

# CURRICULUM VITAE

**Photopoulos Panagiotis**

October 2021



## PERSONAL INFORMATION

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Surname	Photopoulos
Name	Panagiotis
Year of birth	1962
Nationality	Greek
Department	Electrical & Electronic Engineering University of West Attica
Address	250 Thivon & P. Ralli Str, Egaleo Postal Code 12241, Athens Building A
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## CURRENT POSITION

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Assistant Professor at the Department of Electrical and Electronic Engineering of the University of West Attica. Member of the board of the “MSc by research in Electrical and Electronic Engineering”. Teaching of Undergraduate courses: Analogue Electronics, Nanoelectronic Devices, Management, Science Technology and Society.

## EDUCATION

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PhD, May 2003	National Technical University of Athens and Institute of Nanoscience and Nanotechnology NCSR “Demokritos” “Development and Luminescence of nanocrystalline Si/ Silicon dioxide superlattices”
MBA, March 2000	University of Glamorgan

International MBA

MSc, November 1991      University of London, King's College  
M.Sc. "History and Philosophy of Science and Mathematics"

BSc, July 1986      Department of Physics, University of Athens  
BSc in Physics

## SCHOLARSHIPS

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October 1994 -      Doctoral Research Scholarship awarded by NCSR "Demokritos"  
October 1999

November 2005 -      Post-Doctoral Research Scholarship awarded by the  
April 2007      State Scholarships Foundation (IKY)

## PROFESSIONAL EXPERIENCE

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2018 -      **Assistant Professor**, Department of Electrical & Electronic  
Present      Engineering, University of West Attica

Feb. 2021 –      Participation in the project "Development of water-based  
Dec.2021      conductive inks based on graphene for gravure and flexography  
printing (GRAPHEIN)" funded under the Framework: Research  
Create-Innovate", University of West Attica from 04/02/2021 until  
31/12/2021.

May 2021 -      Participation in the project "Erasmus+ KA2 Observation  
December 2021      tools for the promotion of DigITal Economy ERODITE»,  
University of West Attica code 80940. From 28/05/2021 until  
31/12/2021.

2010- 2018      Assistant Professor, Department of Electronic Engineering, TEI of  
Athens

July, 2012 -      Member of the primary research team of the of the European  
September, 2015      project "Research and Development of Novel Multifunctional  
Polymer Nanocomposites", co-funded by the European Union  
(European Social Fund) and Greek National resources under the  
framework of the "THALES". TEI of Athens research group  
Coordinator: D. Triantis. Project Coordinator: A. Kanapitsas,  
Technological Educational Institute of Lamia.

October, 2015- October, 2015	Participation in the project “Employment and carrier” part of the program “Education and Life-long learning” funded by the Greek government and the European Union. From 8/10/2015 until 31/10/2015
April, 2015- September, 2015	Participation in the project “Practical training of the students of the Department of Electronic Engineering, Technological Institute of Athens”, part of the program “Education and Life-long learning” funded by the Greek government and the European Union. From 1/4/2015 until 30/9/2015
March, 2014- September, 2014	Participation in the project ““Updating of the knowledge of Higher Education graduates - Digital and Embedded Systems - Industrial applications.” Department of Electronic Engineering TEI of Athens. From 27/3/2014 until 30/9/2014
September, 2008- November, 2008	Member of the research team of the program COMEPHS, Department of Physics, School of Applied Mathematical and Physical Sciences, NTUA. Subject of research: “Optical spectroscopy of low dimensional systems”. From 1/9/2008 until 30/11/2008
December, 2008- February, 2009	Member of the project's research team “A study of the electrical, properties of quantum dots”, 'School of Applied Mathematical and Physical Sciences, NTUA. Subject of research: "Development of Si quantum dots in MOS structures. From 1/12/2008 until 28/2/2009.
May, 2007- December, 2007	Researcher in the project “Nanoelectronic memory devices”, Department of Physics School of Applied Mathematical and Physical Sciences, NTUA. Subject of research: “Development of nanoparticles using ion sputtering, optical and electrical characterization”. From 1/5/2007 until 31/12/2007.
January, 2004- August, 2008	Technical services and Quality assurance of the Interdepartmental Postgraduate Program “Microsystems and Nanodevices”, Department of Physics School of Applied Mathematical and Physical Sciences, NTUA. From January 2004 until August 2008
November, 2005- April, 2007	Postdoctoral research funded by the State Scholarships Foundation (IKY). “Fabrication and characterization of nanocrystalline silicon optical memories”. Supervisor D. Tsoukalas, Department of Physics School of Applied Mathematical and Physical Sciences, NTUA. From November 2005 until April 2007.

