DIMITRI(O)S KARAMANIS

1. PERSONAL DATA

Date of Birth: 10 June 1968

Marital Status: Married (three daughters)
Contact Address: University of Patras

Department of Environmental & Natural Resources Management

2 Seferi Str., 30100, Agrinio, Greece

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From 15 Oct 2015 on Sabbatical Leave

Brunel University London Institute of Energy Futures

2. STUDIES

A. First Degree:

Title: Bachelor's degree in Physics

Country: Greece

University: The University of Ioannina

School-Dept.: Physics

Year of beginning: September 1986 in the 3rd position among 180 candidates

Year of graduation: June 1990 in the top 5 % of the class

Grade: "Very Good"

B. Graduate Studies:

Subject: Advanced Graduate Courses in Mathematical Physics, Advanced

Quantum Physics, Statistical Mechanics, Experiments in Modern Physics, Nuclear Physics, Solid State, Chemical and High Energy

Physics, Three Semesters, 1990-1992

University: Ioannina Department: Physics

C. Ph.D. Thesis:

Subject: " A study of radioactive pollutants binding by pillared layered clays"

Country: Greece

University: The University of Ioannina

Dept.: Physics
Year of beginning: Dec. 1992
Year of graduation: Feb. 1997

3. COURCES - SCHOOLS - SEMINARS

July 1989 1st Summer School on "Quantum Structure of Matter", University of Crete, Greece. 1991 1st Seminar on "Statistics and Computers", Greek Institute of Statistics, Ioannina, Greece. 1992 Seminar on "UNIX Operating System", Computer Center, The University of Ioannina. 1992-93 Advanced Graduate Courses in Mathematical Physics, Advanced Quantum Physics, Statistical Mechanics, Experiments in Modern Physics, Nuclear Physics, Solid State, Chemical and High Energy Physics, Three Semesters, University of Ioannina, Greece. 1993 3rd Summer School: "Low level measurements of the radioactivity in the environment: Techniques and Applications" Spain, 20/9 -2/10 with a grant from the University of Ioannina. 1995 NATO ASI with a grant from IUR: "Advanced course on Radioecology: Restoration of radioactive sites" Zarechny (Russia), 19-28 June. 1996 NATO ASI with a grant from the Greek Ministry of Development: "Mineral Processing and Environment. Improving the quality of our life" Varna (Bulgaria), 18-30 August. 1998 NATO ASI with a grant from the Greek Ministry of Development: "Chemical separation technologies and related methods of nuclear waste management" Dubna (Russia), 17-29 May. 2000 International Workshop on Nuclear Reaction Data and Nuclear Reactors: Physics, Design and Safety, 13 March-28 March 2000, IAEA-ICTP, Miramare-Trieste, Italy. 2001 International Workshop on Hybrid Nuclear Systems for Energy Production, Utilisation of Actinides and Transmutation of Long Lived Radioactive Wastes, 3-7 September, IAEA-ICTP, Miramare-Trieste, 2001 International Workshop on Nuclear Data for Science and Technology: Accelerator Driven Waste Incineration, 10-21 September, International Atomic Energy Agency (IAEA)- International Centre for Theoretical Physics (ICTP), Miramare-Trieste, Italy

4. PROFESSIONAL EXPERIENCE

Oct 2014-	Instructor, MSc Programme "Environmental Design of Infrastructure		
	Works" Hellenic Open University. School of Science and Technology		
Aug 2014-	Associate Professor on Alternative Energy Sources, Department of		
	Environmental & Natural Resources Management, University of Patras		
May 2009-Aug2014	Assistant Professor on Alternative Energy Sources, Department of		
Environmental & Natural Resources Management, University of Western			
Greece (tenure in April 2013)			
Sept. 2006-April 2009 Adjunct Lecturer, Department of Environmental & Natural Resources			

Sept. 2006-April 2009 Adjunct Lecturer, Department of Environmental & Natural Resources Management, University of Ioannina

