

Списък Публикации*
Доц. дфн Албена Паскалева

А. Глави от книги, статии и доклади на конференции, публикувани в списания

- [A1] D. B. Dimitrov, **A. Paskaleva**, T. Dimitrova, "Radiation effects on wet and dry - oxide metal - oxide - semiconductor devices", Thin Solid Films, **223** (1993) 293 **IF=1.761 (PhD)**
- [A2] **A. Paskaleva**, E. Atanassova, "Fowler – Nordheim tunneling injection in the Si - SiO₂ system treated with argon plasma",
a) Semiconductor Science and Technology, **8** (1993) 1566. **IF=1.921 (PhD)**
b) Plasma News Report, ed. H. V. Boenig, Carlsbad, California, February 1994, p.80.
- [A3] **A. Paskaleva**, E. Atanassova, G. Beshkov, "Rapid Thermal Annealing of SiO₂ for VLSI application"
a) Journal of Non Crystalline Solids, **187** (1995) 35-39. **IF=1.597 (PhD)**
b) Proceedings of the symposium A on Amorphous Insulating Thin Films II of the EMRS 1994 Spring Meeting, Strasbourg, France 24 - 27 May, 1994, ed. R. A.B. Devine, W. L. Warren, J. Kanicki, M. Matsumura, Elsevier Science, 1995.
- [A4] **A. Paskaleva**, E. Atanassova, G. Beshkov, "Effect of rapid thermal annealing in vacuum on the properties of thin SiO₂ films", J. of Physics D: Appl. Physics, **28** (1995) 906-913. **IF=2.528 (PhD)**
- [A5] E. Atanassova, **A. Paskaleva**, "Mobility degradation of the inversion carriers due to MERIE - like plasma action", Solid State Electronics, **39** (1996) 1033-1041. **IF=1.482 (PhD)**
- [A6] E. Atanassova, **A. Paskaleva**, "Influence of the rapid thermal annealing in vacuum on the XPS characteristics of thin SiO₂", Applied Surface Science **103** (1996) 359-367. **IF=2.112 (PhD)**
- [A7] E. Atanassova, **A. Paskaleva**, Structural changes in thin SiO₂ on Si after RIE - like nitrogen plasma action, Applied Surface Science **120** (1997) 306. **IF=2.112 (PhD)**
- [A8] **A. Paskaleva**, E. Atanassova, Damage in Thin SiO₂ - Si Structures Induced by RIE - Like Nitrogen and Oxygen Plasma, Solid State Electronics **42** (1998) 777. **IF=1.482 (PhD)**
- [A9] **A.Paskaleva**, E. Atanassova, "Bulk oxide charge and slow states in Si-SiO₂ structures generated by RIE-mode plasma",
a) Proceedings of 22 International Conference on Microelectronics, MIEL 2000, Nis, Yugoslavia, IEEE Catalog No.00TH8400, p.323.
b) Microelectr. Reliab. **40** (2000) 2033-2037. **IF=1.137**

* С (PhD) или (DSc) са означени статиите, които са използвани за получаване съответно на степен „доктор“ и „доктор на науките“

- [A10] **A.Paskaleva**, E. Atanassova, "Structural Nature of the N_2 RIE Plasma Induced Slow States and Bulk Traps in Thin SiO_2 -Si Structures", E-MRS 1999 Spring Meeting, Strasbourg, France; Mater. Sci. Engineering B **71** (2000) 115-119. **IF=2.331**
- [A11] **A.Paskaleva**, E. Atanassova, Electrical stress and plasma induced traps in SiO_2 , Microel. Reliab., **40** (2000) 933-940. **IF=1.137**
- [A12] E. Atanassova, **A.Paskaleva**, "Electrically active defects in thin SiO_2 -Si structures generated by MERIE- and RIE-mode plasmas", Microel. Reliab., **40** (2000) 381 - 425 (Introductory invited paper) **IF=1.137**
- [A13] **A. Paskaleva**, E. Atanassova, T. Dimitrova, "Leakage currents and conduction mechanisms of Ta_2O_5 layers on Si obtained by r.f. sputtering", presented at 11th International School on Vacuum, Electron and Ion technologies, VEIT'99, Varna, Bulgaria; Vacuum **58** (2000) 470-477. **IF=1.53 (DSc)**