June, 1997- June, 1998	Researcher in the research programs: “Integrated gas flow and gas sensors by using porous Si micromachining”, “Giant magnetoresistance sensors”, “Silicon modules for integrated light engineering”, “Touch and Glo project”. From June 1997 until June 1998.
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## TEACHING EXPERIENCE

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### *POSTGRADUATE PROGRAMS*

October 2012- July 2017	Co-teaching of the course “Nanoelectronics with applications” delivered to the postgraduate program students “Design and development of Advanced Electronic Systems”, Department of Electronic Engineering, TEI of Athens.
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May 2008 – July 2008	"Deposition process, optical lithography, fabrication and electrical characterization of nanostructures". Design of the course and delivery to the students of the interdepartmental postgraduate Program "Microsystems and Nanodevices". Department of Physics, School of Applied Mathematical and Physical Sciences, NTUA Greece.
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April 2007- May 2007	"Deposition process, optical lithography, and electrical characterization of nanostructures". Design of the course and delivery to the students of the interdepartmental postgraduate students "Microsystems and Nanodevices". Department of Physics, School of Applied Mathematical and Physical Sciences, NTUA Greece.
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September 2006- April 2007	"Development of teaching material on the basis of the findings of the Research Project PULLNANO, for the education of the postgraduate students of NTUA in nanoelectronics”, Department of Physics, School of Applied Mathematical and Physical Sciences, NTUA Greece.
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January 2006- April 2006	“Optical lithography process”. Design of the course and delivery to the students of the interdepartmental postgraduate students "Microsystems and Nanodevices". Department of Physics, School of Applied Mathematical and Physical Sciences, NTUA Greece.
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**UNDERGRADUATE PROGRAMS**

October 2018- Present	Department of Electrical & Electronic Engineering, University of West Attica: <ol style="list-style-type: none"><li>1. Physics, 1<sup>st</sup> semester 2018-2019</li><li>2. Electronics I 2<sup>nd</sup> semester 2018 up to present</li><li>3. Nanoelectronic Devices 2018 up to present</li><li>4. Science, Technology and Society 2018 - 2020</li><li>5. Management 2018 up to present</li></ol>
October 2010- July 2018	Department of Electronic Engineering, TEI of Athens: <ol style="list-style-type: none"><li>1. Introduction to Electronics (Labs)</li><li>2. Physics of Semiconductors and Devices (Labs)</li><li>3. Analogue Electronics (Labs)</li><li>4. Filters and Oscillators (Labs)</li><li>5. Nanoelectronic Devices (Theory)</li></ol>
2008-2009	Analogue Electronics (Labs), Filters and Oscillators (labs), Department of Electronic Engineering, TEI of Athens. Under contract.
2007-2008	Applications of control systems (Theory), Interfaces – Microcontrollers (Theory), Acoustic Signal Processing (Theory). Department of Electronic Engineering, TEI Lamias, Under contract.
2006-2009	Signals and Systems (Theory), Department of Computer Engineering, TEI Piraeus. Under contract.
2004-2005	Electronics II (Labs), Department of Electrical Engineering, TEI of Chalkida. Under contract.
2004-2005	Physics (Labs), Department of Electrical Engineering, TEI Lamias. Under contract.
2004-2006	Electronics II (Labs), Department of Computer Engineering, TEI Piraeus. Under contract.
2002-2003	Introduction to Management (Theory), Department of Energy Engineering, TEI of Athens. Under contract.
2001-2002	Power Electronics (Labs), Electronic Design (Labs), Department of Electronic Engineering, TEI of

Athens. Under contract.

1997-1998

Senior Lecturer, Department of Electrical and Electronic Engineering, University of Glamorgan

## ADMINISTRATIVE DUTIES

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2020-Present

Member of the board of the Postgraduate Program “MSc by research in Electrical and Electronic Engineering”

2018-2021

Representative of the “Electronics and Materials” unit to the departmental board of the Department of Electrical and Electronic Engineering.