Mar 2002-April 2009 Research Associate, Physics Department, University of Ioannina Sept. 2002-Feb 2008 Adjunct Lecturer, Faculty of Veterinary Science, University of Thessaly

March 2001-Feb 2002 Marie Curie Return Fellow, Physics Department, University of Ioannina
 March 1999-Feb 2001 Marie Curie Fellow, Centre Etudes Nucleaires de Bordeaux of IN2P3/CNRS France
 May 1998-Feb. 1999 Postdoctoral Researcher, Nuclear Physics Laboratory, University of Ioannina
 Oct. 1998-Feb 1999 Director of the Liaison and Technology Transfer Office, University of Ioannina
 1991-1997 Postgraduate research assistant, Nuclear Physics Laboratory, University of Ioannina

5. TEACHING EXPERIENCE & SUPERVISING WORK

Supervisor of Postdo	ctoral Research	
2014-2015	Eftychios Vardoulakis, Dr, Physics, Postdoctoral researcher of COOL-	
	NANO	
2014-2015	Katia Chalkia, Dr. Environmentalist, Postdoctoral researcher of SOL-	
	NANO	
2013-2015	Spiros Krimpalis, Dr. Physics, Postdoctoral researcher of COOL-NANO	
Supervisor of Postgraduate Students		

Supervisor of Losign	duluie Studenis
2014-	Nikolaos Skandalos, PV building integration
2012-2015	Georgios Gorgolis, Solar cooling of open spaces
2012-2015	Vasilios Kapsalis, Solar thermal storage with phase change materials
2009-2013 Eftychios Vardoulakis, Study of materials and low energy techniques	
	buildings cooling for the mitigation of the urban heat island and energy
	savings

Supervisor of 7 MSc Students of Hellenic Open University

Supervisor of more than 30 Undergraduate Students Diploma Thesis

Teaching			
2015-	Green Environmental Technologies, Co-Instructor, MSc Programme,		
	Department of Environmnetal & Natural Resources Management,		
	University of Patras		
2014-	Design of infrastructure works and environmental protection, MSc		
	Porgramme, Hellenic Open University		
2012	General Physics, Department of Environmental & Natural Resources		
	Management, University of Patras		
2009 - 2015	Environment and Energy, Department of Environmental & Natural		
	Resources Management, University of Western Greece		
2009	Materials Science and Environmental Applications, Department of		
	Environmental & Natural Resources Management, University of Ioannina		
2009 - 2015	Environmental impact assessment studies, Department of Environmental		
	& Natural Resources Management, University of Ioannina		
2008	Physics, Department of Environmental & Natural Resources		
	Management, University of Ioannina		

2006 - 2015	Applications of Renewable Energy Resources, Department of Environmental & Natural Resources Management, University of Ioannina		
2006 - 2015	Energy Savings and Rational Use, Department of Environmental &		
	Natural Resources Management, University of Ioannina		
2003 - 2008	"Physics" and "Introduction in Computer Science", Faculty of Veterinary		
	Science, University of Thessaly		
2006 - 2009	Renewable Energy Resources, Department of Environmental & Natural		
	Resources Management, University of Ioannina		
2002 - 2007	Physics, Computers, Acoustics, Materials Technology, Technological		
	Institute of Epirus		
1998	Internet, Librarians of the University of Ioannina		
1998	"General Physics II with the use of computers"		
1995	Operating Systems (DOS-WINDOW-UNIX) and Microsoft Office,		
	Greek Union of Physicists		
1994	"General Physics II-Exercises"		
1993-1994	Introduction in the use of computers, Educational Institute of Ioannina		
1994	Wordperfect for Unix, Seminar for teachers		
1990-91-92-93	Assistant in the cources of the Physics Department of the University of		
	Ioannina: "Practice in Electromagnetism II", "General Physics II"		

