

CURRICULUM VITAE

Dimitrios Kouvatsos

1. Personal Data

Work address: Institute of Nanoscience and Nanotechnology
National Center for Scientific Research “Demokritos”
Aghia Paraskevi, Athens 153 10, Greece
Phone: (+3010) 6503239, 6503266 fax: (+3010) 6511723
e-mail: D.Kouvatsos@imel.demokritos.gr

Date of birth: October 20, 1961

Marital status: Married, two children

2. Education

Ph.D. Electrical Engineering, Lehigh University January 1992
M.Sc. Electrical Engineering, Lehigh University October 1988
B.Sc. Electrical Engineering, National Technical University of Athens June 1985

3. Professional Positions

| | | |
|-------------------------|-----------------------------|--|
| <i>2/2009 – present</i> | Research Director | Institute of Microelectronics, National Center for Scientific Research “Demokritos” |
| <i>3/2003 – 2/2009</i> | Senior Researcher | Institute of Microelectronics, National Center for Scientific Research “Demokritos” |
| <i>4/1999 – 3/2003</i> | Researcher | Institute of Microelectronics, National Center for Scientific Research “Demokritos” |
| <i>1/1995 – 4/1999</i> | Researcher on contract | Institute of Microelectronics, National Center for Scientific Research “Demokritos” (part time research work 10/93 - 12/94) |
| <i>4/1995 – 6/1995</i> | Visiting Research Scientist | Display Research Laboratory, Lehigh University |
| <i>3/1993 – 12/1994</i> | Analyst / Programmer (Sgt) | Hellenic Air Force |
| <i>8/1992 – 12/1992</i> | Adjunct Lecturer | Department of Electrical Engineering and Computer Science, Lehigh University |
| <i>1/1992 – 12/1992</i> | Visiting Research Scientist | Microelectronics Laboratory, Sherman Fairchild Center for Solid State Studies, Lehigh University |
| <i>1/1989 – 12/1991</i> | Research Assistant | Sherman Fairchild Center for Solid State Studies, Lehigh University |
| <i>8/1986 – 12/1988</i> | Teaching Assistant | Department of Electrical Engineering and Computer Science, Lehigh University |

4. Research Interests and Funded Projects

4.1. Research interests

- Polysilicon TFT operation and ageing performance as related to material properties.
- Thin film transistors in transition metal chalcogenides at room temperatures on various substrates.
- Thin film device integrated microsystems, large area electronics and displays.
- Novel device structures with memory effects fabricated using CMOS compatible processes and devices with new metallization schemes.

Dr. D.N. Kouvatsos is in charge of Project “Thin Film Devices for Microsystems and Large Area Electronics” (Program “Nanoelectronics, Photonics and Microsystems”) of the Institute of Nanoscience and Nanotechnology, NCSR Demokritos.

4.2. Principal investigator in funded programmes

1. EPANAD-EDBM, ESPA 2014-2010 programme: “Transistors and sensors based on molybdenum disulphide”. Funding: 50.050 €.
2. PENED 2005-2009 programme: “Development of polycrystalline silicon thin film transistor technology with advanced annealing and device characterization techniques”. Collaboration with the University of Athens and Sharp Laboratories of America. Funding: 173.000 € (90% public and 10% Sharp funds).
3. Greece-Serbia 2004-2006 bilateral research project: "Performance, stress degradation and reliability characterization of thin film transistors for the investigation of defects in polycrystalline silicon films". Collaboration with the Department of Microelectronics, Faculty of Electronic Engineering, University of Nis, Serbia & Montenegro. Foreign principal investigator: Professor Ninoslav Stojadinovic, Department Head. Funding: 11.740 €.
4. Research grant 2003-2005 from Sharp Laboratories of America: “Analysis of polysilicon TFT devices”. Collaborating partner: LCD Process Technology Laboratory, Sharp Labs of America, Camas, Washington 98607, USA. Funding: 71.800 \$.
5. Greece-Yugoslavia 2002-2004 bilateral research project: "Fabrication and reliability testing of MOS devices with copper metallization for microelectronic applications". Collaboration with the Department of Microelectronics, Faculty of Electronic Engineering, University of Nis, Yugoslavia. Foreign principal investigator: Professor Ninoslav Stojadinovic, Department Head. Funding: 11.400 €.
6. Greece-Romania 2001-2003 bilateral research project: "Silicon nanostructures for biomedical and memory applications". Collaboration with the Romanian National Institute for Research and Development in Microtechnologies. Foreign principal investigator: Dr. Irina Kleps, Senior Researcher. Funding: 11.710 €.

4.3. Participating research scientist

1. Kripis II (EPAN Project): “Development of materials and devices with applications in industry, health, the environment and culture” (from 11/2017). Participation of the Institute of Advanced Materials, Physicochemical Processes, Nanotechnology and Microsystems, NCSR "Demokritos". Total INN funding: 1.400.000 €.

2. Kripis I (EPAN Project): “Advanced materials and devices for the collection and manipulation of energy” (3/2013 – 12/2015). In charge of part of a work package. Participation of the Institute of Advanced Materials, Physicochemical Processes, Nanotechnology and Microsystems, NCSR "Demokritos". Total IAMPPNM funding: 883.200 €.
3. TFTSolar (“Cooperation” National Action): “Development of new photovoltaic silicon materials” (1/2011 – 10/2015). Coordination by the Institute of Microelectronics, NCSR "Demokritos". Total budget: 975.000 €. Total IMEL funding: 295.500 €.
4. IST – GoodFood (FP6 Integrated Project): “Porous Silicon Gas Sensors and Seamless Sensor / Display System on Glass” (1/2004 – 7/2007). Participation of the Institute of Microelectronics, NCSR "Demokritos". Total IMEL funding: 257.000 €.
5. SMILE: “Silicon Modules for Integrated Light Engineering” (1/1999 – 12/2001). Institute of Microelectronics, NCSR "Demokritos".
6. FASEM: “Fabrication and Architecture of Single Electron Memories” (1/1997 – 12/1998). Institute of Microelectronics, NCSR "Demokritos".
7. EPET-II: “Fabrication of CMOS technology microelectronic circuits” (7/1995 – 9/1999). Institute of Microelectronics, NCSR "Demokritos".
8. Esprit – Micromedes: “Modular Microsystem for Controlled Medical Drug Release” (1/1995 – 6/1995). Institute of Microelectronics, NCSR "Demokritos".
9. Defense Advanced Research Projects Agency (USA): “Development of Active Matrix Liquid Crystal Display technology for High Definition Television” (1/1992 – 12/1992). Sherman Fairchild Center for Solid State Studies, Lehigh University.
10. ARO / DNA (USA): “Chemically enhanced oxidation of silicon and microelectronic applications” (1/1989 – 12/1991). Sherman Fairchild Center for Solid State Studies, Lehigh University.

5. Education Activities

5.1. Course instruction

- ◆ Instructor to the graduate students of the Program for Education and Initial Professional Training at NCSR “Demokritos” since 1998. Course: Integrated Circuit Fabrication.
- ◆ Adjunct Lecturer, Department of Electrical Engineering and Computer Science, Lehigh University, from August to December 1992. Course: Physical Electronics.
- ◆ Teaching Assistant / Laboratory Supervisor, Department of Electrical Engineering and Computer Science, Lehigh University, from August 1986 to December 1988. Courses: Electronic Circuits, Physical Electronics, Theory and Simulation of Microelectronic Devices, Physics of Semiconductor Devices (graduate level course). Laboratory: Senior Projects, Electronics Laboratory.

5.2. Supervising duties

1. Supervisor of two postdoctoral fellows (Dr. Michael Exarchos, Dr. Despina Moschou).
2. Principal Advisor of two Ph.D. dissertations and member of advising boards for three additional ones.

3. Advisor of three M.Sc. graduate theses and several B.Sc. degree theses.

6. Other Activities

6.1. Reviewer in scientific journals, conferences and funding agencies

- Reviewer for articles submitted to the journals:
 - *IEEE Transactions on Electron Devices, IEEE Electron Device Letters, IEEE Transactions on Nanotechnology* (IEEE).
 - *Journal of Applied Physics, Applied Physics Letters* (The American Institute of Physics).
 - *Journal of the Electrochemical Society, Electrochemical and Solid-State Letters* (The Electrochemical Society).
 - *Microelectronics Reliability, Microelectronics Engineering, Materials Science and Engineering B* (Elsevier).
 - *Electronics Letters* (Institute of Engineering and Technology).
 - *Semiconductor Science and Technology, Journal of Physics D* (The Institute of Physics).
 - *Thin Solid Films, Superlattices and Microstructures, Surface and Coatings Technology* (Elsevier).
 - *Physica Status Solidi* (Wiley – Interscience).
 - *Nanotechnology* (The Institute of Physics).
- Reviewer for the international conferences:
 - Most ESREF (*European Symposium - Reliability of Electron Devices, Failure Physics and Analysis*) conferences since 2002 (13 out of 18). More than 200 articles have been reviewed.
 - Also, in the following:
 1. 34th *International Conference on Micro- and Nano-Engineering (MNE 2008)* (Athens, Greece, September 2008). Review of 3 articles.
 2. 26th *International IEEE Conference on Microelectronics (MIEL 2008)* (Nis, Serbia & Montenegro, May 2008). Review of 5 articles.
 3. 25th *International IEEE Conference on Microelectronics (MIEL 2006)* (Nis, Serbia & Montenegro, May 2006). Review of 6 articles.
 4. 2nd *Microelectronics, Microsystems and Nanotechnology Conference (MMN 2004)* (Athens, Greece, November 2004). Review of 2 articles.
 5. 24th *International IEEE Conference on Microelectronics (MIEL 2006)* (Nis, Serbia & Montenegro, May 2004). Review of 7 articles.
 6. 13th *European Conference on Chemical Vapor Deposition* (Athens, Greece, August 2001). Review of 5 articles.
 7. 1st *Microelectronics, Microsystems and Nanotechnology Conference (MMN 2000)* (Athens, Greece, November 2000). Review of 1 article.

