

## MARIA KANDYLA

### Curriculum Vitae

**Current occupation:** Senior Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece.

**Address:** National Hellenic Research Foundation  
48 Vasileos Constantinou Ave.  
11635 Athens, Greece

**Email:** [kandyla@eie.gr](mailto:kandyla@eie.gr)  
**Tel.:** +30 210 7273 802  
**Website:** [www.mkandyla.gr](http://www.mkandyla.gr)

### EDUCATION

- Ph.D. in Applied Physics, Harvard University, USA, 2006
- M.Sc. in Applied Physics, Harvard University, USA, 2002
- B.Sc. with Honors in Electrical and Computer Engineering, National Technical University of Athens, Greece, 2000

### EMPLOYMENT

- Senior Researcher, Theoretical and Physical Chemistry Institute  
National Hellenic Research Foundation (Greece) 2019 – present
- Associate Researcher, Theoretical and Physical Chemistry Institute  
National Hellenic Research Foundation (Greece) 2014 – 2019
- Assistant Researcher, Theoretical and Physical Chemistry Institute  
National Hellenic Research Foundation (Greece) 2010 – 2014
- Adjunct Lecturer, Physics Department  
National Technical University of Athens (Greece) 2009 – 2011
- EU Marie-Curie Postdoctoral Researcher, Physics Department  
National Technical University of Athens (Greece) 2008 – 2010
- Postdoctoral Associate, Department of Chemistry  
Massachusetts Institute of Technology (MIT, USA) 2006 – 2008
- Research Assistant, School of Engineering and Applied Sciences  
Harvard University (USA) 2002 – 2006
- Teaching Fellow, Harvard University (USA) 2001 – 2006

### PROFESSIONAL APPOINTMENTS

- Associate in Interdisciplinary Sciences  
Center for Hellenic Studies, Harvard University (USA) 2021 – present

### AWARDS AND HONORS

- Best European M.Sc. Thesis on Material Science and Engineering Award, by the Federation of  
European Materials Societies (FEMS), to G. Chatzigiannakis (thesis advisor M. Kandyla) 2020
- Best M.Sc. Thesis on Condensed Matter and Material Science Award, by the Hellenic Society for  
the Science and Technology of Condensed Matter, to G. Chatzigiannakis (thesis advisor M. Kandyla) 2019
- Paper “Thin films of PS/PS-b-PNIPAM and PS/PNIPAM polymer blends with tunable wettability”,  
M. Kanidi, A. Papagiannopoulos, A. Skandalis, M. Kandyla, and S. Pispas, appeared  
on the [front cover of Journal of Polymer Science Part B: Polymer Physics](#) 2019

- Paper “Laser induced forward transfer of conducting polymers”, M. Kandyla, S. Chatzandroulis, and I. Zergioti, highlighted by [MIT Technology Review](#) and Physics Today 2012
- Invitation to participate to the World Materials Summit for energy and environmental science Organizers: MRS, EMRS, and CMRS, Washington DC, USA 2011
- Marie Curie International Reintegration Grant, European Union 2008 – 2012  
Fabrication of capacitive biosensors using the Laser Induced Forward Transfer Process
- Paper “[Turning aluminum liquid in picoseconds](#)”, M. Kandyla, T. Shih, and E. Mazur selected by Optics and Photonics News (OSA) as one of the 30 most exciting optics papers in 2007 2007
- Graduate Study Fellowship, Harvard University, USA 2001 – 2002  
Watson Endowment Fund and Gordon McKay Endowment
- Graduate Study Fellowship, Harvard University, USA 2000 – 2001  
Watson Endowment Fund, Wright Scholarship Fund, and Jennings Scholarship Fund
- Undergraduate Study Scholarship, Hellenic Scholarships Foundation, Greece 1998 – 1999  
Highest academic achievement
- Undergraduate Study Award, Technical Chamber of Greece 1997 – 1998  
Highest academic achievement

#### EXTERNAL FUNDING

- EU Horizon Europe ERA Postdoctoral Fellowships (Supervisor) 2023 – 2025  
Laser induced nanojet functionalization of two-dimensional materials for sensing and energy harvesting applications
- EU COST Action CA 20126 (Substitute MC member) 2021 – 2025  
Network for research, innovation and product development on porous semiconductors and oxides
- Hellenic Foundation for Research and Innovation Ph.D. Fellowships (Supervisor) 2022 – 2024  
Development of micro/nanostructured electronic and optoelectronic devices via laser processing
- EU COST Action CA 20116 (Substitute MC member) 2021 – 2025  
European network for innovative and advanced epitaxy
- Hellenic Ministry of Development (PI) 2020 – 2022  
Novel studies of cell interactions on nanostructured surfaces
- Hellenic General Secretariat for Research and Technology (Co-PI) 2017 – 2020  
Development of nanostructures and nanodevices via laser processing
- EU ERA.Net MED, Hydrogen production through photovoltaic energy (Co-PI) 2016 – 2020
- EU COST Action CA 15107 (Substitute MC member) 2016 – 2020  
Multi-functional nano-carbon composite materials network
- Hellenic Foundation for Research and Innovation Ph.D. Fellowships (Supervisor) 2017 – 2019  
Development and applications of hybrid nanomaterials and nanostructured surfaces
- EU Horizon 2020 Marie Skłodowska-Curie Individual Fellowships (Supervisor) 2016 – 2018  
Optical distributed vibrational and acoustic sensing technology
- EU COST Action MPNS 1205 (Substitute MC member) 2013 – 2016  
Advances in optofluidics: integration of optical control and photonics with microfluidics
- Hellenic General Secretariat for Research and Technology, KRIPIS-Polynano (Co-PI) 2013 – 2015  
Laser fabrication of functionalized nanostructures
- EU ERA.Net Rus, Low-cost and efficient thin-film solar cells (Co-PI) 2013 – 2014

- Latsis Foundation Grant for Scientific Studies (Coordinator) 2013  
Laser nanostructuring of silicon for novel optoelectronic applications
- EU COST Action MP0803, Plasmonic components and devices (Substitute MC member) 2012
- Collaborations with industry

## ACADEMIC AND RESEARCH TRAINING

### Scientific Collaborators

- Dr. Constantinos Bacharis, “Biomedical applications of lasers”, 2020 – present.
- Dr. Andreas Anastasopoulos, “Development of optoelectronic devices”, 2019 – present.

### Postdoctoral Researchers

- Dr. Massimo Filograno (EU Marie Curie fellow), “Optical distributed vibrational and acoustic sensing technology”, 2016 – 2018.
- Dr. Domna Kotsifaki, “Plasmonic optical trapping”, 2013 – 2014.

### Ph.D. Theses

- Theodoros Giannakis, “Photonics for technological and biomedical applications”, University of Athens, Department of Physics (in progress).
- Maria Kanidi (Hellenic ELIDEK fellow), “Development and applications of hybrid nanomaterials and nanostructured surfaces”, University of Patras, Department of Material Science, 2020.

