – 24 November 2010.
 66. M.C. Kotti, **A. Argiriou**, A. Kazantzidis, Assessment of shadowband correction models under different sky conditions, 11th EMS Annual Meeting & 10th European Conference on Applications of Meteorology, Berlin, Germany, 12-16 September 2011.
 67. M.C. Kotti, **A. A. Argiriou**, A. Kazantzidis, Prediction of beam solar irradiance using shadowband correction models, International Radiation Symposium 2012 06 – 10 August 2012, Dahlem Cube, Berlin, Germany.
 68. A. Poupkou, N. Liora, A. Karagiannidis, T. Giannaros, D. Melas, **A. Argiriou**, Maritime sector emissions contribution to the particulate matter pollution in a Mediterranean city-port: A modeling approach, 33rd International Technical Meeting on Air Pollution Modelling and its Application, Miami, Florida, USA, 26-30 August 2013.
 69. A. Poupkou, N. Liora, A. Karagiannidis, T. Giannaros, D. Melas, **A. Argiriou**, Air quality in a Mediterranean city-port: Particulate matter source apportionment using the WRF-CAMx modeling system, European Aerosol Conference, Prague, 1-6 September 2013.
 70. Kolokythas K. V., **Argiriou A. A.** Homogenization of mean monthly precipitation time series. Proc. 12 International Conference of Meteorology, Climatology and Physics of the Atmosphere, Heraklion, 28 – 31 May 2014, Vol. 1, pp. 598-603, ISBN-978-960-524-430-9.
 71. Mamara A., **Argiriou A.A.**, Anadranistakis M. Homogenization of Greek Climate Temperature Series. Proc. 12 International Conference of Meteorology, Climatology and Physics of the Atmosphere, Heraklion, 28 – 31 May 2014, Vol. 2, pp. 173-177, ISBN-978-960-524-430-9.
 72. Salamalikis V., **Argiriou A. A.**, Lykoudis S, Dotsika E., An isotope-evaporation model for the investigation of the sub-cloud evaporation effect in precipitation. Proc. 12 International Conference of Meteorology, Climatology and Physics of the Atmosphere, Heraklion, 28 – 31 May 2014, Vol. 3, pp. 133-138, ISBN-978-960-524-430-9.
 73. **A. A. Argiriou**, A. Kazantzidis, I. Kioutsioukis, Smart cities, transportation and meteorology – a brief overview of potential applications, Conf. Intelligent Transportation Systems and Smart Cities 2014, Patras, Greece, November 19-22, 2014, Patras, Greece.
 74. D. Contini, A. Donato, A. Gambaro, **A. Argiriou**, D. Melas, D. Cesari, A. Poupkou, A. Karagiannidis, A. Tsakis, E. Merico, R. Cesari, A. Dinoi, Impact of Ship Traffic to PM_{2.5} and Particle Number Concentrations in Three Port-Cities of the Adriatic/Ionian Area. Proc. ICAST 2015: 17th International Conference on Aerosol Science and Technology, Lisbon, Portugal, International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering Vol:9, No:4, pp. 454-459, 2015.
 75. D. Contini, A Gambaro, **A Argiriou**, A Alebic-Juretic, E Barbaro, D Cesari, S Dimopoulos, A Dinoi, A Donato, E Gregoris, A Karagiannidis, T Ivosevic, N Liora, D Melas, E Merico, B Mifka, I Orlic, A Poupkou, and K Sarovic, Impact of maritime transport on particulate matter concentrations and chemical compositions in four port-cities of the Adriatic/Ionian area: an overview of the results of POSEIDON project. Geophysical Research Abstracts Vol. 17, EGU2015-10519, 2015 EGU General Assembly 2015.
 76. A Karagiannidis, A Poupkou, N Liora, S Dimopoulos, C Giannaros, D Melas, and **A Argiriou**, Model study of the ship emissions impact on the air quality in the Adriatic/Ionian area. Geophysical Research Abstracts Vol. 17, EGU2015-9307, 2015 EGU General Assembly 2015.