- External reviewer for research projects submitted to the Greek General Secretariat for Research and Technology.
- Validations of postdoctoral programs for the General Secretariat for Research and Technology.
- Evaluator for proposals in the ICT thematic priority area of the 7th Framework Programme.

6.2. Organization of international conferences

- Member of the Technical Programme Committee for most of the ESREF (*European Symposium - Reliability of Electron Devices, Failure Physics and Analysis*) conferences since 2002.
- Session Chairman in the session “Device Physics and Modeling 1” at the 23rd *International IEEE Conference on Microelectronics (MIEL 2002)*, Nis, Yugoslavia, May 2002.
- Member of the Local Organizing Committee of the 13th *European Conference on Chemical Vapor Deposition (EuroCVD 13)*, Athens, Greece, August 2001.

6.3. Membership in scientific professional organizations

- Member of the Institute of Electrical and Electronics Engineers (IEEE), Electron Devices Society.
- Member of the Electrochemical Society, Dielectrics and Insulation Division.
- Member of the Materials Research Society.
- Member of the Technical Chamber of Greece (TEE).

7. Publications

- 189 research papers to date in journals and scientific conferences. Specifically:

| | |
|--|-----------|
| ➤ <u>Journal papers:</u> | 69 |
| ➤ <u>Refereed Conference Proceedings papers:</u> | 38 |
| ➤ <u>Other International Conference papers:</u> | 61 |
| ➤ <u>National Conference papers:</u> | 21 |

8. Citations

- **678** citations total until January 2019, of which **572** citations by others (excluding self-citations).
- **h-index = 12.**
- Citations in books and professional magazines:
 1. *Silicon Processing for the VLSI era*, vol. 3, p. 494 and vol. 4, p. 106. Stanley Wolf, California State University, Long Beach.

Lattice Press, 1995.

2. "Low ϵ dielectrics: CVD fluorinated silicon dioxides", Ravi K. Laxman, *Semiconductor International*, May 1995, p. 71.
3. "Polysilicon TFT technology will solve problems of mobility, pixel size, cost and yield", Sheau Chen and I.C. Hsieh, *Solid State Technology* **39** (1) 113-120, January 1996.
4. "Enhanced discrete DMOS power trench gate oxide growth", Debra S. Woolsey, *Solid State Technology* **45** (8) 73-78, August 2002.

List of publications

Journal Papers

1. Papadimitropoulos, G., M. Vasilopoulou, N. Vourdas, **D.N. Kouvatsos**, K. Giannakopoulos, S. Kennou and D. Davazoglou, "Room temperature growth of ultra-porous hot-wire deposited tantalum pentoxide", *Advanced Materials Letters* **10** (6), 395, June 2019.
2. **Kouvatsos, D.N.**, G. Papadimitropoulos, A. Spiliotis, M. Vasilopoulou, D. Barreca, A. Gasparotto and D. Davazoglou, "Electrical characteristics of vapor deposited amorphous MoS₂ two-terminal structures and back gate thin film transistors with Al, Au, Cu and Ni-Au contacts", *Physica Status Solidi (c)* **12** (7), 975, July 2015.
3. Papadimitropoulos, G., N. Vourdas, M. Vasilopoulou, **D.N. Kouvatsos**, N. Boukos, D. Barreca, A. Gasparotto and D. Davazoglou, "Hot-wire vapor deposition of amorphous MoS₂ thin films", *Physica Status Solidi (c)* **12** (7), 969, July 2015.
4. Moschou, D.C., **D.N. Kouvatsos**, G.P. Kontogiannopoulos, F.V. Farmakis and A.T. Voutsas, "Technology, performance and degradation characteristics of SLS ELA thin film transistors", *Facta Universitatis: Series Electronics and Energetics* **26** (3), 247, December 2013 (*invited paper*).
5. Moschou, D.C., C.G. Theodorou, N.A. Hastas, A. Tsormpatzoglou, **D.N. Kouvatsos**, A.T. Voutsas and C.A. Dimitriadis, "Short channel effects on LTPS TFT degradation", *Journal of Display Technology* **9** (9), 747, September 2013.
6. Moschou, D.C., F.V. Farmakis, **D.N. Kouvatsos** and A.T. Voutsas, " $V_{g,max} - V_{th}$: A new electrical characterization parameter reflecting the polysilicon film quality of LTPS TFTs", *Microelectronic Engineering* **90**, 76, February 2012.
7. Michalas, L., M. Koutsourelis, G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Hydrogen passivation on sequential lateral solidified poly-Si TFTs", *Microelectronic Engineering* **90**, 72, February 2012.
8. Moschou, D.C., N. Vourdas, D. Davazoglou, **D.N. Kouvatsos**, V.E. Vamvakas and A.T. Voutsas, "On the optical properties of SLS ELA polycrystalline silicon films", *Microelectronic Engineering* **90**, 69, February 2012.
9. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, "A practical model assessing the degradation of polycrystalline silicon TFTs due to DC electrical stress", *IEEE Transactions on Electron Devices* **ED-57** (6), 1390, June 2010.
10. Moschou, D.C., G.P. Kontogiannopoulos, **D.N. Kouvatsos** and A.T. Voutsas, "On the importance of $V_{g,max} - V_{th}$ parameter on LTPS TFT stressing behavior", *Microelectronics Reliability* **50** (2), 190, February 2010.
11. Exarchos, M.A., G.J. Papaioannou, D.C. Moschou, **D.N. Kouvatsos**, A. Arapoyanni and A.T. Voutsas, "On the study of p-channel thin-film transistors fabricated by SLS ELA crystallization techniques", *Thin Solid Films* **517** (23), 6375, October 2009.
12. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Back gate influence on front channel operation of p-channel double gate polysilicon TFTs", *Thin Solid Films* **517** (23), 6364, October 2009.

13. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, "Degradation and lifetime estimation of n-MOS SLS ELA polycrystalline TFTs during hot carrier stressing – Effect of channel width in the region $V_{th} \leq V_{GS, stress} \leq V_{DS, stress}/2$ ", *Semiconductor Science and Technology* **24** (7), 0750271, July 2009.
14. Verrelli, E., D. Tsoukalas and **D. Kouvatsos**, "Deposition and electrical characterization of hafnium oxide films on silicon", *Physica Status Solidi (c)* **5** (12), 3720, December 2008.
15. Exarchos, M.A., D.C. Moschou, G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Performance of thin-film transistors fabricated by sequential lateral solidification crystallization techniques", *Physica Status Solidi (c)* **5** (12), 3634, December 2008.
16. Moschou, D.C., G.P. Kontogiannopoulos, **D.N. Kouvatsos** and A.T. Voutsas, "The effect of crystallization technology and gate insulator deposition method on the performance and reliability of polysilicon TFTs", *Physica Status Solidi (c)* **5** (12), 3630, December 2008.
17. Moschou, D.C., E. Verrelli, **D.N. Kouvatsos**, P. Normand, D. Tsoukalas, A. Speliotis, P. Baiyati and D. Niarchos, "Investigation of top gate electrode options for high-k gate dielectric MOS capacitors", *Physica Status Solidi (c)* **5** (12), 3626, December 2008.
18. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "An experimental study of band gap states electrical properties in poly-Si TFTs by the analysis of the transient currents", *Physica Status Solidi (c)* **5** (12), 3613, December 2008.
19. Moschou, D.C., M.A. Exarchos, **D.N. Kouvatsos**, G.J. Papaioannou, A. Arapoyanni and A.T. Voutsas, "Reliability and defectivity comparison of n- and p-channel SLS ELA polysilicon TFTs fabricated with a novel crystallization technique", *Microelectronics Reliability* **48** (8-9), 1544, August-September 2008.
20. Moschou, D.C., M.A. Exarchos, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, "A novel SLS ELA crystallization process and its effects on polysilicon film defectivity and TFT performance", *Microelectronic Engineering* **85** (5-6), 1447, May-June 2008.
21. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos**, F.V. Farmakis and A.T. Voutsas, "Characterization of thin film transistors fabricated on different sequential lateral solidified poly-silicon substrates", *Microelectronic Engineering* **85** (5-6), 976, May-June 2008.
22. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Investigation of the undershoot effect in polycrystalline silicon thin film transistors", *Solid State Electronics* **52** (3), 394, March 2008.
23. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, "Hot carrier stress induced degradation of SLS ELA polysilicon TFTs – Effects of gate width variation and device orientation", *Solid State Electronics* **52** (3), 388, March 2008.
24. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Role of band gap states on the electrical behaviour of sequential lateral solidified polycrystalline silicon TFTs", *Journal of the Electrochemical Society* **155** (1), H1, January 2008.
25. Michalas, L., M. Exarchos, G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "An experimental study of the thermally activated processes in polycrystalline silicon thin

