





PERSONAL INFORMATION

Ioanna Sakellari

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Sex Female | Date of birth 18/05/1980 | Nationality Greek

WORK EXPERIENCE

01/12/2018–Present

Postdoctoral Researcher

Ultrafast Laser Micro and Nano Processing Lab, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion (Greece)

Project: *Development of techniques for processing of materials for photonic applications via direct laser writing and/or pulsed laser degradation*

01/07/2018–31/08/2018

Postdoctoral Researcher

Nonlinear Lithography group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion (Greece)

Project: *Femtosecond laser submicron structuring of polymers*

01/07/2017–30/06/2018

Stavros Niarchos Postdoctoral Fellow

Nonlinear Lithography Group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion (Greece)

Project: *Development of novel 3D nanomaterial-based devices for their implementation as anodes in photo-electrochemical cells for hydrogen generation based on water splitting*

01/04/2017–30/06/2017

Postdoctoral Researcher

Ultrafast Laser Micro and Nano Processing Lab, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion (Greece)

Project: *Femtosecond laser submicron structuring of polymers*

01/03/2015–28/02/2017

Marie Skłodowska-Curie Postdoctoral Fellow (Horizon2020-MSCA-IF)

4th Physics Institute, University of Stuttgart, Stuttgart (Germany)

Project: *Three-Dimensional Nonlinear Chiral Plasmonic Metamaterials* (G.A. 655249)

20/08/2013–28/02/2015

Postdoctoral Researcher

4th Physics Institute, University of Stuttgart, Stuttgart (Germany)

Project: *Development of three-dimensional chiral plasmonic metamaterials by combining two-photon direct laser writing and electro/electroless plating*

01/07/2011–30/06/2013

Postdoctoral Researcher

Laser Thermal Lab, Mechanical Engineering Department, University of California, Berkeley (United States)

Project: *Set-up a two-photon lithography activity for photonics, fluidics and biomedical applications*

EDUCATION AND TRAINING

- 01/03/2008–05/07/2011 **PhD in Physics**
Physics Department, University of Crete, Heraklion (Greece)
- 01/10/2005–14/12/2007 **Postgraduate Programme in "Optics and Vision"**
Medical Department, University of Crete, Heraklion (Greece)
- 20/09/1999–25/07/2005 **Physics Degree**
Physics Department, University of Crete, Heraklion (Greece)

PERSONAL SKILLS

Mother tongue(s) Greek

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
First Certificate in English					
French	B1	B1	B1	B1	B1
Diplome d'études en langue française (DEL F)					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

Operational Systems Windows και Linux

Microsoft Office, Origin, Matlab, Mathematica, Labview, MPB, CST

Programming Languages: Fortran, C, C++, Java

ADDITIONAL INFORMATION

Publications

A. Scientific Journals

- **I. Sakellari**, E. Kabouraki, D. Karanikolopoulos, S. Droulias, M. Farsari, P. Loukakos, M. Vamvakaki, and D. Gray, "Quantum Dot Based 3D Printed Woodpile Photonic Crystals Tuned For The Visible", (**inside front cover**) *Nanoscale Advances*, 1, 3413 (2019)
- J. Choi, S. Koo, **I. Sakellari**, H. Kim, Z. Su, K. R. Carter, M. Farsari, C. P. Grigoropoulos, and T. P. Russell, "Guided Assembly of Block Copolymers in Three-Dimensional Woodpile Scaffolds", *ACS Applied Materials and Interfaces*, 10, 42933 (2018)
- M. Tasiar, K. Hassanein, L. M. Mazur, **I. Sakellari**, D. Gray, M. Farsari, M. Samoc, F. Santoro, B. Ventura, D. T. Gryko, "The Role of Intramolecular Charge Transfer and Symmetry Breaking in the Photophysics of Pyrrolo[3,2-b]pyrrole-dione", *Physical Chemistry Chemical Physics*, 20, 22260 (2018)
- G. Seniutinas, A. Weber, C. Padeste, **I. Sakellari**, M. Farsari, C. David, "Beyond 100 nm resolution in 3D laser lithography - Post processing solutions", *Microelectronic Engineering*, 191, 25 (2018)