- [A14] E. Atanassova, **A.Paskaleva**, R. Konakova, D. Spassov, V.F. Mitin, "Influence of gamma-radiation on thin Ta_2O_5 – Si structures", Microelectronics J., **32** (2001) 553-562. **IF=0.912 (DSc)**
- [A15] E. Atanassova, N. Novkovski, **A. Paskaleva**, M. Pcovska-Gjorgjevich, Oxygen annealing modification of conduction mechanism in thin rf sputtered Ta_2O_5 on Si, Solid St.Electr., **46** (2002) 1887-1898. **IF=1.482 (DSc)**
- [A16] E. Atanassova, **A. Paskaleva**, Breakdown fields and conduction mechanisms in thin Ta_2O_5 layers on Si for high density DRAMs, Microel. Reliab., **42** (2002) 157 - 173 (Introductory invited paper). **IF=1.137 (DSc)**
- [A17] E. Atanassova, M. Kalitzova, G. Zollo, **A. Paskaleva**, A. Peeva, M. Georgieva, G. Vitali, High temperature-induced crystallization in Ta_2O_5 layers and its influence on the electrical properties, Thin Solid Films **426** (2003) 191-199. **IF=1.761**
- [A18] E. Atanassova, **A. Paskaleva**, Leakage current in the system thin films Ta_2O_5 on Si – is it a limiting factor for nanoscale dynamic memories? 12th International School on Condensed Matter Physics, "Modern Trends in Condensed Matter Science and Technology" 1 - 6 September, 2002 Varna, Bulgaria, J.of Materials Science: Materials in Electronics, **14** (2003) 671-675. **IF=1.486 (DSc)**
- [A19] M. Lemberger, **A.Paskaleva**, S. Zürcher, A.J. Bauer, L. Frey, H. Ryssel, Zirconium silicate films obtained from novel MOCVD precursors, paper presented on IV Symposium "SiO₂ and Advanced Dielectrics", 16-18 September 2002, Trento, Italy; J. Non-Crystalline Solids **322** (2003) 147-153. **IF=1.597 (DSc)**
- [A20] **A.Paskaleva**, M. Lemberger, S. Zürcher, A.J. Bauer, L. Frey, H. Ryssel, Electrical characterisation of zirconium silicate films obtained from novel MOCVD precursors, Proc. of 12th Workshop on Dielectrics in Microelectronics, November 2002, Grenoble, France, Microel. Reliab. **43** (2003) 1253-1257. **IF=1.137 (DSc)**
- [A21] **A. Paskaleva**, N. Novkovski, E. Atanassova, M. Pcovska-Gjorgjevich, Density and spatial distribution of MERIE-like plasma induced defects in SiO_2 , phys.stat.sol.(a) **199** (2003) 243-249. **IF=1.616**
- [A22] M. Lemberger, **A. Paskaleva**, S. Zürcher, A.J. Bauer, L. Frey, H. Ryssel, Electrical Characterization and Reliability Aspects of Zirconium Silicate Films Obtained from Novel MOCVD Precursors, paper presented on INFOS 2003, 18-20 June, 2003, Barcelona, Spain, Microel. Engin., **72** (2004) 315-320. **IF=1.224 (DSc)**

- [A23] E. Atanassova, G. Tyuliev, **A. Paskaleva**, D. Spassov, K. Kostov, *XPS study of N₂ annealing effect on thermal Ta₂O₅ layers on Si*, Appl. Surf. Sci., **225** (2004) p.86-99. **IF=2.112**
- [A24] **A. Paskaleva**, A.J. Bauer, M. Lemberger, S. Zürcher, *Different current conduction mechanisms through thin high-k Hf_xTi_ySi_zO films due to the varying Hf to Ti ratio*, J. Appl. Phys., **95 (10)** (2004) 5583-5590. **IF=2.21 (DSc)**
- [A25] **A. Paskaleva**, R.R. Ciechonski, M. Syväjärvi, E. Atanassova, and R. Yakimova *Characterization of 4H-SiC MOS Structures with Al₂O₃ as Gate Dielectric*, presented on ECSCRM 2004, Bologna, Italy, 31 August –2 Sept. 2004, Mater. Sci. Forum, Vols. 483-485 (2005) 709.