- film transistors”, *Microelectronics Reliability*, **47** (12), 2058, December 2007.
26. Davidovic, V., **D.N. Kouvatsos**, N. Stojadinovic and A.T. Voutsas, “Influence of polysilicon film thickness on radiation response of advanced excimer laser annealed polycrystalline silicon thin film transistors”, *Microelectronics Reliability* **47** (9-11), 1841, September-November 2007.
 27. Farmakis, F.V., G.P. Kontogiannopoulos, **D.N. Kouvatsos** and A.T. Voutsas, “Degradation of double-gate polycrystalline silicon TFTs due to hot carrier stress”, *Microelectronics Reliability* **47** (9-11), 1434, September-November 2007.
 28. Moschou, D.C., M.A. Exarchos, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “Performance and reliability of SLS ELA polysilicon TFTs fabricated with novel crystallization techniques”, *Microelectronics Reliability* **47** (9-11), 1378, September-November 2007.
 29. Farmakis, F.V., **D.N. Kouvatsos**, A.T. Voutsas, D.C. Moschou, G.P. Kontogiannopoulos and G.J. Papaioannou, “Front and Back Channel Properties of Asymmetrical Double-Gate Polysilicon TFTs”, *Journal of the Electrochemical Society* **154** (10), H910, October 2007.
 30. Verelli, E., D. Tsoukalas, K. Giannakopoulos, **D. Kouvatsos**, P. Normand and D.E. Ioannou, “Nickel nanoparticle deposition at room temperature for memory applications”, *Microelectronic Engineering*, **84** (9-10), 1994, September-October 2007.
 31. **Kouvatsos, D.N.**, A.T. Voutsas, L. Michalas, F. Farmakis and G.J. Papaioannou, “Device degradation behavior and polysilicon film morphology of TFTs fabricated using advanced excimer laser lateral solidification techniques”, *Thin Solid Films* **515** (19), 7413, July 2007.
 32. **Kouvatsos, D.N.**, F.V. Farmakis, D.C. Moschou, G.P. Kontogiannopoulos, G.J. Papaioannou and A.T. Voutsas, “Characterization of double gate TFTs fabricated in advanced SLS ELA polycrystalline silicon films”, *Solid State Electronics* **51** (6), 936, June 2007.
 33. Tsevas, S., M. Vasilopoulou, **D.N. Kouvatsos**, A. Speliotis and D. Niarchos, “Characteristics of MOS diodes using sputter-deposited tungsten or copper / tungsten films”, *Microelectronic Engineering*, **83** (4-9), 1434, April-September 2006.
 34. Exarchos, M.A., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “On the drain current overshoot transient in polycrystalline silicon transistors: The effect of hole generation mechanism”, *Journal of Applied Physics*, **99** (2), 024511, January 2006.
 35. Papaioannou, G.J., M. Exarchos, **D.N. Kouvatsos** and A.T. Voutsas, “On the switch-on overshoot transient decay mechanism in polycrystalline silicon thin film transistors”, *Applied Physics Letters*, **87** (25), 252112, December 2005.
 36. Vasilopoulou, M., S. Tsevas, A.M. Douvas, P. Argitis, D. Davazoglou and **D. Kouvatsos**, “Characterization of various low-k dielectrics for possible use in applications at temperatures below 160°C”, *Journal of Physics: Conference Series*, **10**, 218, October 2005.
 37. **Kouvatsos, D.N.**, L. Michalas, A.T. Voutsas and G.J. Papaioannou, “Effects of DC gate and drain bias stresses on the degradation of excimer laser crystallized polysilicon thin film transistors”, *Journal of Physics: Conference Series*, **10**, 45, October 2005.

38. Exarchos, M.A., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, "Investigation of drain current transient behavior in SLS TFTs with the DLTS technique", *Journal of Physics: Conference Series*, **10**, 23, October 2005.
39. Papaioannou, G.J., A. Voutsas, M. Exarchos and **D. Kouvatsos**, "The effect of Generation-Recombination mechanisms on the transient behavior of polycrystalline silicon transistors", *Thin Solid Films* **487** (1-2), 247, September 2005.
40. Vasilopoulou, M., A. Douvas, **D. Kouvatsos**, P. Argitis and D. Davazoglou, "Characterization of various insulators for possible use as low-k dielectrics deposited at temperatures below 200°C", *Microelectronics Reliability* **45** (5-6), 990, May-June 2005.
41. Voutsas, A.T., **D.N. Kouvatsos**, L. Michalas and G.J. Papaioannou, "Effect of silicon thickness on the degradation mechanisms of sequential-laterally-solidified polycrystalline silicon thin film transistors during hot-carrier stress", *IEEE Electron Device Letters* **EDL-26** (3), 181, March 2005.
42. **Kouvatsos, D.N.**, V. Davidovic, G.J. Papaioannou, N. Stojadinovic, L. Michalas, M. Exarchos, A.T. Voutsas and D. Goustouridis, "Effects of hot carrier and irradiation stresses on advanced excimer laser annealed polycrystalline silicon thin film transistors", *Microelectronics Reliability* **44** (9-11), 1631, September-November 2004.
43. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, S. Tsevas, F. Christoforou, D. Davazoglou and C. Boukouras, "Characteristics of W and Cu/W gate MOS diodes fabricated by a process utilizing LPCVD of tungsten and copper liftoff", *Microelectronic Engineering* **70** (2-4), 501, November 2003.
44. Ioannou-Sougleridis, V., B. Kamenev, **D.N. Kouvatsos** and A. G. Nassiopoulou, "Influence of a high electric field on the photoluminescence from silicon nanocrystals in SiO₂", *Materials Science and Engineering B* **101** (1-3), 324, August 2003.
45. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis and A. G. Nassiopoulou, "Charging effects in silicon nanocrystals embedded in SiO₂ films", *Materials Science and Engineering B* **101** (1-3), 270, August 2003.
46. **Kouvatsos, D.N.** and D. Davazoglou, "Gate/drain bias-induced degradation effects in TFTs fabricated in unhydrogenated SPC polycrystalline silicon films", *Thin Solid Films* **426** (1-2), 250, February 2003.
47. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis and A. G. Nassiopoulou, "Charging effects in silicon nanocrystals within SiO₂ layers, fabricated by chemical vapor deposition, oxidation and annealing", *Applied Physics Letters* **82** (3), 397, January 2003.
48. **Kouvatsos, D.N.**, "On-state and off-state stress-induced degradation in unhydrogenated solid phase crystallized polysilicon thin film transistors", *Microelectronics Reliability* **42** (12), 1875, December 2002.
49. Davazoglou, D. and **D.N. Kouvatsos**, "Study of the electronic structure of amorphous and crystallized LPCVD silicon films near the absorption threshold", *Journal of Applied Physics* **92** (8), 4470, October 2002.
50. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, "Electrical stressing effects in solid-phase crystallized polysilicon thin film transistors", *Semiconductor Science and Technology* **17** (6), 515, June 2002.
51. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, "Characterization and stressing

