

George Stamoulis

Office:

Dept. of Computer and Communication Engr.
University of Thessaly
37 Glavani St.
Volos 38221
GREECE
Tel: +30-24210-74971
Cell: +30-6945-386228
Fax: +30-24210-74997
e-mail: georges@uth.gr

Residence:

33B Dionysou St.
Melissia 15127
GREECE

Research Interests

Average and maximum power estimation and minimization; low power design and architecture; reliability and verification of VLSI circuits; CAD system design; telecom and signal processing circuit optimization; wireless sensor networks and applications; sensor signal processing; optimization theory and applications.

Education

1991—1994
University of Illinois Urbana, Illinois
Ph.D. in Electrical and Computer Engineering.
Thesis topic: Probabilistic Simulation for Reliability and Average Power Estimation.
Advisor: Ibrahim Hajj
1989—1991
University of Illinois Urbana, Illinois
Master of Science in Electrical and Computer Engineering.
Thesis topic: New Techniques for Probabilistic Simulation of VLSI CMOS Circuits.
Advisor: Ibrahim Hajj
1984—1989
National Technical University of Athens Athens, Greece
Diploma in Electrical and Computer Engineering.
Thesis topic: Design and Analysis of High Transmission Rate Telecommunication Circuit Elements.
Advisor: John Avaritsiotis

Positions held

University of Thessaly
January 2009—present Professor
September 2007—August 2011 Head of the Department
September 2003—August 2007 Associate Head of the Department
January 2003—January 2009 Associate Professor
École Polytechnique Fédérale de Lausanne
August 2011—February 2012 Visiting Professor
Nanotropic S.A.
November 2008—present Founder, Chief Scientist
Sensap S.A. & Sensap Swiss AG
November 2007—present Founder, Chief Technical Officer
Technical University of Crete
June 2001—January 2003 Assistant Professor
Intel Corp.
January 2000—October 2001 Responsible for power estimation and reduction on Pentium M
April 1999—January 2000 Strategic CAD Laboratories: Santa Clara site manager and area lead for Globals
August 1997—April 1999 Lead of PowerCAD
June 1995—August 1997 Sr. CAD Engineer

University of Iowa
August 1994—June 1995 Visiting Assistant Professor

Languages spoken English Excellent
 French Excellent
 Greek Excellent

Experience
Research

January 2009—present
University of Thessaly. Volos, Greece
Professor.

Average and maximum power estimation and optimization, low power circuit and architecture techniques, reliability and radiation hardening of ICs, sensors, wireless sensor networks, telecom and signal processing circuit optimization for power, performance, and reliability.

January 2003—January 2009
University of Thessaly. Volos, Greece
Associate Professor.

Average and maximum power estimation and optimization, low power circuit and architecture techniques, reliability and radiation hardening of ICs, sensors.

June 2001—January 2003
Technical University of Crete. Chania, Greece
Assistant Professor.

Average and maximum power estimation and optimization, low power circuit and architecture techniques, reliability and radiation hardening of ICs.

January 2000—October 2001
Intel Corp. Haifa, Israel
Responsible for power estimation and reduction for the Centrino project within the Mobile Processor Group.

April 1999—January 2000
Intel Corp. Santa Clara, California
Strategic CAD Laboratories.
Santa Clara site manager and area lead for Globals: power, reliability, noise, and packaging.

January 1999—March 1999.
Hellenic Ministry of National Defense Athens, Greece
Advisor to the Research, Technology and Information Science Committee.

August 1997—April 1999
Intel Corp. Santa Clara, California
Project Lead of PowerCAD.
Development of the next generation tools for power estimation and power reduction.

June 1995—August 1997
Intel Corp. Santa Clara, California
Sr. CAD Engineer.
Low power circuit techniques; CAD tool development; low power architecture and compiler research.

August 1994—June 1995
University of Iowa Iowa City, Iowa
Visiting Assistant Professor.
Average power estimation and simulation for reliability of VLSI circuits.

1989—1994
Coordinated Science Laboratory Urbana, Illinois
Probabilistic simulation for reliability and low power.
1987--1989

National Technical University of Athens Athens, Greece
Participated in the European Commission project RACE, phases 4.0 through 4.4.