- **I. Sakellari**, X. Yin, M. Nesterov, K. Terzaki, A. Xomalis, and M. Farsari, "Three-Dimensional Chiral Plasmonic Metamaterials fabricated by Direct Laser Writing: The Twisted Omega Particle", *Advanced Optical Materials*, 5, 1700200 (2017)
- T. P. Bemat, J. H. Campbell, N. Petta, **I. Sakellari**, S. Koo, J.-H. Yoo, and C. P. Grigoropoulos, "Fabrication of Micron-Scale Cylindrical Tubes by Two-Photon Polymerization", *Fusion Science and Technology*, 70, 310 (2016)
- J.-H. Yoo, J. B. In, C. Zheng, **I. Sakellari**, R. N. Raman, M. J. Matthews, S. Elhadj, and C. P. Grigoropoulos, "Directed dewetting of amorphous silicon film by a donut-shaped laser pulse", *Nanotechnology*, 26, 165303 (2015)
- **I. Sakellari**, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, A. Pikulin, N. Bityurin, M. Vamvakaki, and M. Farsari, "Diffusion-Assisted High Resolution Direct fs Laser Writing", *ACS Nano*, 6, 2302 (2012)
- N. Vasilantonakis, K. Terzaki, **I. Sakellari**, V. Purlys, D. Gray, C. M. Soukoulis, M. Vamvakaki, M. Kafesaki, and M. Farsari, "Three-dimensional Metallic Photonic Crystals with Optical Bandgaps", *Advanced Materials*, 24, 1101 (2012)
- G. Bickaускаite, M. Manousidaki, K. Terzaki, E. Kabouraki, **I. Sakellari**, N. Vasilantonakis, D. Gray, C. M. Soukoulis, C. Fotakis, M. Vamvakaki, M. Kafesaki, M. Farsari, A. Pikulin, and N. Bityurin, "3D Photonic Nanostructures via Diffusion-Assisted Direct fs Laser Writing", *Advances in Optoelectronics*, 2012, 927931, (2012)
- M. Malinauskas, A. Gaidukeviciute, V. Purlys, A. Zukauskas, **I. Sakellari**, E. Kabouraki, A. Candiani, D. Gray, S. Pissadakis, R. Gadonas, A. Piskarskas, C. Fotakis, M. Vamvakaki, and M. Farsari, "Direct laser writing of microoptical structures using a Ge-containing hybrid material", *Metamaterials*, 5, 135 (2011)
- **I. Sakellari**, A. Gaidukeviciute, A. Giakoumaki, D. Gray, C. Fotakis, M. Farsari, M. Vamvakaki, C. Reinhardt, A. Ovsianikov, and B.N. Chichkov, "Two-photon polymerization of titanium-containing sol-gel composites for three-dimensional structure fabrication", *Applied Physics A: Materials Science and Processing*, 100, 359 (2010)
- M. Farsari, **I. Sakellari**, D. Gray, M. Vamvakaki, C. Fotakis, A. Ovsianikov, and B.N. Chichkov, "Three-dimensional direct writing of novel sol-gel composites for photonics applications", *Int. J. Nanomanufacturing*, 6, nos. 1/2/3/4 (2010)
- M. Malinauskas, A. Zukauskas, V. Purlys, K. Belazaras, A. Momot, D. Paipulas, R. Gadonas, A. Piskarskas, H. Gilbergs, A. Gaidukeviciute, **I. Sakellari**, M. Farsari, and S. Juodkazis, "Femtosecond laser polymerization of hybrid/integrated micro-optical elements and their characterization", *Journal of Optics*, 12, 124010 (2010)
- M. Farsari, A. Ovsianikov, M. Vamvakaki, **I. Sakellari**, D. Gray, B. N. Chichkov, and C. Fotakis, "Fabrication of three-dimensional photonic crystal structures containing an active nonlinear optical chromophore", *Applied Physics A*, 93, 11 (2008)
- Ovsianikov, J. Viertel, B. N. Chichkov, M. Oubaha, B. MacCraith, **I. Sakellari**, A. Giakoumaki, D. Gray, M. Vamvakaki, M. Farsari, and C. Fotakis, "Ultra-Low Shrinkage Hybrid Photosensitive Material for Two-Photon Polymerization Microfabrication", *ACS Nano*, 2, 2257 (2008)
- Ovsianikov, A. Gaidukeviciute, B. N. Chichkov, M. Oubaha, B. MacCraith, **I. Sakellari**, A. Giakoumaki, D. Gray, M. Vamvakaki, M. Farsari, and C. Fotakis, "Two-Photon Polymerization of Hybrid Sol-Gel Materials for Photonics Applications", *Laser Chemistry*, 2008, 493059 (2008)

