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#### PERSONAL DATA

Birth date: 31-3-1970

Birth place: Thessaloniki, Greece.

Status: Married; one child.

#### SUMMARY OF SCIENTIFIC – ACADEMIC ACTIVITIES

Teaching experience in Academia (under- and postgraduate) for 10 years, **1 PhD supervision** in University of Balearic Islands-Spain

**Researcher** in 9 Greek-national and International research projects

**Management Committee Member** in EU-COST Action IC1401, “Memristors: Devices, Models, Circuits, Systems and Applications” (MemoCIS)  
**33 papers** in peer-reviewed journals and **35 papers** in peer-reviewed conferences, **2 book chapters**, **1 edited book**, **2 journal Special Issues** (Editor)

Citation index > 180, h-index = 8

**Reviewer** in 21 journals, 17 conferences and 4 projects  
10 invited talks

#### EDUCATION

**Ph.D. in Chaotic Electronics (cum laude)**

Physics Department, Aristotle University of Thessaloniki (2008)

Thesis title: “Characterization of the behavior of a nonlinear electronic oscillator suitable for chaotic signal generation”

**M.Sc. in Electronics (with honours)**

Physics Department, Aristotle University of Thessaloniki (2003)

Thesis title: “A circuit for synchronized chaotic, analog modulation – demodulation of digital signals”

**Physics Diploma**

Physics Department, Aristotle University of Thessaloniki (1996)

Thesis title: “Analog Multiplication and Division Scheme by using D/A converters”

**Telecommunication Technician Diploma**

Hellenic Army Scholl of Telecommunication Technicians (1996)

#### LANGUAGES

Dr. Stavrínides speaks three languages: Greek (native language), English (working language - fluent) and basic Italian.

#### RESEARCH INTERESTS

The research interests of Dr Stavrínides are mainly but not exhaustively in area of applied complexity in circuits and systems as well as in chaotic electronics. Research regarding Memristors and memristor-based circuits is of great interest, while EconoPhysics is another area of active research.

#### EMPLOYMENT

**Novell/Unix Operator** (May 1992 – September 1993)

Departments of Informatics and Physics, Aristotle University of Thessaloniki

**Physics Professor (Lyceum-Gymnasium)** (September 1998 – August 2012)

Private and Greek-State Hi-School

**Research and Teaching Associate** (September 2006 – August 2010)

Physics Dept. Aristotle University of Thessaloniki

**External Professor** (September 2007 – August 2010)

Master course on Radio-engineering, Aristotle University of Thessaloniki

**Adjunct Assistant Professor** (October 2008 – July 2012)

Electrical Engineering Dept., Kavala Institute of Technology

**Adjunct Lecturer** (November 2008 – August 2010)

Department of Informatics, Aristotle University of Thessaloniki

**Adjunct Lecturer** (March 2010 – August 2011)

Physics Dept. Aristotle University of Thessaloniki

**Visiting Assistant Professor** (September 2012 – June 2013)

Electrical and Computer Engineering Dept., University of Cyprus

**Adjunct Lecturer** (March 2014 – today)

Computer Science Department, University of Thessaly

**External Professor** (September 2014 – today)

Master course on Informatics and Computational Bioinformatics, University of Thessaly

#### RESEARCH PROJECTS

- EU-Greece joint research action: Pythagoras II, “**Nonlinear circuits for chaotic signal production**” Coordinator: A.N. Anagnostopoulos (AUTH)
- EU-Greece joint research project action: Pythagoras II, “**Research on the development of an electronic measurement network for an integrated environmental surveillance of water ecosystems**” Coordinator: Th. Laopoulos (AUTH)
- Kavala Institute of Technology Research Committee Project, “**Optical sensor sensitivity optimization (sensor type: Al-A-SiC:H-cSi)**” Coordinator: L. Magafas (TEI Kavallas)
- HELLENIC MINISTRY OF EDUCATION (EU-funded project), Horizontal Action MIS:295381, “**School self-evaluation**”, Coordinator: IDP (IPE)
- NATO: ICSEAP.CLG 981947, “**Development of very-broad-frequency-band detector of electromagnetic radiation**” Coordinators: H.G. Roskos (Goethe Universitüt, Germany), S. Asmontas (Semiconductor Physics Institute, Lithuania), A.N. Anagnostopoulos (AUTH)
- NATO: ICSEAP.CLG 981947, “**Secure communication from nonlinear electronic synchronized circuits**” Coordinator: A.N. Miliou (AUTH)
- NATO: ICSEAP.CLG 983334, “**Cryptography using chaotic oscillators**” Coordinator: A.N. Miliou (AUTH)
- EUROPEAN COMMISSION-Research Directorate-General: A.U.Th, Research Committee 85205, “**Jordan-Europe wide Enhanced Research Links in ICT - JEWEL**” Coordinator: S. Nikolaidis (AUTH)
- EU-COST ACTION, “**Memristors: Devices, Models, Circuits, Systems and Applications**” Coordinator: J. Georgiou (U.Cyprus)

#### PROFESSIONAL ACTIVITY

Dr. Stavrínides has been/is an active organizing/scientific/programme committee member and chair in several international conferences, while he has organized two Mini-Symposiums on *Chaotic Electronics* and *Memristors*. He has been/is reviewer in numerous journals and conferences as well as research projects. He has collaborations with several European laboratories (Politecnico di Torino, University of Cyprus, TU Dresden, University of Balearic Islands etc.). Dr. Stavrínides has been invited to give lectures in the areas of his expertise i.e. synchronization of nonlinear circuits and chaotic electronics. He has also served in a variety of editorial roles. He is a registered Electronics Engineer. Recently he was elevated to the *IEEE Senior Member Grade*. He currently serves as a **High School Principal and Adjunct Lecturer** in Computer Science Department, University of Thessaly and in Electrical Engineering T.E. Department, TEI-EMT.