6. ACHIEVEMENTS-GRANTS

Awards		
2012	National Research Award of Excellence for the project: Building integrated solar cooling of windows and open spaces with innovative nanocomposites, 2012-	
	2015, Hellenic General Secretariat of Research & Technology,	
2012	National Representative in the Regional Programmes RER/1/011 Introduction and harmonizing standardized quality control procedures for radiation technologies και RER/9/121 Supporting Environmental Remediation	
	Programmes of IAEA for 2012-2013	
2011	Research presentation in Media: article at the newsparer Eleftherotipia, 10 June	
	2011 (www.enet.gr/?i=news.el.article&id=292046)	
2010	Financial Support from the John S. Latsis Public Benefit Foundation for the research project "Ash as a Material of Passive Cooling of Buildings and Open-Air Areas"	
2008	Top Reviewer of the Year for the "Analytica Chimica Acta" Journal	
2008	Selection for appointment in the Preparation Commission for the Comprehensive nuclear-test-ban treaty Organization (CTBTO) of the United Nations (UN)	

Invited Expert 2015 Research

2015	Research Programme of Polish Secretariat of Research and Technology	
2014	Romania-EEA cooperation, Romanian Secretariat of Research and Technology	
2013	Guest Editor, Progress in Photovoltaic Systems, International Journal of	
	Photoenergy	
2012-13	Polish-Norwegian Bilateral Cooperation of the Polish Secretariat of Research	
	and Technology	
2013	CRES National Project "Green Roofs"	

2012	Greek-China Bilateral Cooperation of the Hellenic Secretariat of Research and
	Technology
2012	CRES National Project "Bioclimatic Improvements of Urban Spaces"
2011	FP7-ENV-2011 programme (rapporteur)
2010-2011	IAEA Workshops at Montenegro, Athens and Serbia
2008	National Scientific Programme of Chile
2006	EU TACIS-ISTC
2004	EU-FP6-New and Emerging Science and Technology in Europe
1999-	Reviewer for more than 45 Scientific Journals
Invited talks	
2014	International Conference on Non-Conventional Energy, ICONCE2014, Kalyani,
2011	India, 15-17 January 2014
2013	Invited Lecturer, Erasmus IP, 2 nd European Workshop on Renewable Energy
2010	Systems (EWRES), Antalya, September 2013.
2013	IAEA/Argonne Regional Workshop on Element 3: Project Planning and
2010	Management for Decommissioning and Environmental Remediation, Argonne
	National Laboratory, 2-7 June 2013.
2011	IAEA Regional Workshop on Successful Applying for EU Framework
-	Programme Projects and the Final Project Review Meeting, Institute of Physics,
	29 November - 2 December, University of Belgrade, Belgrade, Serbia.
2011	Invited speaker and rapporteur, IAEA Workshop on Regional Workshop on
	Improvement of Education and Training in Nuclear Analytical Techniques, 4-6
	June, Athens
2010	Invited speaker, IAEA Workshop on REP/0/028 Improving educational and
	training capabilities in Nuclear Science and Applications, 1-3 November,
	Podgorica, Montenegro
Invited Comi	
Invited Semi 2015	Solar Energy Technologies for the Sustainable Built Environment, City
2013	University of Hong Kong, August 2015
2015	
2013	Solar Energy Technologies for Building Integrated Applications, Hong Kong Polytechnic University, August 2015
2013	·
2013	Solar Energy Technologies for Building Integrated Applications, ERASMUS Intensive Program "Renewable Energy Systems" Antalya Turkey, 20-30
2010	September 2013 (<u>www.ewres.info</u>) "Evaporative cooling and Applications of the utilization of wind and solar
2010	energy", Seminar at the Technical Chamber of Greece, Aitoloakarnania Unit,
	Agrinio, 25 September
2010	"Energy and Environment", 70 High school of Karditsa and 20 Lyceum of
2010	Hrakleio, Agrinio, 19 March
2009	"Renewable Energy Sources & Environment", Center of Environmental
2003	Education, Konitsa, 11 December
2008	Renewable Energy Sources & Green Business, Seminar on Green Development,
2000	Agrinio
	ASTINO