B. Book Chapters

- A. Ovsianikov, B. Chichkov, M. Oubaha, R. Copperwhite, B. D. MacCraith, A. Gaidukeviciute, **I. Sakellari**, A. Giakoumaki, D. Gray, M. Vamvakaki, M. Farsari, C. Fotakis, "3D microstructuring of hybrid organic-inorganic materials by two-photon polymerization technique", *Innovative Developments in Design and Manufacturing*, p. 477-480, CRC Press, (2009)

C. Conference Proceedings

- **I. Sakellari**, E. Kabouraki, D. Karanikolopoulos, S. Droulias, D. Gray, P. Loukakos, M. Vamvakaki, and M. Farsari, "Three-Dimensional Photonic Devices Functionalized With CdS Quantum Dots", (META'18, the 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics, Marseille, France, 2018)
- **I. Sakellari**, E. Kabouraki, D. Gray, M. Vamvakaki, and M. Farsari, "Quantum Dot Based 3D Photonic Devices", (SPIE Photonics West, Proc. of SPIE Vol 10115, 101151A-1, 2017)
- **I. Sakellari**, X. Yin, M. Nesterov, K. Terzaki, A. Xomalis, and M. Farsari, "3D Chiral Plasmonic

Metamaterials fabricated by Direct Laser Writing: The Twisted Omega Particle", (Metamaterials'16, the 10th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, 2016)

- **I. Sakellari**, X. Yin, M. Nesterov, K. Terzaki, A. Xomalis, and M. Farsari, "*3D Chiral Plasmonic Metamaterials fabricated by Direct Laser Writing: The Twisted Omega Particle*", (META'16, the 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics, 2016)
- **I. Sakellari**, E. Kabouraki, D. Gray, M. Vamvakaki, and M. Farsari, "*Quantum dot based 3D photonic devices*", (Advanced Architectures in Photonics, 2016)
- **I. Sakellari**, X. Yin, M. Nesterov, A. Radke, K. Terzaki, A. Xomalis, M. Farsari, and H. Giessen, "*3D chiral metamaterials made by direct laser writing*", (Deutsche Physikalische Gesellschaft Spring Meeting, Regensburg, 2016)
- **I. Sakellari**, J.-H. Yoo, D. Gray, M. Vamvakaki, N. Bityurin, A. Pikulin, C. Grigoropoulos, and M. Farsari, "*Multiple scribing via diffusion-assisted direct laser writing*", (Deutsche Physikalische Gesellschaft Spring Meeting, Dresden, 2014)
- M. Farsari, **I. Sakellari**, N. Vasilantonakis, K. Terzaki, D. Gray, C. M. Soukoulis, M. Vamvakaki, and M. Kafesaki, "*3D Metallic Photonic Crystals with Optical Bandgaps*", (International Quantum Electronics Conference ISBN: 978-1-4799-0594-2, 2013)
- **I. Sakellari**, E. Kabouraki, D. Gray, C. Fotakis, A. Pikulin, N. Bityurin, M. Vamvakaki, and M. Farsari, "*High-resolution 3D woodpile structures by Direct fs Laser Writing*", (NanoScience & Engineering, SPIE Optics and Photonics, doi:10.1117/12.930155, 2012)
- N. Bityurin, A. Pikulin, **I. Sakellari**, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, M. Vamvakaki, and M. Farsari, "*Spatial resolution in multiphoton laser polymerization*", (8th International Conference on Photo-Excited Processes and Applications, ICPEPA-8, 2012)
- **I. Sakellari**, E. Kabouraki, K. Terzaki, D. Gray, C. Fotakis, A. Pikulin, N. Bityurin, M. Vamvakaki, and M. Farsari, "*Direct fs Laser Writing: Principles and Applications*" (POEM-2012, International Photonics and Optoelectronics Meetings, Wuhan, China, 2012)
- **I. Sakellari**, E. Kabouraki, V. Purlys, A. Gaidukeviciute, D. Gray, C. Fotakis, M. Vamvakaki, and M. Farsari, "*Direct Laser Writing of Gain and Metallic Nanostructures*", (CLEO/EUROPEEQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, doi:10.1109/CLEOE.2011.5943621, 2011)
- M. Malinauskas, A. Zukauskas, V. Purlys, E. Kabouraki, A. Gaidukeviciute, **I. Sakellari**, S. Pissadakis, R. Gadonas, M. Vamvakaki, and M. Farsari, "*Direct Laser Writing of micro-optical structures using germanium-containing hybrid photopolymers*", (CLEO/EUROPEEQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, 2011)
- **I. Sakellari**, A. Gaidukeviciute, A. Giakoumaki, D. Gray, C. Fotakis, M. Vamvakaki, and M. Farsari (IESL - FORTH), C. Reinhardt, A. Ovsianikov, and B.N. Chichkov [Nanotechnology Department, Laser Zentrum Hannover, Germany], "*Direct laser writing of photonic nanostructures*", (SPIE - The International Society for Optical Engineering, vol. 7392, 2009)