77. N. Roukounakis, P. Elias, P. Briole, **A. Argiriou**, I. Kioutsoukis, A. Retalis, D. Katsanos, A. Ganas, D. Dimitrov. Improvement of the vertical component of GPS and INSAR measurements in the western Corinth Gulf (Greece), by the use of high-resolution meteorological modeling of the lower troposphere: The PaTrop Experiment. 12th European Conference on Applications of Meteorology (ECAM) | 07–11 September 2015 | Sofia, Bulgaria.
78. Roukounakis N, P Elias , P Briole , **A Argiriou** , I Kioutsoukis , A Retalis , D Katsanos, Improved estimation of the tropospheric delay component in GPS measurements in the western Corinth Gulf (Greece) by the use of a high-resolution meteorological model: The PaTrop Experiment, 9th HYMEX meeting, Mykonos, Greece, 21-25 September 2015.
79. **Argiriou A A**, Salamalikis V, E. Dotsika, A total weighted least squares method for the determination of the Meteoric Water Line in precipitation for hydrological purposes. 13th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2016, Thessaloniki, Greece, 19 – 21 September, 2016.
80. Kolokythas K., **A A Argiriou**, Filling missing data in target-point wind speed time series. 13th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2016, Thessaloniki, Greece, 19 – 21 September, 2016.
81. Anadranistakis M, A Mamara, **A A Argiriou**, Spatial analysis of the air temperature in Greece for the Normal Period 1971-2000. 13th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2016, Thessaloniki, Greece, 19 – 21 September, 2016.
82. Mamara A, **A A Argiriou**, M Anadranistakis, Homogenization of Precipitation Series in Greece. 13th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2016, Thessaloniki, Greece, 19 – 21 September, 2016.
83. Mamara A, Anadranistakis M, **Argiriou A A**, Homogenization and gridding of the Greek time series. 9th Seminar for Homogenisation and Quality Control in Climatological Databases and 4th Conference on Spatial Interpolation Techniques in Climatology and Meteorology, Budapest, Hungary, April 3 – 7, 2017.
84. **Argiriou A A**, Mamara A, Dimadis E, Homogenization of the Hellenic cloudiness time series, 11th EUMETNET Data Management Workshop Placing climate data to social service: From observations to archives, Zagreb, Croatia, 10 – 17 October 2017.
85. Kolokythas K., **Argiriou, A A**, Investigating the impact of the length of the input datasets in wind speed time series forecasting. 14th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018.
86. Salamalikis V, **Argiriou A A**, Dotsika E, From atmosphere to cave: a simplified isotope – stalagmite model for climate reconstruction applications. 14th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018.
87. **Argiriou A A**, Panagopoulos O, Urban heat island effect in Patras, Greece. Preliminary results. 14th International Conference on Meteorology, Climatology and Atmospheric Physics COMECAP 2018, Alexandroupolis, Greece, 15 – 17 October, 2018.
88. K.D. Droutsas, C.A. Balaras, S. Kontogiannidis, E.D. Dascalaki, **A.A. Argiriou** (2019) Energy Benchmarking of Hellenic Non-Residential Buildings. EinB2019 – 8th International Conference “ENERGY in BUILDINGS 2019”, Athens, Greece, September 28, 2019.
89. Goettsche J, Alexopoulos S, Dümmler A. **Argiriou AA**, Panagopoulos O, Kosmopoulos G, Dokouzis A, Hilger P, Xarchis S (2020). Solar Process Micro mirror concentration system. EUROSUN 2020 – 13th International Conference on Solar Energy for Buildings & Industry, Athens, September 1-3, 2020.
90. Kazantzidis A, Salamalikis V, Tzoumanikas P, **Argiriou A** (2020). Assessment of the spatiotemporal variability of surface global horizontal irradiance using high-resolution satellite data and ground based measurements. EUROSUN 2020 – 13th International Conference on Solar Energy for Buildings & Industry, Athens, September 1-3, 2020.

91. K Zioutas, V Anastassopoulos, **A Argiriou**, G Cantatore, S Cetin, A Gardikiotis, DHH Hoffmann, S Hofmann, M Karuza, A Kryemadhi, M Maroudas, EL Matteson, K Ozbozduman, T Papaevangelou, M Perryman, YK Semertzidis, I Tsagris, M Tsagri, G Tsiledakis, D Utz, E Valachovic (2021) The Dark Universe is not invisible. 43rd COSPAR Scientific Assembly, 28 January – 4 February 2021, Sydney, Australia.