## REVIEWER

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INTERNATIONAL JOURNAL OF INFORMATION AND EDUCATION TECHNOLOGY  
MATERIALS RESEARCH EXPRESS

## PUBLICATIONS

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### PEER-REVIEWED JOURNAL ARTICLES AND BOOK CHAPTERS

- J17. “Problem-based Multiple Response exams for students with and without learning difficulties”, P. Photopoulos, C. Tsonos, I. Stavrakas, D. Triantis, in "*Communications in Computer and Information Science*" (CCIS), Springer Nature (submitted) 2021
- J16. “Remote and in-person learning: Utility versus social experience’ P. Photopoulos, C. Tsonos, I. Stavrakas, D. Triantis *Springer Nature Computer Science* (submitted) 2021
- J15. ‘Problem-solving Multiple-Response tests: Guessing is not a favourable strategy’ P. Photopoulos, D. Triantis, *International Journal of Learning and Teaching* (submitted) 2021
- J14. ‘Think twice: First for Tech. then for Ed.’ P. Photopoulos, D. Triantis, *Springer Nature Computer Science* (submitted) 2021
- J13. ‘A method for the calculation the activation energies of thermally stimulated depolarization current peaks: Application in polyvinylidene fluoride/graphene nanocomposites’ P. Photopoulos, C. Tsonos, I. Stavrakas, D. Triantis, *Physica B: Cond. Mat.* 662 (2021) <https://doi.org/10.1016/j.physb.2021.413338>
- J12. ‘Thermally activated conduction mechanisms in Silicon Nitride MIS structures’ A Kanapitsas, C. Tsonos, D. Triantis, I. Stavrakas, C. Anastasiadis, P. Photopoulos, P. Pissis, V. Em. Vamvakas, *Thin Sol. Films*, 518(9), 2357-2360 (2011)
- J11. ‘Raman enhancement of rhodamine adsorbed on Ag nanoparticles self-assembled into nanowire like arrays’ M. Panagopoulou, N. Pantiskos, P. Photopoulos, Jun Tang, D. Tsoukalas and Y. S. Raptis, *Nanoscale Research Letters*, 6:629 (2011)
- J10. ‘Two-dimensional nanoparticle self-assembly using plasma-induced Ostwald ripening’ J. Tang, P. Photopoulos, A. Tserepi and D. Tsoukalas, *Nanotechnology* 22 235306 (2011)

- J09. 'Photoluminescence from SiO<sub>2</sub>/Si/SiO<sub>2</sub> structures', P. Photopoulos and A.G. Nassiopoulou, *J. Phys: Condens. Matter* 15, 3641, (2003)
- J08. 'Silicon nanostructures in Si/SiO<sub>2</sub> superlattices for light emission applications: possibilities and limits', A.G. Nassiopoulou, T. Ouisse, P. Photopoulos, in '*Frontiers of Nanooptoelectronic systems: Molecular scale engineering and processes*', Edited by L. Pavesi and E.V. Buzaneva, (Kluwer Publishing, Ukraine, 2000)
- J07. 'Photo- and electroluminescence from nanocrystalline silicon single and multilayer structures', P. Photopoulos, A.G. Nassiopoulou, D.N. Kouvatsos and A. Travlos, *Mater. Sci. & Eng. B* 69-70, 345 (2000).
- J06. 'Room and low temperature voltage tunable electroluminescence from a single layer of quantum dots in between two thin SiO<sub>2</sub> layers' P. Photopoulos and A. G. Nassiopoulou, *Appl. Phys. Lett.* 77, 1816 (2000)
- J05. 'Photoluminescence from nanocrystalline silicon in Si/SiO<sub>2</sub> superlattices' P. Photopoulos, A.G. Nassiopoulou, D.N. Kouvatsos, A. Travlos, *Appl. Phys. Lett.* 76, 6951 (2000).
- J04. 'Nanocrystalline silicon for light emitting device applications', A.G. Nassiopoulou, P. Photopoulos and A. Travlos, in: '*Physics Chemistry and Applications of Nanostructures*', 1999, Edited by: V.E. Borisenko, A.B. Filonov, S.V. Gaponenko, V.S. Gurin, (World Scientific, Singapore, 1999), pp. 356-362
- J03. 'Light emitting structures based on nanocrystalline (Si/CaF<sub>2</sub>) multiquantum wells', A.G. Nassiopoulou, V. Tsakiri, V. Ioannou-Sougleridis, P. Photopoulos, S. Menard, F. Bassani and F. Arnaud d' Avitaya, *Journal of Luminescence* 22, 2313 (1998).
- J02. 'Stable visible photo- and electroluminescence from nanocrystalline silicon thin films fabricated on thin SiO<sub>2</sub> layers by low pressure chemical vapour deposition' A.G. Nassiopoulou, V. Ioannou-Sougleridis, P. Photopoulos, A. Travlos, V. Tsakiri and D. Papadimitriou, *Phys. St. Sol. (a)* 165, 79 (1998).
- J01. 'Electroluminescence from Si/CaF<sub>2</sub> multilayers grown by molecular beam epitaxy' V. Ioannou-Sougleridis, V. Tsakiri, A.G. Nassiopoulou, P. Photopoulos, F. Bassani and F. Arnaud d' Avitaya *Phys. St. Sol. (a)* 165, 97 (1998).

