

List of Publications
of Strahil Boychev Georgiev

Publications in jornal with impact factor

- 1 L. Tsankov, D. Pressyanov, K. Mitev, S. Georgiev, I. Dimitrova. *Automatic counting of chemically etched tracks by means of a computer scanner*. Radiat. Meas. 39 (2005) 557-559.
- 2 D. Pressyanov, I. Dimitrova, S. Georgiev, E. Hristova, K. Mitev. *Measurement of radon-222 in water by absorption in Makrofol*. Nucl. Instrum. Meth. A 574 (2007) 202-204.
- 3 D. Pressyanov, K. Mitev, S. Georgiev, I. Dimitrova. *Sorption and desorption of radioactive noble gases in polycarbonates*. Nucl. Instrum. Meth. A 598 (2009) 620-627.
- 4 K. Mitev, D. Pressyanov, I. Dimitrova, S. Georgiev, T. Boshkova, V. Zhivkova. *Measurement of krypton-85 in water by absorption in polycarbonates*. Nucl. Instrum. Meth. A 603 (2009) 491-494.
- 5 D. Pressyanov, K. Mitev, S. Georgiev, I. Dimitrova. *Radon mapping by retrospective measurements – an approach based on CDs/DVDs*. J. Env. Radioact. 101 (2010) 821-825.
- 6 K. Mitev, Y. Madzhunkov, G. Gerganov, I. Dimitrova, S. Georgiev, D. Pressyanov. *Automatic Counting of Electrochemically Etched Tracks in Compact Disks. Application to Retrospective Measurements of Rn-222*. IEEE Trans. Nucl. Sci. 57(1) (2010) 300-308.
- 7 D. Pressyanov, K. Mitev, I. Dimitrova, S. Georgiev. *Solubility of krypton, xenon and radon in polycarbonates. Application for measurements of their radioactive isotopes*. Nucl. Instrum. Meth. A 629 (2011) 323-328.
- 8 I. Dimitrova, K. Mitev, D. Pressyanov, S. Georgiev, T. Boshkova. *Measurements of ^{222}Rn and ^{226}Ra in water by absorption of radon in polycarbonates and etching alpha-tracks*. Radiat. Meas. 46 (2011) 119-126.
- 9 I. Dimitrova, D. Pressyanov, S. Georgiev, P. Yankov, *Logistic of Surveys of Retrospective Radon Concentrations by Home-stored CDs/DVDs*, Rad. Prot. Dosim. 145(2-3) (2011) 300-304.
- 10 D. Pressyanov, S. Georgiev, I. Dimitrova, K. Mitev, T. Boshkova, *Determination of the Diffusion Coefficient and Solubility of Radon in Plastics*, Rad. Prot. Dosim. 145(2-3) (2011) 123-126.
- 11 S. Georgiev, K. Mitev, D. Pressyanov, I. Dimitrova, T. Boshkova, *Numerical modelling of the activity concentration measurements of beta-radioactive noble gases by absorption in polycarbonates and external beta-counting*. Rad. Meas., 47 (2012) 303-310.
- 12 K. Mitev, I. Dimitrova, V. Zhivkova, S. Georgiev, G. Gerganov, D. Pressyanov, T. Boshkova, *Measurements of Rn-222 in water by absorption in polycarbonates and liquid scintillation counting*, Nucl. Instrum. Meth. A 677 (2012) 31-40.
- 13 D. Pressyanov, E. Foerster, S. Georgiev, I. Dimitrova, K. Mitev *Traceability of CDs/DVDs used as retrospective ^{222}Rn detectors to reference STAR laboratory* Rad. Meas. 59 (2013) 165-171.
- 14 D. Pressyanov, I. Dimitrova, S. Georgiev, K. Mitev, *Pilot experiments on retrospective thoron measurements by CDs/DVDs*. Rad. Meas. 50 (2013) 218-222.