Teaching	<p>August 1994—June 1995 <u>University of Iowa</u> Introduction to VLSI Design (Fall 1994) Advanced VLSI Design (Spring 1995) June 2001—January 2003 <u>Technical University of Crete</u> Introduction to VLSI Design (Fall 2001 & 2002) Advanced Topics in Low Power Design (Fall 2001) Digital Design (Spring 2002) September 2001—present <u>University of Thessaly</u> Digital design I (Fall 2001—2008) Digital design II (Spring 2002 & 2003) Circuit analysis (Fall 2009 & 2010) Electronics I (Fall 2010 & 2012) VLSI design (Spring 2003—2012) Testing and Formal Verification of Integrated Circuits (Fall 2003—2006, 2008) Microprocessor design (Fall 2004) VLSI System Design (Spring 2006—2012) CAD Tool Design (Fall 2006—2010 & 2012) Low Power Design (Spring 2011—2012) Computer Architecture (Fall 2006) Electrical Design (Spring 2013)</p>	<p>Iowa City, Iowa (undergraduate) (graduate) Chania, Greece (undergraduate) (graduate) (undergraduate) Volos, Greece (undergraduate) (undergraduate) (undergraduate) (undergraduate) (undergraduate) (graduate) (graduate) (graduate) (graduate) (undergraduate) (undergraduate)</p>
Administrative	<p>September 2007—August 2011 <u>University of Thessaly</u> Head of the Department of Computer and Communications Engineering September 2003—August 2007 <u>University of Thessaly</u> Associate Head of the Department of Computer and Communications Engineering September 2005—August 2007 <u>University of Thessaly</u> Director of the Graduate Studies Program September 2004—August 2005 <u>University of Thessaly</u> Representative of Associate Professors at the Faculty Senate Departmental Committees:</p> <ul style="list-style-type: none"> • Curriculum committee • Graduate selection committee • Administrative personnel selection committee • Student transfer committee • Instructor selection committee • Graduate studies advisory committee • Internal evaluation committee • Undergraduate admission committee • Practical training oversight committee • Equipment purchasing committee <p>University committees</p> <ul style="list-style-type: none"> • Research committee • General Director selection committee • Telecommunications committee 	<p>Volos, Greece Volos, Greece Volos, Greece Volos, Greece Volos, Greece Volos, Greece</p>

Member of over 50 faculty selection committees (over 30 at the University of Thessaly and over 20 at other institutions as an external member)
 Co-authored the recommendatory report for over 15 of the above committees.
 Member of five technical personnel selection committees

Startups	<p>November 2007—present <u>Sensap S.A. & Sensap Swiss AG</u> Athens, Greece & Zurich, Switzerland Founder, Chief Technical Officer</p> <p>November 2008—present <u>Nanotropic S.A.</u> Athens, Greece Founder, Chief Scientist</p>
Consulting	<p>August 1993 <u>Advanced Micro Devices</u> San Jose, California Consultant on reliability and low power issues.</p> <p>June 2003—March 2004 <u>Organization for the Promotion of Greek Culture</u> Athens, Greece Consultant on digital museum platforms</p> <p>September 2009—March 2010 <u>Observatory for the Greek Information Society</u> Athens, Greece Consultant on GIS infrastructure</p> <p>June 2008—present <u>Helic S.A.</u> Athens, Greece Consultant on simulation issues.</p> <p>July 2011—present <u>Hellenic Ministry of National Defense</u> Athens, Greece Security consultant.</p>
Journal and Conference Reviews	<p>IEEE Transactions on Computers IEEE Transactions on VLSI Systems IEEE Transactions on Computer Aided Design Member of the Technical Program Committee of the Custom Integrated Circuit Conference (1996-1997). Member of the Technical Program Committee and session chair in the International Symposium on Low Power Design (1999-2006). Member of the Technical Program Committee of the International On-Line Testing Workshop 2000-2006. Member of the Technical Program Committee of the Design and Test in Europe (2001-2006). Member of the Technical Program Committee of ISQED 2001.</p>
Publications	<p>Georgios I. Stamoulis. "Design and Analysis of High Transmission Rate Telecommunication Circuit Elements." Diploma Thesis. Department of Electrical and Computer Engineering. National Technical university of Athens, June 1989.</p> <p>Georgios I. Stamoulis. "New techniques for probabilistic simulation of VLSI CMOS circuits." Master's Thesis. Department of Electrical and Computer Engineering. University of Illinois at Urbana-Champaign, September 1991.</p> <p>Georgios I. Stamoulis. "Probabilistic simulation for reliability and average power estimation." Ph.D. Thesis. Department of Electrical and Computer Engineering. University of Illinois at Urbana-Champaign, April 1994.</p>
Refereed conferences	<p>P. -C. Li, G. I. Stamoulis, and I. N. Hajj. "A probabilistic timing approach to hot-carrier effect estimation". Proceedings of the IEEE/ACM Conference on Computer Aided Design, pp. 210-213, November 1992.</p> <p>G. I. Stamoulis, and I. N. Hajj. "Improved techniques for probabilistic simulation including signal correlation effects". Proceedings of the 30th ACM/IEEE Design Automation Conference, pp. 379-383, June 1993.</p> <p>P. -C. Li, G. I. Stamoulis, and I. N. Hajj. "iPROBE-d: A hot-carrier and oxide reliability simulator". Proceedings of the International Reliability Physics Symposium 1994, pp. 274-279.</p>