- [A26] M. Lemberger, **A. Paskaleva**, S. Zürcher, A.J. Bauer, L. Frey, H. Ryssel, *Electrical Properties of Hafnium Silicate Films Obtained from a Single-Source MOCVD Precursor*, presented on 13th Workshop on Dielectrics in Microelectronics, WODIM 2004, Cork, Ireland, 28-30 June 2004, Microel. Reliab. **45** (2005) 819-822. **IF=1.137 (DSc)**
- [A27] N. Novkovski, **A. Paskaleva**, E. Atanassova, “*Dielectric properties of rf sputtered Ta₂O₅ on rapid thermally nitrided Si*”, Semicond. Sci. Technol. **20** (2005) 233-38. **IF=1.921**
- [A28] E. Atanassova, **A. Paskaleva**, N. Novkovski, M. Georgieva, *Conduction and reliability behavior of thermal Ta₂O₅-Si structures and the effect of the gate electrode*, J. Appl. Phys. **97(9)** (2005) 094104 (11 pages). **IF=2.21 (DSc)**
- [A29] **A. Paskaleva**, A.J. Bauer, M. Lemberger, *Conduction mechanisms and an evidence for a phonon-assisted conduction process in thin high-k Hf_xTi_ySi_zO films*, Microel. Reliab. **45 (7-8)** (2005) 1124-1133. **IF=1.137 (DSc)**
- [A30] **A. Paskaleva**, A.J. Bauer, M. Lemberger, *An asymmetry of conduction mechanisms and charge trapping in thin high-k Hf_xTi_ySi_zO films*, J. Appl. Phys. **98(5)** (2005) 053707 (8 pages) **IF=2.21 (DSc)**
- [A31] **A. Paskaleva**, R.R. Ciechonski, M. Syväjärvi, E. Atanassova, and R. Yakimova, *Electrical behavior of 4H-SiC MOS Structures with Al₂O₃ as Gate Dielectric*, J. Appl. Phys. **97(12)** (2005) 124507 (4 pages). **IF=2.21**
- [A32] **A. Paskaleva**, E. Atanassova, M. Lemberger, A.J. Bauer “*Correlation between defects, leakage currents and conduction mechanisms in thin high-k dielectric layers*”, (**Invited lecture**) NATO Advance Research Workshop on Defects in High-K dielectrics, St.Petersburg, Russia, 11-14 July, 2005: published in: “Defects in High-K dielectric stacks”, ed. E. Gusev, Springer, 2006 pp.411-422. **(DSc)**
- [A33] **A. Paskaleva**, E. Atanassova, M. Georgieva, *Charge trapping and conduction mechanisms in Ta₂O₅ on nitrided silicon*, J.Phys.D: Appl.Phys., **38** (2005) 4210-4216. **IF=2.528 (DSc)**
- [A34] E. Atanassova, **A. Paskaleva**, *Leakage current and conduction mechanisms in Ta₂O₅ for gigabit dynamic memories applications*”, accepted for publication in "Thin Films and coatings: New research", ed. B.M. Caruta, Nova Science Publishers, Inc., New York, (2005), pp. 27-48. **(DSc)**
- [A35] **A. Paskaleva**, E. Atanassova, “*Beneficial effect of post metallization H₂ annealing on Ta₂O₅ stack capacitors*”, J.Phys.D:Appl.Phys., **39** (2006) 2950-2954. **IF=2.528 (DSc)**

- [A36] **A. Paskaleva**, M. Lemberger, A.J. Bauer “*Stress induced leakage current mechanism in thin Hf-silicate layers*”, Appl. Phys. Lett. 90 (4) (2007) 042105. **IF=3.794 (DSc)**
- [A37] E. Atanassova, **A. Paskaleva**, “*The effect of metal electrode on the electrical characteristics of Ta₂O₅ capacitors for DRAM applications*”, in: “New Materials and Processes for Incoming Semiconductors Technologies”, eds. S. Duenas, H. Castan, Transworld Research Network Chapter 4 (2006), pp.77-111. **(DSc)**
- [A38] E. Atanassova, **A. Paskaleva**, “*Challenges of Ta₂O₅ as high-k dielectric for nanoscale DRAMs*”, **Introductory invited paper**, Microel. Reliab. 47 (2007) 913-23. **IF=1.137 (DSc)**
- [A39] **A. Paskaleva**, M. Lemberger, A.J. Bauer, “*Polarity asymmetry of stress and charge trapping behavior of thin Hf- and Zr-silicate layers*”, Microel. Reliab. 47 (2007) 2094-2099. **IF=1.137 (DSc)**