2007	Towards a virtual observatory for a sustainable development of ecosystems: The ECODONET project, Department of Innovation Engineering, University of Salento
2007	Specially tailored materials for the removal of selected inorganic pollutants from aqueous solutions, Department of Innovation Engineering, University of Salento
2006	Radioactive tracers in chemical analysis and chemical processes, Department of Chemistry, Aristotle University of Thessaloniki
2003	Safety of nuclear reactors (new generation) for energy production, Department of Electrical Engineering, Democritus University of Thrace
2003	Environmental consequences from the development of nuclear reactors, Department of Electrical Engineering, Democritus University of Thrace
2002	The problem of radioactive wastes, Department of Applied Physics, National Technical University of Athens
2000	Neutron capture cross section of ²³² Th in the energy range from 30 keV to 3 MeV, Journee des Seminaires Internes du CEN-Bordeaux, Gujan

Grants

2005-2006	Research Grant, Empirikion Foundation
2003-2004	Postdoctoral Research Grant, State Scholarships Foundation
2002	Grant from the National Science Foundation, US
2001-2002	Marie Curie Postdoctoral Research Return Grant of the European Union
1999-2001	Marie Curie Postdoctoral Research Grant of the European Union
1992-1994	Grant for postgraduate studies from "Georgios Stavrou" Foundation
1987-1990	Grant for undergraduate studies from the Hellenic Ministry of Education
1986	Award and grant from the Hellenic Ministry of Education for the results in the
	Annual Panhellenic Qualification Examination

7. INTERNATIONAL WORKSHOPS - CONFERENCES

- 16-19 March 1992 3rd Annual Meeting of the CEC radiation Protection Program, Ioannina.
- 24-28 September 1994ECP9 Workshop, Saint Petersburg.
- 15-19 May 1996 6th International Conference, "Separation of Ionic Solutes", Piestany Spa, Slovakia.
- 27-29 November, 19952nd Workshop on the Long Term Follow-up of the Chernobyl Disaster, International Union Against Cancer and Hellenic Cancer Society, Athens.
- 22-23 April 1996 Panhellenic Conference "10 years after the Chernobyl accident-Its consequences in Greece, Athens.
- 14-19 July 1996 IEX-96, International Conference on Ion Exchange Developments and Applications, University of Cambridge, UK.
- 9-15 September 2000 7th International Conference on Nuclear Microprobe Technology & Applications, Cite Mondiale, Bordeaux, France.
- 11-13 December 20006th Information Exchange Meeting on Actinide and Fission Product Partitioning and Transmutation, CIEMAT-offices, Madrid, Spain.
- 21-23 May 2002 10th Symposium on Radiation Measurements and Applications, Ann Arbor, Michigan, USA.
- 2-5 October 2005 IV International Conference on Instrumental Methods of Analysis. Heraklion, Greece.

22-25 October 2005	International Conference on new water culture of South East European countries, Athens, Greece.
23-26 November 20	06 2nd International Conference on Water Technology and Environment
	AQUA2006, Integrated Management of Water Resources, Athens,
	Greece.
23-27 April 2007	International Conference on Environmental Radioactivity: From
1	Measurements and Assessments to Regulation, Vienna, Austria.
24-28 June 2007	First International Conference on Environmental Management,
	Engineering, Planning and Economics (CEMEPE), Skiathos, Greece.
22-23 May 2008	International Advanced Workshop on Information and Communication
J	Technologies for Sustainable Agri-production and Environment
	(AWICTSAE 2008), Alexandroupoli, Greece.
26-28 September 20	008 International Conference "The environmental message towards local
1	societies", Corfu, Greece.
20-23 April 2010	1st European Energy Conference: A new forum for energy research, ESF,
1	Barcelona, Spain.
7-13 May 2011	World Renewable Energy Congress, Linkoping, Sweden.
16-18 May 2011	International Conference on Applied Energy, Perugia, Italy.
4-7 September 2011	10th International Conference on Sustainable Energy Technologies.
25-26 Sept 2013	AIVC 2013, Energy conservation technologies for mitigation and
_	adaptation in the built environment: the role of ventilation strategies and
	smart materials
20-22 Sept 2013	II International Workshop on Renewable Energy Sytems, Erasmus IP,
-	Antalya, Turkey (invited)
4-6 Sept 2013	International Conference Clean Technology for Smart Cities and
	Buildings from Nano to Urban Scale, EPFL, Lausanne
26-29 August 2013	12 th International Conference on Sustainable Energy Technologies, Hong
	Kong Polytechnic University
3-7 June 2013	IAEA/Argonne Regional Workshop on Element 3: Project Planning and
	Management for Decommissioning and Environmental Remediation,
	Wanagement for Decommissioning and Environmental Remediation,
	Argonne (invited)
14-17 Jan 2014	
14-17 Jan 2014	Argonne (invited)