G. I. Stamoulis, and I. N. Hajj. "Slope considerations in probabilistic simulation". Proceedings of the 1994 Custom Integrated Circuits Conference, pp. 186-190, May 1994.

G. I. Stamoulis. "A Monte-Carlo approach for the accurate and efficient estimation of average transition probabilities in sequential logic circuits". Proceedings of the 1996 Custom Integrated Circuits Conference, pp. 221-224.

G. I. Stamoulis et al. "Transistor-level optimization". Proceedings of the Design Technology and Test Conference 1997. Invited paper.

Y. Ye, K. Roy, and G. I. Stamoulis. "Quasi-static energy recovery logic and supply clock generation circuits". Proceedings of the 1997 International Symposium on Low Power Design, pp. 96-99.

N. Bellas, I. Hajj, C. Polychronopoulos, and G. Stamoulis. "Architectural and compiler support for energy reduction in the memory hierarchy of high-performance microprocessors". Proceedings of the 1998 International Symposium on Low Power Design, pp. 70-75. June 1998.

N. Bellas, I. Hajj, C. Polychronopoulos, and G. Stamoulis. "A new scheme for I-Cache energy reduction in High Performance Processors". Power-Driven Microarchitectures Workshop, International Symposium On Computer Architecture (ISCA), June 1998, Barcelona, Spain

U. K. Narayanan, R. K. Roy, and G. I. Stamoulis. "Characterizing individual gate power sensitivity in low power design". Proceedings of VLSI-India 1999, pp. 625-628.

N. Bellas, I. Hajj, C. Polychronopoulos, and G. Stamoulis. "Energy and Performance Improvements in Microprocessor Design using a Loop Cache". Proceedings of ICCD '99, pp. 378-383.

P. D. Dimitropoulos, C. Kachris, and G. I. Stamoulis, "A New SOI capacitive sensor for absolute and differential pressure measurements," Digest 18th European Conf. Solid State Sensors (EUROSENSORS 2004), September 2004, Rome – Italy, pp. 60-61.

P. D. Dimitropoulos, S. P. Nikolaidis, D. P. Karampatzakis, and G. I. Stamoulis, "A low-power CMOS VLSI circuit for signal conditioning in integrated capacitive sensors," IEEE Proc. 3rd International Conf. Sensors (Sensors 2004), October 2004, Vienna, Austria, pp. 202–205.

P. D. Dimitropoulos, E. Hristoforou, and G. I. Stamoulis, "A hybrid Jiles-Atherton / Stoner-Wolfarth magnetic hysteresis model for inductive sensors and actuators," IEEE Proc. 3rd International Conf. Sensors (Sensors 2004), October 2004, Vienna, Austria, pp. 1566–1569.