- [A40] N. Novkovski, E. Atanassova and **A. Paskaleva** “*Stress-induced leakage currents of the RF sputtered Ta₂O₅ on N-implanted silicon*” Appl. Surf. Sci., v.253 (9) (2007) 4396-4403. **IF=2.112**
- [A41] M. Lemberger, F. Schön, T. Dirnecker, M. P. M. Jank, L. Frey, H. Ryssel, **A. Paskaleva**, S. Zurcher, A. J. Bauer, “*MOCVD of hafnium silicate films obtained from a single-source precursor on silicon and germanium for gate-dielectric applications*”, Chemical Vapor Deposition, 13 (2007) 105-111. **IF=1.703**
- [A42] **A. Paskaleva**, D. Spassov, E. Atanassova, “*Impact of Si substrate nitridation on electrical characteristics of Ta₂O₅ stack capacitors*”, J.Phys. D: Appl. Phys. 40 (2007) 6709-6717. **IF=2.528 (DSc)**
- [A43] E. Atanassova, N. Stojadinovic, **A.Paskaleva**, D. Spassov, L. Vracar, M. Georgieva, “*Constant voltage stress induced current in Ta₂O₅ stacks and its dependence on gate electrode*”, Semicond. Sci. Techn. **23** (2008) 075017 (pp.9). **IF=1.921**
- [A44] E. Atanassova, **A.Paskaleva**, N. Novkovski, “*Effects of the metal gate on the stress-induced traps in Ta₂O₅/SiO₂ stacks*”, Microel. Reliab. **48** (2008) pp.514-525. **IF=1.137 (DSc)**
- [A45] **A.Paskaleva**, M. Tapajna, E. Atanassova, K. Frohlich, A. Vincze, E. Dobvocka, “*Effect of Ti-doping on Ta₂O₅ stacks with Ru and Al gates*”, Appl. Surf. Sci. **254** (2008) pp.5879-5885. **IF=2.112 (DSc)**
- [A46] V. Yanev, M. Rommel, M. Lemberger, S. Petersen, B. Amon, T. Erlbacher, A. J. Bauer, H. Ryssel, **A. Paskaleva**, W. Weinreich, C. Fachmann, J. Heitmann, and U. Schroeder “*Tunneling atomic-force microscopy as a highly sensitive mapping tool for the characterization of film morphology in thin high-k dielectrics*”, Appl. Phys. Lett. 92, 252910 (2008) (3 pages). **IF=3.794 (DSc)**
- [A47] **A. Paskaleva**, V. Yanev, M. Rommel, M. Lemberger, A. J. Bauer, “*Improved insight in charge trapping of high-k ZrO₂/SiO₂ stacks by using tunneling atomic force microscopy*”, J.Appl.Phys. 104 (2008) 024108. **IF=2.21 (DSc)**
- [A48] E. Atanassova, N. Stojadinovic, **A.Paskaleva**, “*Degradation behavior of Ta₂O₅ stacks and its dependence on gate electrode*”, 19th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis, SEP 29-OCT 02, 2008 Maastricht, NETHERLANDS, Microel. Reliab. 48 (2008) 1193-97. **IF=1.137**

- [A49] A.Paskaleva, E.Atanassova, N.Novkovski, “*Constant current stress of Ti-doped Ta₂O₅ on nitrided Si*”, J. Phys. D: Appl. Phys. **42** (2009) 025105 (pp.8). **IF=2.528 (DSc)**
- [A50] E.Atanassova, A.Paskaleva, “*Doping of Ta₂O₅ as a way to extend its potential as a high-k dielectric*”, 7th Conf. of the Society of Physicists of Macedonia, **invited lecture**, Ohrid, Macedonia 18-21 Sept. 2008, *Physica Macedonica* **57/58** (2008) 17-26. **(DSc)**
- [A51] A. Paskaleva, M. Lemberger, A. J. Bauer, W. Weinreich, J. Heitmann, E. Erben, U. Schröder, L. Oberbeck “*Influence of the amorphous/crystalline phase of Zr_{1-x}Al_xO₂ high-k layers on the capacitance performance of MIM stacks*”, J. Appl. Phys. **106** (2009) 054107. **IF=2.21**
- [A52] I. Karmakov, A. Konova, E. Atanassova, A. Paskaleva, “*Spectroscopic ellipsometry of very thin tantalum pentoxide on Si*”, Applied Surface Science **255** (22), (2009) pp. 9211-9216. **IF=2.112**
- [A53] M. Rommel, V. Yanev, A. Paskaleva, T. Erlbacher, M. Lemberger, A. Bauer and L. Frey “*Electrical Scanning Probe Microscopy Techniques for the Detailed Characterization of High-k Dielectric Layers*”, **invited lecture**, 217th ECS Meeting in Vancouver, BC, Canada; ECS Transactions **28(2)** (2010) 139-156.