8. PARTICIPATION IN RESEARCH PROJECTS IN THE LAST 10 YEARS

- 1. Novel solar responsive semiconducting/porous nanocomposites for the reduction of chemical and thermal urban pollution, GSRT-Greece-Turkey scientific research cooperation, *Scientific Responsible*, 2014-2015.
- 2. Building integrated solar cooling of windows and glass-covered spaces with innovative nanocomposites, COOL-NANO, National Research Award of Excellence, *Scientific Responsible*, 9/2012-9/2015.
- 3. Pollutants degradation and evaporative surface cooling with the use of the environmental technology of innovative photo-responsive material, GSRT-Greece-Turkey scientific research cooperation, *Scientific Responsible*, 6/2011-5/2013.

- 4. Study of photoresponsive materials and passing cooling techniques for the mitigation of the urban heat island phenomenon and energy savings, ESPA-Hrakleitos II Programme, *Scientific Responsible*, 9/2010-8/2013.
- 5. Ash as a Material of Passive Cooling of Buildings and Open-Air Areas, John S. Latsis Public benefic Foundation, *Scientific Responsible*, 1/2010-12/2010.
- 6. Ecodonet: Development of a model Web-based virtual observatory of Acherontas, Kalamas and Torre Guaceto ecosystems and its application as a mobile exhibition and permanent information kiosk for public awareness and sustainable development of coastal ecosystems, Interreg III Greece-Italy, *Contract Coordinator*, 1/2006-9/2008.
- 7. Characterization of inorganic materials for radioactive and toxic pollutants binding, Empirikion Foundation, *Principal Investigator*, 1/1/2005-31/12/2006.
- 8. Pollution of surface waters in the regions of Epirus, Thessaly and Macedonia, EPEAEK, Pythagoras Programme, *Principal Investigator*, 15/7/2004-31/12/2006.
- 9. Characterization of inorganic materials for the binding of radioactive and toxic pollutants, State Scholarships Foundation, *Postdoctoral Fellow*, 1/1/2003-31/12/2003.
- 10. PILCRAD: Decontamination of drinking water from radioactive Cs-137 and Sr-90, Research Committee of the University of Ioannina, *Principal Investigator*, 1/12/2001-30/11/2002.
- 11. Measurement of the ²³²Th(n,2n) reaction cross section in the Th-U cycle, EC Contract FIKW-CT-2000-50001, *EC Marie Curie Fellow*, 3/2001-2/2002.
- 12. Neutron capture cross section of ²³²Th in the energy range 30 keV-3 MeV, EC Contract FI4W-CT98-5004, *EC Marie Curie Fellow*, 3/1999-2/2001.
- 13. European approach to nuclear and radiological emergency management and rehabilitation strategies (EURANOS), EC Contract F16R-CT-2004-508843, *Research Participant*, 1/4/2004-31/12/2004 & 1/4/2006-30/9/2006.
- 14. Selective binding of trace elements through molecular structure on pillared layered clays, Research Committee of the University of Ioannina, *Research Participant*, 1/2002-12/2002.

9. RESEARCH INTERESTS

General Research Profile

Development of appropriate countermeasures such as modified nano-clays for the mitigation of the severe environmental consequences of the Chernobyl accident and followed by cross section measurements in the thorium fuel cycle for energy production and waste incineration in hybrid systems. In the last years, expansion to the study of wind and solar energy systems. The current independent and collaborative research focuses on wind energy assessment and solar cooling of buildings and outdoor spaces.