92. Communications in peer reviewed national conferences

1. M. Santamouris, A. Argiriou, R. Rigopoulos, *Study of a horizontal earth-water-air heat exchanger*, 1st National Conference on Renewable Energy Sources, Vol. A', pp. HEX 99 – HEX 106, Thessaloniki, Greece, 1982.
2. J. F. Daian, A. Argiriou, *Etude experimentale du transfert isotherme d'humidite dans un mortier de ciment*, EUROMECH, 194, I.N.P. Lorraine, 1985.
3. F. Papini, A. Arconada, A. Argiriou, R. Pasquetti, *Analyse des distributions de flux et temperatures au foyer d'un capteur THEK par thermographie I.R.*, Seminaire Heliothermie de l'AFME, Valbonne, France, septembre 1986.
4. R. Pasquetti, J. F. Durastanti, A. Argiriou, M. Audibert, F. Papini, *Modelisation de la boucle thermique des centrales solaires de type THEK*, Seminaire Heliothermie de l'AFME, Valbonne, France, septembre 1986.
5. A. Arconada, A. Argiriou, P. Gallet, F. Papini, A. Ropke, *Mesure des emissivites directionnelles de materiaux portes a haute temperature - Utilisation de la thermographie infrarouge*, Rencontre S.F.T.: Transferts Thermiques aux Temperatures Elevees, Paris, France, mai 1987.
6. A. Argiriou, *Mesure des flux par thermographie infrarouge: application a la caracterisation des materiaux*, 2eme Colloque CFE Universite - Industrie, Lille, France, juin 1987.
7. A. Argiriou, A. Arconada, F. Papini, R. Pasquetti, *Validation de modèles numériques par thermographie infrarouge*, Congrès National des Génies des Procédés, Nancy, septembre 1987.
8. P. Guillemant, A. Arconada, A. Argiriou, J. Marchisio, F. Papini, R. Pasquetti, *Une evolution experimentale dans la restitution des champs de temperature*, Troisieme Congres National de Visualisation et de Traitement d'Images, Belfort, France, mai 1988.
9. M. Santamouris, C.A. Balaras, E. Dascalaki, A. Argiriou, A. Gaglia, *Energy consumption in Hellenic office buildings*, Seminar on Energy Retrofit of Office Buildings, University of Athens, Athens, Greece, May 1995.
10. A. Argiriou, M. Santamouris, *Use of the EUROKOBRA and WIS software tools for the energy retrofit of buildings*. Seminar on Energy Retrofit of Office Buildings, University of Athens, Athens, Greece, May 1995.
11. A. Tsangrassoulis, M. Cakouri, M. Santamouris, A. Argiriou, D. Asimakopoulos, *Energy savings in office buildings through natural and artificial lighting*, Seminar on Energy Retrofit of Office Buildings, University of Athens, Athens, Greece, May 1995.
12. M. Santamouris, D. Asimakopoulos, C. Helmis, E. Dascalaki, A. Argiriou, C.A. Balaras, M. Petrakis, *Progress in the topic of passive cooling and building physics – Results of recent research*, 7th Common Conference of the Union of Greek Physicists and the Union of Cypriot Physicists, Heraklion, Grece, 5 - 7 April 1996.
13. A.A. Argiriou, C.A. Balaras, D.N. Asimakopoulos, *Activities of IMPAE-NOA regarding the calibration of meteorological instrumentation*, 3rd Hellenic Conference of Meteorology – Climatology and Atmospheric Physics, Athens, Greece, 1996.
14. M. Santamouris, A. Argiriou, D. Asimakopoulos, *Passive Cooling of Buildings PASCOOL project – Results and perspectives*, 5th National Conference of Renewable Energy Sources, Athens, Greece, November 1996.
15. A. Argiriou, D. Asimakopoulos, V. Geros, E. Dascalaki, N. Klitsikas, C. Balaras, M. Santamouris. *Potential for energy savings of building cooling using earth to air heat exchangers, radiative coolers and evaporative coolers*. 5th National Conference of Renewable Energy Sources, Athens, Greece, November 1996.
16. A. Tsangrassoulis, M. Santamouris, A. Argiriou, D. Asimakopoulos, *Creation of an educational package on the use of innovative lighting techniques for buildings*, 5th National Conference of Renewable Energy Sources, Athens, Greece, November 1996.

