#### **CURICULUM VITAE**

# **Professor Emmanuel Drakakis**

Electrical and Computer Engineering Department Hellenic Mediterranean University (HMU)



#### PERSONAL INFORMATION

Place and Date of Birth: Nafplio Argolidas, 16/05/1960

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Google Scholar: https://scholar.google.com/citations?user=m142o\_QAAAAJ&hl=en

### **Short CV**

Dr. Emmanuel Drakakis graduated from the Physics Department of the University of Crete, Greece, in 1983. He acquired the postgraduate Diplôme des Etudes Approfondies (DEA) in Physics of Ionized Gases and Plasmas of the University of Toulouse III (P. Sabatier), France, in 1985 and his doctorate degree from the Center for Atomic Physics of Toulouse (renamed LAPLACE) of the University Toulouse in 1988

He has worked as a researcher at the Research Centre of Plasma Physics of the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, at the Low Energy Plasma Laboratory of the University of Crete, at the Institute of Plasma Physics of the University of Crete, as well as at the Environmental Research Laboratory of the Institute of Electronic Structure & Laser of the Foundation for Research and Technology, Greece. From 1991 to 1996 he was a Visiting Professor at the Department of Physics of the University of Crete, Greece.

In 2003 he was elected Assistant Professor at the Department of Electrical Engineering of the Technological Educational Institute (TEI) of Crete. From 2010 to 2014 he was the Head of the Department of Electrical Engineering and from 2014 to 2017 at the position of Dean of the School of Engineering, at the same institution. He is currently a Professor at the Department of Electrical and Computer Engineering of the Hellenic Mediterranean University (HMU) which is the evolution of the

Technological Educational Institute of Crete. He is also Vice-Rector of Students and Academic Affairs at the Hellenic Mediterranean University (HMU).

He has a long experience as a researcher or a member of research groups funded by 25 international and national research programs, with the following main research objects: electrical discharges, discharge lamps, low and high energy plasma physics and non-neutral plasmas, high current accelerators, earth radiation budget, photovoltaic systems, materials for electromagnetic shielding. He has over 40 publications in peer review journals with 960 citations with h-index 16 and i10-index 23. He has been involved in national and European projects as coordinator or member of the research team.

# **STUDIES**

- Docteur de l'Université Paul Sabatier, Physique des Gaz et des Plasmas, Centre de Physique Atomique, Toulouse, France, 1988
- **Diplôme d'Etudes Approfondies (D.E.A),** Université Paul Sabatier, Physique des Gaz et des Plasmas, Centre de Physique Atomique, Toulouse, France, 1985
- BSc in Physics, University of Crete, Heraklion, Greece, 1982

# **SCOLARSHIPS**

- Undergraduate Fellow of the Ministry of Education, University of Crete, 1979-80
- Postgraduate Fellow of the French Government, Paul Sabatier University, Toulouse, France, 1983-1987
- Postgraduate Fellow of the Center for Atomic Physics, Toulouse, France, 1987-1988
- Postdoctoral fellow of EURATOM at the Center for Plasma Physics Research (CRPP: Centre de Recherches en Physique de Plasmas), Switzerland (EPFL: Ecole Polytechnique Fédérale de Lausanne, Switzerland), EPFL, Lausanne, Switzerland, 1990

# **RESEARCH INTERESTS**

- Study and investigation of high-pressure discharge light lamps
- Electrical and optical measurements in high pressure discharge lamps
- Dense plasma optical diagnostics
- Development of diagnostic methods and models of radiation propagation in electric discharges of metal vapors (applications in electric light sources)
- Models of radiation propagation in the earth's atmosphere
- Design and manufacture of electronic power supplies
- Study and investigation of performance of new materials for electromagnetic shielding
- Development and study of innovative nanocomposites for applications in electric energy systems

# PROFESSIONAL EXPERIENCE

- Professor, Department of Electrical and Computer Engineering, Hellenic Mediterranean University (May 2019-present)
- Professor, Department of Electrical Engineering, Technological Educational Institute of Crete (November 2013-April 2019)
- Associate Professor, Department of Electrical Engineering, Technological Educational Institute of Crete (January 2009-November 2013)
- Assistant Professor, Department of Electrical Engineering, Technological Educational Institute of Crete (June 2003-December 2008)
- Research Fellow at the Institute of Technology and Research, Institute of Electronic Structure & Laser, Laboratory of Environmental Research, (July 2001- November 2007)