- [A54] E. Atanassova, N. Novkovski, A. Paskaleva, D. Spassov, “*Constant current stress-induced leakage current in mixed HfO₂-Ta₂O₅ stacks*”, Microelectron. Reliab. **50** (2010) pp. 794-800. **IF=1.137**
- [A55] M. Tapajna, A. Paskaleva, E. Atanassova, E. Dobrocka, K. Husekova, K. Frohlich, “*Gate oxide thickness dependence of the leakage current mechanism in Ru/Ta₂O₅/SiON/Si structures*”, Semicond. Sci. Technol. **25** (2010) 075007. **IF=1.921 (DSc)**
- [A56] A. Paskaleva, M. Lemberger, E. Atanassova, A. J. Bauer, "Traps and trapping phenomena and their implementations on electrical behavior of high-k capacitor stack", **Invited lecture**, 16th Workshop on Dielectrics in Microel. WODIM'2010, June 2010, Bratislava, Slovakia; J. Vac. Sci. Technol. **29(1)** (2011) 01AA03 (10 pages). **IF=1.267 (DSc)**
- [A57] A. Paskaleva, M. Tapajna, E. Dobrocka, K. Husekova, E. Atanassova, K. Frohlich, "Structure and dielectric properties of Ru-based gate/Hf-doped Ta₂O₅ stacks", Appl. Surf. Sci., **257** (2011) 7876-7880. **IF=2.112 (DSc)**
- [A58] A. Paskaleva, M. Lemberger, A.J. Bauer, L. Frey, “*Implication of oxygen vacancies on current conduction mechanisms in TiN/Zr_{1-x}Al_xO₂/TiN MIM structures*”, J. Appl. Phys. **109** (2011) 076101. **IF=2.21**
- [A59] A. Paskaleva, E. Atanassova, “*Evidence for a conduction through shallow traps in Hf-doped Ta₂O₅*”, Mater. Sci. Semicond. Process. **13** (2010) 349-55. **IF=1.955 (DSc)**
- [A60] A. Skeparovski, N. Novkovski, E. Atanassova, A. Paskaleva, V. Lazarov, "Effect of Al gate on the electrical behavior of Al-doped Ta₂O₅ stacks", J. Phys. D: Appl. Phys. **44** (2011) 235103. **IF=2.528**
- [A61] I. Karmakov, A. Paskaleva, E. Atanassova “*Interfacial layers in Ta₂O₅/Si based stacks and constituent depth profiles by Spectroscopic ellipsometry*”, Appl. Surf. Sci. **258** (2012) 4507-12. **IF=2.112**

- [A62] E. Atanassova, **A. Paskaleva**, D. Spassov, "Doped Ta_2O_5 and mixed $HfO_2-Ta_2O_5$ films for dynamic memories application", Microelectron. Reliab. 51, 642-50 (2012), invited paper. **IF=1.137 (DSc)**
- [A63] W. Weinreich, A. Shariq, K. Seidel, J. Sundqvist, **A. Paskaleva**, M. Lemberger, A. Bauer „Detailed leakage current analysis of MIM capacitors with ZrO_2 , ZSZ and ZAZ as dielectric and TiN electrodes”, WODIM, Dresden, 2012, J. Vac. Sci. Technol. B. 31(1) (2013) 01A109 **IF=1.267**
- [A64] I. Karmakov, **A. Paskaleva**, Influence of Hf doping on interfacial layers of Ta_2O_5 stacks studied by ellipsometry, Appl. Surf. Sci. 271 (2013) 12-18. **IF=2.112**
- [A65] K. Fröhlich, P. Jančovič, B. Hudec, J. Décher, **A. Paskaleva**, T. Bertaude, T. Schroeder, Atomic layer deposition of thin oxide films for resistive switching, 224th Electrochemical Society Meeting, San Francisco (Oct. 27-Nov. 1, 2013) ECS Transactions 58(10) (2013) 163-170.
