

Curriculum Vitae

Dr. Konstantia Kyritsi

*Special Teaching Fellow
Laboratory of Nonlinear Systems – Circuits & Complexity (LANSCOM)
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Personal Data

Date of Birth 16-05-1973
Place of Birth Larissa, Greece
Nationality Greek

Summary of Scientific – Academic Activities

- 18 International Journal publications and 10 International Conference contributions.
- I have participated, as a researcher, in several nationally and internationally (EU) funded projects:

PENED 1994 (A/A 1833) : “*Study of the chaotic electrical conductivity of semiconductors and semiconductive devices*”
INCO-COPERNICUS 98 E.U. “*Industrial Realization of α -Si heterostructures for electrical applications*”
E E 1998 NTCONGS (ESPRIT LTR): “*New technology for the control of narrow-gap semiconductor materials*”

Education

2015- Laboratory Teaching Staff, Department of Physics, AUTH
1998-2003 PhD in Nonlinear dynamics of semiconductive devices; Dissertation: “Nonlinear behavior of semiconductive devices α -Si/Si(p)/Si(n)” Department of Physics, AUTH. Grade: Excellent.
1995-1997 MSc. Materials Physics & Technology. Department of Physics, AUTH. Grade: Excellent.
1991-1995 Bachelor. Department of Physics, AUTH.

Research Interests

“Nonlinear Phenomena in Circuits and Materials”

- Study of chaotic oscillations in circuits with non-linear resistors and routes to chaos
- Study of the Negative Differential Resistance (NDR) in semiconductor devices with non-linear characteristic I-U
- Nonlinear dynamics of electronic devices;
- Memristors and memristive circuits;
- Chaotic cryptography and secure communication

Course(s):

- Electric Circuits Laboratory
- Atomic and Molecular Physics Laboratory
- Nuclear Physics: Laboratory Course I
- Introductory Physics Laboratory

Scholarships

1998-1999 PhD studies, AUTH Research Committee.

Notable Publications

1. “Coverage Performance of a Chaotic Mobile Robot Using an Inverse Pheromone Model” Petavratzis, E.K., Volos, C.K., Stouboulos, I.N., Kyritsi, K.G., Valavanis, K.P. 2019 8th International Conference on Modern Circuits and Systems Technologies, **MOCAS 2019**
2. “Characterization of a non-autonomous second-order non-linear circuit for secure data transmission” A.N. Miliou, A.P. Valaristos, S. Stavrinides, K. Kyritsi and A.N. Anagnostopoulos, **Chaos, Solitons & Fractals**, 33, 1248 (2007)
3. “Oscillations in the α -Si/Si(n)/Si(p) device: Embedding and Correlation dimensions” K. Kyritsi, A.N. Anagnostopoulos and G.L. Bleris **Chaos, Solitons & Fractals**, 21, 741 (2004)
4. “On the influence of noise in the evaluation of the oscillations in the α -Si/Si(n)/Si(p) device” K. Kyritsi and A.N. Anagnostopoulos **Chaos, Solitons & Fractals**, 21, 651 (2004)
5. “The period doubling route to chaos of a second order non-linear non-autonomous chaotic oscillator-part I” S. Stavrinides, N. Deliolanis, K. Kyritsi, A.N. Anagnostopoulos, A. Tamasevicius, A. Cenys **Chaos, Solitons & Fractals**, 20, 843 (2004)