- Visiting Professor at the University of Crete, Department of Physics (1991-1996)
- Researcher at the Institute of Plasma Physics of the University of Crete (1993-2014)
- Researcher of the Low Energy Plasma Laboratory of the University of Crete (1990-1993)
- Researcher at the Center for Plasma Physics Research (CRPP: Centre de Recherches en Physique de Plasmas), Switzerland (EPFL: Ecole Polytechnique Fédérale de Lausanne, Switzerland) (1990)

# RESEARCH EXPERIENCE

- 1. Extensive experience (over 25 years) in technology and science of electrical light sources. High pressure plasma discharge lamps. Propagation of plasma radiation in high pressure discharges. Low energy plasma diagnostics. High resolution plasma spectroscopy.
- 2. Extensive experience in design and analysis technologies of electronic and electrical circuits. Design of high voltage switches for Ion thrusters. Design of DC-DC converters Design of Marx Generator type power supply systems for generating high voltage 1 MVolt. Mine detection systems.
- 3. Electromagnetic 3-D codes. Design of electronic and electrical power systems of betatron machines. Design of accelerator systems for γ-ray production in collaboration with Fermilab (Final Report to FNAL together with C. A. Kapetanakos and J. Krall).
- 4. Development of optical spectroscopic plasma diagnostic computerized devices in tokamak machines with CCD cameras and Reticon cameras with multichannel analyzers.

# **ADMINISTRATION EXPERIENCE**

- 1. Vice Rector for Academic and Student Affairs, Hellenic Mediterranean University (May 2019 until today)
- 2. Vice Rector for Academic and Student Affairs, Technological Educational Institute of Crete (December 2017 to May 2019)
- 3. Dean of the School of Technological Applications, Technological Educational Institute of Crete (September 2014 to November 2017)
- 4. President of the Department of Electrical Engineering, Technological Educational Institute of Crete (September 2010 to 2014)

# **EDUCATION EXPERIENCE**

#### Teaching in undergraduate level

Electric Circuits Theory, Simulation of Electric Circuits, Power Electronics, Physics and Physics Labs

# Teaching in graduate level

Simulation and Analysis of Electrical and Electronic Circuits, Active and Passive Solar Systems

### Thesis Supervision

More than 20 MSc and diploma theses

### REVIEWER IN INTERNATIONAL JOURNALS

Institute of Physics (IOP) Journals (Journal of Physics D)

# **ORGANIZATION OF CONFERENCES**

 COST Strategic Workshop on Lighting Technology for the Future, 1-3 December 2006, Hotel Atlantis, Heraklion – Crete, Greece • UPEC 2017, 52<sup>nd</sup> International Universities' Power Engineering Conference, 28<sup>th</sup> – 31<sup>st</sup> August 2017, Heraklion, Crete, Greece

### **PUBLICATIONS**

#### A. Invited Talks

- 1. "The Effect of Easily Ionized Additives on Mercury Arc Plasmas: Transition from the Ionizing to the Recombining Phase",
  - D. Karabourniotis and E. Drakakis,

invited talk,

30th IEEE Intern. Conf. on Plasma Science 2003, 2-5 June 2003, Jeju, Korea

- 2. "Electron temperature and density in a metal-halide discharge",
  - D. Karabourniotis and E. Drakakis,

invited talk,

29th IEEE Intern. Conf. on Plasma Science 2002, 26-30 May 2002, Banff, Alberta, Canada

- 3. "Species Densities and Hg/Na Ratio in AC Metal Halide Discharges",
  - D. Karabourniotis and E. Drakakis,

invited talk,

21st IEEE Intern. Conf. on Plasma Science, 6-8 June 1994, Santa Fe, New Mexico, USA

- 4. "Plasma Diagnostics in High-Pressure Light Sources",
  - D. Karabourniotis and E. Drakakis,

invited talk,

20th IEEE Intern. Conf. on Plasma Science, 7-9 June 1993, Vancouver, B.C., Canada