- [A66] K. Murakami, M. Rommel, B. Hudec, A. Rosová, K. Hušeková, E. Dobročka, R. Rammula, A. Kasikov, J.-H. Han, W. Lee, S.-J. Song, **A. Paskaleva**, A. J. Bauer, L. Frey, K. Fröhlich, J. Aarik, and Ch.-S. Hwang, “Nanoscale Characterization of TiO_2 Films Grown by Atomic Layer Deposition on RuO_2 Electrodes”, ACS Applied Materials and Interfaces, 6(4) (2014) 2486–2492. **IF=6.723**
- [A67] B. Hudec, **A. Paskaleva**, P. Jančovič, J. Décher, J. Décher, A. Rosová, E. Dobročka, and K. Fröhlich, Resistive switching in TiO_2 -based MIM structures with Al_2O_3 barrier layer at the metal/dielectric interface, oral presentation at E-MRS 2013, Strasbourg, Thin Solid Films, 563 (2014) 10-14. **IF=1.761**
- [A68] **A. Paskaleva**, B. Hudec, P. Jančovič, K. Fröhlich, D. Spasov, The influence of technology and switching parameters on resistive switching behavior of $TiN/HfO_2/Pt$ MIM structures, Facta Universitatis,Series: Electronics and Energetics, 27(4) (2014), pp. 621 – 630
- [A69] **A. Paskaleva**, W. Weinreich, A. J. Bauer, M. Lemberger, L. Frey, “Improved electrical behavior of ZrO_2 -based MIM structures by optimizing the O_3 oxidation pulse time”, Mater. Sci. Semicond. Proc. 29 (2015) 124-131. **IF=1.955**
- [A70] **A. Paskaleva**, M. Rommel, A. Hutzler, D. Spasov, A.J. Bauer, “Tailoring the Electrical Properties of HfO_2 MOS-Devices by Aluminum Doping”, ACS Applied Materials and Interfaces, 7(31) (2015) 17032-17043. **IF=6.723**
- [A71] N. Novkovski, **A. Paskaleva**, A. Skeparovski, D. Spasov, “Model based precise analysis of the injection currents in $Al/ZrO_2/Al_2O_3/ZrO_2/SiO_2/Si$ structures for use in charge trapping non-volatile memory devices”, Mater. Sci. Semicond. Process., 44 (2016) 30–37. **IF=1.955**
- [A72] D. Spasov, A. Skeparovski, **A. Paskaleva**, N. Novkovski, “A comparative study of charge trapping in HfO_2/Al_2O_3 and ZrO_2/Al_2O_3 based multilayered metal/high-k/oxide/Si structures”, Thin Solid Films, 614 (2016) 7-15. **IF=1.761**
- [A73] D. Spasov, **A. Paskaleva**, E. Guziewicz, G. Luka, T. A. Krajewski, K. Kopalko, A. Wierzbicka, B. Blagoev, Electrical characteristics of multilayered $HfO_2 - Al_2O_3$ charge trapping stacks deposited by ALD, J. Phys.:Conf. Series 764 (2016) 012016
- [A74] M. Rommel, **A. Paskaleva**, Investigation of high-k dielectric stacks by C-AFM: advantages, limitations and possible applications”, Chapter 4, in "Conductive Atomic Force Microscopy: Application in nanomaterials”, ed. M. Lanza, Wiley VCH, (in press)

В. Доклади, публикувани в пълен текст в сборници на конференции

- [B1] **A. Paskaleva**, E. Atanassova, G. Beshkov, "Electrical characterization of the RTA treated thermally grown SiO_2 ", Proc. VIII Intern. School on Condensed Matter Physics, Varna, 18 - 24 Sept. 1994, eds. J.Marshal, N. Kirov, A. Vavrek, Research Studies Press, Taunton, Somerset, England, p. 452. (**PhD**)