N. E. Evmorfopoulos, D. P. Karampatzakis, and G. I. Stamoulis, "Voltage-Drop-Constrained Optimization of Power Distribution Network Based on Reliable Maximum Current Estimates", ICCAD '04, pp. 479- 484.

D. P. Karampatzakis, N. E. Evmorfopoulos and G. I. Stamoulis, "A Statistically-Based Engine for P/G Network Optimization", IEEE PRIME '05, pp. 51- 54.

G. Dimitriou, P. K. Kikiras, G. I. Stamoulis, and I. N. Avaritsiotis. "A Tool for Calculating Energy Consumption in Wireless Sensor Networks", Proceedings of the 10th Panhellenic Conference on Informatics 2005, pp. 611-621.

G. Stamoulis, M. Koziri, I. Katsavounidis, and N. Bellas. "A Low-Power VLSI Architecture for Intra Prediction in H.264", Proceedings of the 10th Panhellenic Conference on Informatics 2005, pp. 633-640.

D. Karampatzakis, N. Evmorfopoulos, M. Tsiampas, and G. Stamoulis, "An RTL-to-grid design flow for power grid verification based on a statistical estimation engine", IEEE PRIME, Lecce, Italy, 2006. IEEE PRIME '06, pp. 37-40.

M. G. Koziri, G. I. Stamoulis, and I. X. Katsavounidis, "A Low-Power VLSI Architecture for Intra Prediction in H.264", IEEE PRIME '06, pp. 109-112.

D. Bountas, and G. I. Stamoulis, "CARROT: A Tool for Fast and Accurate Soft Error Rate Estimation", 6th International Workshop, SAMOS 06, pp.331-338.

N. Evmorfopoulos, D. P. Karampatzakis, and G. I. Stamoulis, "Precise Identification of the Worst-Case Voltage Drop Conditions in Power Grid Verification", ICCAD '06, pp. 112-118.

M. G. Koziri, G. I. Stamoulis, and I. X. Katsavounidis, "Power reduction in H.264 encoder through algorithmic and circuits transformation" ISLPED 2006, pp. 107-112.

M. G. Koziri, A. N. Dadaliaris, G. I. Stamoulis, and I. X. Katsavounidis, "A Novel Low-Power Motion Estimation Design for H.264" ASAP 2007.

P. Kikiras, D. Drakoulis, D. Dres, and G. I. Stamoulis, "Wireless Sensor Networks: Business Models and Market Issues", at 6th Conf. Telecomm Technoeconomics, 2007, Helsinki, Finland.

K. Katsalis, A. Xenakis, K. Kikiras, and G. Stamoulis "Topology Optimization in Wireless Sensor Networks for Precision Agriculture Applications" "International Conference on Sensor Technologies and Applications SENSORCOMM 2007, Valencia, Spain, pp. 526-530.

K. Katsalis, A. Xenakis, P. Kikiras, and G. Stamoulis Μεθοδολογίες βελτιστοποίησης της τοπολογίας ασυρμάτων δικτύων αισθητήρων σε εφαρμογές γεωργίας ακριβείας. 5ο Συνέδριο Ε.Γ.Μ.Ε. 2007, Larissa, Greece.

K. Katsalis, A. Xenakis, K. Kikiras, and G. Stamoulis, "Topology Optimization in Wireless Sensor Networks for Precision Agriculture Applications". 6th European Conference on Precision Agriculture, 2007, Skiathos, Greece.

D. P. Karampatzakis, M. K. Tsiampas, N. E. Evmorfopoulos, and G. I. Stamoulis, "A Design Flow for the Precise Identification of the Worst-Case Voltage Drop in Power Grid Analyses". Panhellenic Conference on Informatics, 2008 (PCI '08), pp. 135 – 139.

P. Kikiras, L. Perlepes, I. Kalavros, A. Tzimas, and G. Stamoulis, "Sensor Networks Applications in Livestock Production: the Case of Fleming Institute's Animal House". 2nd Panhellenic Conference of Livestock Breeding, 2008, Larissa, Greece.