#### B. Invited Articles in International Journals

- "Diagnostics of Lighting Arc Plasmas by Non-LTE Emission Spectroscopy.", D. Karabourniotis, E. Drakakis, J. High Temperature Plasma Processes, 8, 535-547 (2004)
- 2. "Temperatures and Charged Particle Densities in a Metal-Halide Arc Lamp; Comparison of Nonequilibrium Spectroscopy and Thermochemical Calculation", D. Karabourniotis and E. Drakakis, IEEE Trans. On Plasma Science, 31, 310 (2003)

#### C. Publications in International Journals

1. "Zinc oxide-graphene based composite layers for electromagnetic interference shielding in the GHz frequency range"

E Drakakis, M Suchea, V Tudose, G Kenanakis, D Stratakis, K Dangakis, A Miaoudakis, D Vernardou, E Koudoumas

Thin Solid Films, 651, 152-157, 2018.

2. A study of the electromagnetic shielding mechanisms in the GHz frequency range of graphene based composite layers

E Drakakis, E Kymakis, G Tzagkarakis, D Louloudakis, M Katharakis, G Kenanakis, M Suchea, V Tudose, E Koudoumas

Applied Surface Science 398, 15-18, 2017.

3. "A MATLAB/SIMULINK Approach for a First Course in Power Electronics"

D Pylarinos, I Androulidakis, K Siderakis, E Drakakis

Journal of Engineering Science and Technology Review 9 (5), 56-60, 2016

4. "A New Approach for Open Air Insulator Test Stations: Experience from Talos and the Polydiagno Project"

- D. Pylarinos, K. Siderakis, E. Thalassinakis, N. Mavrikakis, E. Koudoumas, E. Drakakis, E. Kymakis Journal of Electrical Engineering, Vol. 16, No. 2, Art. No. 16.2.32, pp. 269-273, 2016
- "Laboratory Investigation of the Hydrophobicity Transfer Mechanism on Composite Insulators Aged in Coastal Service"
  - N. Mavrikakis, K. Siderakis, E. Koudoumas, E. Drakakis, E. Kymakis Journal of Electrical Engineering, Engineering, Technology & Applied Science Research 6 (5), pp. 1124-1129, 2016.
- 6. "Nanostructured composite layers for electromagnetic shielding in the GHz frequency range" M. Suchea, I.V. Tudose, G. Tzagkarakis, G. Kenanakis, M. Katharakis, E. Drakakis, E. Koudoumas, Applied Surface Science, **353** (2015) 151-154
- 7. "Atomic and excitation temperatures in medium- and high-pressure mercury arc lamps" E. Drakakis and D. Karabourniotis and G. Zissis, Journal of Light & Visual Environment, **37** (4), 166 (2014)
- 8. "Atomic gas temperature in a non-LTE high-intensity discharge lamp determined from the red wing of the resonance mercury line 254 nm"
  - E. Drakakis and D. Karabourniotis, J. Appl. Phys., 112 053304 (2012)
- 9. "Sharp rise of excitation temperature in the periphery of arc lamps measured from the 254-nm resonance line of mercury"
  - E. Drakakis and D. Karabourniotis, Appl. Phys. Lett., 97, 1 (2010)
- 10. "Super-radiance in the sodium resonance line from sodium iodide arc lamps"
  - D. Karabourniotis and E. Drakakis, Appl. Phys. Lett. 97, 061501 (2010)
- 11. "Power losses analysis in a single switch resonant reset forward converter implemented with a SiC power JFET"
  - N. Polyzos, E. Drakakis, K. Siderakis, E. Tatakis and G. Lempidis Journal of Energy and Power Engineering, Jan. 2010, Volume 4, No.1 (Serial No.26)
- 12. "Modeling the photovoltaic potential of a site"
  - F. Mavromatakis, G. Makrides, G. Georghiou, A. Pothrakis, Y Franghiadakis, E. Drakakis and E. Koudoumas, Renewable Energy, 35, 1387-1390 (2009)
- 13. "Diagnostics of dense dispersive plasma from self-reversed atomic lines"
  - D. Karabourniotis and E. Drakakis, Plasma Phys. Control. Fusion, 50, (2008)
- 14. "Source function approximations and their impact on the shape of self-reversed atomic lines" D. Karabourniotis, E. Drakakis, J. J. van der Mullen, Journ. of Quant. Spectr. & Rad. Transfer, 108, 319-341 (2007)
- 15. "The direct effect of aerosols on solar radiation based on satellite observations, reanalysis datasets, and spectral aerosol optical properties from Global Aerosol Data Set (GADS)."
  - N. Hatzianastassiou, C. Matsoukas, E. Drakakis, P. W. Stackhouse, Jr. P. Koepke, A. Fotiadi, K. G. Pavlakis and I. Vardavas
  - Atmos. Chem. Phys., 7, 2585-2599 (2007)
- 16. "ENSO surface longwave radiation forcing over the tropical Pacific."
  - K. G. Pavlakis, D. Hatzidimitriou, E. Drakakis, C. Matsoukas, A. Fotiadi, N. Hatzianastassiou and I. Vardavas
  - Atmos. Chem. Phys., 7, 2013-2026 (2007)
- 17. "Aerosol Physical and Optical Properties in the Eastern Mediterranean Basin, Crete, from Aerosol Robotic Network Data"
  - A. Fotiadi, N. Hatzianastassiou, E. Drakakis, C. Matsoukas, K. G. Pavlakis, D. Hatzidimitriou, N. Mihalopoulos and I. Vardavas,
  - Atmos. Chem. Phys., 6, 5399-5413 (2006)