- properties of polysilicon TFTs utilizing oxide films deposited using TEOS”, *Journal de Physique IV* **11** (Pr3), 1037, August 2001.
52. Davazoglou, D., **D.N. Kouvatsos** and E. Valamontes, “Influence of texture on the absorption threshold of LPCVD silicon films”, *Journal de Physique IV* **11** (Pr3), 1029, August 2001.
 53. Ouisse, T., V. Ioannou-Sougleridis, **D. Kouvatsos** and A.G. Nassiopoulou, “Electrical modelling of SiO₂ / Si superlattices”, *Journal of Physics D: Applied Physics* **33** (21), 2691, November 2000.
 54. Photopoulos, P., A.G. Nassiopoulou, **D.N. Kouvatsos** and A. Travlos, “Photoluminescence from nanocrystalline silicon in Si / SiO₂ superlattices”, *Applied Physics Letters* **76** (24), 3588, June 2000.
 55. Photopoulos, P., A.G. Nassiopoulou, **D.N. Kouvatsos** and A. Travlos, “Photo- and electroluminescence from nanocrystalline silicon single and multilayer structures”, *Materials Science and Engineering B* **69-70**, 345, January 2000.
 56. **Kouvatsos, D.N.**, A.T. Voutsas and M.K. Hatalis, “Polycrystalline silicon thin film transistors fabricated in various solid phase crystallized films deposited on glass substrates”, *Journal of Electronic Materials* **28** (1), 19, January 1999.
 57. Hatalis, M.K., **D.N. Kouvatsos**, J.-H. Kung, A.T. Voutsas and J. Kanicki, “Thin film transistors in low temperature as-deposited and reduced-crystallization-time polysilicon films on 665°C strain point glass substrates”, *Thin Solid Films* **338** (1-2), 281, January 1999.
 58. Normand, P., D. Tsoukalas, K. Aidinis, A. Tserepi, **D. Kouvatsos** and E. Kapetanakis, “Fabrication of Si nano-wires using anisotropic dry and wet etching”, *Microelectronic Engineering* **41/42**, 551, March 1998.
 59. Tsoukalas, D., C. Tsamis, **D.N. Kouvatsos**, P. Revva and E. Tsoi, “Reduction of the reverse short channel effect in SOI MOSFETs”, *IEEE Electron Device Letters* **EDL-18** (3), 90, March 1997.
 60. Tsamis, C., **D.N. Kouvatsos** and D. Tsoukalas, “Influence of N₂O oxidation on point defect injection kinetics in the high temperature regime”, *Applied Physics Letters* **69** (18), 2725, October 1996.
 61. **Kouvatsos, D.N.** and M.K. Hatalis, “Polycrystalline silicon thin film transistors fabricated at reduced thermal budgets by utilizing fluorinated gate oxidation”, *IEEE Transactions on Electron Devices* **ED-43** (9), 1448, September 1996.
 62. **Kouvatsos, D.N.**, A.T. Voutsas and M.K. Hatalis, “High performance thin film transistors in large grain size polysilicon deposited by thermal decomposition of disilane”, *IEEE Transactions on Electron Devices* **ED-43** (9), 1399, September 1996.
 63. **Kouvatsos, D.N.**, D. Tsoukalas, G.T. Sarcona, M.K. Hatalis and J. Stoemenos, “Single crystal silicon thin film transistors fabricated at low process temperatures on glass substrates”, *Electronics Letters* **32** (8), 775, April 1996.
 64. Tsoukalas, D. and **D. Kouvatsos**, “Silicon interstitial trapping in polysilicon films studied by monitoring interstitial reactions with underlying insulating films”, *Applied Physics Letters* **68** (11), 1549, March 1996.
 65. **Kouvatsos, D.N.**, F.A. Stevie and R.J. Jaccodine, “Interface state density reduction and

effect of oxidation temperature on fluorine incorporation and profiling for fluorinated MOS capacitors”, *Journal of the Electrochemical Society* **140** (4), 1160, April 1993.

66. **Kouvatsos, D.N.**, M.K. Hatalis and R.J. Jaccodine, “Fluorine-enhanced oxidation of polycrystalline silicon and application to thin film transistor fabrication”, *Applied Physics Letters* **61** (8), 937, August 1992.
67. **Kouvatsos, D.**, F.P. McCluskey, R.J. Jaccodine and F.A. Stevie, “Silicon-fluorine bonding and fluorine profiling in SiO₂ films grown by NF₃-enhanced oxidation”, *Applied Physics Letters* **61** (7), 780, August 1992.
68. **Kouvatsos, D.**, J.-G. Huang, V. Saikumar, P.J. Macfarlane, R.J. Jaccodine and F.A. Stevie, “SiO₂ film stress: Thickness dependence, non-planar oxidation and fluorine related effects”, *Journal of the Electrochemical Society* **139** (8), 2322, August 1992.
69. **Kouvatsos, D.**, J.-G. Huang and R.J. Jaccodine, “Fluorine-enhanced oxidation of silicon: Effects of fluorine on oxide stress and growth kinetics”, *Journal of the Electrochemical Society* **138** (6), 1752, June 1991.

Refereed Proceedings Papers

70. Moschou, D.C., **D.N. Kouvatsos**, I. Pappas, C. Dimitriadis and A.T. Voutsas, “Short channel effects in double gate polycrystalline silicon SLS ELA TFTs”, *Proceedings of the 28th International IEEE Conference on Microelectronics (MIEL 2012)*, Nis, Serbia, May 2012.
71. Hastas, N., A. Tsormpatzoglou, **D.N. Kouvatsos**, D.C. Moschou, A.T. Voutsas and C.A. Dimitriadis, “Trap properties of asymmetrical double gate polysilicon thin-film transistors with low frequency noise in terms of the grain boundaries direction”, *Proceedings of the 28th International IEEE Conference on Microelectronics (MIEL 2012)*, Nis, Serbia, May 2012.
72. Moschou, D.C., N.A. Hastas, A. Tsormpatzoglou, **D.N. Kouvatsos**, C.A. Dimitriadis, and A.T. Voutsas, “Short channel effects on LTPS TFT degradation”, *Proceedings of the 8th International TFT Conference (ITC 2012)*, Lisbon, Portugal, January 2012.
73. Moschou, D.C., F.V. Farmakis, **D.N. Kouvatsos** and A.T. Voutsas, “ $V_{g,max} - V_{th}$: A new electrical characterization parameter reflecting the polysilicon film quality of LTPS TFTs”, *Proceedings of the 7th International Thin Film Transistors Conference (ITC 2011)*, Cambridge, United Kingdom, March 2011.
74. Kontogiannopoulos, G.P., M.A. Exarchos, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “The effect of small geometry on the degradation performance of SLS ELA polysilicon thin film transistors”, *Proceedings of the 29th International Display Research Conference IDRC '09 / Eurodisplay 2009*, Rome, Italy, September 2009.
75. Kontogiannopoulos, G.P., D.C. Moschou, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “Short channel effects in SLS ELA polysilicon TFTs”, *Proceedings of the 5th International Thin Film Transistors Conference (ITC '09) / 2009 Society for Information Display Europe Chapter Meeting*, Paris, France, March 2009.
76. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “Width dependent degradation of polycrystalline silicon TFTs”, *Proceedings of the 26th International IEEE Conference on Microelectronics (MIEL 2008)*, p. 549, Nis, Yugoslavia, May 2008.

77. Exarchos, M.A., L. Michalas, G.J. Papaioannou, **D.N. Kouvatsos**, and A.T. Voutsas, “The impact of gate oxide polarization on drain current transient behavior of advanced excimer laser crystallized polysilicon thin film transistors”, *Proceedings of the 3rd International Thin Film Transistors Conference (ITC '07) / 2007 Society for Information Display Europe Chapter Meeting*, p. 196, Rome, Italy, January 2007.
78. Moschou, D.C., **D.N. Kouvatsos**, F.V. Farmakis and A.T. Voutsas, “Characterization of advanced directional SLS ELA polysilicon TFTs – Dependence of device parameters on orientation and geometry”, *Proceedings of the 3rd International Thin Film Transistors Conference (ITC '07) / 2007 Society for Information Display Europe Chapter Meeting*, p. 192, Rome, Italy, January 2007.
79. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos**, and A.T. Voutsas, “Investigation of the Undershoot Effect in Polycrystalline Silicon Thin Film Transistors”, *Proceedings of the 3rd International Thin Film Transistors Conference (ITC '07) / 2007 Society for Information Display Europe Chapter Meeting*, p. 116, Rome, Italy, January 2007.
80. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “Hot carrier stress induced degradation of SLS ELA polysilicon TFTs – Effects of gate width variation and device orientation”, *Proceedings of the 3rd International Thin Film Transistors Conference (ITC '07) / 2007 Society for Information Display Europe Chapter Meeting*, p. 100, Rome, Italy, January 2007.
81. Farmakis, F.V., **D.N. Kouvatsos**, A.T. Voutsas, D.C. Moschou, G.P. Kontogiannopoulos and G.J. Papaioannou, “Front and back channel properties of asymmetrical double-gate polysilicon TFTs”, *Thin Film Transistor Technologies VIII Symposium, Electrochemical Society Transactions* **3** (8), 75, 2006.
82. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “The role of grain boundaries in the performance of poly-Si TFTs”, *Thin Film Transistor Technologies VIII Symposium, Electrochemical Society Transactions* **3** (8), 87, 2006.
83. Michalas, L., M. Exarchos, G.J. Papaioannou, **D. Kouvatsos** and A. Voutsas, “Physics and electrical characterization of excimer laser crystallized polysilicon TFTs”, *Proceedings of the 25th International IEEE Conference on Microelectronics (MIEL 2006)*, p. 597, Nis, Serbia & Montenegro, May 2006.
84. **Kouvatsos, D.N.**, G.J. Papaioannou, M. Exarchos, L. Michalas and A.T. Voutsas, “Effect of hot carrier stress on the performance, trap densities and transient behavior of SLS ELA TFTs”, *Proceedings of the 35th European Solid State Device Research Conference (ESSDERC 2005)*, p. 395, Grenoble, France, September 2005.
85. **Kouvatsos, D.N.**, A.T. Voutsas and G.J. Papaioannou, “Thin film transistors fabricated in laser-crystallized chemically vapor deposited amorphous silicon films on quartz substrates”, *15th European Conference on Chemical Vapor Deposition, Electrochemical Society Proceedings Volume PV 2005-09*, p. 465, Bochum, Germany, September 2005.
86. Exarchos, M., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “An investigation of the electrically active defects in poly-Si thin film transistors”, *Thin Film Transistor Technologies VII Symposium, Electrochemical Society Proceedings Volume PV 2004-15*, p. 125, 2004.
87. Exarchos, M., **D.N. Kouvatsos**, G.J. Papaioannou, V. Davidovic, N. Stojadinovic, L. Michalas, and A.T. Voutsas, “Characterization of Advanced Excimer Laser Crystallized