P. Kikiras, L. Perlepes, and G. Stamoulis, "Wireless Sensor Networks in Gaming". 1st Workshop on Wireless Sensor Networks, 2008, Athens, Greece.

D. Bountas, G. Stamoulis, and N. Evmorfopoulos, "A macromodel technique for VLSI dynamic simulation by mapping pre-characterized transitions". IEEE International Conference on Computer Design, 2008 (ICCD 2008), pp. 450 – 456.

N. Papadakis, K. Ntalianis, A. Doulamis, and G. Stamoulis, "An Automatic Multi-Agent Web Image and Associated Keywords Retrieval System". 16th International Conference on Systems, Signals and Image Processing, 2009 (IWSSIP 2009), pp. 1-4.

M. Owaida, M. Koziri, I. Katsavounidis, and G. Stamoulis, "A high performance and low power hardware architecture for the transform and quantization stages in H.264". IEEE International Conference on Multimedia and Expo, 2009 (ICME 2009), pp. 1102 – 1105.

A. Xenakis, L. Perlepes, P. Kikiras, and G. Stamoulis. "Application of the LGR Algorithm for topology control in a wireless sensor network for precision agriculture applications". Panhellenic Conference of the Society of Agricultural Engineers, 2009, Thessaloniki Greece, pp. 641-648.

C. Chatziplaton, G. I. Stamoulis, and P. Kikiras, "Vehicle speed and position determination using WSN". 2nd Workshop on Wireless Sensor Networks, 2009, Athens, Greece.

G. Giannakas, F. Plessas, G. Nassopoulos, and G. Stamoulis, "A 2.45GHz power harvesting circuit in 90nm CMOS". 17th IEEE International Conference on Electronics, Circuits, and Systems (ICECS), 2010, pp. 835 – 838.

M. K. Tsiampas, D. Bountas, P. Merakos, N. E. Evmorfopoulos, S. Bantas, and G. I. Stamoulis, "A power grid analysis and verification tool based on a Statistical Prediction Engine". 17th IEEE International Conference on Electronics, Circuits, and Systems (ICECS), 2010, pp. 839 – 842.

A. Zaharis, A. I. Martini, P. Kikiras, and G. Stamoulis, "User Authentication Method and Implementation Using a Three-Axis Accelerometer". MOBILIGHT 2010, pp. 192-202.

A. Raman, D. Bountas, and G. Stamoulis, "A High-Capacity Power Integrity Flow Supporting Inductive Rail Effects With Transistor-Level Accuracy". Magma Users Summit on Integrated Circuits 2010 (Best paper award).

A. Zaharis, A. I. Martini, L. Perlepes, G. Stamoulis, and P. Kikiras, "Live forensics framework for wireless sensor nodes using sandboxing". Proceedings of the 6th ACM workshop on QoS and security for wireless and mobile networks 2010 (Q2SWinet '10), pp. 70-77.

N. Evmorfopoulos, M. -A. Rammou, G. Stamoulis, and J. Moondanos, "Characterization of the worst-case current waveform excitations in general RLC-model power grid analysis". 2010 IEEE/ACM International Conference on Computer-Aided Design (ICCAD), pp. 824 – 830.

V. N. Petoussis, P. D. Dimitropoulos, G. Stamoulis, and E. Houstis, "Novel Dynamic Technique Reducing the Offset Voltage in a Hall Effect Sensor". 18th Sensor + Test, 2011, pp. 780 – 785.

V. N. Petoussis, P. D. Dimitropoulos, G. Stamoulis, and E. Houstis, "Introducing a New Hall Effect Sensor- Novel Dynamic Offset Reduction Method", 1st International Conference on Pervasive and Embedded Computing and Communication Systems (PECCS) Algarve Portugal, 2011.

A. Zaharis, L. Perlepes, G. Stamoulis, and P. Kikiras, "End – to – End Secure Data Delivery in Wireless Sensor Networks". SENSORCOMM 2011, pp. 356-364.

F. Liakou, P. Dimitropoulos, and G. Stamoulis, "2D Simulator for Eddy Current Field Filters". Eurosensors XXV, 2011.

M. -A. Nef, S. Karagiorgou, G. I. Stamoulis, and P. K. Kikiras, "Supporting Service Differentiation in Wireless Sensor Networks". 15th Panhellenic Conference on Informatics (PCI), 2011, pp. 127 – 133.