Conferences

- **I. Sakellari**, E. Kabouraki, D. Karanikolopoulos, S. Droulias, D. Gray, P. Loukakos, M. Vamvakaki, and M. Farsari, «*Three-Dimensional Photonic Devices Functionalized With CdS Quantum Dots*» (**invited talk**), META'18, the 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics, Marseille, France (2018)
- **I. Sakellari**, E. Kabouraki, K. Terzaki, A. Xomalis, X. Yin, M. Nesterov, D. Gray, M. Vamvakaki, and M. Farsari, «*Quantum Dot Based and Metallic Nanostructures By Direct Laser Writing*» (**invited talk**), Nano2Fun, Parma, Italy (2017)
- **I. Sakellari**, E. Kabouraki, D. Gray, M. Vamvakaki, and M. Farsari, «*Quantum Dot Based 3D Photonic Devices*» (**poster**), SPIE Photonics West, San Francisco, California, USA (2017)
- **I. Sakellari**, X. Yin, M. Nesterov, K. Terzaki, A. Xomalis, and M. Farsari, «*3D Chiral Plasmonic Metamaterials Fabricated by Direct Laser Writing: The Twisted Omega Particle*» (**oral**), Metamaterials'16, the 10th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Chania, Crete, Greece (2016)
- **I. Sakellari**, X. Yin, M. Nesterov, K. Terzaki, A. Xomalis, and M. Farsari, «*3D Chiral Plasmonic Metamaterials Fabricated by Direct Laser Writing: The Twisted Omega Particle*» (**oral**), META'16, the 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics, Torremolinos, Malaga, Spain (2016)
- E. Kabouraki, **I. Sakellari**, M. Vamvakaki, and M. Farsari «*Quantum Dot Based 3D Photonic Devices*» (**oral**), the 8th Mediterranean Conference on Nano-Photonics (MediNano-8), Athens,

Greece (2016)

