

Marios Nestoros

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Personal: **Birthday:** 20/2/1970
Marital status: married

Education

- PhD in Physics, University of Cyprus, 2000
- BSc in Physics, National and Kapodestrian University of Athens, 1994

Positions Held:

- Associate Dean, School of Sciences and Engineering, University of Nicosia, 4/2014-
- Head of Electrical and Computer Engineering Department, 12/2009- 3/2012
- Associate Professor, Department of Electrical and Computer Engineering, University of Nicosia, Cyprus, 11/2007-
- Assistant Professor, Department of Engineering, Intercollege, Cyprus, (10/2002- 10/2007)
- Medical Physicist, Bank of Cyprus Oncology Centre (4/1999-9/2002)
- Research Assistant, Department of Physics, University of Cyprus (3/1995-3/1998).European Project: Avicenne 940147: Selective Coatings for Solar Heating and Cooling: Preparation and Characterization.

Areas of Concentration/ Research Interests:

Design of antennas for RFID applications, photothermal physics, nondestructive characterization (thermal and optoelectronic properties) of materials and layered structures, physics of semiconductors, interaction of laser radiation and matter, photothermal gas sensors

Professional Associations

Organization/field	Title
American Physical Society	Member
European Physical Society	Member

Languages:

Greek (Fluent), English (Fluent), German (basic knowledge-level A2)

Research & Publications

Doctoral Dissertation:

“Photothermal Characterization of Semiconductors and Solar Selective Coatings”, Department of Physics, University of Cyprus, 2000.

Participation in Funded Research Programs

1. Cyprus Research Promotion, SOS-H2:TEXNO/0603/12, hydrogen detection using photothermal techniques, (2004-2007). Participation status: Research Associate
2. EU funded project, Avicenne 940147: Selective Coatings for Solar Heating and Cooling: Preparation and Characterization, (1995-1998). Participation status: Research Associate

Publications

Chapters in Books

1. **M. Nestoros**: *Photothermal Techniques in Material Characterization*, in Materials Science, edited by Y. Mastai, ISBN 980-953-307-918-4, Intech, Rijeka, (2013)
2. C. Christofides, **M. Nestoros** and A. Othonos: *Photothermal Radiometric Study of Implanted Semiconductors*, in Progress in Photothermal and Photoacoustic Science and Technology, Volume IV: Semiconductors and Electronic Materials, ch.4, edited by A. Mandelis and P.Hess, ISBN-13: 978-0819435064, Bellingham, USA, (2000)

Journal Articles

1. **M. Nestoros** , M. A Christou, A. C. Polycarpou: Design of Wideband, Circularly Polarized Patch Antennas for RFID Applications in the FCC/ETSI Bands, Progress In Electromagnetics Research C, Vol. 78, 115–127, (2017)

2. **M. Nestoros**, M. Mourouti, N. C. Papanicolaou, and C. Christofides: A photothermal microscopy investigation of carrier transport in ion implanted silicon thin films under the action of external electric field, *Optoelectronics and Advanced Materials-Rapid Communications*, **5**, 514-518, (2011)
3. C.Sherifi, M.D.Papademetriou, **M. Nestoros**, and C. Christofides: Photomodulated thermorefectance microscopy applied on ion implanted materials, *Physica Status Solidi (c)*, **5** (12), 3767-3770, (2008)
4. C. Demetriou, **M. Nestoros** and C. Christofides: Photothermal Hydrogen Sensor: The technique, experimental process, and physicochemical analysis, *Applied Physics A* **92** (3), 651-658, (2008)
5. N. C. Papanicolaou, **M. Nestoros** and C. Christofides: Numerical Investigation of Linear and Nonlinear Photothermal Radiometry On Silicon Wafers Using Chebyshev Spectral Method, *Journal of Neural, Parallel & Scientific Computations* **15**, (2), 165-179, (2007)
6. Y. Karmiotis , **M. Nestoros** and C. Christofides: Finite Thickness and Semi-Infinite Photothermal Radiometric Models for the Characterization of Semiconductors, *Applied Physics Letters* **72**, (6), 695-697, (1998)
7. A. Othonos, **M. Nestoros**, D. Palmeiro, C. Christofides, R. S. Bes, and J. P. Traverse: Photothermal Radiometry on Nickel (Pigmented Aluminium Oxide) Selective Solar Absorbing Surface Coatings, *Solar Energy Materials and Solar Cells* **51**, 171-179 (1998)
8. **M. Nestoros**, Y. Karmiotis and C. Christofides: Two Layer Model for Photothermal Radiometry Applied on Semiconducting Thin Films, *Journal of Applied Physics* **82** (12), 6220-6227 (1998)
9. **M.Nestoros**, A. Gutierrez-Lliorente, A. Othonos, C Christofides and J. M. Martinez Duart: Photothermal Radiometric and Spectroscopic Measurements in Silicon Nitride Thin Films, *Journal of Applied Physics* **82** (12), 6215-6219 (1998)
10. A. Mandelis, **M. Nestoros**, A. Othonos and C. Christofides: Thermophysical Characterization of Commercial Paper by Use of Laser Infrared Radiometry, *Journal of Pulp and Paper Science* **23**, J108-J112 (1997)
11. A. Othonos, A. Mandelis, **M. Nestoros**, and C. Christofides: Laser Photothermal Diagnostics of Genuine and Counterfeit British and United States Banknotes, *Optical Engineering* **36** (2), 400 (1997)
12. A. Mandelis, **M. Nestoros** and C. Christofides: Thermoelectronic Wave Coupling in Laser Photothermal Theory of Semiconductors at Elevated Temperatures, *Optical Engineering* **36**, 459-468 (1997)
13. C. Christofides, F. Diakonos, A. Seas, C. Christou, **M. Nestoros**, and A. Mandelis: Two Layer Model for Photomodulated Thermorefectance of Semiconductor Wafers, *Journal of Applied Physics* **80** (3), 1713-1725 (1996)