Principal investigator in three national research programs and an interregional research collaboration, he has contract coordinated an Interreg III Greece-Italy collaboration and has been participated in national and international research projects. Received educational and research grants while selected and offered an appointment at the Comprehensive Nuclear-Test-Ban Treaty Organization of United Nations in 2008 at the P3 level. Recently completed a National Research Grant of Excellence (2012-2015).

Reviewer for more than 60 international journals like Renewable Energy, Energy, Energies, Solar Energy, Energy&Buildings, Wind & Structures, Renewable&Sustainable Energy Reviews, Applied Energy, Energy Conversion and Management, Journal of Advanced Oxidation Technologies, Applied Clay Science, IEEE Transactions on Nuclear Science, Wind Engineering and Industrial Aerodynamics, European Physical Journal A, Materials Chemistry & Physics, Chemosphere, Science of Total Environment, Chemical Engineering Journal, Desalination, Environmental Monitoring and Assessment, Colloids and Surfaces A, Applied Radiation and Isotopes, Analytica Chimica Acta, Journal of Hazardous Materials etc. Three postgraduate and more than 10 undergraduate students are currently carrying out their thesis under his supervision. Research collaboration with research groups from Greek Universities and Institutes, Bogazici University, Salento University and Hong Kong Polytechnic University.

Research Activities

- Methods of passive solar cooling of buildings and photo-responsive materials
- Recycling of fossil-fuel by-products in solar cooling applications
- Accelerator Driven Systems for energy production and waste incineration, Gamma cells, Radiation metrology
- Assessment of mainland, coastal and offshore wind potential and management of wind energy
- Solar energy, solar cells and applications
- Water resources
- Environmental impact of energy production and use
- Community-based sustainable development

10. OTHER ACTIVITIES

- 1. Co-organizer of the workshop: "Internet: A New World", 1995.
- 2. Member of the University Committee for Graduate Studies, 1992-1994.
- 3. Member of the Hellenic Physical Society, 1990-1997
- 4. Member of the Hellenic Association of Nuclear Physicists, 1990-
- 5. Member of the American Physical Society, 1990-1995
- 6. Member of the European Physical Socitey, 1992-1995
- 7. Member of the Clay Minerals Society, 1992-1998
- 8. Co-establisher of the Local Information Electronic Network in the Region of Epirus. 1998.
- 9. Member of the Marie Curie Fellowship Association, 1999-
- 10. Member of the Alfred Kastler Foundation 1999-
- 11. Member of World Society for Sustainable Energy Technologies, 2013-

11. PUBLICATIONS

i. At a glance	Number
 Articles in SCI Journals 	96
Mean Impact Factor	>2.25
 Conference Proceedings 	60
 Final reports of funded projects 	12

Lecture Notes-Monographs	10
Presentations at International conferences-workshops	34
Seminars	16
Recognition of Research	
 Citations to Journal Articles (excl. self-citations) 	>1160
 H index 	18

List of most significant publications

A. Book Chapters

Solar cooling with hydrophilic porous materials for reducing cooling needs, Ch. 10, In: Ecoefficient materials for mitigating building cooling needs, Eds. Fernando Pacheco-Torgal, João Labrincha, Luísa F. Cabeza and Claes-Göran Granqvist, Woodhead-Elsevier Publishing, Cambridge, UK.