- **I. Sakellari**, X. Yin, M. Nesterov, A. Radke, K. Terzaki, A. Xomalis, M. Farsari, and H. Giessen, «*3D Chiral Plasmonic Metamaterials fabricated by Direct Laser Writing*» (**oral**), Deutsche Physikalische Gesellschaft (DPG) Spring Meeting, Regensburg, Germany (2016)
- **I. Sakellari**, J.-H. Yoo, D. Gray, M. Vamvakaki, N. Bityurin, A. Pikulin, C. P. Grigoropoulos, and Maria Farsari, «*Multiple Scribing via Diffusion-Assisted Direct Laser Writing*» (**oral**), Deutsche Physikalische Gesellschaft (DPG) Spring Meeting, Dresden, Germany (2014)
- E. Kabouraki, **I. Sakellari**, M. Vamvakaki, D. Gray, and M. Farsari «*Direct fs laser writing: principles and applications*» (**oral, invited paper**), NanoScience & Engineering, SPIE Optics and Photonics, San Diego, CA, USA (2013)
- E. Kabouraki, **I. Sakellari**, D. Gray, M. Vamvakaki, and M. Farsari, «*Quantum dot based higher order nonlinear photonic devices*» (**oral**), European Materials Research Society Spring Meeting (EMRS), Strasbourg, France (2013)
- **I. Sakellari**, J.-H. Yoo, D. Gray, M. Vamvakaki, A. Pikulin, N. Bityurin, C. Fotakis, C. P. Grigoropoulos and M. Farsari, «*Multiple Scribing via Diffusion-Assisted Direct Laser Writing*» (**oral**), International Mechanical Engineering Congress and Exposition - ASME, San Diego, CA, USA (2013)
- M. Farsari, **I. Sakellari**, N. Vasilantonakis, K. Terzaki, D. Gray, C. M. Soukoulis, M. Vamvakaki and M. Kafesaki, «*3D Metallic Photonic Crystals with Optical Bandgaps*» (**oral**), International Quantum Electronics Conference, Munich, Germany (2013)
- **I. Sakellari**, E. Kabouraki, D. Gray, C. Fotakis, A. Pikulin, N. Bityurin, M. Vamvakaki and M. Farsari, «*High-resolution 3D woodpile structures by Direct fs Laser Writing*» (**oral**), NanoScience & Engineering, SPIE Optics and Photonics, San Diego, CA, USA (2012)
- N. Bityurin, A. Pikulin, **I. Sakellari**, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, M. Vamvakaki, and M. Farsari, «*Spatial resolution in multiphoton laser polymerization*» (**oral**), 8th International Conference on Photo-Excited Processes and Applications (ICPEPA-8), Rochester, NY, USA (2012)
- E. Kabouraki, **I. Sakellari**, D. Gray, M. Vamvakaki and M. Farsari, «*3D Active Photonic Nanostructures*» (**oral**), META'12, the 3rd International Conference on Metamaterials, Photonic Crystals and Plasmonics, Paris, France (2012)
- **I. Sakellari**, E. Kabouraki, K. Terzaki, D. Gray, C. Fotakis, A. Pikulin, N. Bityurin, M. Vamvakaki, M. Farsari, «*Direct fs Laser Writing: Principles and Applications*» (**oral**), POEM-2012, International Photonics and Optoelectronics Meetings, Wuhan, China (2012)
- **I. Sakellari**, E. Kabouraki, V. Purlys, A. Gaidukeviciute, D. Gray, C. Fotakis, M. Vamvakaki and M. Farsari, «*Direct Laser Writing of Gain and Metallic Nanostructures*» (**oral**), CLEO/EUROPE-EQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, Munich, Germany (2011)
- E. Kabouraki, **I. Sakellari**, C. Fotakis, M. Vamvakaki and M. Farsari, «*3D Active Photonic Nanostructures*» (**oral**), CLEO/EUROPE-EQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, Munich, Germany (2011)
- M. Malinauskas, A. Zukauskas, V. Purlys, E. Kabouraki, A. Gaidukeviciute, **I. Sakellari**, S. Pissadakis, R. Gadonas, M. Vamvakaki and M. Farsari, «*Direct Laser Writing of micro-optical structures using germanium-containing hybrid photopolymers*» (**oral**), CLEO/EUROPE-EQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, Munich, Germany (2011)
- E. Kabouraki, **I. Sakellari**, C. Fotakis, M. Vamvakaki and M. Farsari (IESL-FORTH, Heraklion, Crete, Greece), «*3D Active Photonic Nanostructures*» (**poster**), CLEO/EUROPE-EQEC, Conference on Lasers and Electro-Optics, European Quantum Electronics Conference, Munich, Germany (2011)
- **I. Sakellari**, A. Gaidukeviciute, D. Gray, C. Fotakis, M. Vamvakaki and M. Farsari, «*3D photonic woodpile structures exhibiting visible optical diffraction patterns*» (**oral**), The International Conference on Coherent and Nonlinear Optics (ICONO) - The Lasers, Applications, and Technologies conference (LAT) (ICONO/LAT 2010), (Laser-Assisted Micro- and Nanotechnologies I, LMA3), Kazan, Russia (2010)
- **I. Sakellari**, A. Gaidukeviciute, M. Vamvakaki, D. Gray, C. Fotakis, M. Farsari, «*High Resolution 3D Photonic Crystals fabricated using Direct Laser Writing*» (**poster**), PECS-IX, the 9th International Conference on Photonic and Electromagnetic Crystal Structures, Granada, Spain (2010)
- **I. Sakellari**, A. Gaidukeviciute, M. Vamvakaki, D. Gray, C. Fotakis, M. Farsari, «*3D photonic*

