

List of publications in the journals from SCI list

58. N.D. Vasović, **G.S. Ristić**, "A switching system based on microcontroller for successive applying of MGT and CPT on MOSFETs", *Measurement*, (DOI: 10.1016/j.measurement.2012.03.011), accepted for publication (2012).
57. N.D. Vasović, G.S. Ristić, "A new microcontroller-based RADFET dosimeter reader", *Radiation Measurements* 47 (4), 272-276 (April 2012) (DOI: <http://dx.doi.org/10.1016/j.radmeas.2012.01.017>).
56. M. Todorović, N.D. Vasović, **G.S. Ristić**, "A system for gas electrical breakdown time delay measurements based on a microcontroller", *Measurement Science & Technology*, **23** (1) 015901 (9pp) (2012) (doi: 10.1088/0957-0233/23/1/015901).
55. D. Sokolovic, B. Djordjevic, G. Kocic, P. Babovic, **G. Ristic**, Z. Stanojkovic, D.M. Sokolovic, A. Veljkovic, A. Jankovic, Z. Radovanovic, "Melatonin effect on body mass and behaviour of rats during exposure to microwave radiation from mobile phone", *Bratisl Lek Listy*, accepted for publication.
54. S. Savovic, A. Djordjevich, **G. Ristic**, Numerical solution of the transport equation describing the radon transport from subsurface soil to buildings, *Radiation Protection Dosimetry*, accepted for publication (doi: 10.1093/rpd/ncr397).
53. **G.S. Ristić**, "Defect behaviors during high electric field stress of p-channel power MOSFETs ", *IEEE Trans. on Device and Materials Reliability*, **12** (1), 94 – 100 (March 2012) (doi: 10.1109/TDMR.2011.2168399).
52. **G.S. Ristić**, N.D. Vasović, M. Kovačević, A.B. Jakšić, "The sensitivity of 100 nm RADFETs with zero gate bias up to dose of 230 Gy(Si)", *Nuclear Instruments and Methods in Physics Research. Section B: Beam Interactions with Materials and Atom*, **269**, 2703 – 2708 (2011)
51. **G.S. Ristić**, N.D. Vasović, "Interface and oxide state behaviors of commercial n-channel power MOSFETs during high electric field stress and thermal annealing at 150 °C", *Semiconductor Science & Technology*, **49** (7), pp. 1140 – 1152 (2011)
50. E.V. Jelenkovic, **G.S. Ristic**, M.M. Pejovic, M.M. Jevtic, K.J. Shrawan, M. Videnovic-Misic, M. Pejovic, and K.Y. Tong, "Effect of fluorination and hydrogenation by ion implantation on reliability of poly-Si TFTs under gamma irradiation", *Journal of Physics D: Applied Physics*, **44** (1), 015101 (7 pp) (2011).
49. **G.S. Ristić**, "Thermal and UV annealing of irradiated pMOS dosimetric transistors", *Journal of Physics D: Applied Physics*, **42**, 135101 (12pp) (2009).
48. S. Jha, E.C. Jelenković, M.M. Pejović, **G.S. Ristić**, M. Pejović, K.Y. Tong, C. Surya, I. Bello and W.J. Zhang, "Stability of submicron AlGaIn/GaN HEMT devices irradiated by gamma rays", *Microelectronic Engineering*, **86** (1), pp. 37-40 (2009).
47. T.N. Nešić, **G.S. Ristić**, J.P. Karamarković, M.M. Pejović, "Modelling of time delay of electrical breakdown for nitrogen-filled tubes at pressures of 6.6 and 13.3 mbar in the increase region of the memory curve", *Journal of Physics D: Applied Physics*, **41**, 225205 (10 pp) (2008).
46. M.M. Pejović, J.P. Karamarković, **G.S. Ristić**, M.M. Pejović, "Analysis of electrically neutral active particles loss in afterglow in krypton at 2.6 mbar pressure", *Physics of Plasmas*, **15** (1), pp. 013502 – 1-7 (2008).
45. **G.S. Ristić**, "Influence of ionizing radiation and hot carrier injection on metal-oxide-semiconductor transistors", *Journal of Physics D: Applied Physics*, Topical Review, **41**, pp. 023001 (19 pp) (2008).