#### PEER-REVIEWED CONFERENCE PUBLICATIONS

- C22. 'Post-COVID-19 Education: A Case of Technology Driven Change?' (2021) P. Photopoulos, I. Stavrakas, Triantis D. In *Proceedings of the 13th International Conference on Computer Supported Education*-Volume 1: CSEDU. 2021;1:603-13. <https://doi.org/10.5220/00104812060306>
- C21. 'Acceptance of Distance Learning during the COVID-19 Movement Restrictions: Does the Year of Studies Matter?' (2021) P. Photopoulos, C. Tsonos, I. Stavrakas, and D. Triantis. In *Proceedings of the 13th International Conference on Computer Supported Education CSEDU* 2021;1: 591-602. DOI: 10.5220/0010462805910602C20.
- C20. 'Preference for Multiple Choice and Constructed Response Exams for Engineering Students with and without Learning Difficulties' (2021) P. Photopoulos, C. Tsonos, I. Stavrakas, and D. Triantis. (2021). *Proceedings of the 13th International Conference on Computer Supported Education-CSEDU* pp. 220-231, Vol.1, 2021. DOI: 10.5220/0010462502200231
- C19. 'Weighted Scoring of Multiple-choice Questions based Exams: Expert and Empirical Weighting Factors.' (2020) P. Photopoulos, O. Tsakiridis, I. Stavrakas, and D. Triantis. In *Proceedings of the 12th International Conference on Computer Supported Education* -

- Volume 1: CSEDU, ISBN 978-989-758-417-6, pages 382-387. DOI: 10.5220/0009358303820387
- C18. 'Comparison of Electronic Examinations using Adaptive Multiple-choice Questions and Constructed-response Questions.' (2020) P. Stavroulakis, P. Photopoulos, E. Ventouras, and D. Triantis. In *Proceedings of the 12th International Conference on Computer Supported Education - Volume 1: CSEDU*, ISBN 978-989-758-417-6, pages 358-365. DOI: 10.5220/0009341603580365
- C17. 'Thermally stimulated discharge current (TSDC) characteristics in PVDF-graphene nanocomposites', (2015) I. Stavrakas, D. Triantis, P. Photopoulos, A. Kanapitsas and C. Tsonos *Science in Technology (Scinte) Conference Proceedings* 5-7 November 2015, Athens Greece.
- C16. 'Dc conductivity measurements on PVDF composite samples of low grapheme content', G.T. Malliaros, I. Stavrakas, P. Photopoulos, D. Triantis, *XXXI Πανελλήνιο Συνέδριο ΦΣΚ & ΕΥ Θεσσαλονίκη* 20-23 Σεπτ. 2015
- C15. 'Study of the influence of the filler concentration on electrical energy storage in ZnO or TiO<sub>2</sub> /epoxy resin composites', D. Triantis, I. Stavrakas, G. Hloupis, K. Moutzouris, P. Photopoulos *E-MRS Spring Meeting*, Strasbourg France 2013
- C14 'Selective SERS of rhodamine-R6G on Ag-nanoparticles organized in linear arrays', M. Panagopoulou, P. Photopoulos, D. Tsoukalas and Y. S. Raptis *9th International Conference on Nanosciences & Nanotechnologies – NN12 'Ioannis Vellidis' Congress Centre*, Thessaloniki, Greece, 3 - 6 July 2012
- C13. 'Room and Low temperature conduction of Silver Nanoparticles', P. Photopoulos, N. Matthaiakakis, S. Giannakopoulos and D. Tsoukalas, *XXVIII Πανελλήνιο Συνέδριο ΦΣΚ & ΕΥ Πάτρα* 23-26 Σεπτ. 2012
- C12. 'Size control of Ag nanoparticles for SERS sensing applications', P. Photopoulos, N. Boukos, M. Panagopoulou, N. Meintanis, N. Pantiskos, D. Tsoukalas, *Eurosensors XXV*, Athens, 4-7 Sept. 2011
- C11. 'Probing the electrical properties of Si nitride/Si interfaces', C. Tsonos, A. Kanapitsas, A. Karagounis, I. Stavrakas, D. Triantis, C. Anastasiadis, P. Photopoulos, V. Em. Vamavakas and P. Pissis, *27th International Conference on Microelectronics (MIEL)*, Nis, Republic of Serbia 16-19 May 2010,
- C10. 'Radiative recombination from Si quantum dots in Si/SiO<sub>2</sub> superlattices', P. Photopoulos, T. Ouisse, D.N. Kouvatsos, A.G. Nassiopoulou, *Microelectronics, Microsystems and Nanotechnology MMN 2000*, Athens, Greece
- C09. 'Photo- and Electroluminescence from Si/SiO<sub>2</sub> superlattices', P. Photopoulos, A.G. Nassiopoulou and D.N. Kouvatsos, *Symposium on Materials and Technologies for Optoelectronic Devices, E-MRS 2000, Spring Meeting*, Strasbourg, May 2000
- C08. 'Low Dimensional Si structures: from electron transport to light emission' (invited), T. Ouisse, A.G. Nassiopoulou, V. Ioannou-Sougleridis, P. Photopoulos, D.N. Kouvatsos, *XII Greek National Conference on Solid State Physics*, Nauplio, September 2000.
- C07. 'Electroluminescence from Si in nc-Si/CaF<sub>2</sub> and Si/SiO<sub>2</sub> superlattices', A.G. Nassiopoulou, T. Ouisse, P. Photopoulos, F. Bassani and F. Arnaud d' Avitaya, *MEL-ARI Workshop Project: Silicon Modules for Integrated Light Engineering*, April 2000, Edinburgh, UK
- C06. 'Dielectric and Optical Properties of nc-Si/CaF<sub>2</sub> superlattices' V. Tsakiri, V. Ioannou-Sougleridis, P. Photopoulos, A.G. Nassiopoulou, F. Bassani and F. Arnaud d'Avitaya, *XV Greek National Conference on Solid State Physics*, Patras 27-29 September 1999.



