

Dr. Odysseas Tsilipakos
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Institute of Electronic Structure & Laser,
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[Google Scholar](#)

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Research Experience

2016 – ... **Postdoctoral Researcher**
 Institute of Electronic Structure & Laser, Foundation for Research and Technology – Hellas
[Phononic-, Photonic-, and Meta-Materials Group](#)
 Group Leaders: Prof. E. N. Economou, Prof. C. M. Soukoulis, Prof. M. Kafesaki

Nov 2021 **Visiting Researcher**
 Consiglio Nazionale delle Ricerche (CNR), Rome, Italy
 Institute for Microelectronics and Microsystems (IMM)

Jun – Aug 2016 **Visiting Researcher**
 Ames Laboratory–U.S. DOE and Iowa State University, Ames, IA, USA
[Research Group](#)
 Group Leader: Prof. C. M. Soukoulis

2014 – 2015 **Postdoctoral Researcher**
 Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki
[Photonics Group](#)
 Group Leader: Prof. E. E. Kriezis

2008 – 2013 **Graduate Research Assistant**
 Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki

Education

2008 – 2013 **PhD in Electrical and Computer Engineering**
 Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki

2001 – 2008 **Diploma degree in Electrical and Computer Engineering**
 Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki

Skills and Qualifications

Languages

- **English:** Certificate of Proficiency in English, University of Michigan | C2
- **German:** Zertifikat Deutsch als Fremdsprache, Goethe Institut | B1

Programming/ Software

- Scientific Programming: Matlab, C/C++, Python, Mathematica
- Electromagnetic Analysis Software: COMSOL Multiphysics, CST Microwave Studio, Ansoft Designer

Honors and Distinctions

Jul 2021	Paper “ <i>Electro-optic modulation in integrated photonics</i> ” (DOI: 10.1063/5.0048712) selected as “ Editor’s Pick ” in the Journal of Applied Physics
Jul 2020	Three-year ELIDEK research proposal (Principal Investigator) marked with 95.7/100 in the final evaluation stage. Project starts on January 2021.
Aug 2019	Elevation to IEEE Senior Member grade. Awarded to members who have made significant contributions to the profession.
Nov 2019	Appointment as Management Committee member (2 members per participating country) for Cost Action CA18223 - Future communications with higher-symmetric engineered artificial materials
Apr 2019	Paper “ <i>Intelligent Metasurfaces with Continuously Tunable Local Surface Impedance for Multiple Reconfigurable Functions</i> ” (DOI: 10.1103/PhysRevApplied.11.044024) where I am equally-contributing first-author selected as “ Editor’s Pick ” in Physical Review Applied and has received ~100 citations as of August 2020 (Google Scholar)
Mar 2019 – Feb 2020 (12 months)	Stavros Niarchos Foundation – FORTH Postdoctoral research fellowship within project ARCHERS
Jan 2014 – Dec 2014 (12 months)	Postdoctoral excellence research fellowship from the Research Committee of the Aristotle University of Thessaloniki for studying optical bistability with silicon-plasmonic resonators
Apr 2012	Best student paper award for the paper “ <i>Hybrid silicon-plasmonics: efficient waveguide interfacing for low-loss integrated switching components</i> ” presented in SPIE Photonics Europe 2012 – Nanophotonics Conference
Mar 2011 – Aug 2013 (30 months)	“Heracleitus II” research scholarship , co-financed by the European Union and Greek national funds, for studying guided-wave plasmonic components
Nov 2009 – Feb 2011 (16 months)	Scholarship from the Greek State Scholarships Foundation for postgraduate studies. Three scholarships awarded for Electrical Engineers in the entire country.

Publications

I have co-authored **48 journal papers** (5 under review), **59 conference contributions**, and **5 book chapters**. As of November 2021, I have received a total of **~1184 citations** to my work and an **h-index of 20** [Google Scholar](#)

For a complete publication list see: https://www.iesl.forth.gr/sites/default/files/publications/Tsilipakos_PublicationList.pdf

Summary of published journal paper details:

Journal	Impact Factor	Papers
Advanced Optical Materials (Wiley)	8.286	3
ACS Photonics (ACS)	6.880	2
Journal of Selected Topics in Quantum Electronics (IEEE)	4.917	1
Physical Review Applied (APS)	4.532	3
IEEE Transactions on Antennas and Propagation (IEEE)	4.435	1
Journal of Lightwave Technology (IEEE/OSA)	4.162	2
IEEE Access (IEEE)	4.098	3
Scientific Reports (Springer Nature)	3.998	1
Physical Review B (APS)	3.736	3
Optics Letters (OSA)	3.713	1
Applied Physics Letters (AIP)	3.521	2
Optics Express (OSA)	3.356	4
IEEE Journal of Quantum Electronics (IEEE)	2.753	1
Crystals (MDPI)	2.589	1
IEEE Photonics Technology Letters (IEEE)	2.553	2
Physical Review E (APS)	2.353	1
Journal of Applied Physics (AIP)	2.328	5
Journal of the Optical Society B (OSA)	2.284	2

Optics Communications (Elsevier)	1.887	1
Applied Physics A (Springer)	1.784	1
Optical and Quantum Electronics (Springer)	1.547	2
Microwave and Optical Technology Letters (Wiley)	0.933	1
	total IF points: 158.3	total: 43
	mean IF: 3.7	

Appointments

- Nov 2019 - ... (ongoing)** *Management Committee member* (2 members per participating country)
 Cost Action [CA18223](#) - Future communications with higher-symmetric engineered artificial materials

Research Interests

- Metasurfaces, metamaterials and complex electromagnetic media
 - Tunable, reconfigurable, and software-controlled metasurfaces
 - Metasurfaces for wavefront control, polarization manipulation, and dispersion engineering
- Graphene and two-dimensional photonic materials
- Toroidal dipole and anapole electromagnetic excitations
- Nonlinear optics in resonant structures and guided wave devices
- Nanophotonics, plasmonics, silicon photonics
- Optical cavities and resonators
- Computational and theoretical electromagnetics

Project participation

- I have participated as a researcher in 7 European collaborative projects and 3 national projects.
- As a Principal Investigator: three-year project (2nd Call for H.F.R.I. Post-Doctoral Researchers) started January 2021.

Teaching/Academic Experience

- [2020-2022] Adjunct Lecturer in University of Crete, Department of Materials Science and Technology:
 - Mechanical and Thermal Properties of Materials (ETY-349) (5th semester)
 - Advanced Computational Materials Science (ETY-448) (8th semester)
- [2009-2013] During my PhD studies I served as a teaching assistant in three undergraduate courses in the Dept. of Electrical Engineering, Aristotle University of Thessaloniki:
 - Optical Communications (8th semester),
 - Microwaves I (8th semester),
 - Microwaves II (9th semester),
 - Photonics Technology (9th semester)
- Co-supervision of two (2) PhD students, fourteen (14) Master-level (MSc and diploma degrees) thesis projects, and three (3) Undergraduate (bachelor) projects

Memberships

- [2019 - ...] The Optical Society (OSA)
- [2005 - ...] Institute of Electrical and Electronics Engineers (IEEE). *Awarded Senior Member grade in 2019.*
- [2020 - ...] Hellenic Society for the Science and Technology of Condensed Matter (HSSTCM), member society of the Federation of European Materials Societies (FEMS)
- [2012 - 2017] SPIE society

Refereeing

- Reviewer for 36 Journals (AAAS, Nature, APS, ACS, Wiley, OSA, AIP, IEEE, IOP, and more)
- Reviewer for Funding Agencies