M. -A. Nef, I. Filippopoulos, E. Voumvourakis, A. Aggelis, L. Perlepes, G. Stamoulis, and P. Kikiras, "i-Protect: An Open Source Emergency Management Framework". 15th Panhellenic Conference on Informatics (PCI), 2011, pp. 386 – 391.

F. Toufexis, A. Papanikolaou, D. Soudris, G. Stamoulis, and S. Bantas, "Power, Performance and Area Prediction of 3D ICs during Early Stage Design Exploration in 45nm". 18th IEEE International Conference on Electronics, Circuits, and Systems (ICECS), 2011, pp. 715 - 718.

N. Larisis, L. Perlepes, P. Kikiras, and G. Stamoulis, "U-Park: Parking Management System Based on Wireless Sensor Network Technology". SensorComm 2012.

M. -A. Nef, L. Perlepes, S. Karagiorgou, G. I. Stamoulis, and P. K. Kikiras, "Enabling QoS in the Internet of Things". Fifth International Conference on Communication Theory, Reliability, and Quality of Service (CTRQ), 2012, accepted for publication.

K. Daloukas, M.-A. Rammou, G. Drasidis, M. Tsiampas, N. Evmorfopoulos, P. Tsompanopoulou, and G. Stamoulis. "Parallel Preconditioners Based on Fast Poisson Solvers for Efficient Large-Scale Power Grid Analysis". ACM/IEEE 2012 Design Automation Conference, Poster. San Francisco, June 2012.

K. Daloukas, N. Evmorfopoulos, P. Tsompanopoulou, and G. Stamoulis. "Fast Transform-Based Solvers as Parallel Preconditioners for Large-Scale Power Grid Analysis on Massively Parallel Architectures". Poster at the ACM Student Research Competition, held in conjunction with the ACM/IEEE 2012 Design Automation Conference. San Francisco, June 2012.

K. Daloukas, N. Evmorfopoulos, P. Tsompanopoulou, and G. Stamoulis. "Fast Transform-Based Preconditioners for Large-Scale Power Grid Analysis on Massively Parallel Architectures", accepted for publication at ICCAD 2012.

N. Zarokostas, P. Dimitropoulos, J. Soldatos, and G. Stamoulis. "Triggering and Data Collection Framework for Sensing Application Level Events", accepted for publication at SOFTCOM 2012.

A. Xenakis, I. Katsavounidis, and G. Stamoulis. "Investigating Wireless Sensor Network Lifetime under Static Routing with Unequal Energy Distribution", accepted for publication at APSIPA 2012.