- Polysilicon Thin Film Transistors”, *Proceedings of the 24th International IEEE Conference on Microelectronics (MIEL 2004)*, p. 697, Nis, Yugoslavia, May 2004.
88. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, S. Tsevas, D. Davazoglou, F. Christoforou and C. Boukouras, “Fabrication of midgap metal gate MOS devices compatible with very thin SiO₂ films using low pressure chemically vapor deposited tungsten films and copper liftoff”, *Proceedings of the 3rd Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean*, Thessaloniki, Greece, May 2003.
 89. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, S. Tsevas, D. Davazoglou, F. Christoforou and C. Boukouras, “Fabrication and characteristics of midgap metal gates compatible with thin SiO₂ films using low pressure chemically vapor deposited tungsten films”, *14th European Conference on Chemical Vapor Deposition, Electrochemical Society Proceedings Volume PV 2003-08*, p. 1364, Paris, France, April 2003.
 90. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, “Electrical stressing-induced degradation effects in solid phase crystallized polysilicon thin film transistors”, *Proceedings of the 23rd International IEEE Conference on Microelectronics (MIEL 2002)*, p. 713, Nis, Yugoslavia, May 2002.
 91. Ouisse, T., A.G. Nassiopoulou and **D.N. Kouvatsos**, “Electrical modeling and characterization of Si / SiO₂ superlattices”, *Proceedings of the 1st Microelectronics Microsystems and Nanotechnology Conference (MMN 2000)*, p. 65, Athens, Greece, November 2000.
 92. Photopoulos, P., T. Ouisse, **D.N. Kouvatsos** and A.G. Nassiopoulou, “Radiative recombination from silicon quantum dots in Si / SiO₂ superlattices”, *Proceedings of the 1st Microelectronics Microsystems and Nanotechnology Conference (MMN 2000)*, p. 37, Athens, Greece, November 2000.
 93. Vamvakas, V.E., **D.N. Kouvatsos** and D. Davazoglou, “Polycrystalline silicon thin film transistors having gate oxides deposited using TEOS”, *Proceedings of the 1st Microelectronics Microsystems and Nanotechnology Conference (MMN 2000)*, p. 107, Athens, Greece, November 2000.
 94. Kapetanakis, E., P. Normand, D. Tsoukalas, G. Kamoulakos, **D. Kouvatsos**, J. Stoemenos, S. Zhang, J.A. van den Berg and D.G. Armour, “MOS memory using silicon nanocrystals formed by very low energy ion implantation”, *Proceedings of the 30th European Solid State Device Research Conference (ESSDERC 2000)*, p. 476, Cork, Ireland, September 2000.
 95. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, “Polycrystalline silicon thin film transistors with gate oxides deposited by LPCVD using tetraethylorthosilicate (TEOS)”, *Thin Film Transistor Technologies IV Symposium Proceedings*, Electrochemical Society Proceedings Volume 98-22, 1998.
 96. **Kouvatsos, D.N.**, A.T. Voutsas and M.K. Hatalis, “Thin film transistors fabricated at low thermal budgets in various types of polycrystalline silicon films on glass substrates”, *Thin Film Transistor Technologies IV Symposium Proceedings*, Electrochemical Society Proceedings Volume 98-22, 1998.
 97. Davazoglou, D., **D. Kouvatsos** and E. Valamontes, “Optical properties of undoped, phosphorus doped and oxidized LPCVD polycrystalline silicon films obtained by transmission and FTIR measurements”, *Proceedings of the 14th International Conference on Chemical Vapor Deposition*, Electrochemical Society Proceedings Volume 97-25, p.

796, 1997.

98. Tsamis, C., **D.N. Kouvatsos** and D. Tsoukalas, "Point defect injection kinetics by N₂O oxidation of silicon", *Defects and Diffusion in Silicon Processing Symposium Proceedings*, Materials Research Society, 1997 (Materials Research Society Spring 1997 Meeting, San Francisco, California, USA, April 1997).
99. Tsoukalas, D., C. Tsamis, **D. Kouvatsos** and D. Skarlatos, "Estimation of point defect fundamental properties using SOI structures and devices", *Proceedings of the 4th International Symposium on Process Physics and Modeling in Semiconductor Technology*, Electrochemical Society Proceedings Volume 96-4, p. 348, 1996.
100. Tsoukalas, D., **D. Kouvatsos**, E. Tsoi, P. Revva and C. Tsamis, "Influence of the silicon thickness on the reverse short channel effect in SOI MOSFETs", *Proceedings of the 26th European Solid State Device Research Conference (ESSDERC 96)*, p.83, Bologna, Italy, September 1996.
101. **Kouvatsos, D.N.**, G.T. Sarcona, D. Tsoukalas, M.K. Hatalis, D. Goustouridis and J. Stoemenos, "Thin film transistors fabricated at low temperatures in single crystal silicon films on glass substrates", *2nd International Active Matrix Liquid Crystal Displays Workshop Proceedings*, p. 119, Bethlehem, Pennsylvania, USA, September 1995.
102. Hatalis, M.K., **D.N. Kouvatsos**, S-H. Lin, A.T. Voutsas, J.-H. Kung and Q. Liu, "Effect of grain size and process temperature on distribution of polysilicon TFT electrical characteristics", *Proceedings of the 12th International Display Research Conference*, p. 150, Monterey, California, USA, October 1994.
103. Hatalis, M.K., **D.N. Kouvatsos**, J.-H. Kung, A.T. Voutsas, S-H. Lin and J. Kanicki, "Effect of grain size and device structure on poly-Si TFTs", *1st International Active Matrix Liquid Crystal Displays Workshop Proceedings*, p. 22, Bethlehem, Pennsylvania, USA, October 1993.
104. Hatalis, M.K., **D.N. Kouvatsos**, J.-H. Kung, A.T. Voutsas, F.E. Fehlner and J. Kanicki, "Low-temperature poly-Si TFTs on Corning code 1734 and 1735 glass substrates", *Proceedings of the Society for Information Display*, vol. 24, p. 724, 1993 (Society for Information Display Spring 1993 Meeting, Seattle, Washington, USA, May 1993).
105. **Kouvatsos, D.N.**, R.J. Jaccodine and F.A. Stevie, "Interface trap density reduction and oxide profiling for MOS capacitors with fluorinated gate oxide dielectrics", *The Physics and Chemistry of SiO₂ and the Si – SiO₂ interface, Vol. II*, edited by C.R. Helms and B.E. Deal, Plenum Press, New York, USA, 1993.
106. **Kouvatsos, D.N.**, J.-H. Kung, M.K. Hatalis and R.J. Jaccodine, "Fluorinated gate oxide films utilized in polysilicon thin film transistors", *Amorphous Insulating Thin Films Symposium Proceedings, Materials Research Society*, vol. 284, p. 437, 1992 (Materials Research Society Fall 1992 Meeting, Boston, Massachusetts, USA, December 1992).
107. Kung, J.-H., **D.N. Kouvatsos** and M.K. Hatalis, "Polycrystalline silicon TFTs with various 800°C thermally grown gate oxides", *Thin Film Transistor Technologies Symposium Proceedings*, p. 201, Electrochemical Society Proceedings Volume 92-24, 1992.

