

LIST OF SELECTED PUBLICATIONS

of Professor Dobromir Pressyanov, Ph.D., D.Sc.

Books and monographs

1. Dobromir S. Pressyanov: *Radon and radon progeny: Methodological points and case studies*. Lambert Academic Publishing GmbH & Co. KG., ISBN: 978-3-8484-8604-5 (2012).
2. C. Cinelli,....D. Pressyanov et al. *European Atlas of Natural Radiation*. JRC, European Commission (2020)
3. *WHO handbook on indoor radon: A public health perspective*. WHO, Geneva (2009). Eds.: H. Zeeb, F. Shannoun, contributors: Akiba S.,, Pressyanov D. et al. (102 authors).
4. D. Pressyanov, I. Dimitrova, K. Mitev, S. Georgiev: *Retrospective radon measurements: Techniques and perspectives*. Handbook on radon: Properties, measurements and health effects,: chapter 4: pages 101-129; Nova Science Publishers Inc., New York., ISBN: 978-1-62100-369-4 (2012).
5. Dobromir S. Pressyanov: *Nuclear tracks in polycarbonates with high radon absorption ability: Opportunities for measuring ^{222}Rn* . Nuclear track detectors: Design, methods and applications, chapter 4: pages 155-176; Nova Science Publisher Inc., New York, (2010).
6. Cunningham E., Konsta A., Chasseau D., Demuinck C., Pressyanov D., Sosnowska I. *Network opportunities for specialization in physics*. **Book-series:** Inquires into European Higher Education in Physics; IN: [A]Scent of/for Physics, vol. 6, pp. 55-67 Gent, Belgium, (2002).

Selected publications with IF/SJR

7. **D. Pressyanov.** New generation of highly sensitive radon detectors based on activated carbon with compensated temperature dependence. *Scientific Reports* 12 (2022) 8479.
8. **P. Stavrev, N. Stavreva, R. Ruggieri, A. Nahum, D. Pressyanov.** Analysis of tumour dose-response data from animal experiments via two TCP models accounting for tumor hypoxia and resensitization. *Physical and Engineering Sciences in Medicine* (in press).
9. Naccarato S.,... **D. Pressyanov**,... R. Ruggieri. Automated Planning for Prostate Stereotactic Body Radiation Therapy on the 1.5 T MR-Linac. *Advances in Radiation Oncology* 7 (2022) 100865.
10. **D. Pressyanov, P. Stavrev.** A Method for Identification and Assessment of Radioxenon Plumes by Absorption in Polycarbonates. *Sensors* 21 (2021) 8107.
11. **P. Stavrev, N. Stavreva, B. Genova, R. Ruggieri, F. Alongi, A. Nahum, D. Pressyanov.** The Impact of Different Timing Schedules on Prostate HDR-Mono-Brachytherapy. A TCP Modeling Investigation. *Cancers* 13 (2021) 4899.
12. **P. Stavrev, N. Stavreva, R. Ruggieri, A. Nahum, P. Tsonev, D. Penev, D. Pressyanov.** Theoretical investigation of the impact of different timing schemes in hypofractionated radiotherapy. *Medical Physics* 48 (2021) 4085.
13. **R. Ruggieri, M. Rigo, S. Naccarato, D. Gurrera, ..., N. Stavreva, D. Pressyanov, P. Stavrev, R. Pellegrini, F. Alongi.** Adaptive SBRT by 1.5 T MR-linac for prostate cancer: On the accuracy of dose delivery in view of the prolonged session time. *Physica Medica*, 80 (2020) 34-41.
14. **K. Mitev, P. Cassette, D. Pressyanov, S. Georgiev, Ch. Dutsov, N. Michielsen, B. Sabot.** Methods for the experimental study of ^{220}Rn homogeneity in calibration chambers. *Applied Radiation and Isotopes*, 165 (2020) 109259.
15. **Dobromir Pressyanov, Dimitar Dimitrov.** The problem with temperature dependence of radon diffusion chambers with anti-thoron barrier. *Rom. J. Phys.* 65 (2020) 801.

16. N. Stavreva, P. Stavrev, A. Balabanova, A. Nahum, R. Ruggieri, **D. Pressyanov**. Modelling the effect of spread in radiosensitivity parameters and repopulation rate on the probability of tumour control. *Phys. Med.* 63 (2019) 79-86.
17. **D. Pressyanov**, I. Dimitrova, K. Mitev, S. Georgiev, D. Dimitrov, Identifying radon priority areas and dwellings with radon exceedances in Bulgaria using stored CD/DVDs. *J. Envir. Radioact.* 196 (2019) 274.
18. **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. Envir. Res. Publ. Health*, 16 (2019) 3038.
19. K. Mitev, Ch. Dutsov, S. Georgiev, T. Boshkova, **D. Pressyanov**, Unperturbed, high spatial resolution measurement of Radon-222 in soil-gas depth profile, *J. Envir. Radioact.* 196 (2019) 253-258.
20. P. Stavrev, N. Stavreva, A. Nahum, R. Ruggieri, P. Tsonev, **D. Pressyanov**, Variable versus conventional inter-fraction intervals in SBRT. April 2019. *Radiotherapy and Oncology* 133 (2019) S1042.
21. K. Mitev, P. Cassette, I. Tartes, S. Georgiev, I. Dimitrova, **D. Pressyanov**, Diffusion lengths and partition coefficients of $^{131\text{m}}\text{Xe}$ and ^{85}Kr in Makrofol N and Makrofol DE polycarbonates, *Appl. Radiat. Isot.* 134 (2018) 269.
22. **D. Pressyanov**, D. Dimitrov, I. Dimitrova. Passive radon monitors with part-time sensitivity to radon. *Radiat. Meas.* 118 (2018) 72-76.
23. P. Stavrev, N. Stavreva, D. Penev, A. Nahum, R. Ruggieri, **D. Pressyanov**. Investigation of the effect of natural tumor cell death on radiotherapy outcomes. *Phys. Med. Biol.* 63 (2018) 205001.
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25. P. Stavrev, N. Stavreva, A. Nahum, **D. Pressyanov**. TCP and Gaussian Radiosensitivities. *Radiotherapy and Oncology* 127 (2018) S1080-S1081.
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27. L. Tommasino, **D. Pressyanov**. A new generation of passive radon monitors: the film-badges for occupational exposures. *Radiat. Prot. Dosim.* 181 (2018) 15.

28. D. Dimitrov, **D. Pressyanov**. The CD/DVD method as a tool for the health physics service and ventilation diagnostics in underground mines. *Radiat. Prot. Dosim.* 181 (2018) 30-33.

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31. K. Mitev, S. Georgiev, I. Dimitrova, **D. Pressyanov**, Application of scintillation counting using polycarbonates to radon measurement., *Radiat. Meas.* 92 (2016) 32-38.

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Selected patents

88. **D. Pressyanov**, Compensating module for sensors for measurement of radioactive noble gases. Bulg. patent BG 67405 (2021), priority 19.03.2019.

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