B. Journals

2015

- 1. G. Gorgolis, <u>D. Karamanis</u>, Solar energy materials for glazing technologies, Sol. Ener. Mater. & Sol. Cells (accepted).
- 2. V. Kapsalis, <u>D. Karamanis</u>, On the effect of roof added photovoltaics on building's energy demand, Energy & Buildings 108, 195-204
- 3. N. Skandalos, <u>D Karamanis</u>, PV glazing technologies, Renewable & Sustainable Energy Reviews 49 (2015) 306-322.
- 4. S. Krimpalis, <u>D. Karamanis</u>, A novel approach to measuring the solar reflectance of conventional and innovative building components, Energy & Buildings 97, 137-145.
- 5. H. Yang, H Shen, T. Xu, <u>D. Karamanis</u>, Progress in photovoltaic devices and systems, Inter. J. Photoenergy 2015, 926063.
- 6. <u>D. Karamanis</u>, E. Kyritsi, S. Krimpalis, Well-ordered nanoporous materials for low-temperature water phase changes and solar evaporative cooling, Sol. Ener. Mater. & Sol. Cells, 139, 34-43.
- 7. I. Spiropoulou, <u>D. Karamanis</u>*, G. Kehayias, Offshore wind farms development in relation to environmental protected areas, Sustainable Cities & Society, 14, 305-312

2014

- 8. N. Ökte, <u>D. Karamanis</u>, D. Tuncel, Dual functionality of TiO₂-flyash nanocomposites: water vapor adsorption and photocatalysis, Catalysis Today 230, 205-213 (IF: 3.407)
- 9. E. Vardoulakis, <u>D. Karamanis</u> and G. Mihalakakou, Heat island phenomenon and cool roofs mitigation strategies in a small city of elevated temperatures, Advances Building Energy Research 8, 55-62.
- 10. V. C. Kapsalis, E. Vardoulakis and <u>D. Karamanis*</u>, Simulation of the cooling effect of the roof added photovoltaic panels, Advances Builidng Energy Research 8, 41-54.

2013

- 11. <u>D. Karamanis*</u>, E. Kyritsi, S. Krimpalis, E. Vardoulakis, G. Gorgolis, V. Kapsalis, G. Mihalakakou, N. Ökte, Cooling roofs through low temperature solar-heat transformations in hydrophilic porous materials, Advances Builidng Energy Research 7, 235-243.
- 12. E. Vardoulakis, <u>D. Karamanis</u>, A. Fotiadi, G. Mihalakakou, The heat island effect in a small Mediterranean city of elevated summertime temperatures, Solar Energy 94, 128-144 (IF: 2.952).
- 13. Neren Ökte*, <u>Dimitris Karamanis*</u> A novel photoresponsive ZnO-FlyAsh nanocomposite for environmental and energy applications, Appl. Catal. B: Environmental 142-143,538-552 (IF: 5.825).

- 14. E. Vardoulakis, <u>D. Karamanis</u>, P. Mihalakakou. Heat island effect in Western Greece: results, statistical analysis and discussion. 2013. Fresenius Environmental Bulletin 7, (IF: 0.716).
- 15. <u>Dimitris Karamanis</u>*. Wind energy resources analysis of Western Greece coast in terms of sustainable environmental indicators and towards their community-based exploitation in South-East Europe. 2013. J. Renewable & Sustainable Energy 5, 041801-041817 (Invited by the Guest Editors of a Special issue: Renewable Energy in South-Eastern Europe) (IF: 1.51) (Top 10 most read articles since its publication till November 2013).

2012

- D. Karamanis*, E. Vardoulakis, E. Kyritsi, N. Okte. Surface solar cooling through water vapor desorption from photo-responsive sepiolite nanocomposites. Energy Conversion & Management 63, 118-122.
- 17. <u>D. Karamanis</u>* and E. Vardoulakis. Application of zeolitic materials prepared from fly ash to water vapor adsorption for solar cooling. Applied Energy 97, 334-339.