44. **G.S. Ristić**, M.M. Pejović, A.B. Jakšić, "Physico-chemical processes in metal–oxide–semiconductor transistors with thick gate oxide during high electric field stress", *Journal of Non-Crystalline Solid*, **353**, pp. 170-179 (2007).
43. A. R. Lubinsky, W. Zhao, **G. Ristic**, J. A. Rowlands, "Screen optics effects on detective quantum efficiency in digital radiography: Zero-frequency effects", *Medical Physics*, **33**, pp. 1499-1509 (2006).
42. **G. S. Ristić**, M. M. Pejović, A. B. Jakšić, "Defect behaviors in n-channel power VDMOSFETs during HEFS and thermal post-HEFS annealing", *Applied Surface Science*, **252**, pp. 3023-3032 (2006).
41. **G.S. Ristić**, M.M. Pejović, A.B. Jakšić, "Fowler-Nordheim high electric field stress of power VDMOSFETs", *Solid-State Electronics*, **49** (7), pp. 1140-1152 (2005).
40. M.M. Pejović, M. M. Pejović, **G.S. Ristić**, "Gamma and UV radiation effects on breakdown voltage of neon-filled tube", *IEEE Transaction of Plasma Science*, **33** (3), pp. 1047-1052 (2005).
39. W. Zhao, **G. Ristić**, J. A. Rowlands, "X-ray imaging performance of structured cesium iodide scintillators", *Medical Physics*, **31**(9), pp. 2594-2605 (2004).
38. **G. S. Ristić**, M. M. Pejović, A. B. Jakšić, "Comparison between post-irradiation annealing and post-high electric field stress annealing of n-channel power VDMOSFETs", *Applied Surface Science*, **220**, pp. 181-185 (2003).
37. A. Jakšić, **G. Ristić**, M. Pejović, A. Mohammadzadeh, C. Sudre, and W. Lane, "Gamma-ray irradiation and post-irradiation responses of high dose range RADFETs", *IEEE Trans. Nuclear Science*, **49** (3), pp. 1356-1363 (2002).
36. M. M. Pejović, **G. S. Ristić**, Č. S. Milosavljević, and M. M. Pejović, "Influence of tube wall material type and tube temperature on the recombination processes of nitrogen ions and atoms in afterglow", *Journal of Physics D: Applied Physics*, **35**, pp. 2536-2542 (2002).
35. M. M. Pejović, **G. S. Ristić**, J. P. Karamarković, "Electrical breakdown in low pressure gases", *Journal of Physics D: Applied Physics*, Topical Review, **35**, R91-R103 (2002).
34. M. M. Pejović, **G. S. Ristić**, "Memory effects in argon, nitrogen and hydrogen", *IEEE Transaction of Plasma Science*, **30** (3), pp. 1315-1319 (2002).
33. M. M. Pejović, **G. S. Ristić**, "Analysis of mechanisms which lead to electrical breakdown in argon using the time delay method", *Physics of Plasmas*, **9** (1), pp. 364-370 (2002).
32. M. M. Pejović, **G. S. Ristić**, "Analysis of mechanisms which lead to electrical breakdown in a krypton-filled tube using the time delay method", *Journal of Physics D: Applied Physics*, **33** (21), pp. 2786-2790 (2000).
31. M. M. Pejović, **G. S. Ristić**, "Nitrogen-filled tube as a sensor of ionizing radiation", *Review of Scientific Instruments*, **71** (6), pp. 2377-2379 (2000).
30. A. B. Jakšić, M. M. Pejović, **G. S. Ristić**, "Properties of latent interface-trap building in irradiated metal-oxide-semiconductor transistors determined by switched bias isothermal annealing experiments", *Applied Physics Letters*, **77** (25), pp. 4220-4222 (2000).
29. A. B. Jakšić, M. M. Pejović, **G. S. Ristić**, "Isothermal and isochronal annealing experiments on irradiated commercial power VDMOSFETs", *IEEE Trans. Nuclear Science*, **47** (3), pp. 659-666 (2000).
28. A. B. Jakšić, **G. S. Ristić**, M. M. Pejović, "New experimental evidence of latent interface-trap build up in power VDMOSFETs", *IEEE Trans. Nuclear Science*, **47** (3), pp. 580-586 (2000).