17. C.A. Balaras, A.A. Argiriou, M. Santamouris, E. Dascalaki, A. Gaglia, *Energy savings potential in Hellenic Hospitals and health care buildings.*, Workshop “Energy Savings in Hospitals”, Center for Renewable Energy Sources, Athens, 1997.
18. A.A. Argiriou, S. Lykoudis, S. Kontoyiannidis, C.A. Balaras, D. Asimakopoulos, M. Petrakis, P. Kassomenos, *Development of typical meteorological years for Athens – Application in energy simulation software.* Proc. 4th Hellenic Conference of Meteorology – Climatology and Atmospheric Physics, Vol. 2, pp. 225-230, Athens, Greece, September 1996.
19. C.A. Balaras, A.A. Argiriou, D.N. Asimakopoulos, *Possibilities of solar protection of buildings*, Proc. 6th National Conference of Renewable Energy Sources, Vol. A, pp. 49-56, Volos, Greece, November 1999.
20. C.A. Balaras, K. Droutsas, A.A. Argiriou, *Thermal behavior and general evaluation of Hellenic residential multistory buildings.* Proc. 6th National Conference of Renewable Energy Sources, Vol. A, pp. 49-56, Volos, Greece, November 1999.
21. C.A. Balaras, A.A. Argiriou, S. Kontoyiannidis, *Absorption heat pump coupled with solar collectors and floor heating/cooling system*, Proc. 6th National Conference of Renewable Energy Sources, Vol. B, pp. 363-370, Volos, Greece, November 1999.
22. I. Livada, S. Lykoudis, A.A. Argiriou, *Study of relative humidity time series of Athens for the period 1901-1997.* Proc. 5th Hellenic Conference of Meteorology – Climatology and Atmospheric Physics, pp. 59-64, Thessaloniki, Greece, September 2000.
23. A. Argiriou, S. Lykoudis, E. Flokas, I. Keramitsoglou, P. Yiannoulis, *Isotopic composition of rainfall in Greece*, Proc. 6th Hellenic Conference of Meteorology – Climatology and Atmospheric Physics, Ioannina, Greece, September 2002.
24. A.A. Argiriou and S.P. Lykoudis, *Spatial and temporal distribution of stable isotopes in rainfall over Greece*, 7th Hellenic Conference on Meteorology – Climatology and Atmospheric Physics, Nicosia, Cyprus, September 2004.
25. **A.A. Argiriou**, MC Kotti, *Assessment of shadowband correction models for Athens, Greece.* 8th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Athens, Greece, 24-26 May 2006.
26. **A. A. Argiriou**, N. Ioannou, D. Skourellos, V. Kotroni, K. Lagouvardos, *Correction of temperature and wind velocity BOLAM model forecasts at mean sea level using neural networks*, 8th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Athens, Greece, 24-26 May 2006.
27. D. Katsanos, K. Lagouvardos, V. Kotroni, **A. A. Argiriou**, *Correlation of electrical activity with brightness temperature and radar reflectivity profiles in the Mediterranean*, 8th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Athens, Greece, 24-26 May 2006.
28. Zagouras A., **Argiriou A.**, Aloizos G., Fotopoulos S., Oikonomou G., Flokas H.A., *Development of a chain code based artificial intelligence system for automatic classification of weather maps*, 9th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Thessaloniki, Greece, 28-30 May 2008.
29. Mazarakis N., Kotroni V., Lagouvardos K., **Argiriou A.**, *Investigation of the forecast ability of convective parametrization schemes during summer storms, Διερεύνηση της προγνωστικής ικανότητας σχημάτων παραμετροποίησης των κατακόρυφων ανοδικών κινήσεων μεταφοράς, σε περιπτώσεις θερινών καταιγίδων.* 9th Panhellenic Conference of Meteorology, Climatology and Atmospheric Physics, Thessaloniki, Greece, 28-30 May 2008.
30. Mazarakis N., Kotroni V., Lagouvardos K., **Argiriou A.**, *The sensitivity of numerical forecasts to various modifications of the Kain – Fritsch convective parametrisation scheme during the warm period*, Proc. 10th International Conference of Meteorology, Climatology and Atmospheric Physics, pp. 87-95, Patras, Greece, 25-28 May 2010.

31. Lykoudis S.P., **Argiriou A. A.**, Flocas H.A., **Isotopic detection of below cloud evaporation of rainfall**, 10th International Conference of Meteorology, Climatology and Atmospheric Physics, pp. 458-468, Patras, Greece, 25-28 May 2010.
32. Mamara A., **Argiriou A. A.**, Anadranistakis M., *Homogenization of mean annual temperature series of the Eastern Aegean*, 10th International Conference of Meteorology, Climatology and Atmospheric Physics, pp. 719-728, Patras, Greece, 25-28 May 2010.
33. V. Salamalakis, **A. A. Argiriou**, E. Dotsika, *Stable isotopic composition of atmospheric water vapor in Greece*, Advances in Meteorology, Climatology and Atmospheric Physics, Athens, May 2012, Vol. 1, 271-276, Springer, Basel.
34. K.V. Kolokythas, **A. A. Argiriou**, *Homogenization of temperature time series of Western Greece*, Advances in Meteorology, Climatology and Atmospheric Physics, Athens, May 2012, Vol. 1, 535-540, Springer, Basel.
35. A. Zagouras, V. Salamalakis, **A. A. Argiriou** and S. Lykoudis, *Efficient ANN training for the reconstruction of isotopic time series*, Advances in Meteorology, Climatology and Atmospheric Physics, Athens, May 2012, Vol. 1, 825-831, Springer, Basel.
36. M.C. Kotti, **A. A. Argiriou**, *Use of shadowband correction models for predicting beam solar irradiance*, Advances in Meteorology, Climatology and Atmospheric Physics, Athens, May 2012, Vol. 1, 1069-1074, Springer, Basel.
37. **A. Argiriou**, A. Gaglia, E. Dialynas, E. Kostopoulou, *Degree days in Greece – Classification as a function of the building use type*. Proceedings of the 11th National Conference on Renewable Energy Sources, Thessaloniki, Greece, March 14-16, 2018.