14. **M. Nestoros**, B. C. Forget, C. Christofides and A. Seas: Photothermal Reflectance Versus Temperature: Quantitative Analysis, *Physical Review B* **51** (20), 14115-14123 (1995)

Abstracts

1. **M. Nestoros** , M. A Christou, A. C. Polycarpou: On the Design of Wideband, Circularly Polarized Patch Antennas for RFID Applications in the FCC/ETSI bands, Progress In Electromagnetics Research Symposium, PIERS 2017, St Petersburg, Russia, 22-25 May, 2017
2. **M. Nestoros** and N. C. Papanicolaou: Photothermal wave analysis of thin polymer layers deposited on optically transparent substrates, 13th International Conference on Nanosciences & Nanotechnologies (NN16), 5-8 July 2016, Thessaloniki, Greece
3. **M. Nestoros**, I. Savva, T. Krasia, N. C. Papanicolaou, A. Othonos and C. Christofides: Thermal and optical characterization of methacrylate-based polymers with embedded carbon nanotubes, 9th International Conference on Nanosciences & Nanotechnologies, 3-6 July, 2012, Thessaloniki, Greece, Book of Abstracts p. 134
4. 2. C. Sherifi, M. D. Papademetriou, **M. Nestoros**, and C. Christofides: Photomodulated Thermoreflectance Microscopy on Ion Implanted Materials, Micro & Nano 2007, International Conference, NCSR Demokritos, Athens, 18 – 21 November 2007, Book of Abstracts, http://www.micro-nano.gr/conf2007/docs/abstract_book.pdf Abstract PI.71, page 89
5. C. Demetriou, **M. Nestoros** and C. Christofides: Photomodulated Thermoreflectance for hydrogen detection. XXII Panhellenic Conference of Solid State Physics and Material Science, Book of Abstracts p. 34 (<http://xxii-synedrio.physics.upatras.gr/>), Patra, 2006
6. **M. Nestoros** and C. Christofides: Photothermal Radiometry as a Non Destructive Technique for the Evaluation of Museum Objects. International Workshop: In Situ Non Destructive Analysis and Testing of Museum Objects. Book of Abstracts p 32-33, Bratislava, 2005
7. C Christofides, **M.Nestoros**, A. Gutierrez-Lliorente, A. Othonos, and J. M. Martinez Duart: Photothermal Radiometric and Spectroscopic Measurements in Silicon Nitride Thin Films, X International Conference on Photoacoustic and Photothermal Phenomena, Book of Abstracts, 7-P4, Rome 1998.
8. **M. Nestoros**, Y. Karmiotis and C. Christofides: Photothermal Radiometry Applied on Semiconducting Thin Films: A Two Layer Model, X International Conference on Photoacoustic and Photothermal Phenomena, Book of Abstracts, 7-P18, Rome 1998.