### M.Sc. Theses

- Niki Diamantopoulou, “Laser applications in ophthalmology”, National Technical University of Athens, Joint Master’s Program in Microsystems and Nanodevices (in progress).
  - George Chatzigiannakis, “Development of optoelectronic devices based on Si/ZnO nano-heterostructures”, National Technical University of Athens, Joint Master’s Program in Materials Science and Technology, 2019.
- Best European M.Sc. Thesis on Material Science and Engineering Award, by the Federation of European Materials Societies, FEMS (2020).**
- Melina Alexiadou, “Development and characterization of nanocomposite ZnO:Au and ZnO:Pd thin-film acetone sensors”, National Technical University of Athens, Joint Master’s Program in Materials Science and Technology, 2014.
  - Christos Chatzimanolis, “Development and characterization of thin NiO films with Au nanoparticles and their application as low temperature hydrogen sensors”, National Technical University of Athens, Joint Master’s Program in Materials Science and Technology, 2012.

### B.Sc. Theses

- Maria Koufopoulou, “Laser processing of polymeric materials and intraocular lenses”, National Technical University of Athens, School of Applied Mathematical and Physical Sciences (in progress).
- Konstantina Nikolaidou, “Development of nanostructured optoelectronic devices”, National and Kapodistrian University of Athens, Department of Physics, 2018.
- Athanasios Mellos, “Development of thin-film, a-Si:H solar cells using pulsed laser deposition”, National Technical University of Athens, School of Applied Mathematical and Physical Sciences, 2013.

### Internships

- Anthia Kounoupioti, “Laser micro/nanostructuring of solid surfaces for optoelectronic applications”, National Technical University of Athens, School of Electrical Engineering and Computer Science, 2019.

### Ph.D. Committees

- External examiner for Yohann Franz, “Polycrystalline silicon waveguides for integrated photonics”, University of Southampton (UK), Faculty of Physical Sciences and Engineering, 2018.
- Ph.D. committee member for Angelos Giannoudakos, “Laser development of thin oxide films and study of their physicochemical properties”, National Technical University of Athens, School of Chemical Engineering, 2017.

### RESEARCH EXPERIENCE

**National Hellenic Research Foundation, Greece, Principal Investigator** 2010 – present

Light-matter interaction  
 Laser nanostructuring  
 Plasmonics, nanophotonics  
 Pulsed laser deposition  
 Chemical sensors  
 Thin-film optoelectronics  
 Spectroscopy

**National Technical University of Athens, Greece, Postdoctoral Researcher** 2008 – 2010

Advisor: Professor Ioanna Zergioti  
 EU Marie Curie International Reintegration Grant ‘Fabrication of capacitive biosensors using the Laser Induced Forward Transfer process’  
 Laser printing for organic photovoltaics and chemical/biological microsensors  
 Laser development of silicon photonic nanostructures  
 Laser conservation of cultural heritage assets

**Massachusetts Institute of Technology (MIT), USA, Postdoctoral Associate** 2006 – 2008

Advisor: Professor Keith Nelson  
 Femtosecond laser systems, ultrafast spectroscopy, optics, and condensed matter physics  
 Ultrafast, single-shot, pump-probe spectroscopy  
 Irreversible photoinduced phase transitions  
 Modeling of experimental results

**Harvard University, USA, Ph.D. student** 2000 - 2006

Advisor: Professor Eric Mazur  
 Femtosecond laser systems, ultrafast spectroscopy, optics, and condensed matter physics  
 Ultrafast, broadband, pump-probe spectroscopy  
 Dielectric function dynamics  
 In charge of the spectroscopic ellipsometer facility at Harvard University

### TEACHING EXPERIENCE

**National Technical University of Athens, Greece**

- **Guest Lecturer**, “Seminars in Materials Science and Technology” 2012 – 2018  
 Joint Master’s Program, Materials Science and Technology
- **Adjunct Lecturer**, “Laboratory Physics” 2009 – 2011  
 School of Applied Mathematical and Physical Sciences

**Harvard University (USA), Teaching Fellow**

- “Mathematical Methods in the Sciences”, Applied Mathematics Department Spring 2006

- “Statistical Thermodynamics”, Applied Physics Department Fall 2003
- “Mathematical Methods in the Sciences”, Applied Mathematics Department Spring 2002
- “Quantum Mechanics b”, Physics Department Fall 2001
- “Signals and Systems”, Engineering Department Spring 2001

## PROFESSIONAL ACTIVITIES AND SERVICE

### Reviews

- Reviewer for research proposals
  - EU Horizon Europe Twin Green and Digital Transition, 2021
  - EU Horizon 2020 Marie Skłodowska-Curie Individual Fellowships, 2019
  - EU Horizon 2020 Information and Communication Technologies, 2018
  - EU ERA.Net Actions, 2017
  - Hellenic General Secretariat for Research and Technology, 2017
  - Hellenic State Scholarships Foundation, 2017
  - EU COST Actions, 2016
- Reviewer for scientific journals: ACS Applied Materials and Interfaces, Laser & Photonics Reviews, Applied Physics Letters, Scientific Reports, The Journal of Physical Chemistry C, Sensors and Actuators B, Optics Express, Biomedical Optics Express, Optics Letters, ACS Applied Nano Materials, Applied Surface Science, Microporous and Mesoporous Materials, International Journal of Hydrogen Energy, Journal of Alloys and Compounds, ACS Omega, Journal of Applied Physics, Materials Letters, Optical Materials Express, Materials Science in Semiconductor Processing, Materials Chemistry and Physics, Optics and Laser Technology, Applied Optics, Applied Physics A, Chemical Physics Letters, Thin Solid Films, Photonics and Nanostructures – Fundamentals and Applications, Microelectronic Engineering, Journal of Materials Science: Materials in Electronics.

### Advisory committees

- Interdisciplinary Advisory Committee member, Harvard University Center for Hellenic Studies Greece, Nafplion, Greece, 2020 – present.

### Conference committees

- [E-MRS Spring Meeting 2022](#) Symposium Co-organizer “Fundamental and applied research in laser-material interactions”, European Materials Research Society, Strasbourg, France (May 2022).
- [Micro and Nano Engineering International Conference \(MNE\)](#) International Technical Program Committee, Leuven, Belgium (September 2022).
- [Conference on Lasers and Electro-Optics \(CLEO\) 2021](#) Program Committee “Light-matter interactions and materials processing”, Optical Society of America, San Jose, CA USA (May 2021).
- Panhellenic Conference on Solid State Physics and Materials Science Local Organizing Committee, Athens, Greece (September 2021).
- Conference on Lasers and Electro-Optics (CLEO) 2020 Program Committee “Light-matter interactions and materials processing”, Optical Society of America, San Jose, CA USA (May 2020).
- Conference on Lasers and Electro-Optics (CLEO) 2019 Program Committee “Light-matter interactions and materials processing”, Optical Society of America, San Jose, CA USA (May 2019).
- Micro and Nano Engineering (MNE) 2019 Conference International Program Committee, Rhodes, Greece (September 2019).
- European Congress and Exhibition on Advanced Materials and Processes [EUROMAT 2017](#) Managing Committee, Thessaloniki, Greece (September 2017).