- Journals
- J. N. Avaritsiotis, G. Stamoulis, and S. A. Achtidas. "Automatic Resistor generation and thick film circuit layout using the Magic layout editor". *Microelectronics Journal*, pp. 5-14, June 1991.
- P. -C. Li, G. I. Stamoulis, and I. N. Hajj. "A probabilistic timing approach to hot-carrier effect estimation". *IEEE Transactions on Computer Aided Design*, pp. 1223-1234, October 1994.
- N. Bellas, I. Hajj, C. Polychronopoulos, and G. Stamoulis. "Architectural and Compiler Techniques for Energy Reduction in High Performance Microprocessors". *IEEE Transactions on VLSI Systems*, June 2000, pp. 317-326.
- G. I. Stamoulis. "A Monte-Carlo Approach for the Estimation of Average Transition Probabilities in Sequential Logic Circuits". *Active and Passive Electronic Components*, vol. 24, no. 2, pp. 69-85, 2001.
- N. E. Evmorfopoulos, G. I. Stamoulis, and J. N. Avaritsiotis. "A Monte-Carlo approach for maximum power estimation based on extreme value theory". *IEEE Transactions on Computer Aided Design*, vol. 21, no. 4, pp. 415-432, 2002.
- P. D. Dimitropoulos, C. Kachris, D. P. Karampatzakis, and G. I. Stamoulis, "A new SOI capacitive sensor for absolute and differential pressure measurements", *Sensors and Actuators A*, Vol. 123-124 (2005), pp. 36-43.
- P. D. Dimitropoulos, D. P. Karampatzakis, G. D. Panagopoulos, and G. I. Stamoulis, "A Low-Power / Low-Noise Readout Circuit for Integrated Capacitive Sensors", *IEEE J. Sensors*, Vol. 6 (2006), pp. 755-769.
- P. D. Dimitropoulos, G. I. Stamoulis, and E. Hristoforou, "A 3D Hybrid Jiles-Atherton / Stoner-Wohlfarth Magnetic Hysteresis Model for Inductive Sensors and Actuators", *IEEE J. Sensors*, Vol. 6 (2006), pp. 721-736.
- N. E. Evmorfopoulos, D. P. Karampatzakis, and G. I. Stamoulis, "Accurate Minimum Area Design of Power/Ground Meshes Subject to Voltage-Drop Constraints", *Journal of Active and Passive Electronic Devices*, Vol. 2 (2006), pp. 55-70.
- V. N. Petoussis, P. Dimitropoulos, and G. Stamoulis, "A Novel Hall Effect Sensor Using Elaborate Offset Cancellation Method". *Sensors and Transducers*, Vol. 100, Issue 1 (2009), pp. 85-91.
- V. N. Petoussis, P. Dimitropoulos, and G. Stamoulis, "General Development of a New Hall Effect Sensor". *Sensors and Transducers*, Vol. 127, Issue 4 (2011), pp. 36-44.
- L. Perlepes, A. Zaharis, G. Stamoulis, and P. Kikiras, "A Framework for Secure Data Delivery in Wireless Sensor Networks". *Sensors and Transducers*, Vol. 136, Issue 2 (2012), pp. 125-149.
- N. Larisis, L. Perlepes, P. Kikiras, and G. Stamoulis, "U-Park: Parking Management System Based on Wireless Sensor Network Technology". Accepted for publication in *Sensors & Transducers Journal*.
- Book Chapters
- N. Evmorfopoulos, J. Avaritsiotis, and G. Stamoulis, "Maximum power estimation in CMOS VLSI circuits", in A. Nassiopoulou and X. Zanni (eds.), *Microelectronics, Microsystems and Nanotechnology*, World Scientific, 2001.
- Books
- Translation to Greek of the 3rd edition of "Computer Architecture" by Hennessy and Patterson.
- U.S. Patents
- G. I. Stamoulis, J. Sugisawa, and M. Y. Zhang. "Method and Apparatus for Low Power Data Transmission". United States Patent 5831453.
- G. I. Stamoulis, and Y. Ye. "Method and Apparatus for Generating Waveforms using Adiabatic Circuitry". United States Patent 5838203.
- G. Stamoulis, S. Bantas, D. Bountas, N. Evmorfopoulos, M. Tsiampas, and P. Merakos. "System and Method for Fast Power Grid and Substrate Noise Simulation". United States Patent Application 12/894101.
- G. Stamoulis, S. Bantas, D. Bountas, N. Evmorfopoulos, M. Tsiampas, and P. Merakos. "System and Method for Circuit Analysis". United States Patent Application 12/894102.

Academic advising

Ph.D. students	Seven graduated, four ongoing. Co-advising: four ongoing Member of the examining committee in eleven Ph.D. defenses at the University of Thessaly, three at the National Technical University of Athens, two at the Technical University of Crete, one at the University of Patras, one at EPFL, and one at Purdue University.
Master's theses supervised	Eleven completed, three ongoing
Diploma theses supervised	67 completed and 13 ongoing.
Semester projects	93 completed

Funded research

- Intel Corp.: \$45000 and an equipment grant
- Theon Sensors S.A.: €229000.
- General Secretariat for Research and Technology: PENED 2003 €106000
- General Secretariat for Research and Technology: NETNET €15000
- Ministry of Culture: €6000
- Common Economic Area: iMuse €500000
- General Secretariat for Research and Technology: Nanotropic Spin-off €600000
- Ministry of Development: ECOSYSTEM €40000

Citations

Over 700