nanostructures fabricated using direct laser writing» (oral), Society of Photographic Instrumentation Engineers, SPIE Photonics Europe, Brussels, Belgium (2010)

- M. Farsari, A. Ovsianikov, **I. Sakellari**, A. Gaidukeviciute, M. Vamvakaki, D. Gray, B.N. Chichkov, C. Fotakis, «*Three-dimensional photonic crystals containing hybrid and nonlinear optical materials» (poster)*, Electrical, Transport and Optical Properties of Inhomogeneous Media (ETOPIM8), Rethymnon, Crete, Greece (2009)
- **I. Sakellari**, A. Gaidukeviciute, C. Reinhardt, A. Giakoumaki, A. Ovsianikov, M. Vamvakaki, D. Gray, B.N. Chichkov, C. Fotakis, M. Farsari, «*Recent advances in the structuring of novel sol-gel composites by two-photon polymerization» (poster)*, European Materials Research Society Spring Meeting (E-MRS), Strasbourg, France (2008)
- M. Farsari, C. Reinhardt, **I. Sakellari**, A. Giakoumaki, A. Ovsianikov, M. Vamvakaki, D. Gray, B.N. Chichkov, C. Fotakis «*Three-dimensional direct writing of novel sol-gel composites for photonics applications» (oral)*, XXIV Panhellenic Conference on Solid State Physics and Materials Science, Heraklion, Crete, Greece (2008)
- **I. Sakellari**, A. Giakoumaki, C. Reinhardt, A. Ovsianikov, M. Vamvakaki, D. Gray, B.N. Chichkov, M. Farsari, C. Fotakis «*Three-dimensional photonic crystal structures made by 2-photon polymerization» (poster)*, XXIV Panhellenic Conference on Solid State Physics and Materials Science, Heraklion, Crete, Greece (2008)

Honours and awards

- 01/07/2017 - 30/06/2018
Stavros Niarchos Postdoctoral Fellowship "*Development of novel 3D nanomaterial-based devices for their implementation as anodes in photo-electrochemical cells for hydrogen generation based on water splitting*", ARCHERS project, Stavros Niarchos Foundation - Foundation for Research and Technology Hellas, Heraklion, Greece
- 01/03/2015 – 28/02/2017
Marie Skłodowska-Curie Individual Fellowship "*Three-Dimensional Nonlinear Chiral Plasmonic Metamaterials*", Horizon2020-MSCA-IF, 4th Physics Institute, University of Stuttgart, Stuttgart, Germany