- Training Workshop on Materials for Future Energy Sources Organizing Committee, Athens, Greece (December 2017).
- Training Workshop on Advanced Material Characterization Techniques Organizing Committee, Athens, Greece (November 2016).

#### Editorial positions

- Editorial Board Member, [Euro-Mediterranean Journal for Environmental Integration](#), 2015 – 2017.

#### Professional Societies

- Board member of the [Hellenic Society for the Science and Technology of Condensed Matter](#), 2014 – 2018.
- Member of the Optical Society (OSA).
- Member of the European Technology Platform [Photonics 21](#).
- Member of the Technical Chamber of Greece.

#### PUBLICATIONS

##### A. Peer-reviewed journals

1. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Broadband wavelength-selective isotype heterojunction  $n^+$ -ZnO/ $n$ -Si photodetector with variable polarity*, [Journal of Alloys and Compounds](#) **903**, 163836 (2022).
2. M.L. Filograno, G. Piniotis, V. Gikas, V. Papavasileiou, C.J. Gantes, M. Kandyla, and C. Riziotis, *Comparative assessment and experimental validation of a prototype phase-optical time-domain reflectometer for distributed structural health monitoring*, [Journal of Sensors](#) **2022**, 6856784 (2022).
3. M. Kanidi, A. Papadimitropoulou, C. Charalampous, Z. Chakim, G. Tsekenis, A. Sinani, C. Riziotis, and M. Kandyla, *Regulating MDA-MB-231 breast cancer cell adhesion on laser-patterned surfaces with micro- and nanotopography*, [Biointerphases](#) **17**, 021002 (2022).
4. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Laser-microstructured ZnO/ $p$ -Si photodetector with enhanced and broadband responsivity across the ultraviolet-visible-near-infrared range*, [ACS Applied Electronic Materials](#) **2**, 2819 (2020).
5. M. Kanidi, A. Papagiannopoulos, A. Matei, M. Dinescu, S. Pispas, and M. Kandyla, *Functional surfaces of laser-microstructured silicon coated with thermoresponsive PS/PNIPAM polymer blends: switching reversibly between hydrophilicity and hydrophobicity*, [Applied Surface Science](#) **527**, 146841 (2020).
6. K. Sahbeni, M. Jlassi, S. Khamlich, M. Kandyla, M. Kompitsas, and W. Dimassi, *Effect of CdO ratios on the structural and optical properties of CdO–TiO<sub>2</sub> nanocomposite thin films*, [Journal of Materials Science: Materials in Electronics](#) **31**, 3387 (2020).
7. M.L. Filograno, C. Riziotis, and M. Kandyla, *A low-cost Phase-OTDR system for structural health monitoring: design and instrumentation*, [Instruments](#) **2019**, 3, 46 (2019).

8. M. Kanidi, A. Dagkli, N. Kelaidis, D. Palles, S. Aminalragia-Giamini, J. Marquez-Velasco, A. Colli, A. Dimoulas, E. Lidorikis, M. Kandyla, and E.I. Kamitsos, *Surface-enhanced Raman spectroscopy of graphene integrated in plasmonic silicon platforms with a three-dimensional nanotopography*, [Journal of Physical Chemistry C](#) **123**, 3076 (2019).
9. M. Kanidi, A. Papagiannopoulos, A. Skandalis, M. Kandyla, and S. Pispas, *Thin films of PS/PS-*b*-PNIPAM and PS/PNIPAM polymer blends with tunable wettability*, [Journal of Polymer Science Part B: Polymer Physics](#) **57**, 670 (2019). [**Front cover article**]
10. S.W. Teitelbaum, T. Shin, J.W. Wolfson, Y.-H. Cheng, I.J. Porter, M. Kandyla, and K.A. Nelson, *Real-time observation of a coherent lattice transformation into a high-symmetry phase*, [Physical Review X](#) **8**, 031081 (2018).
11. C. Moslah, M. Kandyla, G.A. Mousdis, G. Petropoulou, and M. Ksibi, *Photocatalytic properties of titanium dioxide thin films doped with noble metals (Ag, Au, Pd, and Pt)*, [Physica Status Solidi A](#) **215**, 1800023 (2018).
12. K. Sahbeni, I. Sta, M. Jlassi, M. Kandyla, M. Hajji, M. Kompitsas, and W. Dimassi, *Annealing temperature effect on the physical properties of titanium oxide thin films prepared by the sol-gel method*, [Journal of Physical Chemistry and Biophysics](#) **7**, 1000257 (2017).
13. M. Alexiadou, M. Kandyla, G. Mousdis, and M. Kompitsas, *Pulsed laser deposition of ZnO thin films decorated with Au and Pd nanoparticles with enhanced acetone sensing performance*, [Applied Physics A](#) **123**, 262 (2017).
14. A. Mellos, M. Kandyla, D. Palles, and M. Kompitsas, *Effects of hydrogen pressure on hydrogenated amorphous silicon thin films prepared by low-temperature reactive pulsed laser deposition*, [Physica Status Solidi C](#) **14**, 1600088 (2017).
15. D.G. Kotsifaki, M. Kandyla, and P.G. Lagoudakis, *Plasmon enhanced optical tweezers with gold-coated black silicon*, [Scientific Reports](#) **6**, 26275 (2016).
16. I. Sta, M. Jlassi, M. Kandyla, M. Hajji, P. Koralli, F. Krout, M. Kompitsas, and H. Ezzaouia, *Surface functionalization of sol-gel grown NiO thin films with palladium nanoparticles for hydrogen sensing*, [International Journal of Hydrogen Energy](#) **41**, 3291 (2016).
17. D.G. Kotsifaki, M. Kandyla, and P.G. Lagoudakis, *Near-field enhanced optical tweezers utilizing femtosecond-laser nanostructured substrates*, [Applied Physics Letters](#) **107**, 211111 (2015).
18. T. Shin, S.W. Teitelbaum, J. Wolfson, M. Kandyla, and K.A. Nelson, *Extended two-temperature model for ultrafast thermal response of band gap materials upon impulsive optical excitation*, [The Journal of Chemical Physics](#) **143**, 194705 (2015).