Conference Papers

108. Papadimitropoulos, J. Theodorakos, I. Zergioti and **D.N. Kouvatsos**, “Laser annealing of amorphous molybdenum sulphide ultra-thin films”, *17th International Conference on Nanosciences & Nanotechnologies (NN20)*, Thessaloniki, Greece, July 2020.
109. Papadimitropoulos, A. Balliou, D. Davazoglou and **D.N. Kouvatsos**, “Growth of molybdenum sulphide ultra-thin films and their characterization”, *17th International Conference on Nanosciences & Nanotechnologies (NN20)*, Thessaloniki, Greece, July 2020.
110. Papadimitropoulos, G., A. Balliou and **D.N. Kouvatsos**, “Investigation of morphological and structural properties of hot-wire deposited molybdenum sulphide thin films”, *45th International Conference on Micro- and Nano-Engineering (MNE 2019)*, Rhodes, Greece, September 2019.
111. Papadimitropoulos, G., V. Tsouti, **D.N. Kouvatsos**, I. Kostis, D. Goustouridis, N. Stathopoulos, S. Kaminaris and D. Davazoglou, “Investigation of structural, morphological and electrical characterization of hot-wire metal oxides”, *16th International Conference on Nanosciences & Nanotechnologies (NN19)*, Thessaloniki, Greece, July 2019.
112. Papadimitropoulos, G., A. Gasparotto, D. Barreca, A.G. Kontos, D. Davazoglou and **D.N. Kouvatsos**, “Structural and morphological properties of hot-wire deposited MoS₂ thin films”, *22nd Biennial European Conference on Chemical Vapor Deposition and 16th Baltic ALD Conference*, Luxembourg, June 2019.
113. Papadimitropoulos, G., V. Tsouti, **D.N. Kouvatsos**, D. Davazoglou and S. Chatzandroulis, “Hot Wire Deposition of MoS₂ films on flexible polyimide/metal substrates and their use as flexible strain sensors”, *15th International Conference on Nanosciences & Nanotechnologies (NN18)*, Thessaloniki, Greece, July 2018.
114. Papadimitropoulos, G., **D.N. Kouvatsos** and D. Davazoglou, “Structural, morphological and electrical characterization of hot-wire deposited metal oxides”, *European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2017)*, Thessaloniki, Greece, September 2017.
115. Papadimitropoulos, G., **D. Kouvatsos**, I. Kostis, M. Vasilopoulou and D. Davazoglou, “Structural, morphological and electrical characterization of hot-wire deposited metal oxides”, *6th International Symposium on Transparent Conductive Materials (TCM 2016)*, Chania, Greece, October 2016.
116. Papadimitropoulos, G., **D.N. Kouvatsos**, M. Vasilopoulou, Th. Speliotis, N. Boukos, D. Barreca, A. Gasparotto, N. Vourdas, D. Davazoglou, “Hot-wire vapor deposition and characterization of amorphous MoS₂ thin films and of two-terminal structures and back gate thin film transistors fabricated on these films”, *6th International Conference on Micro-Nanoelectronics, Nanotechnologies and MEMS (MicroNano 2015)*, Athens, Greece, October 2015.
117. **Kouvatsos, D.N.**, G. Papadimitropoulos, A. Spiliotis, M. Vasilopoulou, D. Barreca and D. Davazoglou, “Electrical characteristics of two-terminal vapor deposited MoS₂ structures with Al, Au, Cu and Ni-Au contacts”, *20th Biennial European Conference on Chemical Vapor Deposition*, Sempach, Switzerland, July 2015.
118. Papadimitropoulos, G., N. Vourdas, M. Vasilopoulou, **D.N. Kouvatsos**, D. Barreca and D. Davazoglou, “Hot-wire vapor deposition of MoS₂ thin films”, *20th Biennial European Conference on Chemical Vapor Deposition*, Sempach, Switzerland, July 2015.

119. Papadimitropoulos, G., N. Pasipoularidis, **D. Kouvatsos** and D. Davazoglou, “Gas sensing properties and electrical characterization of hot-wire porous metal oxide thin films”, *5th International Symposium on Transparent Conductive Materials (TCM 2014)*, Chania, Greece, October 2014.
120. Moschou, D.C., **D.N. Kouvatsos** and A.T. Voutsas, “P- vs n- channel SLS ELA double gate TFT degradation”, *11th International Conference on Nanosciences and Nanotechnologies (NN 2014)*, Thessaloniki, Greece, July 2014.
121. Moschou, D.C., F.V. Farmakis, **D.N. Kouvatsos** and A.T. Voutsas, “ $V_{g,max} - V_{th}$: A new electrical characterization parameter reflecting the polysilicon film quality of LTPS TFTs”, *4th International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2010)*, Athens, Greece, December 2010.
122. Moschou, D.C., N. Vourdas, D. Davazoglou, **D.N. Kouvatsos**, V.E. Vamvakas and A.T. Voutsas, “On the optical properties of SLS ELA polycrystalline silicon films”, *4th International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2010)*, Athens, Greece, December 2010.
123. Michalas, L., M. Koutsourelis, G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “Hydrogen passivation on sequential lateral solidified poly-Si TFTs”, *4th International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2010)*, Athens, Greece, December 2010.
124. Moschou, D.C. N. Vourdas, D. Davazoglou, **D.N. Kouvatsos**, V.E. Vamvakas and A.T. Voutsas, “On the optical and structural properties of advanced SLS ELA polycrystalline silicon thin films”, *European Materials Research Society Spring 2009 Meeting*, Strasbourg, France, May 2009.
125. Moschou, D.C., M.A. Exarchos, **D.N. Kouvatsos**, G.J. Papaioannou, A. Arapoyanni and A.T. Voutsas, “Reliability and defectivity comparison of n- and p-channel SLS ELA polysilicon TFTs fabricated with a novel crystallization technique”, *19th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF 2008)*, Maastricht, The Netherlands, October 2008.
126. Exarchos, M.A., G.J. Papaioannou, D.C. Moschou, **D.N. Kouvatsos**, A. Arapoyanni and A.T. Voutsas, “On the study of p-channel Thin-Film Transistors fabricated by SLS ELA crystallization techniques”, *European Materials Research Society Spring 2008 Meeting, Symposium I: Thin Film Materials for Large Area Electronics*, Strasbourg, France, May 2008.
127. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “Back gate influence on front channel operation of p-channel double gate polysilicon TFTs”, *European Materials Research Society Spring 2008 Meeting, Symposium I: Thin Film Materials for Large Area Electronics*, Strasbourg, France, May 2008.
128. Moschou, D.C., G.P. Kontogiannopoulos, **D.N. Kouvatsos** and A.T. Voutsas, “The effect of crystallization technology and gate insulator deposition method on the performance and reliability of polysilicon TFTs”, *3rd International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2007)*, Athens, Greece, November 2007.
129. Exarchos, M.A., D.C. Moschou, G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “Performance of Thin-Film Transistors fabricated by Sequential Lateral Solidification crystallization techniques”, *3rd International Conference on Micro- and Nanoelectronics*,

Nanotechnology and MEMS (MicroNano 2007), Athens, Greece, November 2007.

130. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “An Experimental Study of Band Gap States Electrical Properties in Poly-Si TFTs by the Analysis of the Transient Currents”, *3rd International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2007)*, Athens, Greece, November 2007.
131. Moschou, D.C., E. Verelli, **D.N. Kouvatsos**, P. Normand, D. Tsoukalas, A. Speliotis, P. Bayiati and D Niarchos, “Investigation of top gate electrode variations for high-k gate dielectric MOS capacitors”, *3rd International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2007)*, Athens, Greece, November 2007.
132. Verrelli, E., D. Tsoukalas and **D. Kouvatsos**, “Deposition and electrical characterization of hafnium oxide films on silicon”, *3rd International Conference on Micro- and Nanoelectronics, Nanotechnology and MEMS (MicroNano 2007)*, Athens, Greece, November 2007.
133. Farmakis, F.V. G.P. Kontogiannopoulos, **D.N. Kouvatsos** and A.T.Voutsas, “Degradation of double gate polycrystalline silicon TFTs due to hot carrier stress”, *18th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF 2007)*, Arcachon, France, October 2007.
134. Davidović, V., **D.N. Kouvatsos**, N. Stojadinović, A.T. Voutsas, “Influence of polysilicon film thickness on radiation response of advanced excimer laser annealed polycrystalline silicon thin film transistors”, *18th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF 2007)*, Arcachon, France, October 2007.
135. Moschou, D. C., M. A. Exarchos, **D.N. Kouvatsos**, G. J. Papaioannou and A. T. Voutsas, “Performance and reliability of SLS ELA polysilicon TFTs fabricated with novel crystallization techniques”, *18th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF 2007)*, Arcachon, France, October 2007.
136. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos**, F.V. Farmakis and A.T. Voutsas, “Characterization of thin film transistors fabricated on different sequential lateral solidified poly-silicon substrates”, *33rd International Conference on Micro- and Nano-Engineering (MNE 2007)*, Copenhagen, Denmark, September 2007.
137. Moschou, D. C., M. A. Exarchos, **D.N. Kouvatsos**, G. J. Papaioannou and A. T. Voutsas, “A novel SLS ELA crystallization process and its effects on polysilicon film defectivity and TFT performance”, *33rd International Conference on Micro- and Nano-Engineering (MNE 2007)*, Copenhagen, Denmark, September 2007.
138. Verelli, E. D. Tsoukalas, K. Giannakopoulos, **D. Kouvatsos**, P. Normand and D.E. Ioannou, “Nickel nanoparticle deposition at room temperature for memory applications”, *15th bi-annual Conference – Insulating Films on Semiconductors (INFOS 2007)*, Athens, Greece, June 2007.
139. Farmakis, F.V., **D.N. Kouvatsos**, A.T. Voutsas, D.C. Moschou, G.P. Kontogiannopoulos and G.J. Papaioannou, “Front and back channel properties of asymmetrical double-gate polysilicon TFTs”, *The Electrochemical Society Extended Abstracts*, vol. 2006-2, 2006 (210th Meeting of the Electrochemical Society, Cancun, Mexico, October 2006).
140. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “The role of grain boundaries in the performance of poly-Si TFTs”, *The Electrochemical Society Extended Abstracts*, vol. 2006-2, 2006 (210th Meeting of the Electrochemical Society, Cancun,

Mexico, October 2006).