2011

- 18. <u>D. Karamanis</u>*, N. Okte, E. Vardoulakis, T. Vaimakis. Water vapor adsorption and photocatalytic pollutant degradation with TiO₂-sepiolite nanocomposites. App. Clay Sci. 53, 181-187.
- 19. E. Vardoulakis, <u>D. Karamanis</u>*, M.N. Assimakopoulos, G. Mihalakakou. Solar cooling with aluminium pillared clays. Solar Energy Materials & Solar Cells 95, 2363-2370.
- 20. E. Vardoulakis, <u>D. Karamanis</u>*, M.N. Assimakopoulos, S.N. Boemi, G. Mihalakakou. Moisture sorption properties of modified porous clays for roof evaporative cooling applications. International Journal of Ventillation 10, 212.
- E. Vardoulakis, <u>D. Karamanis</u>*. Experimental investigation of the use of lignite ash for roof solar cooling. Proceedings of the World Renewable Energy Congress, 7-13 May 2011, Linkoping, Sweden.
- 22. <u>D. Karamanis</u>*. Management of moderate wind energy coastal resources. Energy Conversion and Management 52, 2623-2628.
- 23. <u>D. Karamanis</u>*, C. Tsabaris, K. Stamoulis, D. Georgopoulos. Wind energy resources in the Ionian Sea. Renewable Energy 36, 815-822.
- 24. K.C. Stamoulis, <u>D. Karamanis</u>, K.G. Ioannides. Assessment of tritium levels in rivers and precipitation in north-western Greece before the ITER operation. Fusion Engin. Design 86, 206-213.
- 25. D. Tarrio et al. (the n-TOF collaboration). Neutron-induced fission cross section of natPb and Bi-209 from threshold to 1 GeV: An improved parametrization. Physical Review C 83, 044620.

2010

- 26. E. Vardoulakis, <u>D. Karamanis</u>*. Building integrated evaporative cooling: From natural porous materials to hydrophilic nancomposites. Proceedings of the World Renewable Energy Congress XI, 25-30 September 2010, Abu Dhabi, UAE, pp. 1750-1755.
- 27. D. Gournis et al. A two-dimensional magnetic hybrid material based on intercalation of a cationic prussian blue analogue in montmorillonite nanoclay. J. Col. Inter. Sci. 348, 393-401.
- 28. K. Stamoulis, K. Ioannides, <u>D. Karamanis</u>. Deconvolution of liquid scintillation alpha spectra of mixtures of uranium and radium isotopes. Anal. Chim. Acta 657, 108-115.
- 29. <u>D. Karamanis</u>*, E. Vardoulakis, G. Mihalakakou, N. Kitsos. Study of wind and solar energy utilization for the electricity needs of lighting and ventilation of Dodoni and Driskos tunnels in the Egnatia highway. Proceedings of the 4th National Conference of the application of renewable energy sources (RENES-2010), Athens, 5-6 May 2010.
- 30. D. Karadimos et al. Analysis of the FIC detector data at the n-TOF facility. Nucl. Instr. Meth. B 268, 2556-2662.
- 31. C. Paradela et al. (the n-TOF collaboration) Neutron-induced fission cross section of ²³⁴U and ²³⁷Np measured at the CERN Neutron Time-of-Flight (n_TOF) facility. Phys. Rev. 82, 034601.

32. N. Colona et al. (the n-TOF collaboration). Neutron cross-sections for next generation reactors: New data from n_TOF. Appl. Rad. Isot. 68, 643-646.

2009

- 33. <u>D. Karamanis</u>*, K. Ioannides, K. Stamoulis. Environmental assessment of natural radionuclides and heavy metals in waters discharged from a lignite-fired power plant. Fuel 88, 2046-2052 and Fuel & Energy Abstracts, 51, 120.
- 34. M. Calviani et al. (the n-TOF collaboration). High-accuracy ²³³U(n,f) cross-section measurement at the white-neutron source n_TOF from near-thermal to 1 MeV neutron energy. Phys. Rev. C 80, 044604.
- 35. M. Calviani et al. (the n-TOF collaboration). Fission cross section measurements on ²³³U and minor actinides at CERN n-TOF facility. AIP Conference Proceedings 1175, pp. 211-218.

2008

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- 37. <u>D. Karamanis</u>* et al. (the ECODONET collaboration). The ECODONET project: Development of a model Web based virtual observatory of Acherontas, Kalamas and Torre Guaceto ecosystems and its application as a mobile exhibit and permanent environmental kiosk towards public awareness and sustainable development of coastal ecosystems. 2008. In proceedings of the International Advanced Workshop AWICTSAE 2008, Alexandroupolis, 22-23 May, 2008.

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