19. T. Shin, J.W. Wolfson, S.W. Teitelbaum, M. Kandyla, and K.A. Nelson, *Carrier confinement and bond softening in photoexcited bismuth films*, [Physical Review B \*\*92\*\*, 184302 \(2015\)](#).
20. I. Sta, M. Jlassi, M. Kandyla, M. Hajji, P. Koralli, R. Allagui, M. Kompitsas, and H. Ezzaouia, *Hydrogen sensing by sol-gel grown NiO and NiO:Li thin films*, [Journal of Alloys and Compounds \*\*626\*\*, 87 \(2015\)](#).
21. D.G. Georgiadou, M. Ulmeanu, M. Kompitsas, P. Argitis, and M. Kandyla, *Scalable fabrication of nanostructured p-Si/n-ZnO heterojunctions by femtosecond-laser processing*, [Materials Research Express \*\*1\*\*, 045902 \(2014\)](#).
22. I. Sta, M. Jlassi, M. Hajji, M.F. Boujmil, R. Jerbi, M. Kandyla, M. Kompitsas, and H. Ezzaouia, *Structural and optical properties of TiO<sub>2</sub> thin films prepared by spin coating*, [Journal of Sol-Gel Science and Technology \*\*72\*\*, 421 \(2014\)](#).
23. T. Shin, J.W. Wolfson, S.W. Teitelbaum, M. Kandyla, and K.A. Nelson, *Dual echelon femtosecond single-shot spectroscopy*, [Review of Scientific Instruments \*\*85\*\*, 083115 \(2014\)](#).
24. M. Kandyla, C. Chatzimanolis-Moustakas, M. Guziewicz, and M. Kompitsas, *Nanocomposite NiO:Pd hydrogen sensors with sub-ppm detection limit and low operating temperature*, [Materials Letters \*\*119\*\*, 51 \(2014\)](#).
25. M. Kandyla, C. Chatzimanolis-Moustakas, E.P. Koumoulos, C. Charitidis, and M. Kompitsas, *Nanocomposite NiO:Au hydrogen sensors with high sensitivity and low operating temperature*, [Materials Research Bulletin \*\*49\*\*, 552 \(2014\)](#).
26. I. Fasaki, M. Kandyla, M.G. Tsoutsouva, and M. Kompitsas, *Optimized hydrogen sensing properties of nanocomposite NiO:Au thin films grown by dual Pulsed Laser Deposition*, [Sensors and Actuators B: Chemical \*\*176\*\*, 103 \(2013\)](#).
27. M. Kandyla, C. Pandis, S. Chatzandroulis, P. Pissis, and I. Zergioti, *Direct laser printing of thin-film polyaniline devices*, [Applied Physics A \*\*110\*\*, 623 \(2013\)](#).
28. D.G. Kotsifaki, M. Kandyla, I. Zergioti, M. Makropoulou, E. Chatzitheodoridis, and A.A. Serafetinides, *Optical tweezers with enhanced efficiency based on laser-structured substrates*, [Applied Physics Letters \*\*101\*\*, 011102 \(2012\)](#).
29. I. Fasaki, M. Kandyla, and M. Kompitsas, *Properties of pulsed laser deposited nanocomposite NiO:Au thin films for gas sensing applications*, [Applied Physics A \*\*107\*\*, 899 \(2012\)](#).



30. M. Kandyla, S. Chatzandroulis, and I. Zergioti, *Laser induced forward transfer of conducting polymers*, [Opto-electronics Review 18, 345 \(2010\)](#). [Also selected for presentation at the [MIT Technology Review and Physics Today](#)]
31. E. Drakaki, M. Kandyla, E. Chatzitheodoridis, I. Zergioti, A.A. Serafetinides, A. Terlixli, E. Kouloumpi, A. Moutsatsou, M. Doulgerides, V. Kantarelou, A. Karydas, and C. Vlachou-Mogire, *Laser studies of metallic artworks*, [Applied Physics A 101, 349 \(2010\)](#).
32. C.R. Mendonca, M. Kandyla, T. Shih, R.F. Aroca, C.J.L. Constantino, and E. Mazur, *Ultrafast dynamics of bis (n-butylimido) perylene thin films excited by two-photon absorption*, [Applied Physics A 96, 369 \(2009\)](#).
33. M. Shen, J.E. Carey, C.H. Crouch, M. Kandyla, H.A. Stone, and E. Mazur, *High-density regular arrays of nanometer-scale rods formed on silicon surfaces via femtosecond laser irradiation in water*, [Nano Letters 8, 2087 \(2008\)](#).
34. M. Kandyla, T. Shih, and E. Mazur, *Turning aluminum liquid in picoseconds*, [Optics and Photonics News 18, 44 \(2007\)](#).
35. M. Kandyla, T. Shih, and E. Mazur, *Femtosecond dynamics of the laser-induced solid-to-liquid phase transition in aluminum*, [Physical Review B 75, 214107 \(2007\)](#).
36. S.I. Kudryashov, M. Kandyla, C.A.D. Roeser, and E. Mazur, *Intraband and interband optical deformation potentials in femtosecond-laser excited  $\alpha$ -Te*, [Physical Review B 75, 085207 \(2007\)](#).
37. C.A.D. Roeser, M. Kandyla, A. Mendioroz, and E. Mazur, *Optical control of coherent lattice vibrations in tellurium*, [Physical Review B 70, 212302 \(2004\)](#).

## B. Book chapters

1. C. Moslah, G.A. Mousdis, M. Kandyla, G. Petropoulou, and M. Ksibi, *Photocatalytic properties of TiO<sub>2</sub> thin films doped with noble metals (Ag, Au, Pd, and Pt) for water decontamination*, NATO Science for Peace and Security Series A: Chemistry and Biology, Nanostructured Materials for the Detection of CBRN (2018); J. Bonca and S. Kruchinin (Eds.), Springer, Dordrecht, The Netherlands, Chapter 6, pp. 71 – 89. ISBN: 978-9402413038.  
[DOI: 10.1007/978-94-024-1304-5\\_6](#)

## C. Conference proceedings

1. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Laser-structured ZnO/p-Si photodetector with enhanced and broadband responsivity*, 2021 Conference on Lasers and Electro-Optics (2021).