- 15 D. Pressyanov, S. Georgiev, I. Dimitrova, K. Mitev, *Experimental study of the response of radon track detectors with solid absorbers as radiators*. Rad. Meas. 50 (2013) 141-144.
- 16 K. Mitev, V. Zhivkova, D. Pressyanov, S. Georgiev, I. Dimitrova, G. Gerganov, T. Boshkova, *Liquid scintillation counting of polycarbonates: A sensitive technique for measurement of activity concentration of some radioactive noble gases*, Appl. Rad. Isot. 93 (2014) 87-95.
- 17 K. Mitev, S. Georgiev, D. Pressyanov, I. Dimitrova, T. Boshkova, V. Zhivkova *A High-sensitivity Method for the Measurement of ^{222}Rn Based on Liquid Scintillation Counting of Polycarbonate Powder*, Rad. Prot. Dosim. 160 (2014) 188-191.
- 18 D. Pressyanov, K. Mitev, S. Georgiev, I. Dimitrova *Optimization of etching conditions of CDs/DVDs used as detectors for ^{222}Rn* Rad. Meas. 83 (2015) 36-40.
- 19 S. Georgiev, I. Dimitrova, D. Pressyanov, K. Mitev *Retrospective Rn-220 Measurements by Compact Discs* IEEE Trans. Nucl. Sci. 63(1) (2016) 333-340.
- 20 K. Mitev, I. Dimitrova, A. Tarancón, D. Pressyanov, L. Tsankov, T. Boshkova, S. Georgiev, R. Sekalova, J. García. *Pilot Study of the Application of Plastic Scintillation Microspheres to Rn-222 Detection and Measurement* IEEE Trans. Nucl. Sci. 63(2) (2016) 1209-1217.
- 21 I. Dimitrova, S. Georgiev, D. Pressyanov, B. Sabot, N. Michielsen, S. Bondiguel, K. Mitev *Influence of the type of CD case on the track density distribution in CDs exposed to thoron* Appl. Rad. Isot. 109 (2016) 393–396.
- 22 K. Mitev, P. Cassette, S. Georgiev, I. Dimitrova, B. Sabot, T. Boshkova, I. Tartès, D. Pressyanov *Determination of ^{222}Rn absorption properties of polycarbonate foils by liquid scintillation counting. Application to ^{222}Rn measurements* Appl. Rad. Isot. 109 (2016) 270–275.
- 23 K. Mitev, S. Georgiev, I. Dimitrova, D. Pressyanov *Application of scintillation counting using polycarbonates to radon measurements* Rad. Meas. 92 (2016) 32-38.
- 24 E. Pelay. A. Tarancon, K. Mitev Ch. Dutsov, S. Georgiev, L. Tsankov, J. F. Garcia, *Synthesis and characterisation of scintillating microspheres made of polystyrene/polycarbonate for ^{222}Rn measurements*, J Radioanal Nucl Chem 314 (2017) 637–649.
- 25 K. Mitev, Ch. Dutsov, S. Georgiev, L. Tsankov, T. Boshkova *Study of ^{222}Rn Absorption and Detection Properties of EJ-212 and BC-400 Plastic Scintillators* IEEE Trans. Nucl. Sci. 64(6) (2017) 1592-1598.
- 26 D. Pressyanov, K. Mitev, S. Georgiev, I. Dimitrova, J. Kolev *Laboratory facility to create reference radon + thoron atmosphere under dynamic exposure conditions*, J. Env. Radioact. 166 (2017) 181-187.
- 27 K. Mitev, S. Georgiev, I. Dimitrova, D. Pressyanov *Radon-222 in Soil-gas Measurements by Compact Discs. Comparison to Diffusion Chamber Measurements* Rad. Prot. Dosim. 181(1) (2018) 38-41.
- 28 K. Mitev, P. Cassette, I. Tartès, S. Georgiev, I. Dimitrova, D. Pressyanov *Diffusion Lengths and Partition Coefficients of ^{131}mXe and ^{85}Kr in Makrofol N and Makrofol DE Polycarbonates* Appl. Rad. Isot. 134 (2018) 269–274.

- 29 K. Mitev, Ch. Dutsov, S. Georgiev, T. Boshkova, D. Pressyanov *Unperturbed, High Spatial Resolution Measurement of Radon-222 in Soil-gas Depth Profile* , J. Env. Radioact. 196 (2019) 253-258.
- 30 D. Pressyanov, L. Quindos Poncela, S. Georgiev, I. Dimitrova, K. Mitev, C. Sainz, I. Fuente, D. Rabago, *Testing and Calibration of CDs as Radon Detectors at Highly Variable Radon Concentrations and Temperatures* . Int. J. Environ. Res. Public Health 16 (17), (2019) 3038.
- 31 S. Georgiev, K. Mitev, Ch. Dutsov, T. Boshkova, I. Dimitrova, *Partition Coefficients and Diffusion Lengths of ^{222}Rn in Some Polymers at Different Temperatures* Int. J. Environ. Res. Public Health 16 (22), (2019), 4523.
- 32 D. Pressyanov, I. Dimitrova, K. Mitev, S. Georgiev, D. Dimitrov *Identifying Radon Priority Areas and Dwellings with Radon Exceedance in Bulgaria Using Stored CD/DVDs* , J. Env. Radioact. 196 (2019) 274-280. (Q1)
- 33 E R. Merín, A. Tarancón, K. Mitev, S. Georgiev, Ch. Dutsov, H. Bagán, J. F. García *Evaluation of synthesis conditions for plastic scintillation foils used to measure alpha- and beta-emitting radionuclides* J. Radioanal Nucl. Chem. 319 (2019) 135-145.
- 34 K. Mitev, P. Cassette, D. Pressyanov, S. Georgiev, Ch. Dutsov, N. Michielsen, B. Sabot, *Method for the experimental study of ^{220}Rn homogeneity in calibration chambers* Appl. Rad. Isot.165 (2020) 109259
- 35 K. Mitev, S. Georgiev, B. Sabot, *Approaches for reduction of the temperature bias on radon detectors packed in antithoron polymer membranes* Appl. Rad. Isot. 177 (2021) 109915