- [B2] **A. Paskaleva**, E. Atanassova, "Very thin SiO_2 layers after rapid thermal annealing in vacuum", Proc. of the 20th International Conference on Microelectronics, MIEL'95, Nis, Serbia, vol.1, pp. 57-60, IEEE Catalog No. 95TH8108. (**PhD**)
- [B3] E. Atanassova, **A. Paskaleva**, "XPS study of thin thermal SiO_2 layers after RTA in vacuum", Proc. IX Intern. School on Condensed Matter Physics, eds. J.Marshal, N.Kirov, A.Vavrek, J.Maud, World Scientific, Singapore, 1997, p.365. (**PhD**)
- [B4] E. Atanassova, **A. Paskaleva**, "RIE nitrogen plasma -induced structural changes in thin SiO_2 layers", Proceedings of 21 International Conference on Microelectronics, Nis, Yugoslavia, 15-17 Sept. 1997, IEEE Catalog No.97TH8232., p.617. (**PhD**)
- [B5] **A.Paskaleva**, E. Atanassova, Electrically active defects generated by N_2 RIE plasma in thin SiO_2 structures, 11th International School on Condensed Matter Physics, Sept. 2000, Varna, Bulgaria, Proc. of the ISCMP eds. J.Marshal, A.Petrov, A.Vavrek, D. Nesheva, D.Dimova-Malinovska, J.Maud, Printed by Bookcraft, Bath, 2001, p.248
- [B6] **A. Paskaleva**, E. Atanassova, N. Novkovski, M. Pcovska-Gjorgjevich, „Conduction mechanisms in thin rf sputtered Ta_2O_5 on Si and their dependence on O_2 annealing“, Proc. of 23th International Conference on Microelectronics, MIEL, 12-15 May 2002, Nis, Serbia, IEEE Catalog Number 02TH8595C, vol.2, p.755. (**DSc**)
- [B7] **A. Paskaleva**, M. Lemberger, S. Zürcher , A.J. Bauer, Electrical Properties and Conduction Mechanisms in $Hf_xTi_ySi_zO$ Films Obtained from Novel MOCVD Precursors, Proceedings of the Intern. Conf. On Microel. (MIEL), 24th Edition, May 2004, Nish, Serbia and Montenegro. (**DSc**)
- [B8] E. Atanassova, **A.Paskaleva**, High temperature N_2 annealing – a promising way for improving the structure of Ta_2O_5 and its interface with Si, Proceedings of the Intern. Conf. On Microel. (MIEL), 24th Edition, May 2004, Nish, Serbia and Montenegro, Vol.2 (2004) pp.467-470.
- [B9] A.J. Bauer, **A. Paskaleva**, M. Lemberger, L. Frey, H. Ryssel, Thin $Hf_xTi_ySi_zO$ films with varying Hf to Ti contents as candidates for high-k dielectrics, presented at Electrochemical Society Conference, Quebec, 15-20 May, 2005; in: "Advanced Gate Stack, Source/Drain, and Channel Engineering for Si-Based CMOS: New Materials, Processes, and Equipment", (eds.) E. P. Gusev, L. J. Chen, D.-L. Kwong, P. J. Timans, F. Roozeboom, M. C. Öztürk, and H. Iwai, Proceedings Volume 2005-05, pp.125-132, Pennington, NJ, USA, The Electrochemical Society, Inc., ISBN 1-56677-463-2. (**DSc**)
- [B10] M. Lemberger, F. Schön, T. Dirnecker, M. P. M. Jank, **A. Paskaleva**, A. J. Bauer, L. Frey, and H. Ryssel, High-k hafnium silicate films on silicon and germanium wafers by MOCVD using a single-source precursor, in: A. Devi, R. Fischer, H. Parala, M. Allendorf, and M. Hitchman: Fifteenth European Conference on Chemical Vapor Deposition (EUROCVD-15), Proceedings Volume 2005-09, The Electrochemical Society, Inc., Pennington, NJ, USA, 2005, pp. 873—880.