DOI: [10.1364/CLEO\\_SI.2021.SM3B.2](https://doi.org/10.1364/CLEO_SI.2021.SM3B.2)

2. M. Kanidi, A. Papagiannopoulos, A. Matei, M. Dinescu, S. Pispas, and M. Kandyla, *Functional surfaces of laser-microstructured silicon coated with polymer blends switching between hydrophilicity and hydrophobicity*, 2020 Conference on Lasers and Electro-Optics (2020).  
DOI: [10.1364/CLEO\\_SI.2020.STh4H.4](https://doi.org/10.1364/CLEO_SI.2020.STh4H.4)
3. M. Kanidi, A. Dagkli, N. Kelaidis, D. Palles, S. Aminalragia-Giamini, J. Marquez-Velasco, A. Colli, A. Dimoulas, E. Lidorikis, M. Kandyla, and E.I. Kamitsos, *Surface-enhanced Raman spectroscopy of graphene integrated in three-dimensional nanostructured plasmonic silicon platforms*, 2019 Conference on Lasers and Electro-Optics (2019).  
DOI: [10.1364/CLEO\\_SI.2019.SM1H.3](https://doi.org/10.1364/CLEO_SI.2019.SM1H.3)
4. M.L. Filograno, G. Piniotis, V. Gikas, V. Papavassiliou, Ch. Gantes, M. Kandyla, and C. Riziotis *Experimental validation of a prototype photonic phase optical time domain reflectometer for SHM in large-scale infrastructures*, 4th Joint International Symposium on Deformation Monitoring (JISDM) (2019).  
<https://jisdm2019.org/index.php/proceedings/>.
5. M. Kandyla, A. Mellos, and M. Kompitsas, *Hydrogenated amorphous silicon films grown by pulsed laser deposition*, Conference on Lasers and Electro-Optics Europe and International Quantum Electronics Conference, Optica Publishing Group (2013).  
DOI: [10.1109/CLEOE-IQEC.2013.6801594](https://doi.org/10.1109/CLEOE-IQEC.2013.6801594)
6. M. Kandyla, C. Chatzimanolis-Moustakas, C. Charitidis, M. Guziewicz, and M. Kompitsas, *Optimized hydrogen sensing properties of PLD-grown nanocomposite NiO:Au and NiO:Pd thin films at ppb-concentration levels*, Conference on Lasers and Electro-Optics Europe and International Quantum Electronics Conference, Optica Publishing Group (2013).  
DOI: [10.1109/CLEOE-IQEC.2013.6801587](https://doi.org/10.1109/CLEOE-IQEC.2013.6801587)
7. M. Guziewicz, P. Klata, J. Grochowski, K. Golaszewska, E. Kaminska, J.Z. Domagala, B.A. Witkowski, M. Kandyla, Ch. Chatzimanolis, M. Kompitsas, and A. Piotrowska, *Hydrogen sensing properties of thin NiO films deposited by RF sputtering*, [Procedia Engineering 47, pp. 746-749 \(2012\)](https://doi.org/10.1016/j.procedia.2012.09.001).
8. M. Kandyla, C. Pandis, G. Tsekenis, P. Dimitrakis, S. Chatzandroulis, and I. Zergioti, *Biosensor fabrication by direct laser microprinting*, 2010 Frontiers in Optics/Laser Science Conference, Optics InfoBase Conference Papers 2010, Code 103082 (2010).  
DOI: [10.1364/FIO.2010.FWF4](https://doi.org/10.1364/FIO.2010.FWF4)
9. A.A. Serafetinides, E. Drakaki, E. Fabrikesi, M. Kandyla, I. Zergioti, C. Vlachou-Mogire, R.R. Thomson, A.K. Kar, N. Boukos, and A.G. Karydas, *Comparative evaluation of ultrafast laser beam interactions with the silvering in late Roman coins*, [Proceedings of SPIE 7391, Article No. 73910P \(2009\)](https://doi.org/10.1117/12.73910P).

10. C.R. Mendonca, M. Kandyla, T. Shih, R.F. Aroca, C.J.L. Constantino, and E. Mazur, *Ultrafast reflectivity dynamics in bis (n-butylimido) perylene thin films*, 2008 Conference on Lasers and Electro-Optics & Quantum Electronics and Laser Science Conference 1-9, pp. 2459-2460 (2008).  
DOI: [10.1109/CLEO.2008.4552169](https://doi.org/10.1109/CLEO.2008.4552169)
11. M. Kandyla, T. Shih, and E. Mazur, *Femtosecond dynamics of the laser-induced solid-to-liquid phase transition in aluminum*, 2007 Conference on Lasers and Electro-Optics & Quantum Electronics and Laser Science Conference 1-5, pp. 2488-2489 (2007).  
DOI: [10.1109/QELS.2007.4431110](https://doi.org/10.1109/QELS.2007.4431110)
12. S. Kudryashov, M. Kandyla, C.A.D. Roeser, and E. Mazur, *Transient picometer atomic displacements in a-Te photoexcited by femtosecond laser pulses*, [Proceedings of SPIE 6727, Article No. 672709](https://doi.org/10.1117/12.672709), (2007).

#### D. Conference presentations

1. M. Kanidi, A. Papadimitropoulou, C. Charalampous, Z. Chakim, G. Tsekenis, A. Sinani, C. Riziotis, and M. Kandyla, *Regulating breast cancer cell adhesion on laser-patterned surfaces*, European Materials Research Society (E-MRS) Spring Meeting, virtual conference (June 2022).
2. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Wavelength-selective isotype heterojunction n<sup>+</sup>-ZnO/n-Si photodetector*, European Materials Research Society (E-MRS) Spring Meeting, virtual conference (June 2022).
3. T. Giannakis and M. Kandyla, *Viscoelastic properties of stored red blood cells using single beam optical tweezers*, European Materials Research Society (E-MRS) Spring Meeting, virtual conference (June 2022).
4. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Laser-microstructured ZnO/Si heterojunction photodetectors*, European Congress and Exhibition on Advanced Materials and Processes (EUROMAT), virtual conference (September 2021).
5. M. Kanidi, A. Bardakas, A. Kerasidou, A. Anastasopoulos, C. Tsamis, and M. Kandyla, *Hierarchical surfaces with reversible photoinduced and heat-induced wettability: ZnO nanorods on laser-microstructured silicon*, Micro and Nano Engineering Conference (MNE), Turin, Italy (September 2021).
6. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Isotype ZnO/n-Si photodetector with broadband wavelength-selective operation and variable polarity*, 35<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Athens, Greece (September 2021).

