

Списък с публикации за участие в конкурса

1. **Pressyanov D., Dimitrov D.** (2024) The Sensitivity of Innovative Techniques for Measuring Low Levels of Radon in the Environment Using Passive Detectors. *J. Envir. Radioact.* 277, 107461.
2. **Pressyanov D., Momchilov M., Georgiev P.** (2023) Influence of humidity on activated carbon fabrics scheduled for use in high sensitivity radon detectors. *Applied Radiation and Isotopes* 200, 110941.
3. **Penev, D., Stavrev, P., Stavreva, N. , Pressyanov, D.** (2023). Influence of dose uncertainty on TCP estimates: a model study. *Eur. Phys. J. Spec. Top.* 232, 1543–1547.
4. **Pressyanov D.** (2022). New generation of highly sensitive radon detectors based on activated carbon with compensated temperature dependence. *Scientific Reports* 12, 8479.
5. **Pressyanov D., Dimitrov D., Georgiev P.** (2022) A sensitive DVD-based radon and thoron detector for environmental monitoring. *Measurement* 203, 112026.
6. **Pressyanov D., Stavrev P. (2021)** A Method for Identification and Assessment of Radioxenon Plumes by Absorption in Polycarbonates. *Sensors* 21, 8107.
7. **Pressyanov D., Dimitrov D.** (2020) The problem with temperature dependence of radon diffusion chambers with anti-thoron barrier. *Rom. J. Phys.* 65, 801.
8. **Pressyanov D., Dimitrova I., Mitev K., Georgiev S., Dimitrov D.** (2019) Identifying radon priority areas and dwellings with radon exceedances in Bulgaria using stored CD/DVDs. *J. Envir. Radioact.* 196, 274-280.
9. **Pressyanov D., Quindos Poncela L., Georgiev S., Dimitrova I., Mitev K., Sainz C., Fuente I., Rabago D.** (2019) Testing and Calibration of CDs as Radon Detectors at Highly Variable Radon Concentrations and Temperatures. *Int. J. Envir. Res. Publ. Health*, 16, 3038.
10. **Pressyanov D., Dimitrov D., Dimitrova I.** (2018) Passive radon monitors with part-time sensitivity to radon. *Radiat. Meas.* 118, 72-76.
11. **Pressyanov D., Mitev K., Georgiev S., Dimitrova I., Kolev J.** (2017) Laboratory facility to create reference radon + thoron atmosphere under dynamic exposure conditions. *J. Envir. Radioact.* 166, 181-187.

- 12. Pressyanov D., Dimitrov D., Dimitrova I.** (2015). Energy-efficient Reconstructions and Indoor Radon: The Impact Assessed by CDs/DVDs. *J. Environ. Radioact.* 143, 76-79.
- 13. Pressyanov D., Foerster E., Georgiev S., Dimitrova I., Mitev K.** (2013) Traceability of CDs/DVDs used as retrospective ^{222}Rn detectors to reference STAR laboratory *Radiat. Meas* 59, 165-171.
- 14. Pressyanov D.** (2012) Retrospective measurements of thoron and radon by CDs/DVDs: a model approach. *Radiat. Prot. Dosim.* 149, 464-468.
- 15. Pressyanov D., Georgiev S., Dimitrova I., Mitev K., Boshkova T.** (2011) Determination of the diffusion coefficient and solubility of radon in plastics. *Radiat. Prot. Dosim.* 145, 123-126.
- 16. Pressyanov D., Mitev K., Georgiev S., Dimitrova I.** (2011) Solubility of krypton, xenon and radon in polycarbonates. Application for measurement of their radioactive isotopes. *Nucl. Instrum. Methods Phys. Res. A* 629, 323-328.
- 17. Pressyanov D.** (2010) Radon research and practice in Bulgaria-from retrospective measurements to mitigation. *Nukleonika* 55, 477-482.
- 18. Pressyanov D., Mitev K., Georgiev S., Dimitrova I.** (2010) Radon mapping by retrospective measurements – an approach based on CDs/DVDs. *J. Envir. Radioact.* 101, 821825.
- 19. Pressyanov D., Mitev K., Georgiev S., Dimitrova I.** (2009) Sorption and desorption of radioactive noble gases in polycarbonates. *Nucl. Instrum. Methods Phys. Res. A* 598, 620-627.
- 20. Pressyanov D.** (2009) Modeling a ^{222}Rn measurement technique based on absorption in polycarbonates and track-etch counting. *Health Phys.* 97, 604-612.
- 21. Pressyanov D.** (2008) Radon progeny distribution in cylindrical diffusion chambers. *Nucl. Instrum. Methods Phys. Res. A* 596, 246-250.
- 22. Pressyanov D., Dimitrova I., Georgiev S., Hristova E., Mitev K.** (2007) Measurement of radon-222 in water by absorption in Makrofol. *Nucl. Instrum. Methods Phys. Res. A* 574, 202-204.
- 23. Tsankov L., Pressyanov D., Mitev K., Georgiev S., Dimitrova I.** (2005) Automatic counting of chemically etched tracks by means of a computer scanner. *Radiat. Meas.* 39, 557-559.
- 24. Pressyanov D., Buysse J., Poffijn A., Van Deynse A. , Meesen G.** (2004) Integrated measurements of ^{222}Rn by absorption in Makrofol. *Nucl. Instrum. Methods. Phys. Res. A* 516, 203-208.