- [B11] E. Atanassova, **A.Paskaleva**, “*Challenges of Ta_2O_5 as high-k Dielectric for Nanoscale DRAMs*”, **invited lecture**, Proc. 25th Intern. Conf. on Microelectronics, (MIEL 2006), Belgrade, Serbia, 14-17 May, 2006, IEEE El. Dev. Soc.Vol. 1, (2006) pp. 47-54. (**DSc**)
- [B12] **A. Paskaleva**, M. Lemberger, A.J. Bauer “*Stress induced leakage currents and charge trapping in thin Zr- and Hf-silicate layers*”, Proc. 25th Intern. Conf. on Microelectronics, (MIEL 2006), Belgrade, Serbia, 14-17 May, 2006, IEEE El. Dev. Soc.Vol. 2, (2006) pp.589-592. (**DSc**)
- [B13] **A. Paskaleva**, E. Atanassova, “*Post-metallization H_2 annealing of electrically active defects in Ta_2O_5 /nitrided Si stacks*”, Proc. 6th Intern. Conf. on Advanced Semiconductor Devices and Microsystems, Smolenice Castle, Slovakia, 16-18 Oct. 2006, IEEE El. Dev. Soc. Cat. N=06 EX1383, (2006) pp 25-28. (**DSc**)
- [B14] E. Atanassova, **A.Paskaleva**, D.Spassov, “*Ti-doped Ta_2O_5 stacked capacitors*”, Proc. 26th Intern. Conf. on Microel. (MIEL’ 2008), Niš, Serbia, 11-14 May 2008, IEEE El. Dev. Soc.Vol. 2 (2008) pp.529-532.
- [B15] N. Novkovski, E. Atanassova, **A.Paskaleva**, “*Model based analysis of electrical and wear-out characteristics of 7 nm thin Ta_2O_5/SiO_xN_y stacks on Si*”, Proc. 26th Intern. Conf. on Microel. (MIEL’ 2008), Niš, Serbia, 11-14 May 2008, IEEE El. Dev. Soc.Vol. 2 (2008) pp.533-536.
- [B16] A.Skeparovski, N.Novkovski, **A.Paskaleva**, E.Atanassova, “*Constant current stress characteristics of Ti-doped Ta_2O_5 on Si*”, Proc. 26th Intern. Conf. on Microel. (MIEL’ 2008), Niš, Serbia, 11-14 May 2008, IEEE El. Dev. Soc.Vol. 2 (2008) pp.579-582.
- [B17] E. Atanassova, **A.Paskaleva**, D.Spassov, “*Constant voltage stress induced current in Ta_2O_5 stacks*”, Proc. of 7th Intern. Conf. on Advanced Semicond. Devices and Microsystems, ASDAM’2008, Smolenice Castle, Slovakia, Oct. 12-16 (2008), Eds. S.Hascik, J.Osvald, IEEE El. Dev. Soc. (2008) pp.59-62. (**DSc**)
- [B18] M.Tapajna, E.Dobrocka, **A.Paskaleva**, K.Husekova, E.Atanassova, K.Fröhlich, “*Electrical characterization of Ru- and RuO_2/Ta_2O_5 gate stacks for nanoscale DRAM technology*”, Proc. of 7th Intern. Conf. on Advanced Semicond. Devices and Microsystems, ASDAM’2008, Smolenice Castle, Slovakia, Oct. 12-16 (2008), Eds. S.Hascik, J.Osvald, IEEE El. Dev. Soc. (2008) pp.267-270. (**DSc**)
- [B19] E. Atanassova, **A. Paskaleva**, D. Spassov, *Doping of Ta_2O_5 as a way to extend its potential for DRAM applications*” **Invited lecture**, Proc. 27 th Intern. Conf. on Microel. (MIEL’2010), 16-17 May 2010, Nish, Serbia, p.427 . (**DSc**)
- [B20] A. Skeparovski, N. Novkovski, **A. Paskaleva**, “*Charge trapping properties in Ti-doped Ta_2O_5 films on nitride Si*”, Proc. 28th Intern. Conf. on Microel. (MIEL’2012), Nish, Sebia, 13-16 May, 2012, IEEE El. Dev. Soc., 327-30 (2012).
- [B21] **A. Paskaleva**, B. Hudec, P. Jančovič, K. Fröhlich, *Resistive switching effects in $TiN/HfO_2/Pt$ MIM structures and their dependence on bottom electrode interface engineering*, Proc. 29th Intern. Conf. on Microel. (MIEL 2014), Belgrade, Serbia, 12-15 May, 2014; ISBN 978-1-4799-5295-3, p.285.