7. A. Papadimitropoulou, Z. Chakim, M. Kanidi, C. Charalampous, G. Tsekenis, and M. Kandyla, *Growth of breast cancer cells on patterned surfaces*, 35<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Athens, Greece (September 2021).
8. M. Kanidi, A. Bardakas, A. Kerasidou, A. Anastasopoulos, C. Tsamis, and M. Kandyla, *Hierarchical surfaces with reversible photoinduced and heat-induced wettability: ZnO nanorods on laser-microstructured silicon*, 18<sup>th</sup> International Conference on Nanosciences and Nanotechnologies, Thessaloniki, Greece (July 2021).
9. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Laser-structured ZnO/p-Si photodetector with enhanced and broadband UV-Vis-NIR responsivity*, European Materials Research Society (E-MRS) Spring Meeting, virtual conference (June 2021).
10. G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, and M. Kandyla, *Laser-structured ZnO/p-Si photodetector with enhanced and broadband responsivity*, Conference on Lasers and Electro-Optics (CLEO), San Jose, CA USA (May 2021).
11. M. Kanidi, A. Papagiannopoulos, A. Matei, M. Dinescu, S. Pispas, and M. Kandyla, *Functional surfaces of laser-microstructured silicon coated with polymer blends switching between hydrophilicity and hydrophobicity*, Conference on Lasers and Electro-Optics (CLEO), San Jose, CA USA (May 2020).
12. M. Kanidi, A. Papagiannopoulos, A. Skandalis, S. Pispas, and M. Kandyla, *Films of polymers blends with tunable wettability on microstructured silicon substrates*, 34<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Patras, Greece (September 2019).
13. G. Chatzigiannakis, S. Gardelis, V. Lykodimos, and M. Kandyla, *Photoresponsivity of laser-microstructured ZnO/Si heterojunctions*, 34<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Patras, Greece (September 2019).
14. C. Christophoridis, M. Kanidi, M. Kandyla, G. Mousdis, E. Bizani, and A. Hiskia, *Enhanced photocatalytic activity of novel TiO<sub>2</sub> thin films developed on a laser-microstructured Si surface*, 6<sup>th</sup> European Conference on Environmental Applications of Advanced Oxidation Processes, Portorose, Slovenia (June 2019).
15. M. Kandyla, M. Kanidi, A. Dagkli, N. Kelaidis, D. Palles, S. Aminalragia-Giamini, J. Marquez-Velasco, A. Colli, A. Dimoulas, E. Lidorikis, and E.I. Kamitsos, *Surface-enhanced Raman spectroscopy of graphene integrated in three-dimensional nanostructured plasmonic silicon platforms*, Conference on Lasers and Electro-Optics (CLEO), San Jose, CA USA (May 2019).
16. M. Kanidi, A. Papagiannopoulos, A. Skandalis, S. Pispas, and M. Kandyla, *Tunable wettability of polymer blend films on flat and microstructured silicon surfaces*, European Materials Research Society (E-MRS) Spring Meeting, Nice, France (May 2019).

17. G. Chatzigiannakis, K. Nikolaidou, S. Gardelis, and M. Kandyla, *Laser-microstructured ZnO/Si heterojunction photodetectors with enhanced performance*, European Materials Research Society (E-MRS) Spring Meeting, Nice, France (May 2019).
18. M. Kanidi, A. Dagkli, N. Kelaidis, D. Palles, S. Aminalragia-Giamini, J. Marquez-Velasco, A. Colli, A. Dimoulas, E. Lidorikis, M. Kandyla, and E.I. Kamitsos, *Surface-enhanced Raman spectroscopy of graphene integrated with plasmonic black silicon*, European Materials Research Society (E-MRS) Spring Meeting, Nice, France (May 2019).
19. M.L. Filograno, G. Piniotis, V. Gikas, V. Papavassiliou, C. Gantes, M. Kandyla, and C. Riziotis, *A hybrid photonic-geodetic approach for the assessment of dynamic testing and structural health monitoring in large-scale infrastructures*, 4<sup>th</sup> Joint International Symposium on Deformation Monitoring (JISDM), Athens, Greece (May 2019).
20. S. Gardelis, M. Kandyla, K. Nikolaidou, G. Chatzigiannakis, and V. Lykodimos, *Enhancement of responsivity of a ZnO/Si heterojunction formed on laser-microstructured Si substrates*, Micro & Nano International Conference, Thessaloniki, Greece (November 2018).
21. M. Kanidi, A. Dagkli, M. Kandyla, N. Kelaidis, D. Palles, A. Colli, E. Lidorikis, S. Aminalragia-Giamini, J. Marquez-Velasco, A. Dimoulas, and E.I. Kamitsos, *Surface-enhanced Raman spectroscopy of graphene integrated in plasmonic silicon nanostructures*, 33<sup>rd</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Nicosia, Cyprus (September 2018).
22. M. Kanidi, A. Papagiannopoulos, A. Skandalis, S. Pispas, and M. Kandyla, *Tunable wettability of thin polymer films*, 33<sup>rd</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Nicosia, Cyprus (September 2018).
23. M. Kanidi, A. Papagiannopoulos, A. Skandalis, S. Pispas, and M. Kandyla, *Tunable wettability of thin polymer films on microstructured silicon surfaces*, European Congress and Exhibition on Advanced Materials and Processes (EUROMAT), Thessaloniki, Greece (September 2017).
24. M. Kandyla, C. Moslah, M.M. Islam, G. Petropoulou, G.A. Mousdis, and M. Ksibi, *Photocatalytic properties of TiO<sub>2</sub> thin films doped with noble metals (Ag, Au, Pd, and Pt)*, European Congress and Exhibition on Advanced Materials and Processes (EUROMAT), Thessaloniki, Greece (September 2017).
25. M. Alexiadou, M. Kandyla, G. Mousdis, and M. Kompitsas, *Pulsed laser deposition of ZnO thin films decorated with Au and Pd nanoparticles with enhanced acetone sensing performance*, 6<sup>th</sup> International Symposium on Transparent Conductive Materials, Chania, Greece (October 2016).

26. M. Kandyla, N. Kelaidis, D. Palles, S.A. Giamini, M. Kanidi, J. Marquez, A. Dimoulas, and E.I. Kamitsos, *Properties of graphene supported on gold-coated black silicon*, 32<sup>nd</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Ioannina, Greece (September 2016).
27. [Invited] M. Kandyla, *Laser processing of micro/nanodevices*, 1<sup>st</sup> Panhellenic Conference on Photonics, Athens, Greece (May 2016).
28. N. Latsis, M. Ulmeanu, D. Palles, and M. Kandyla, *Femtosecond-laser nanostructured silicon substrates for UV photodiodes based on p-Si/n-ZnO heterojunctions*, 6<sup>th</sup> International Conference on Micro-Nanoelectronics, Nanotechnologies and MEMS, Athens, Greece (October 2015).
29. D.G. Kotsifaki, D. Georgiadou, M. Ulmeanu, P.G. Lagoudakis, and M. Kandyla, *Silicon nanostructures for photonic and optoelectronic applications*, European Materials Research Society (E-MRS) Spring Meeting, Lille, France (May 2015).
30. [Invited] D.G. Kotsifaki, M. Kandyla, and P.G. Lagoudakis, *Tunable femtosecond-pulsed plasmonic nanotweezers based on laser-fabricated substrates*, 11<sup>th</sup> International Conference of Computational Methods in Sciences and Engineering (ICCMSE), Athens, Greece (March 2015).
31. I. Sta, M. Jlassi, P. Koralli, M. Hajji, M. Kandyla, G. Mousdis, M. Kompitsas, and H. Ezzaouia, *Effect of palladium doping on the structural, optical, and electrical properties of NiO films prepared by spin coating*, 5<sup>th</sup> International Symposium on Transparent Conductive Materials, Chania, Greece (October 2014).
32. P. Koralli, M. Kandyla, G. Mousdis, M. Sideris, M. Kompitsas, M. Girtan, and D.E. Manolakos, *Sol-gel grown compound ZnO thin films for photovoltaic applications*, 5<sup>th</sup> International Symposium on Transparent Conductive Materials, Chania, Greece (October 2014).
33. D. Kotsifaki, M. Kandyla, and P. Lagoudakis, *Plasmonic nanotweezers based on femtosecond-laser nanostructured substrates*, 30<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Heraclion, Greece (September 2014).
34. I. Sta, M. Jlassi, M. Kandyla, M. Hajji, P. Koralli, M. Kompitsas, and H. Ezzaouia, *Sensing characteristics of NiO and NiO:Li thin films deposited by the sol-gel method on glass substrates*, 30<sup>th</sup> Panhellenic Conference on Solid-State Physics and Materials Science, Heraclion, Greece (September 2014).
35. M. Kompitsas, P. Koralli, M. Kandyla, G. Mousdis, and M. Girtan, *Low cost and high efficiency, second generation thin film solar cells*, 10<sup>th</sup> International Conference on Physics of Advanced Materials (ICPAM-10), Iasi, Romania (September 2014).
36. [Invited] M. Kompitsas, M. Kandyla, P. Koralli, and G. Mousdis, *Thin-film, metal oxide electrochemical gas sensors functionalized with noble metal nanoparticles*, 1<sup>st</sup> Autumn School on Physics of Advanced