Conference Proceedings

1. N. C. Papanicolaou, M. Nestoros and C. Christofides: “Numerical Simulation of Nonlinear Photothermal Radiometry on Silicon Wafers Using a Chebyshev Galerkin Method”, Third International Conference on Neural, Parallel and Scientific Computations, volume 3, pages 188-192, USA, 2006. Dynamic Publishers Inc.
2. **M. Nestoros** and C. Christofides: Thermal waves and electronic carrier waves, as diagnostic tools in non-destructive characterization of high technology materials. 9th Joint Conference of the Association of Cypriot Physicists and the Association of Greek Physicists: Advances and Perspectives in Physics: New technologies and Physics Education. Book of Abstracts, p.3, Nicosia, 2005.
3. C Christofides, A. Othonos, **M. Nestoros**: Development of a supersensitive hydrogen sensor. 8th Panhellenic Symposium of Catalysis, pp 130-133, Ayia Napa, 2004.
4. **M. Nestoros**, B. C. Forget, Antonis Seas and C. Christofides: *Photothermal Reflection Signal Versus Temperature: Study of Implanted Silicon Wafers*. Progress in Natural Science, Edited by Shu-Yi Zhang, Vol. 6 Supplement, S-507-510 (Taylor and Francis, 1996).

Research Network

1. European COST Action G8: “Non destructive evaluation and testing of Museum Objects”, Cyprus delegate.
2. European COST Action P11: “Physics of linear, non-linear and active photonic crystals”, Workgroup 2 (material characterization). Cyprus delegate
3. European COST Action MP0702: “Towards subwavelength photonic structures”. Cyprus delegate

Invited Talks, Seminars & Colloquia

1. University of Salento, Italy, 11/5/2017, Department of Engineering, “Design of Wideband, Circularly Polarized Patch Antennas for RFID Applications in the FCC/ETSI bands”
2. VIA University College, Horsens, Denmark, 4/6/13, Department of Civil Engineering, “Thermal and Electronic Wave Methodology in Non-Destructive Evaluation of Composite Materials”
3. Universite Paul Sabatier, Laboratoire Materieux et Energie, Toulouse, France, 4/6/1997. “Photothermal Techniques for the evaluation of passive cooling surfaces”

Other Scholarly Activities

1. Participation in the Erasmus Teacher Mobility Program (10-12/5/2017), University of Salento, Italy
2. Participation in the Erasmus Teacher Mobility Program (3-7/6/2013), VIA University College in Horsens, Denmark.
3. Participation in the Erasmus Teacher Mobility Program (3-7/5/2004), Vitus Bering University College in Horsens, Denmark.

Experience

Administrative

1. Associate Dean, School of Sciences and Engineering, University of Nicosia, 4/2014-
2. Head of the Department of Electrical and Computer Engineering, 12/2009-3/2012
3. Coordinator for the Physics Courses. There are a total of ten courses offered for eight different Programs of the University of Nicosia (2002-present)
4. Associate Head of the Department of Engineering, (2007-2009)
5. Member of the Senate (Faculty affairs Committee, Curriculum Committee, Student Disciplinary Committee), University of Nicosia, (2008-2010)
6. Member of the School Assembly, University of Nicosia, (2008-present)
7. Member of the Senate (Faculty affairs Committee), Intercollege, (2007-2008)
8. Member of the Curriculum Committee (School of Sciences and Engineering), Intercollege, 2004-2007

Teaching

At University of Nicosia:

- PHYS-150 -General Physics I (Mechanics)
- PHYS-160 -General Physics II (Electricity and Magnetism)
- PHYS-270-General Physics III (Heat, Waves & Optics)
- PHYS-305-Semiconductor Physics and Technology
- PHYS-110-Elements of Physics
- PHAR-110-Physics for Pharmacy
- BIOL-240-Principles of Biophysics
- ECE467/567- Renewable Energy Sources and Technologies

At the Physics Department, University of Cyprus

- Physics 686-Electronics (Theory and Laboratory) for the MSc Program: Principles of Physics (2008-2012)
- Physics 115 (Electricity, Magnetism Thermal Physics Lab) (2008)

Professional Experience as a medical physicist

- Radiation dosimetry for: linear accelerators, brachytherapy and diagnostic x-ray units.
- 3D treatment planning for external beam radiotherapy (photons, electrons) and brachytherapy treatments.
- Quality assurance: linear accelerators, simulators, diagnostic x-ray machines, and nuclear imaging (gamma camera, SPECT)
- Radiation protection calculations.

Medical physics Training

- 3D treatment planning and quality assurance for: linear accelerators with multileaf collimators, brachytherapy units, Offenbach Radiotherapy Clinic, Offenbach and Karls Eberhard University Clinic Tübingen, Germany May-June 2001.
- Modern Brachytherapy Techniques, Teaching course from ESTRO. Scholarship from International Atomic Energy Association, Bratislava, 29/8/-2/9/2001.

Extra Curricular Activities

Elected Member of the Faculty Union Committee (University of Nicosia & Intercollege) 2008-2012