- "Spatial and Temporal Distribution of Long-Term Solar Surface Radiation Budget over Greece."
   A. Fotiadi, N. Hatzianastassiou, P. W. Stackhouse Jr., C. Matsoukas, E. Drakakis, K. G. Pavlakis, D. Hatzidimitriou, I. Vardavas,
   Quarterly Journal of the Royal Meteorological Society, 132, 2693-2718 (2006)
- "Optical characteristics of desert dust over the East Mediterranean during summer: a case study."
   D. Balis, V. Amiridis, S. Kazadzis, A. Papaannis, G. Tsaknakis, S. Tzortzakis, N. Kalivitis, M. Vrekousssis, M. Kanakidou, N. Mihalopoulos, G. Chourdakis, S. Nickovic, C. Perez, J. Baldasano and. M. Drakakis
  - Ann. Geophys., 24, 807-821 (2006)
- 20. "Global distribution of Earth's surface shortwave radiation budget",
  - N. Hatzianastassiou, C. Matsoukas, A. Fotiadi, K. G. Pavlakis, E. Drakakis, D. Hatzidimitriou, I. Vardavas,
  - Atmos. Chem. Phys., 5, 2847-2867 (2005)
- 21. "Seasonal heat budget of the Mediterranean Sea",
  - C. Matsoukas, A. C. Banks, N. Hatzianastassiou, K. G. Pavlakis, D. Hatzidimitriou, E. Drakakis, P. W. Stackhouse, and I. Vardavas,
  - J. Geophys. Res., 110, C12008, doi:10.1029/2004JC002566 (2005)
- 22. "Analysis of the decrease in the tropical mean outgoing shortwave radiation at the top of atmosphere for the period 1984-2000"
  - Fotiadi A., Hatzianastasiou, N., C. Matsoukas, Pavlakis, K.G., Drakakis, E., D., Hatzidimitriou, Vardavas. I..
  - Atmospheric Chemistry and Physics 5, 1721-1730 (2005)
- 23. "Diagnostics of Lighting Arc Plasmas by Non-LTE Emission Spectroscopy",
  - D. Karabourniotis, E. Drakakis
  - J. High Temperature Plasma Processes (invited paper), 8, 535-547 (2004)
- 24. "On the decadal increase in the tropical mean outgoing longwave radiation for the period 1984-2000",
  - D.Hatzidimitriou, K.G. Pavlakis, N. Hatzianastassiou, C. Matsoukas, E. Drakakis and I. Vardavas, Atmospheric Chemistry and Physics, 4, 1419-1425 (2004)
- 25. "Long term global distribution of Earth's shortwave radiation budget at the top of the atmosphere", N. Hatzianastassiou, A. Fotiadi, C. Matsoukas, E. Drakakis, K.G. Pavlakis, D. Hatzidimitriou and I. Vardavas.
  - Atmospheric Chemistry and Physics, 4, 1217-1235 (2004)
- 26. "Ten-year radiation budget of the Earth: 1984-1993",
  - N. Hatzianastassiou, C. Matsoukas., D. Hatzidimitriou, K.G. Pavlakis, E. Drakakis and I. Vardavas, International Journal of Climatology, 24, 1785-1802 (2004)
- 27. "Ten-year global distribution of downwelling longwave radiation",
  - K. G. Pavlakis, D. Hatzidimitriou, C. Matsoukas, E. Drakakis, N. Hatzianastassiou and I. Vardavas Atmos. Chem. Phys., 4, 127–142 (2004)
- 28. "Temperatures and Charged Particle Densities in a Metal-Halide Arc Lamp; Comparison of Nonequilibrium Spectroscopy and Thermochemical Calculation",
  - D. Karabourniotis and E. Drakakis,
  - IEEE Trans. On Plasma Science (Invited Paper), 31, 310 (2003)
- 29. "Ion densities in an ac metal halide arc discharge",
  - D. Karabourniotis and E. Drakakis,
  - Appl. Phys. Lett. 82, 700 (2003)