Research Experience

- 01/07/2017 - 30/06/2018
Stavros Niarchos Postdoctoral research: "*Development of novel 3D nanomaterial-based devices for their implementation as anodes in photo-electrochemical cells for hydrogen generation based on water splitting*", Nonlinear Lithography group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion, Greece
- 01/03/2015 – 28/02/2017
Marie Skłodowska-Curie Postdoctoral research: "*Three-Dimensional Nonlinear Chiral Plasmonic Metamaterials*", 4th Physics Institute, University of Stuttgart, Stuttgart, Germany
- 20/08/2013 – 28/02/2015
Postdoctoral research: "*Three-Dimensional Chiral Plasmonic Metamaterials*", 4th Physics Institute, University of Stuttgart, Germany
- 01/07/2011 – 30/06/2013
Postdoctoral research: "*Two-Photon Lithography for applications in photonics, fluidics and biomedics*", Laser Thermal Lab, Mechanical Engineering Department, University of California, Berkeley, USA
- 01/02/2008 – 15/06/2011
Doctoral research. Thesis title: "*Photonic Crystals with tunable properties*", Nonlinear Lithography group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion, Greece
- 01/04/2007 - 31/10/2007
Master research. Thesis title: "*Wave guiding method for the characterization of spiropyran doped polymeric matrices and Zr doped Sol-Gels*", Nonlinear Lithography group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Heraklion, Greece

Teaching Experience

- **Undergraduate:**

2008 - 2011:

Teaching Assistant, Department of Physics, University of Crete, Heraklion, Greece
Laboratory of Laser and Modern Physics (undergraduate module),
Introduction to Optoelectronics - Photonics (undergraduate module)

■ **Seminars:**

2010:

Laboratory Instructor at METAMORHOSE - 17th European Doctoral School on Metamaterials (December 13 – 17, Institute of Electronic Structure and Laser (IESL) – Foundation for Research and Technology Hellas (FORTH), Heraklion, Crete, Greece)

■ **Mentoring and training of graduate students:**

- Anastasia Giakoumaki [01/05/2008 – 01/06/2009] (Undergraduate student, Materials Chemistry research group, Materials Science Department, University of Crete, Greece). Training on the prism-film coupling method for measuring the linear refractive index of composite sol-gel materials.
- Elmina Kabouraki [01/10/2009 – 01/06/2011] (Master student, Materials Chemistry research group, Materials Science Department, University of Crete, Greece). Training on multi-photon lithography for the fabrication of photonic nanostructures, on pump-probe technique for measuring the linear and nonlinear optical response of the fabricated structures, on Z-Scan method for measuring the nonlinear refractive index of nonlinear composite materials.
- Sangmo Koo [01/03/2012 – 30/06/2013] (PhD student, Laser Thermal Lab, Mechanical Engineering Department, University of California, Berkeley, USA). Training on multi-photon lithography for the fabrication of tailor-made hybrid cell scaffolds, on the synthesis of biocompatible hybrid sol-gel materials suitable for two-photon polymerization structuring, on tuning the mechanical properties of the composite hybrid materials for measuring the contractile forces of cardiac stem cells.
- Patrik Sven Rohner [01/02/2013 – 30/06/2013] (Master student, Laser Thermal Lab – ETH Zurich, Mechanical Engineering Department, University of California, Berkeley, USA). Training on multi-photon lithography for super-hydrophobic nanostructure fabrication. Master thesis title: "The fabrication of high aspect ratio nanotrees and nanopalms by two-photon polymerization".
- Elmina Kabouraki [01/04/2017 – 31/08/2018] (PhD student, Materials Chemistry research group, Materials Science Department, University of Crete, Greece). Training on optical characterization of photonic structures using FTIR and optical spectroscopy techniques. Training on setting up a multi-photon lithography activity.
- Dimitra Ladika [01/06/2017 – 30/06/2018] (Master student, Nonlinear Lithography research group, Institute of Electronic Structure and Laser - Foundation for Research and Technology, Greece). Training on multi-photon lithography and on setting up a 2-beam initiation threshold technique for measuring the effective nonlinear absorption in multi-photon photoresists. Master thesis title: "Optical characterization of organic nonlinear materials".

References

- Professor Costas Grigoropoulos, Laser Thermal Lab, Mechanical Engineering Department, University of California, Berkeley, USA (cgrigoro@berkeley.edu)
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