Publications in jornal with SJR

- 1 K. Mitev, Y. Madzhunkov, G. Gerganov, I. Dimitrova, S. Georgiev, D. Pressyanov. *An algorithm for automatic counting of electrochemically etched tracks in compact disks used for retrospective measurements of radon-222* . 2008 Nuclear Science Symposium, Dresden, Germany 19-25 Oct. 2008. IEEE-NSS Conf. record, 827-832.
- 2 S. Georgiev, K. Mitev, D. Pressyanov, T. Boshkova, I. Dimitrova,. *Measurement of Xe-133 in Air by Absorption in Polycarbonates - Detection Limits and Potential Applications*. 2011 Nuclear Science Symposium, Valencia, Spain 23-29 October 2011. IEEE-NSS Conf. record, 290-292.
- 3 K. Mitev, R. Tsibranski, V. Avramov, B. Stoenelova, I. Dimitrova, T. Boshkova, S. Georgiev. *Measurements of ^{131}I , ^{134}Cs and ^{137}Cs in environmental samples in Bulgaria after the Fukushima accident*. 2011 Nuclear Science Symposium, Valencia, Spain 23-29 October 2011. IEEE-NSS Conf. record, 1256-1260.
- 4 51. I. Dimitrova, K. Mitev, V. Zhivkova, S. Georgiev, G. Gerganov, D. Pressyanov. *Measurements of Rn-^{222} in Water by Liquid Scintillation Counting of Polycarbonates* . 2011 Nuclear Science Symposium, Valencia, Spain 23-29 October 2011. IEEE-NSS Conf. record, 183-187. (SJR)
- 5 S. Georgiev, I. Dimitrova, D. Pressyanov, K. Mitev. *Retrospective Rn-^{220} measurements by compact discs* , 2012 Nuclear Science Symposium, Anaheim, USA 28 Oct. - 03 Nov. 2012. IEEE-NSS Conf. record 250-252.

- 6 I. Dimitrova, S. Georgiev, K. Mitev, D. Pressyanov. *Influence of the Water Temperature on Direct Measurements of Rn-222 in Water by Liquid Scintillation Counting of Polycarbonates*, 2012 Nuclear Science Symposium, Anaheim, USA 28 Oct. - 03 Nov. 2012. IEEE-NSS Conf. record 1941-1944.
- 7 I. Dimitrova, K. Mitev, T. Boshkova, S. Georgiev. *An Approach to Study the Distribution of Radon in Natural Materials Containing Radium*, 2013 Nuclear Science Symposium, Seoul, Korea 27 Oct. - 2 Nov. 2013. IEEE-NSS Conf. Record 1-5
- 8 D. Pressyanov, D. Dimitrov, I. Dimitrova, S. Georgiev, K. Mitev *Novel approaches in radon and thoron dosimetry* AIP Conf. Proc. 1607 (2014) 24-31.
- 9 D. Pressyanov, P. Kovacheva, K. Mitev, S. Georgiev. *Common organics as samples to measure radioxenon after nuclear emergency*, 2015 Nuclear Science Symposium, San Diego, USA 31 Oct. - 07 Nov. 2015. IEEE-NSS Conf. Record 1-3.
- 10 D. Pressyanov, D. Dimitrov, S. Georgiev, I. Dimitrova *Tests of CDs/DVDs as Passive Radon and Thoron Detectors for Mines and Caves*, 2015 Nuclear Science Symposium, San Diego, USA 31 Oct. - 07 Nov. 2015. IEEE-NSS Conf. Record 1-3.
- 11 I. Dimitrova, S. Georgiev, D. Pressyanov, T. Boshkova, F. Vassileva *Diffusion Length of Rn-222 in Home-Stored CDs/DVDs – Influence on Rn-222 and Rn-220 Measurements* 2016 Nuclear Science Symposium, Strasbourg, France 29 Oct.-5 Nov. 2016 IEEE-NSS Conf. Record 1-5

Book Chapter

- 1 D. Pressyanov, I. Dimitrova, K. Mitev, S. Georgiev (2012) *Retrospective radon measurements: techniques and perspectives*. Chapter 4 IN: Handbook on Radon: Properties, Measurements and Health Effects. Editors: Z. Li, C. Feng, Nova Science Publishers, Inc., New York, ISBN: 978-1-62100-369-4