- 30. "Electron temperature in a sodium-iodide lighting plasma",
  - D. Karabourniotis and E. Drakakis,

Appl. Phys. Lett. 81, 1972 (2002)

- 31. "Feasibility Studies of a Race-Track Modified Betatron Accelerator (RT-MBA)",
  - C. A. Kapetanakos, J. Krall, E. Drakakis, A. Warner and G. Jackson,

Nuclear Instruments and Methods, 11, 197 (2001)

- 32. "Effect of fast velocity on the beam dynamics in a modified betatron accelerator.",
  - Z. Xenidi, E. Drakakis and C. A. Kapetanakos,

Physical Review E, 55, 5985 (1997)

- 33. "Excitation of cyclotron resonances from random fluctuations of stellarator windings»,
  - E. Drakakis, D. Karabourniotis, and C. A. Kapetanakos,

Physical Review E, 53, 2795 (1996)

- 34. "Proposal for beam extraction from a modified betatron accelerator with a toroidal electric field.",
  - C. A. Kapetanakos, E. Drakakis, Z. Xenidi, and D. Karabourniotis,

Phys. Rev. Letts. 74, 5851 (1995)

- 35. "Plasma composition and mixing ratio in current modulated metal halide discharges",
  - D. Karabourniotis, E. Drakakis and A. Palladas,
  - J. Phys. D: Appl. Phys. 27, 781 (1994)
- 36. "Determination of Hg  $6^3P_1$  and Tl  $6^2P_{3/2}$  population densities in non-local thermal equilibrium Hg and Hg-Tll discharge plasmas by absorption spectroscopy",
  - E. Drakakis, A. Palladas and D. Karabourniotis,
  - J. Phys. D: Appl. Phys. 25, 1733 (1992)
- 37. "Electron and population temperatures in a non-LTE optically thick plasma",
  - D. Karabourniotis, E. Drakakis and B. Zacharopoulos,
  - J. Phys. D: Appl. Phys. 25, 188 (1992)
- 38. "Application of Bartels' approximations in optically-thin line spectroscopy",
  - D. Karabourniotis, E. Drakakis and A. Palladas,
  - J. Quantit. Spectrosc. Radiative Transfer 45, 359 (1991)
- 39. "Pellet injection in the TCA Tokamak",
  - B. P. Duval, E. Drakakis, Ch. Hollenstein, Y. Martin and P. J. Paris, Société Suisse de Physique, Automne 1990, Bulletin SPG/SSP, Vol. 7(2),1990. p. 30
- 40. "Arc pressure effect on the population of the Hg 6<sup>3</sup>P levels".
  - D. Karabourniotis, S. Couris, E. Drakakis and J. J. Damelincourt,
  - J. Appl. Phys. 66, 1084 (1989)
- 41. "The influence of temperature and broadening on the emission of self-reversed lines in mercury-thallium iodide high pressure discharges".
  - J. J. Damelincourt, C. Soriano, T. Abdelnnadher, E. Drakakis and E. Roaux,

Journal de Commission Intern. de l' Éclairage 7, 3 (1988)

- 42. "Plasma temperature determination from the total intensity of a self-reversed line",
  - D. Karabourniotis, C. Karras, E. Drakakis and J. J. Damelincourt,
  - J. Appl. Phys. 53, 7259 (1982)

### D. Publication in Conference Proceedings

- 1. Graphene based composites for GHz electromagnetic shielding
  - G. Tzagkarakis, M. Suchea, I. V. Tudose, G. Kenanakis, M. Katharakis, E Koudoumas, E. Drakakis E-MRS 2015 Spring Meeting, Lille France, 11-15 May 2015