Materials (PAMS-1), Iasi, Romania (September 2014).

37. D. Kotsifaki, M. Kandyla, and P. Lagoudakis, *Optical forces in nanostructure-enhanced plasmonic tweezers*, European Materials Research Society (E-MRS) Spring Meeting, Lille, France (May 2014).
38. D. Kotsifaki, P. Lagoudakis, and M. Kandyla, *Near-field enhanced optical nanotweezers based on laser-structured substrates*, SPIE Photonics Europe, Brussels, Belgium (April 2014).
39. M. Kandyla, A. Mellos, and M. Kompitsas, *Reactive pulsed laser deposition of amorphous hydrogenated silicon thin films for solar cell applications*, SPIE Photonics Europe, Brussels, Belgium (April 2014).
40. D. Kotsifaki, P. Lagoudakis, and M. Kandyla, *Optical nanotrapping*, 2<sup>nd</sup> International Conference on Research Infrastructures, Athens, Greece (April 2014).
41. A. Mellos, P. Koralli, M. Kandyla, M. Kompitsas, and D.E. Manolakos, *Structural, optical, and electrical properties of hydrogenated Si:H thin films grown by pulsed laser deposition*, XXIX Panhellenic Conference of Solid State Physics and Materials Science, Athens, Greece (September 2013).
42. P. Koralli, M. Kandyla, M. Kompitsas, G. Mousdis, M. Girtan, and D.E. Manolakos, *Laser scribing of thin films for second generation, large scale monolithic photovoltaics*, XXIX Panhellenic Conference of Solid State Physics and Materials Science, Athens, Greece (September 2013).
43. M. Kandyla, A. Mellos, and M. Kompitsas, *Hydrogenated amorphous silicon films grown by pulsed laser deposition*, Conference on Lasers and Electro-Optics Europe (CLEO/Europe-IQEC), Munich, Germany (May 2013).
44. M. Kandyla, C. Chatzimanolis, C. Charitidis, M. Guziewicz, and M. Kompitsas, *Optimized hydrogen sensing properties of PLD-grown nanocomposite NiO:Au and NiO:Pd thin films at ppb-concentration levels*, Conference on Lasers and Electro-Optics Europe (CLEO/Europe-IQEC), Munich, Germany (May 2013).
45. M. Kandyla, C. Chatzimanolis, V. Tsikourkitoudi, I. Kartsonakis, C. Charitidis, M. Kompitsas, and M. Guziewicz, *Structural and mechanical properties of RF magnetron-sputtered NiO thin films and their surface sensitizing by Pd-nanoparticles for hydrogen sensing below the one ppm limit*, 4<sup>th</sup> International Symposium on Transparent Conductive Materials, Hersonissos, Greece (October 2012).
46. C. Chatzimanolis, M. Kandyla, C. Charitidis, M. Kompitsas, and I. Hotovy, *Growth and characterization of Au-nanoparticles sensitized NiO thin films for hydrogen sensing down to a few ppm*, 4<sup>th</sup> International Symposium on Transparent Conductive Materials, Hersonissos, Greece (October 2012).
47. C. Popescu, A. Popescu, I. Iordache, M. Kandyla, E. Markou, N. Koralli, D.E. Manolakos, and M. Kompitsas, *Optical sensor based on the surface plasmon resonance of noble metal nanoparticles on the*

*surface of a transparent conductive oxide for cholesterol detection*, 4<sup>th</sup> International Symposium on Transparent Conductive Materials, Hersonissos, Greece (October 2012).

48. M. Guziewicz, J. Grochowski, K. Golaszewska, J.Z. Domagala, B. Witkowski, E. Kamińska, M. Kandyla, C. Chatzimanolis, M. Kompitsas, and A. Piotrowska, *Hydrogen sensing properties of thin NiO films deposited by RF sputtering*, Eurosensors, Krakow, Poland (September 2012).
49. M. Kandyla, D.G. Kotsifaki, I. Zergioti, M. Makropoulou, E. Chatzitheodoridis, and A.A. Serafetinides, *Optical tweezers with enhanced efficiency based on laser-structured substrates*, European Materials Research Society (E-MRS) Spring Meeting, Strasbourg, France (May 2012).
50. M. Kandyla, C. Chatzimanolis, V. Tsikourkitoudi, I.A. Kartsonakis, I. Hotovy, C. Charitidis, and M. Kompitsas, *Nanocomposite NiO:Au hydrogen sensors with a few ppm sensitivity and low operating temperature*, European Materials Research Society (E-MRS) Spring Meeting, Strasbourg, France (May 2012).
51. M. Kandyla, I. Fasaki, and M. Kompitsas, *NiO:Au thin-film hydrogen sensors grown by a two-laser, two-target PLD technique*, International Conference on Laser Ablation, Playa del Carmen, Mexico (November 2011).
52. M. Kandyla, C. Pandis, S. Chatzandroulis, P. Pissis, and I. Zergioti, *Direct laser printing of thin-film polyaniline devices*, International Conference on Laser Ablation, Playa del Carmen, Mexico (November 2011).
53. [Invited] M. Kandyla, I. Kalpyris, M.M. Stylianakis, E. Kymakis, N. Boukos, and I. Zergioti, *Laser fabrication of organic solar cells*, World Materials Summit, Washington, DC USA (October 2011).
54. M. Kandyla, P. Perdika, I. Fasaki, and M. Kompitsas, *Stability and high sensitivity of a compound NiO:Au thin film hydrogen sensor grown by a two-laser, two-target PLD technique*, Eurosensors, Athens, Greece (September 2011).
55. I. Kalpyris, M. Kandyla, M.M. Stylianakis, E. Kymakis, N. Boukos, and I. Zergioti, *Laser printing of semiconducting polymer materials for organic solar cells*, International Symposium on Flexible Organic Electronics, Thessaloniki, Greece (July 2011).
56. I. Kalpyris, M. Kandyla, and I. Zergioti, *Laser printing of semiconducting polymer materials for organic solar cells*, European Materials Research Society (E-MRS) Spring Meeting, Nice, France (May 2011).
57. M. Kandyla, C. Pandis, G. Tsekenis, P. Dimitrakis, S. Chatzandroulis, and I. Zergioti, *Biosensor fabrication by direct laser microprinting*, Frontiers in Optics/Laser Science Conference, Rochester, NY USA (October 2010).