141. Michalas, L., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “Temperature Analysis of Poly-Si TFTs Transfer Characteristics”, *IEEE Proceedings of CAS 2006*, Vol. 2, pp. 323-326, *29th International Semiconductor Conference*, 27-29 September 2006, Sinaia, Romania.
142. **Kouvatsos, D.N.**, A.T. Voutsas, L. Michalas and G.J. Papaioannou, “Device degradation behavior and polysilicon film morphology of TFTs fabricated using advanced excimer laser lateral solidification techniques”, *European Materials Research Society Spring 2006 Meeting, Symposium I: Thin Film Materials for Large Area Electronics*, Nice, France, May 2006.
143. Tsevas, S., M. Vasilopoulou, **D.N. Kouvatsos**, A. Speliotis and D. Niarchos, “Characteristics of MOS diodes using sputter-deposited W or Cu/W films”, *Micro-and-Nano-Engineering 2005*, Vienna, Austria, September 2005.
144. **Kouvatsos, D.N.**, L. Michalas, A.T. Voutsas and G.J. Papaioannou, “Effects of DC gate and drain bias stresses on the degradation of excimer laser crystallized polysilicon thin film transistors”, *2nd Conference on Microelectronics, Microsystems and Nanotechnology*, Athens, Greece, November 2004.
145. Exarchos, M.A., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “Investigation of drain current transient behavior in SLS TFTs with the DLTS technique”, *2nd Conference on Microelectronics, Microsystems and Nanotechnology*, Athens, Greece, November 2004.
146. Vasilopoulou, M., S. Tsevas, A. M. Douvas, P. Argitis, D. Davazoglou and **D. Kouvatsos**, “Characterization of various low-k dielectrics for possible use in applications at temperatures below 160°C”, *2nd Conference on Microelectronics, Microsystems and Nanotechnology*, Athens, Greece, November 2004.
147. Exarchos, M., G.J. Papaioannou, **D.N. Kouvatsos** and A.T. Voutsas, “An investigation of the electrically active defects in poly-Si thin film transistors”, *The Electrochemical Society Extended Abstracts*, vol. 2004-2, 2004 (206th Meeting of the Electrochemical Society, Honolulu, Hawaii, October 2004).
148. **Kouvatsos, D.N.**, V. Davidovic, G.J. Papaioannou, N. Stojadinovic, L. Michalas, M. Exarchos, A.T. Voutsas and D. Goustouridis, “Effects of hot carrier and irradiation stresses on advanced excimer laser annealed polycrystalline silicon thin film transistors”, *15th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF 2004)*, Zurich, Switzerland, October 2004.
149. Papaioannou, G.J., A. Voutsas, M. Exarchos and **D. Kouvatsos**, “The effect of Generation-Recombination mechanisms on the transient behavior of polycrystalline silicon transistors”, *8th International Conference on Polycrystalline Semiconductors – Materials, Technologies and Device Applications (POLYSE 2004)*, Potsdam, Germany, September 2004.
150. Vasilopoulou, M., A. Douvas, **D. Kouvatsos**, P. Argitis and D. Davazoglou, “Characterization of various insulators for possible use as low-k dielectrics deposited at temperatures below 200°C”, *13th Workshop on Dielectrics in Microelectronics (WODIM 2004)*, Kinsale, Ireland, June 2004.
151. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, S. Tsevas, D. Davazoglou, F. Christoforou

- and C. Boukouras, "Fabrication of midgap metal gates compatible with very thin SiO₂ films using low pressure chemically vapor deposited tungsten films", *The Electrochemical Society Extended Abstracts*, vol. 2003-1, 2003 (203rd Meeting of the Electrochemical Society, Paris, France, April 2003).
152. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, S. Tsevas, F. Christoforou, D. Davazoglou and C. Boukouras, "Characteristics of W and Cu/W gate MOS diodes fabricated by a process utilizing LPCVD of W and Cu liftoff", *2003 European Workshop on Materials for Advanced Metallization*, La Londe les Maures, France, March 2003.
 153. **Kouvatsos, D.N.**, V. Ioannou-Sougleridis, A.G. Nassiopoulou and A. Travlos, "Charging effects in silicon nanocrystals embedded in SiO₂ films", *European Materials Research Society Spring 2002 Meeting, Micro- and Nano-Structured Semiconductors Symposium*, Strasbourg, France, June 2002.
 154. Ioannou-Sougleridis, V., B. Kamenev, **D.N. Kouvatsos** and A.G. Nassiopoulou, "Electric field induced blue-shift of the photoluminescence from silicon nanocrystals in SiO₂", *European Materials Research Society Spring 2002 Meeting, Micro- and Nano-Structured Semiconductors Symposium*, Strasbourg, France, June 2002.
 155. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, "Characterization and stressing properties of polysilicon TFTs utilizing oxide films deposited using TEOS", *13th European Conference on Chemical Vapor Deposition*, Athens, Greece, August 2001.
 156. Davazoglou, D., **D.N. Kouvatsos** and E. Valamontes, "Influence of texture on the absorption threshold of LPCVD silicon films", *13th European Conference on Chemical Vapor Deposition*, Athens, Greece, August 2001.
 157. Photopoulos, P., A.G. Nassiopoulou and **D. Kouvatsos**, "Photo- and electroluminescence from Si / SiO₂ superlattices", *European Materials Research Society Spring 2000 Meeting, Materials and Technologies for Optoelectronics Devices Symposium*, Strasbourg, France, May 2000.
 158. Nassiopoulou, A.G., V. Ioannou-Sougleridis, **D. Kouvatsos**, P. Photopoulos and V. Tsakiri, "Electroluminescence from Si in nc-Si / CaF₂ and nc-Si / SiO₂ superlattices", *Advanced Research Initiative in Microelectronics (MEL-ARI) Workshop: Silicon Modules for Integrated Light Engineering*, Edinburgh, Scotland, UK, April 2000.
 159. **Kouvatsos, D.N.**, V.E. Vamvakas and D. Davazoglou, "Thin film transistors having gate oxides deposited by LPCVD using tetraethoxysilane (TEOS)", *The Electrochemical Society Extended Abstracts*, vol. 90-2, Abstract no. 688, 1998 (194th Meeting of the Electrochemical Society, Boston, Massachusetts, USA, November 1998).
 160. **Kouvatsos, D.N.**, A.T. Voutsas and M.K. Hatalis, "Thin film transistors fabricated at low thermal budgets in as-deposited and crystallized polysilicon films on glass substrates", *The Electrochemical Society Extended Abstracts*, vol. 90-2, Abstract no. 683, 1998 (194th Meeting of the Electrochemical Society, Boston, Massachusetts, USA, November 1998).
 161. Kapetanakis, E., P. Normand, D. Tsoukalas, **D. Kouvatsos**, J.A. van den Berg, D.G. Armour and J. Stoemenos, "Resonant tunneling through two-dimensional arrays of silicon nanocrystals formed by very low energy Si⁺ ion implantation in thin SiO₂ films", *1998 General Conference of the Condensed Matter Division of the European Physical Society*, Grenoble, France, August 1998.
 162. Normand, P., D. Tsoukalas, E. Kapetanakis, J.A. van den Berg, D.G. Armour, J.