- Study of a Miniature Plasma Focus Neutron Source loannis Fitilis et al INTERNATIONAL CONFERENCE ON APPLICATIONS OF NUCLEAR TECHNIQUES, Crete, Greece, June 2015
- Nanostructured coatings for electromagnetic shielding in the GHz frequency band G. Tzagkarakis, M. Suchea, I. V. Tudose, G. Kenanakis, M. Katharakis, E Koudoumas, E. Drakakis 30th Panhellenic Conference on Solid-State Physics and Materials Science, Heraklion, Crete, Greece, 21-24 September 2014
- "Graphene based paint-like composites for electromagnetic shielding in the GHz frequency range"
   M. Suchea, I. V. Tudose, G. Kenanakis, E Koudoumas, E. Drakakis
   Graphene 2014, 6-9 May 2014, Toulouse, France
- 5. "Determination of atomic and excitation temperatures in a nonequilibrium HID lamp from the red wing of the 254-nm line of mercury"
  - D. Karabourniotis, E. Drakakis
  - **LS13:** The 13<sup>th</sup> International Symposium on the Science and Technology of Light Sources 24-29 July 2012, Try, New York, USA
- "Performance investigation of composite and RTV SIR coated insulators at a coastal test station"
   K. Siderakis, D. Pylarinos, E. Thalassinakis and E. Drakakis
   46th International Universities' Power Engineering Conference (UPEC2011), 5th 8th September 2011, Soest, Germany
- 7. "Superradiance in the sodium D lines of a MHD lamp"
  - D. Karabourniotis, E. Drakakis
  - LS12: The 12<sup>th</sup> International Symposium on the Science and Technology of Light Sources και WLED3: The 3<sup>rd</sup> International Conference on White LEDs and Solid-State Lighting, 11-17 July 2010, Eindhoven, The Netherlands
- 8. "Power losses analysis in a single switch resonant reset forward converter implemented with a SiC power JFET'
  - N. P. Polyzos, E. P. Drakakis, K. Siderakis, E. C. Tatakis, G. Lempidis International Exhibition & Conference for POWER ELECTRONICS & INTELLIGENT MOTION POWER QUALITY, 4 – 6 May 2010, Nuremberg, Germany
- 9. "Μοντέλο προσδιορισμού φωτοβολταϊκού δυναμικού σ' ένα τόπο"
  - Φ. Μαυροματάκης, Γ. Μακρίδης, Γ. Γεωργίου, Α. Ποτηράκης, Γ. Φραγκιαδάκης Ε. Δρακάκης, Ε. Κουδουμάς
  - Ένατο Εθνικό Συνέδριο για τις ήπιες μορφές ενέργειας, Γεροσκήπου, Πάφος, Κύπρος, 26-28 Μαρτίου 2009
- 10. "Diagnostics of dense dispersive plasmas by line reversal."
  - D. Karabourniotis, E. Drakakis
  - 10th High Technology Plasma Conference, 7-12 July 2008, Patras, Greece
- 11. "A comparison of the performance ratio of photovoltaic modules at different tilt angles."

  E. Drakakis, F. Mavromatakis, Y. Franghiadakis, P. Tzanetakis and I. Fragiadakis

  DEMSEE 2007, Deregulated Electricity Market Issues in South-Eastern Europe, September 2007, Istanbul, Turkey
- 12. "Experimental Emulation of Air Fluorescence and Study of its Yield at Low Pressure Electrical Discharges."
  - S. Maltezos, E. Drakakis, E. Fokitis, A. Geranios, V. Gika, D. Karabourniotis, N. Antonakakis Spyropoulos
  - 30th International Cosmic Ray Conference, July 3 11, 2007, Merida, Yucatan, Mexico
- 13. "Dispersive-plasma diagnostics: determination of temperatures from self-reversed lines using the one-parameter model."