- C05. 'Nanocrystalline silicon light emitting diodes' P. Photopoulos, D. Kouvatsos, A. Travlos and A.G. Nassiopoulou, *XV Greek National Conference on Solid State Physics*, Patras 27-29 September 1999.
- C04. «Φωτοφωταύγεια στο ορατό και εγγύς υπέρυθρο σε θερμοκρασία περιβάλλοντος από νανοκρυσταλλικό πυρίτιο επάνω σε λεπτά στρώματα SiO<sub>2</sub>» Π. Φωτόπουλος, Β. Ιωάννου-Σουγλερίδης, Α. Νασιοπούλου, *XIV Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης* Ιωάννινα, 15-18 Σεπτεμβρίου 1998
- C03. 'Visible and near infrared electroluminescence from nanocrystalline silicon', A.G. Nassiopoulou, P. Photopoulos and V. Ioannou-Sougleridis, *European Conference PHASDOM'98*, Switzerland, October 1998
- C02. 'Visible and near IR electroluminescence from nc-Si', A.G. Nassiopoulou and P. Photopoulos, *PHASDOM'98*, Switzerland, October 1998.
- C01. 'Electroluminescent Devices based on zero and one-dimensional silicon structures' A.G. Nassiopoulos, P. Photopoulos, V. Ioannou-Sougleridis, S. Grigoropoulos, D. Papadimitriou, *Mat. Res. Soc. Symp.* Vol 452, 1997

## **PUBLISHED BOOKS**

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Photopoulos P., Palamidis Al., Veloni An., *Signals and Systems*: Synchroni Edkotiki Publisher, 2019 ISBN 978-960-595-034-7 (Eudoxus Code Number: 86194150)

Photopoulos P., Veloni An., *Signals and Systems for Engineers* Synchroni Edkotiki Publisher, 2008 ISBN 9789606674273 (Eudoxus Code Number: 5754)

## **LECTURER NOTES**

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Physics Labs, TEI Lamias, February 2005

Introduction to Electronics Labs, TEI of Athens, 2011

Physics of Semiconductor Devices Labs, TEI of Athens 2012

Electronics I (Theory), UNIWA, 2018

Micro, nano-electronic Devices (Theory), UNIWA, 2018

Science, Technology and Society, UNIWA, 2019

Management, UNIWA, 2019