58. M. Kandyla, G. Tsekenis, P. Dimitrakis, S. Chatzandroulis, C. Pandis, and I. Zergioti, *Fabrication of polyaniline biosensors using the laser induced forward transfer process*, European Materials Research Society (E-MRS) Spring Meeting, Strasbourg, France (June 2010).
59. M. Kandyla, G. Tsekenis, C. Boutopoulos, S. Chatzandroulis, P. Dimitrakis, and I. Zergioti, *Fabrication of biosensors using the laser induced forward transfer process*, International Conference on Laser Ablation, Singapore (November 2009).
60. E. Drakaki, M. Kandyla, E. Chatzitheodoridis, I. Zergioti, A.A. Serafetinides, A. Terlix, E. Kouloumpi, A. Moutsatsou, M. Doulgerides, V. Kantarelou, A. Karydas, and C. Vlachou-Mogire, *Laser conservation of metallic objects of historical significance*, International Conference on Laser Ablation, Singapore (November 2009).
61. E. Drakaki, B. Klingenberg, I. Tsilikas, E. Zoros, M. Kandyla, and A.A. Serafetinides, *Laser cleaning and characterization of old corroded metal coins*, International Conference on Laser Ablation, Singapore (November 2009).
62. E. Drakaki, B. Klingenberg, I. Tsilikas, E. Zoros, M. Kandyla, and A.A. Serafetinides, *Laser cleaning of corroded metal coins using laser techniques*, International Conference on Laser Technologies and Lasers, Smolyan, Bulgaria (October 2009).
63. E. Drakaki, B. Klingenberg, I. Tsilikas, E. Zoros, M. Kandyla, A.A. Serafetinides, V. Kantarelou, A.G. Karydas, E. Kontou, N. Katsikosta, P. Tselekas, and D. Evgenidou, *Evaluation of laser cleaning of ancient Greek, Roman and Byzantine coins*, European Conference on Applications of Surface and Interface Analysis, Antalya, Turkey (October 2009).
64. E. Drakaki, M. Kandyla, E. Chatzitheodoridis, I. Zergioti, A.A. Serafetinides, A. Terlix, E. Kouloumpi, A. Moutsatsou, M. Doulgerides, V. Kantarelou, A. Karydas, and C. Vlachou-Mogire, *Laser studies of metallic artworks*, European Conference on Applications of Surface and Interface Analysis, Antalya, Turkey (October 2009).
65. A.A. Serafetinides, E. Drakaki, E. Fabrikesi, M. Kandyla, I. Zergioti, C. Vlachou-Mogire, R.R. Thomson, A.K. Kar, N. Boukos, and A.G. Karydas, *Comparative evaluation of ultrafast laser beam interactions with the silvering in late roman coins*, World of Photonics Congress, Munich, Germany (June 2009).
66. T. Shih, C. R. Mendonca, M. Kandyla, , R. F. Aroca, C. J. L. Constantino, and E. Mazur, *Ultrafast reflectivity dynamics in bis (n-butylimido) perylene thin films*, Conference on Lasers and Electro-Optics (CLEO/QELS), San Jose, CA USA (May 2008).
67. S. Kudryashov, M. Kandyla, C.A.D. Roeser, and E. Mazur, *Transient picometer atomic displacements in a-Te photoexcited by femtosecond laser pulses*, International conference on coherent and nonlinear optics, Minsk, Belarus (June 2007).

68. M. Kandyla, T. Shih, and E. Mazur, *Femtosecond dynamics of the laser-induced solid-to-liquid phase transition in aluminum*, Conference on Lasers and Electro-Optics (CLEO/QELS), Baltimore, MD USA (May 2007).
69. M. Kandyla, C. Roeser, and E. Mazur, *Ultrafast frequency dynamics of coherent phonons in Te under high density photoexcitation*, Photonics West conference, San Jose, CA USA (January 2006).
70. J. Orcutt, P. Tayalia, M. Kandyla, and E. Mazur, *Femtosecond time-resolved dual-angle reflectometry to observe laser-induced dynamics in solids*, Gordon Research Conference on Laser Interactions with Materials, Proctor Academy, Andover, NH USA (August 2004).
71. [Invited] C. Roeser, M. Kandyla, and E. Mazur, *Control of coherent optical phonons in tellurium*, Photonics West Conference, San Jose, CA USA (January 2004).
72. M. Kandyla, C.A.D. Roeser, A.M.-T. Kim, and E. Mazur, *Ultrafast phase transitions in solids*, International School of Atomic and Molecular Spectroscopy, Erice, Italy (May 2003).

#### **SEMINARS (INVITED)**

- *Laser processing for photonics and optoelectronics*, Foundation for Research and Technology – Hellas (FORTH), Heraclion, Greece (February 2021).
- *Laser processing of functional micro/nanostructures*, Technical University of Braunschweig, Germany (September 2019).
- *Development and applications of laser-processed nanostructures*, Skolkovo Institute of Science and Technology, Russian Federation (November 2018).
- *Development and applications of laser-processed hybrid nanomaterials*, HSSTCM Workshop “Materials at the Nanoscale”, School of Physics, Aristotle University of Thessaloniki, Greece (November 2018).
- *Laser processing of functional micro/nanostructures*, Physics Department, National and Kapodistrian University of Athens, Athens, Greece (November 2016).
- *Ultrafast material dynamics*, 60<sup>th</sup> Birthday Symposium in Honor of Eric Mazur, Harvard University, Cambridge, MA USA (November 2014).
- *Laser deposition and patterning of thin-film and nanocomposite devices*, Ecole Telecom Paris Tech, Paris, France (March 2012).
- *Laser – matter interaction: spectroscopy, nanotechnology, and biotechnology*, Applied Physics Department, National Technical University of Athens, Athens, Greece (April 2010).
- *Optical excitation and coherent control of high amplitude lattice vibrations in semiconductors*, Laboratoire d’Optique Appliquée, Paris, France (February 2008).
- *Ultrafast dynamics in highly excited materials*, University of Oxford, Oxford, UK (January 2008).
- *An optical study of the solid-to-liquid phase transition in aluminum*, Harvard University, Cambridge, USA (November 2006).
- *Ultrafast dynamics in highly excited semiconductors*, Foundation for Research and Technology – Hellas (FORTH), Heraclion, Greece (January 2005).