27. **G. S. Ristić**, M. M. Pejović, A. B. Jakšić, "Analysis of postirradiation annealing of n-channel power vertical double-diffused metal-oxide-semiconductor transistors", *Journal of Applied Physics*, **87** (7), pp. 3468-3477 (2000).
26. M. M. Pejović, **G. S. Ristić**, Z. Lj. Petrović, "Influence of light from nitrogen-filled lamps on time delay of electrical breakdown in nitrogen-filled tubes", *Journal of Physics D: Applied Physics*, **32** (13), pp. 1489-1493 (1999).
25. M. M. Pejović, **G. S. Ristić**, Č. S. Milosavljević, P. D. Vuković, J. P. Karamarković, "Statistical reliability of time delay values for nitrogen-filled tube at pressure of 1.3 mbar", *VACUUM- Surface Engineering, Surface Instrumentation and Vacuum Technology*, 53 (3-4), pp.435-440 (1999).
24. M. M. Pejović, J. P. Karamarkovic, **G. S. Ristić**, "The application of time delay method for analysis of processes which initiate electrical breakdown in 1.3 mbar nitrogen", *IEEE Transaction of Plasma Science*, 26 (6), pp. 1733-1737 (1998).
23. M. Pejović, A. Jakšić, **G. Ristić**, "The behaviour of radiation-induced gate-oxide defects in MOSFETs during annealing at 140 °C", *Journal of Non-Crystalline Solid*, **240**, pp. 182-192 (1998).
22. A. Jakšić, M. Pejović, **G. Ristić**, S. Raković, "Latent interface-trap generation in commercial power VDMOSFETs", *IEEE Trans. Nuclear Science*, 45 (3), pp.1365-1371 (1998).
21. **G. S. Ristić**, M. M. Pejović, A. B. Jakšić, "Numerical simulation of creation-passivation kinetics of interface traps in irradiated n-channel power VDMOSFETs during thermal annealing with various gate biases", *Microelectronic Engineering*, 45 (3), 1365-1371 (1998).
20. **G. S. Ristić**, M. Pejović, A. Jakšić, "Modelling of kinetics of creation and passivation of interface traps in metal-oxide-semiconductor transistors during postirradiation annealing", *Journal of Applied Physics*, **83** (6), pp. 2994-3000, 1998.
19. M. M. Pejović, V. Lj. Marković, **G. S. Ristić**, S. Mekić, "Efficiency of copper and gold cathode in initiation of secondary emission in nitrogen-filled tube", *VACUUM- Surface Engineering, Surface Instrumentation and Vacuum Technology*, **48** (6), pp. 129-134, 1997.
18. **G. Ristić**, A. Jakšić, M. Pejović, "pMOS dosimetric transistors with two-layer gate oxide", *Sensors and Actuators: A. Physical*, **A 63**, pp. 129-134, 1997.
17. M. Pejović, A. Jakšić, **G. Ristić**, B. Baljošević, "Processes in n-channel MOSFETs during postirradiation thermal annealing", *Radiation Physics and Chemistry*, **49** (5), pp. 521-525, 1997.
16. M. Pejović, **G. Ristić**, "Creation and passivation of interface traps in irradiated MOS transistors during annealing at different temperatures", *Solid-State Electronics*, **41** (5), pp. 715-720, 1997.
15. M. Pejović, **G. Ristić**, A. Jakšić, "Formation and passivation of interface traps in irradiated n-channel power VDMOSFETs during thermal annealing", *Applied Surface Science*, **108** (1), pp. 141-148, 1997.
14. M. M. Pejović, V. Lj. Marković, **G. S. Ristić**, S. Mekić, "Determination of formative time of electrical breakdown in nitrogen-filled tube", *IEE Proceedings - Science, Measurement and Technology*, **143** (6), pp. 413-415, 1996.
13. **G. Ristić**, S. Golubović, M. Pejović, "Sensitivity and fading of pMOS dosimeters with thick gate oxide", *Sensors and Actuators: A. Physical*, **A 51**, pp. 153-158, 1996.
12. A. Jakšić, **G. Ristić**, M. Pejović, "Analysis of the processes in power VDMOSFETs during gamma-ray irradiation and subsequent thermal annealing", *Physica Status Solidi (a)*, **155** (2), pp. 371-379, 1996

11. M. Pejović, J. Živković, Č. Milosavljević, **G. Ristić**, "Formative time determination in nitrogen-filled tube using statistical methods", *Japanese Journal of Applied Physics (Part 1)*, **34**(3), pp. 1652-1656, 1995.
10. A. Jakšić, **G. Ristić**, M. Pejović, "Rebound effect in power VDMOSFETs due to latent interface-trap generation", *Electronics Letters*, **31** (14), pp. 1198-1199, 1995.
9. M. Pejović, S. Golubović, **G. Ristić**, "Temperature-induced rebound in Al-gate NMOS transistors", *IEE Proceedings-G: Circuits, Devices and Systems*, **142** (6), pp. 413-416, 1995.
8. N. Stojadinović, M. Pejović, S. Golubović, **G. Ristić**, V. Davidović, S. Dimitrijević, "Effect of radiation-induced oxide-trapped charge on mobility in *p*-channel MOSFETs", *Electronics Letters*, **31** (6), pp. 497-498, 1995.
7. **G. Ristić**, S. Golubović, M. Pejović, "*P*-channel metal-oxide-semiconductor dosimeter fading dependencies on gate bias and oxide thickness", *Applied Physics Letters*, **66** (1), pp. 88-89, 1995.
6. S. Golubović, **G. Ristić**, M. Pejović, S. Dimitrijević, "The role of interface traps in rebound mechanisms", *Physica Status Solidi (a)*, **143**, pp. 333-339, 1994.
5. **G. Ristić**, S. Golubović, M. Pejović, "pMOS dosimeter with two-layer gate oxide operated at zero and negative bias", *Electronics Letters*, **30** (4), pp. 295-296, 1994.
4. M. Pejović, S. Golubović, **G. Ristić**, M. Odalović, "Temperature and gate bias effects on gamma - irradiated Al - gate metal - oxide - semiconductor transistors", *Japanese Journal of Applied Physics*, **33** (2), pp. 986-990, 1994.
3. M. Pejović, S. Golubović, **G. Ristić**, M. Odalović, "Annealing of gamma-irradiated Al - gate NMOS transistors", *Solid-State Electronics*, **37** (1), pp. 215-216, 1994.
2. M. Pejović, **G. Ristić**, S. Golubović, "A comparison between thermal annealing and UV -radiation annealing of γ - irradiated NMOS transistors", *Physica Status Solidi (a)*, **140**, pp. K53-K57, 1993.
1. **G. Ristić**, S. Golubović, M. Pejović, "pMOS transistors for dosimetric application", *Electronics Letters*, **29** (18), pp. 1644-1646, 1993.