Other publications

A.A. Argiriou, *Energy-efficient hospital design: Thessaloniki project*, Invited contribution to the European Directory of Energy Efficient Building 1994, James & James Publishers, London, 1994.

Salamalakis V., Argiriou A., Dotsika E., *Spatial distribution of $\delta^{18}O$ due to evapotranspiration over Greece*, Volume in memoriam of Professor Apostolos Flocas, Chelmis K. & Nastos P. (Eds), National and Kapodistrian University of Athens, Athens, Greece, 2014.

Textbooks

1. *Heat gain control and passive cooling*, Booklet prepared collaboration with the Architectural Association School of Architecture (Prof. Simos Yannas ed.) in the frame of the C.E.C. TEMPUS program. Co-author M. Santamouris. 1993.
2. *Natural light in buildings*, Lecture in the Proceedings of the Seminar *Energy Savings in Buildings*, organised by the Central Institution of Energy Efficiency Education (CIENE) of the University of Athens, in the frame of the SAVE programme of the E.U.(Contract SAVE 4.1031/92-052).
3. Authoring of *Chapters 11: Ground Cooling, 12: Evaporative Cooling and 13: Radiative Cooling* of the book *Passive Cooling in Buildings*. James & James, London.
4. *Natural Cooling Techniques*, Book edited by the Central Institution of Energy Efficiency Education (CIENE) of the University of Athens, in the frame of the SAVE programme of the E.U. (Contract SAVE 4.1031/93-071).
5. Co-Editor & Co-author of the book: *Daylight Techniques in Buildings – Reference Handbook*, Edited in the frame of the Altener project 4.1030/Z/95-094 by the National Observatory of Athens, Athens, Greece, 1997.
6. *Daylight Techniques in Buildings - Reference Handbook* (1997) Eds A. Αργυρίου, Κ. Μπαλαράς, Δ. Ασημακόπουλος. Author of Chapters 1 & 6 (In collaboration with A. Tsangrassoulis). Published by the National Observatory of Athens in the frame of the European Commission ALTENER Programme (Contract XVII/4.1030/Z/95-094).
7. *Integrated Approach to Solar Control – Design Guidelines* (1999) Ed. D. N. Asimakopoulos. Co-author of chapters 7.2 & 7.4. Published by the National Observatory of Athens in the frame of the European Commission JOULE programme (Contract JOR3-CT96-00113).
8. *Energy storage & Energy Savings* (1999) Author of Chapter 1 “Solar Ponds – Interseasonal Heat Storage” and Chapter 2 “Earth-to-air heat exchangers”. Published by the Technological Educational Institute of Piraeus in the frame of the graduate course “Energy Systems Management”.
9. *Conventional and Renewable Energy Sources* (1999) Author of Chapter 4 “Nuclear Fusion and Fission” and Chapter 7 “Wind Energy”. Published by the Technological Educational Institute of Piraeus in the frame of the graduate course “Energy Systems Management”.
10. The UNESCO Encyclopedia of Life Support Systems. Author of Chapter 3.17.3.2 “Temperature and Humidity Balance of Premises”.
11. **Argiriou A.A.**, Lykoudis S, Chapter 11: Improving the Spatial Coverage of Stable Isotope Data; pp. 335-348 *New Topics in Water Resources Research and Management*, Henrik M. Andreassen (Editor), Nova Publishers, NY, ISBN: 1-60021-974-8, (2008).
12. *University Physics with Modern Physics*, 14th Edition, Hugh D. Young, Roger A. Freedman: Member of the translation team of the Hellenic edition. Papazisis Publishers, Athens, Greece, ISBN: 978-960-02-3535-7 (Vol A) 978-960-02-3536-4 (Vol B) (2019).