## **PUBLICATIONS**

*Dr Stavrínides has authored or co-authored 68 journal and conference papers and 2 book chapters, while he is co-editor of an edited book. Two of his journal papers are review articles. He has also co-written teaching notes for an undergraduate course. His published work has received more than 180 citations while he enjoys an h-index=8.*

### **SELECTED JOURNAL PAPERS**

1. "Characterization of a non-autonomous second order non-linear circuit for secure data transmission" by A.N. Miliou, A.P. Valaristos, **S.G. Stavrínides**, K.G. Kyritsi, A.N. Anagnostopoulos, *Chaos Solitons & Fractals*, 33(4), pp. 1248-1255, 2007.
2. "Secure communication by chaotic synchronization: Robustness under noisy conditions" by A.N. Miliou, I.P. Antoniadis, **S.G. Stavrínides**, A.N. Anagnostopoulos, *Nonlinear Analysis: Real World Applications*, 8, pp. 1003-1012, 2007.
3. "A digital non autonomous chaotic oscillator suitable for information transmission" by **S.G. Stavrínides**, N.F. Karagiorgos, K. Papathanasiou, S. Nikolaidis and A.N. Anagnostopoulos, *IEEE TCAS-II*, 60(12), Art. No. 6654269, pp. 887-891, 2013.
4. "Using modern RF tools to predict chaotic behaviour of electronic circuits and systems" by **S.G. Stavrínides**, K. Papathanasiou and A.N. Anagnostopoulos, *International Journal of Electronics*, 102(2), pp. 233-247, 2015.
5. "Chaotic analysis of gold price index" by M. Haniás, L. Magafas, **S.G. Stavrínides**, *Journal of Engineering Science and Technology Review*, 8(1), pp. 16-18, 2015.
6. "Chaotic Behavior of Random Telegraph Noise in nanoscale UTBB FD-SOI MOSFETs" by D.H. Tassis, **S.G. Stavrínides**, M.P. Haniás, C.G. Theodorou, G. Ghibaudó and C.A. Dimitriadis, accepted for publication (available online) in *IEEE Electron Device Letters*, 2017.

### **SELECTED CONFERENCE PAPERS**

1. "An automated setup for the analysis of chaotic systems" by **S.G. Stavrínides**, Th. Laopoulos and A.N. Anagnostopoulos, in *Procs. IEEE IDAACS '05*, pp. 628-632, September 2005, Sofia, Bulgaria.
2. "An autonomous mobile robot guided by a chaotic true random-bits generator" by Ch.K. Volos, I.M. Kyprianidis, I. Stouboulos, **S.G. Stavrínides** and A.N. Anagnostopoulos, *Chaos and Complex Systems-Springer Complexity Series*, pp. 337-344, *Procs. CCS 2012, May 2012, Antalya, Turkey*.
3. "Control of economic situations by utilizing an electronic circuit" by **S.G. Stavrínides**, M.P. Haniás, L. Magafas, S. Banerjee, in *Procs. 2<sup>nd</sup> International Conference on Econophysics (ICE2011)*, p. 33, June 2013, Kavala, Greece.
4. "Multi-state Memristive Nanocrossbar for High-Radix Computer Arithmetic Systems" by G. Papandroulidakis, I. Vourkas, G. Sirakoulis, **S.G. Stavrínides**, S. Nikolaidis, in *Procs. IEEE-NANO 2015*, Article number 7388682, pp. 625-628, July 2015, Rome, Italy.
5. "An analytical energy model for the reset transition in unipolar Resistive-Switching RAMs" by M. M. Al Chawa, R. Picos, E. Garcia-Moreno, **S.G. Stavrínides**, J.B. Roldan, F. Jimenez-Molinós, In *Procs. IEEE-MELECON2016*, April 2016, Limassol, Cyprus.
6. "A two-transistor non-ideal memristor emulator" by J. Kalomiros, **S.G. Stavrínides**, F. Corinto, In *Procs. IEEE-MOCAST2016*, May 2016, Thessaloniki, Greece.

### **BOOKS**

**D1.** Springer's Complexity Series: **Chaos and Complex Systems: Proceedings of the 4th International Interdisciplinary Chaos Symposium**, editors: **S.G. Stavrínides**, S. Banerjee, H. Caglar, M. Ozer, Springer, ISBN: 978-3642339134, January 2013.

### **BOOK CHAPTERS**

- E1.** "Digital information transmission using discrete chaotic signal" by A.N. Anagnostopoulos, A.N. Miliou, **S.G. Stavrínides**, A.S. Dmitriev, E.V. Efremova, in **"Chaos Synchronization and Cryptography for Secure Communications: Applications for Encryption"**, edited by Santo Banerjee, Chapter 19, pp. 439-462, IGI Global, ISBN: 978-1615207374, May 2010.
- E2.** "The route from synchronization to de-synchronization of chaotic operating circuits and systems" by **S.G. Stavrínides**, A.N. Anagnostopoulos in **"Applications of Nonlinear Dynamics and Chaos in Science and Engineering – Vol. 3"**, edited by Santo Banerjee and Lamberto Rondoni, Chapter 9, pp. 229-275, Springer, ISBN: 978-3642340161, February 2013.

*(Sources: Scopus, ISI, Google Scholar, Publish or Perish, MS Academic Search and A.U.Th. Library System)*

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