- Stoemenos, K. Aidinis, **D. Kouvatsos**, A. Tserepi, E. Tsoi and M. Hatzakis, "Towards single electronics using ion beam synthesis and optical lithography", *Advanced Research Initiative in Microelectronics (MEL-ARI) Nano-Scale Integrated Circuits 1st Annual Workshop*, Lille, France, February 1998.
163. Normand, P., D. Tsoukalas, K. Aidinis, A. Tserepi, **D. Kouvatsos** and E. Kapetanakis, "Fabrication of Si nanowires using anisotropic dry and wet etching", *Micro-and-Nano-Engineering '97*, Athens, Greece, September 1997.
164. Davazoglou, D., **D. Kouvatsos** and E. Valamontes, "Optical properties of undoped, phosphorus doped and oxidized LPCVD polycrystalline silicon films obtained by transmission and FTIR measurements", *11th European Conference on Chemical Vapor Deposition, The Electrochemical Society Extended Abstracts*, vol. 97-2, 1997 (192nd Meeting of the Electrochemical Society, Paris, France, September 1997).
165. Tsoukalas, D., C. Tsamis, **D. Kouvatsos** and D. Skarlatos, "Estimation of fundamental point defect properties using SOI structures and devices", *The Electrochemical Society Extended Abstracts*, vol. 96-1, p. 468, Abstract no. 352, 1996 (189th Meeting of the Electrochemical Society, Los Angeles, California, USA, May 1996).
166. Kung, J.-H., **D.N. Kouvatsos** and M.K. Hatalis, "Polysilicon TFTs with various 800°C thermally grown gate oxides", *The Electrochemical Society Extended Abstracts*, vol. 92-2, 1992 (182nd Meeting of the Electrochemical Society, Toronto, Ontario, Canada, October 1992).
167. **Kouvatsos, D.N.** and M.K. Hatalis, "Thin silicon dioxide films grown at very low oxygen partial pressure in oxygen diluted by helium", *The Electrochemical Society Extended Abstracts*, vol. 92-2, p. 399, 1992 (182nd Meeting of the Electrochemical Society, Toronto, Ontario, Canada, October 1992).
168. **Kouvatsos, D.**, R.J. Jaccodine and F.A. Stevie, "Interface trap density reduction and oxide profiling for fluorinated MOS capacitors", *The Electrochemical Society Extended Abstracts*, vol. 92-1, Abstract no. 249, 1992 (181st Meeting of the Electrochemical Society, St. Louis, Missouri, USA, May 1992).
169. **Kouvatsos, D.**, P.J. Macfarlane, R.J. Jaccodine and F.A. Stevie, "SiO₂ film stress thickness dependence for dry and fluorinated oxides and relevant fluorine effects", *The Electrochemical Society Extended Abstracts*, vol. 91-2, Abstract no. 568, 1991 (180th Meeting of the Electrochemical Society, Phoenix, Arizona, USA, October 1991).
170. **Kouvatsos, D.**, J.-G. Huang and R.J. Jaccodine, "Fluorine enhanced oxidation of silicon: effect of fluorine on oxide stress", *The Electrochemical Society Extended Abstracts*, vol. 90-2, p. 447, Abstract no. 310, 1990 (178th Meeting of the Electrochemical Society, Seattle, Washington, USA, October 1990).

National Conferences

171. Moschou, D. C., M. A. Exarchos, **D.N. Kouvatsos**, G. J. Papaioannou and A. T. Voutsas, "Stress and Performance Characteristics of Novel Polysilicon TFTs", *23rd Panhellenic Conference for Solid State Physics*, Athens, Greece, September 2007.
172. Kontogiannopoulos, G.P., F.V. Farmakis, **D.N. Kouvatsos** and A.T. Voutsas, "Degradation at the Back Polysilicon Interface During Hot Carrier Stress in Double Gate Polysilicon TFTs", *23rd Panhellenic Conference for Solid State Physics*, Athens, Greece, September 2007.

173. Exarchos, M.A., D.C. Moschou, **D.N. Kouvatsos**, G.J. Papaioannou and A.T. Voutsas, “The Effect of Sub-boundaries on the Performance and Reliability of Novel SLS ELA Polysilicon TFTs”, *23rd Panhellenic Conference for Solid State Physics*, Athens, Greece, September 2007.
174. Michalas, L., G.I. Papaioannou, **D. Kouvatsos** and A.T. Voutsas, “Investigation of the electrical properties of TFTs fabricated in SLS polycrystalline silicon films”, *23rd Panhellenic Conference for Solid State Physics*, Athens, Greece, September 2007.
175. Verrelli, E., D. Tsoukalas, K. Giannakopoulos, **D. Kouvatsos**, P. Normand and D.E. Ioannou, “Charge storage into metallic nanoparticles”, *23rd Panhellenic Conference for Solid State Physics*, Athens, Greece, September 2007.
176. Exarchos, M.A., G.I. Papaioannou, **D. Kouvatsos** and A.T. Voutsas, “Investigation of carrier generation-recombination mechanisms in Poly-Si Thin-Film-Transistors”, *22nd Panhellenic Conference for Solid State Physics*, Patra, Greece, September 2006.
177. Michalas, L., G.I. Papaioannou, **D. Kouvatsos** and A.T. Voutsas, “Investigation of the transient overshoot effect in polycrystalline silicon thin film transistors”, *22nd Panhellenic Conference for Solid State Physics*, Patra, Greece, September 2006.
178. Michalas, L., G.I. Papaioannou, **D. Kouvatsos** and A.T. Voutsas, “Investigation of the temperature dependence of the electrical characteristics of polycrystalline silicon thin film transistors”, *21st Panhellenic Conference for Solid State Physics*, Nicosia, Cyprus, September 2005.
179. Tsevas, S., M. Vasilopoulou, **D.N. Kouvatsos**, A. Speliotis and D. Niarchos, “Fabrication and characterization of MOS diodes with W or Cu/W gates deposited using sputtering”, *21st Panhellenic Conference for Solid State Physics*, Nicosia, Cyprus, September 2005.
180. Michalas, L., **D. Kouvatsos**, G. Papaioannou and A.T. Voutsas, “Investigation of the influence of hot carrier effects on the operation of thin film transistors crystallized using advanced excimer laser annealing techniques”, *Proceedings of the 20th Panhellenic Conference for Solid State Physics*, Ioannina, Greece, September 2004.
181. Exarchos, M.A., G.J. Papaioannou, **D. Kouvatsos** and A. Voutsas, “Investigation of the influence of light on the generation – recombination mechanisms in poly-Si thin-film-transistors”, *Proceedings of the 20th Panhellenic Conference for Solid State Physics*, Ioannina, Greece, September 2004.
182. Exarchos, M.A., G.J. Papaioannou, **D. Kouvatsos** and A. Voutsas, “Investigation of polarization effects in SLS ELA thin-film-transistors using deep level transient spectroscopy”, *Proceedings of the 20th Panhellenic Conference for Solid State Physics*, Ioannina, Greece, September 2004.
183. **Kouvatsos, D.N.** and A.T. Voutsas, “Influence of gate and drain bias electrical stressing on TFTs fabricated using solid phase or excimer laser crystallization”, *Proceedings of the 19th Panhellenic Conference for Solid State Physics and Materials Science*, Thessaloniki, Greece, September 2003.
184. Ioannou-Sougleridis, V., **D.N. Kouvatsos**, A.G. Nassiopoulou and A. Travlos, “Memory effects in MIS devices containing silicon nanocrystals in oxide”, *Proceedings of the 18th Panhellenic Conference for Solid State Physics and Materials Science*, Heraklion,

Greece, September 2002.

185. Kapetanakis, E., P. Normand, D. Tsoukalas, G. Kamoulakos, **D. Kouvatsos**, J. Stoemenos, S. Zhang and J.A. van den Berg, "Memory effects in floating gate MOSFETs based on Si nanocrystals formed by very low energy Si⁺ ion implantation and thermal treatment", *Proceedings of the 16th Panhellenic Conference for Solid State Physics*, Nafplion, Greece, September 2000.
186. Ouisse, T., A.G. Nassiopoulou, V. Ioannou-Sougleridis, P. Photopoulos and **D.N. Kouvatsos**, "Low dimensional silicon structures: from electron transport to light emission" (invited paper), *Proceedings of the 16th Panhellenic Conference for Solid State Physics*, p. 449, Nafplion, Greece, September 2000.
187. Photopoulos, P., **D. Kouvatsos**, A. Travlos and A.G. Nassiopoulou "Nanocrystalline silicon photodiodes", *Proceedings of the 15th Panhellenic Conference for Solid State Physics*, Patra, Greece, September 1999.
188. Vamvakas, B.E., **D. Kouvatsos** and D. Davazoglou, "Characterization of thin film transistors with gate oxides deposited by chemical vapor deposition of tetraethylorthosilicate (TEOS)", *Proceedings of the 14th Panhellenic Conference for Solid State Physics*, Ioannina, Greece, September 1998.
189. **Kouvatsos, D.N.**, D. Tsoukalas, G.T. Sarcona, M.K. Hatalis and J. Stoemenos, "Transistors fabricated in single crystal silicon films at low process temperatures on glass substrates", *Proceedings of the 12th Panhellenic Conference for Solid State Physics*, Heraklion, Greece, September 1996.
190. Tsoukalas, D., C. Tsamis, P. Revva, **D. Kouvatsos** and E. Tsoi, "Two-dimensional distribution of interstitial atoms following silicon oxidation", *Proceedings of the 11th Panhellenic Conference for Solid State Physics*, p. 37, Xanthi, Greece, September 1995.
191. **Kouvatsos, D.N.**, D. Mouricaud, E. Tsoi and D. Tsoukalas, "Characterization of very thin oxides and oxinitrides grown by thermal oxidation in different oxidizing environments", *Proceedings of the 10th Panhellenic Conference for Solid State Physics*, p. 425, Delphi, Greece, September 1994.