- 25. Pressyanov D., Buysse J., Poffijn A., Meesen G., Van Deynse A.** (2003) The compact disk as radon detector-a laboratory study of the method. *Health Phys.* 84, 642-651.
- 26. Pressyanov D.** (2002) Short solution of the radioactive decay chain equations. *Am. J. Phys.* 70, 444-445.
- 27. Pressyanov D., Buysse J., Van Deynse A., Poffijn A., Meesen G.** (2001) Indoor radon detected by compact discs. *Nucl. Instrum. Methods. Phys. Res. A* 457, 665-666.
- 28. Pressyanov D., Buysse J., Poffijn A., Meesen G., Van Deynse A.** (2000) Polycarbonates: a long-term highly sensitive radon monitor. *Nucl. Instrum. Methods. Phys. Res. A* 447, 619-621.
- 29. Picolo J. L., Pressyanov D., Blanchis P., Michielsen N., Grassin D., Voisin V., Turek K.** (2000) A radon-222 metrological chain from primary standard to field detectors. *Appl. Radiat. & Isot.* 52, 427-434.
- 30. Pressyanov D., Rusinov I., Simeonov G.** (1999) Radon progeny deposition in track-detection diffusion chambers. *Nucl. Instrum. Methods. Phys. Res. A* 435, 509513.
- 31. Pressyanov D., Minev L., Uzunov P., Danon S., Valerianova Z.** (1999) Excess lung cancer incidence and radon indoors in a Bulgarian town. *J. Epid. & Commun. Health* 53, p. 448.
- 32. Pressyanov D., Van Deynse A., Buysse J., Poffijn A., Meesen G.** (1999) Polycarbonates: a new retrospective radon monitor. Proc. Conf. IRPA'99, Budapest, 23-27 August 1999, p. 716.
- 33. Popov P. C., Pressyanov D. S.** (1997) Track density assessment by obstructed total internal reflection of a laser beam. *Radiat. Meas.* 27, 27-30.
- 34. Димитров М., Пресиянов Д.** (1997) Вътрешно облъчване от дъщерни продукти на ^{222}Rn на подземни работници от български уранови мини за периода 1958-1989. *Доклади на БЯД* 3 (1), 44-49.
- 35. Пресиянов Д., Димитров М.** (1997) Вътрешно облъчване от дъщерни продукти на ^{222}Rn на подземни работници от Бургаски медни мини за периода 1962-1990. *Доклади на БЯД* 3 (1), 39-43.
- 36. Pressyanov D. S., Guelev M. G., Sharkov B. G.** (1995) Radon and radon progeny outdoors in a valley with enhanced natural radioactivity. *Atmos. Environment* 29, 3433-3439.

- 37.** Пресиянов Д. (2023) Компенсаторен модул за сензори за измерване на радиоактивни благородни газове. *Патент за изобретение* BG 67484, (приоритет 19.08.2020).
- 38.** Pressyanov D. S., Guelev M. G., Pentchev O. J. (1993) Apparatus for measuring the time-integrated volume specific activities of radon and thoron daughters in the air. *United States Patent 5,225,673* (приоритет 4.01.1991).