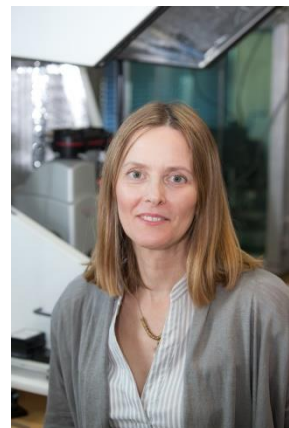


## CURRICULUM VITAE

### Evangelia Sarantopoulou

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### Education

Ph.D. in Physics, University of Athens, Greece (1996)  
Diploma in Physics, University of Athens, Greece (1988)

### Research and teaching appointments

2013- present Senior Researcher, TPCI/NHRF, Athens, Greece.  
2004-2012: Associate Researcher, TPCI/ NHRF, Athens, Greece.  
1998-2003: Post-doctoral Researcher, TPCI/ NHRF, Athens, Greece.  
1996-1998: Post-doctoral Researcher, National Technical University /NTUA, Athens, Greece.

### Main research interests

- Biophysics: Cancer cells, nanomedicine, and complexity in biosystems.
- Nanomechanics.
- Space sciences.
- Photonic synthesis of nanostructured materials and photonic surface processing with short light wavelengths.

- Targeting specified magnetic, electric, and self-assembly functionalities at nanoscale.
- Photonic adsorption at interfaces, hybridization of bio surfaces.
- Microwave spectroscopy and interaction of EMF fields with cells.

## External funding

Scientist in charge of two European Space Agency projects and in one EU-FP7, scientific coordinator in three bilateral research projects. Participated in more than ten national and international research projects in collaboration with academic and industrial organizations. (International: Science, Human Capital & Mobility, Linkage-NATO, Large Scale Installation, Brite-Euram, Esprit, IST, INTAS, Quality of Life, GROWTH, ERANET, Lifelong Learning Programme, National: PENED, ESPA, Bilateral).

## Conferences and invited talks

145 international and 9 Greek conferences, 4 invited talks.

## Honors and awards

Guest Editor of the Special Issue "Dynamics and Applications of Photon-Nanostructured" of "Nanomaterials" MDPI journal (2018-2020)

The article "Surface profile gradient in amorphous Ta<sub>2</sub>O<sub>5</sub> semi conductive layers regulates nanoscale electric current stability." was picked up as "a significance statement in physics for the year 2017" by "[Advances in Engineering.](#)"

Member of Editorial board for Heliyon – Elsevier (2013-2019)

Visiting Professor at Kazan Federal University, Institute of Physics (2015-2019)

Postgraduate fellowship of the British council at the University of Oxford UK (1992)

Postgraduate fellowship of the Theoretical and Physical Chemistry Institute, Athens, (1988-1992) Greece.

## Teaching activities

Visiting Professor at Kazan Federal University, Institute of Physics (2015-2019).

Participation in the teaching of two Postgraduate courses in the framework of the Postgraduate qualification program of National and Kapodistrian University of Athens, Faculty of Biology (2011, 2012, 2014)

Participation in Quantum SpinOff project workshops (2014, 2015)

Teaching assistant in experimental training of students in Physics (National Technical University of Athens, NTUA, Athens Greece, 1998-1999).

Supervision of two Ph.D. three MSc. one honour and one undergraduate student.

## Professional affiliations and activities

Member of the Nanosafety cluster.

European Low Gravity Research Association.

Reviewer in numerous international journals.

Research project evaluator in several European Commission panels.

## Publications

169 publications, 5 chapters in books. More than 2240 citations, h-index:27, and h-i10: index 57 (Google Scholar 9/2021).

## Selected recent publications

E. Bakalis, V. Gavriil, A.C. Cefalas, Z. Kollia, F. Zerbetto, E. Sarantopoulou, "Viscoelasticity and noise properties reveal the formation of biomemory in cells", *J. Phys. Chem.B* **2021**, *125*, 10883.

[DOI: /10.1021/acs.jpccb.1c01752](https://doi.org/10.1021/acs.jpccb.1c01752)

E. Sarantopoulou, "Dynamics and Applications of Photon-Nanostructured Systems", *Nanomaterials* **2020**, *10*, 1741.

[DOI: 10.3390.nano10091741](https://doi.org/10.3390.nano10091741)

V. Gavriil, M. Chatzichristidi, D. Christofilos, G. A. Kourouklis, Z. Kollia, E. Bakalis, A.C. Cefalas, E. Sarantopoulou, "Entropy and Random Walk Trails Water Confinement and Non-Thermal Equilibrium in Photon-Induced Nanocavities", *Nanomaterials* **2020**, *10*, 1101.

[DOI:10.3390.nano10061101](https://doi.org/10.3390.nano10061101)

V. Gavriil, M. Chatzichristidi, Z. Kollia, A.C. Cefalas, N.Spyropoulos-Antonakakis, V.V. Semashko, E. Sarantopoulou, "Photons Probe Entropic Potential Variation during Molecular Confinement in Nanocavities," *Entropy* **2018**, *20*, 545.

[DOI: 10.3390.e20080545](https://doi.org/10.3390.e20080545)

A.D. Velentzas, P.D. Velentzas, S.A. Katarachia, A.K. Anagnostopoulos, N.E. Sagioglou, E.V. Thanou, M.M. Tsioka, V.E. Mpakou, Z. Kollia, V.E. Gavriil, I.S. Papassideri, G.T. Tsangaris, A.C. Cefalas, E. Sarantopoulou, D.J. Stravopodis, "The indispensable contribution of s38 protein to ovarian-eggshell morphogenesis in *Drosophila melanogaster*.", *Sci. Rep.* **2018**, *8*, 16103.

[DOI: 10.1038.s41598-018-34532-2](https://doi.org/10.1038.s41598-018-34532-2)

V.V. Semashko, M. S. Pudovkin, A.C. Cefalas, P.V. Zelenikhin, V. E. Gavriil, A.S. Nizamutdinov, Z. Kollia, A. Ferraro, E. Sarantopoulou, "Tiny Rare-Earth Fluoride Nanoparticles Activate Tumour Cell Growth via Electrical Polar Interactions.", *Nanoscale Res. Lett.* **2018**, *13*, 370.

[DOI: 10.1186.s11671-018-2775-z](https://doi.org/10.1186.s11671-018-2775-z)

A.C. Cefalas, Z. Kollia, N. Spyropoulos-Antonakakis, V. Gavriil, D. Christofilos, G. Kourouklis, V.V. Shemashko, V. Pavlov, E. Sarantopoulou, "Surface profile gradient in amorphous Ta<sub>2</sub>O<sub>5</sub> semi conductive layers regulates nanoscale electric current stability.", *Appl. Surf. Sci.* **2017**, *396*, 1000.

[DOI: 10.1016.j.apsusc.2016.11.076](https://doi.org/10.1016.j.apsusc.2016.11.076)

A.D. Velentzas, P.D. Velentzas, N.E. Sagioglou, E.G. Konstantakou, A.K. Anagnostopoulos, M.M. Tsioka, V.E. Mpakou, Z. Kollia, C. Consoulas, L.H. Margaritis, I.S. Papassideri, G.Th. Tsangaris, E. Sarantopoulou, A.C. Cefalas, D. J. Stravopodis. "Targeted Downregulation of s36 Protein Unearths its Cardinal Role in Chorion Biogenesis and Architecture during *Drosophila melanogaster* Oogenesis.", *Sci. Rep.* **2016**, *6*, 35511.

[DOI: 10.1038.srep35511](https://doi.org/10.1038.srep35511)