- D. Karabourniotis and E. Drakakis 28th ICPIG, July 15-20, 2007, Prague, Czech Republic
- "Aerosol properties in the eastern Mediterranean based on the AERONET station at FORTH/Crete", A. Fotiadi, E. Drakakis, N. Hatzianastassiou, C. Matsoukas and I. Vardavas, Geophysics Research Abstracts, Vol. 8 08500, European Geosciences Union, 2-7 April 2006, Vienna, Austria
- "The precipitation regime across the Mediterranean basin based on satellite data",
   N. Hatzianastassiou, V. Antakis, E. Drakakis, B. D. Katsoulis,
   Geophysics Research Abstracts, EGU06-A-10726, oral presentation, European Geosciences Union, 2-7 April 2006, Vienna, Austria
- 16. "Global distribution of 10-year daily mean shortwave and longwave radiation at one-degree spatial resolution".
  - C. Matsoukas, K. G. Pavlakis, N. Hatzianastassiou, E. Drakakis, D. Hatzidimitriou, P. W. Stackhouse Jr. and I. Vardavas,
  - Geophysics Research Abstracts, Vol. 8 08613, European Geosciences Union, 2-7 April 2006, Vienna, Austria
- 17. "Electron and sodium-excitation temperatures in a 12-atm Hg-Nal lighting plasma from line self-reversal"
  - D. Karabourniotis, E. Drakakis, and S. Skouritakis,
  - XXVII International Conference on Phenomena in Ionized Gases, July 17-22, 2005, Eindhoven, The Netherlands
- 18. "Time resolved column densities of excited metal atoms in metal-halide arc lamps using high-resolution absorption spectroscopy".
  - E. Drakakis and D. Karabourniotis.
  - 10<sup>th</sup> Intern. Symp. on the Sci. and Techn. of Light Sources,18-22 July 2004, Toulouse, France http://books.google.com/books?hl=el&lr=&id=bKZ0\_6FqvokC&oi=fnd&pg=PA347&dq=Time+resolve d+column+densities+Drakakis&ots=jvJnsLL61E&sig=qNFoXW3dLhotQXfQT-FjW0F9MkA#PPP1,M1
- 19. "Deviations of Thallium excited-states from equilibrium in a metal halide arc lamp."
  D. Karabourniotis, J. J. Curry, E. Drakakis, and E. Benck,
  10<sup>th</sup> Intern. Symp. on the Sci. and Techn. of Light Sources,18-22 July 2004, Toulouse, France http://books.google.com/books?hl=el&lr=&id=bKZ0\_6FqvokC&oi=fnd&pg=PA347&dq=Time+resolve d+column+densities+Drakakis&ots=jvJnsLL61E&sig=qNFoXW3dLhotQXfQT-FjW0F9MkA#PPP1,M1
- 20. "Summary of the experimental results of the Modified Betatron Accelerator (MBA)", E. Drakakis, V. Zacharopoulos, D. Karabourniotis and C. A. Kapetanakos, Workshop on Generation, Physics and Applications of Superdense Hot Z-Pinch Plasmas, 18-22 April 1994, Agia Pelagia-Crete, Greece
- "The Modified Betatron Accelerator in Crete and its perspectives",
   D. Karabourniotis, E. Drakakis, V. Zacharopoulos and C. A. Kapetanakos,
   Workshop on Generation, Physics and Applications of Superdense Hot Z-Pinch Plasmas, 18-22
   April 1994, Agia Pelagia-Crete, Greece
- 22. "The Modified Betatron Accelerator: A new "twist" in stellarators",
  - C. A. Kapetanakos, T. Smith, K. McDonald, J. Riordon, D. Karabourniotis, M. Drakakis and V. Zacharopoulos,
  - 9th IAEA Workshop on Stellarators, 9-12 May 1993, Garching, Germany

- 23. "Determination of excited-state densities in non-LTE high-pressure discharges",
  D. Karabourniotis, E. Drakakis and A. Palladas,
  6th Intern. Symp. on the Sci. and Techn. of Light Sources, 30 Aug.-3 Sept. 1992, Budapest,
  Hungary
- 24. "Pellet ablation studies in the TCA tokamak",
  - E. Drakakis, M. Dutch, B. P. Duval, Ch. Hollenstein, B. Joye, J. B. Lister, Y. Martin, Ch. Nieswand and P.J. Paris,
  - 18th Conf. on Contr. Fusion and Plasma Phys. 3-7 June 1991, Berlin, GDR
- 25. "Time-dependent absorption measurements of the TI-535 nm line in a Hg-TII arc",
  - A. Palladas, E. Drakakis and D. Karabourniotis,
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