

Krasimir Mitev

List of Publications by Year in descending order

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85
papers

911
citations

516215
16
h-index

476904
29
g-index

85
all docs

85
docs citations

85
times ranked

620
citing authors

#	ARTICLE	IF	CITATIONS
1	AGATA – Advanced GAMMA Tracking Array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 668, 26-58.	0.7	378
2	Sorption and desorption of radioactive noble gases in polycarbonates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 598, 620-627.	0.7	40
3	Measurement of radon-222 in water by absorption in Makrofol. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 574, 202-204.	0.7	24
4	Automatic Counting of Electrochemically Etched Tracks in Compact Discs. Application to Retrospective Measurements of Rn-222. IEEE Transactions on Nuclear Science, 2010, 57, 300-308.	1.2	24
5	Analytical calculations of counting losses in internal gas proportional counting. Applied Radiation and Isotopes, 2002, 56, 231-236.	0.7	21
6	Measurement of 222Rn and 226Ra in water by absorption of radon in polycarbonates and etching alpha-tracks. Radiation Measurements, 2011, 46, 119-126.	0.7	20
7	Automatic counting of chemically etched tracks by means of a computer scanner. Radiation Measurements, 2005, 39, 557-559.	0.7	19
8	Evaluation of the accidental coincidence counting rates in TDCR counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 977, 164292.	0.7	19
9	Solubility of krypton, xenon and radon in polycarbonates. Application for measurement of their radioactive isotopes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 629, 323-328.	0.7	18
10	Measurement of 222 Rn by absorption in plastic scintillators and alpha/beta pulse shape discrimination. Applied Radiation and Isotopes, 2016, 110, 236-243.	0.7	18
11	Measurement of and in air by absorption in Makrofol. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 527, 657-659.	0.7	17
12	Radon mapping by retrospective measurements – an approach based on CDs/DVDs. Journal of Environmental Radioactivity, 2010, 101, 821-825.	0.9	17
13	Measurement of Rn-222 in water by absorption in polycarbonates and liquid scintillation counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 677, 31-40.	0.7	17
14	Determination of the diffusion coefficient and solubility of radon in plastics. Radiation Protection Dosimetry, 2011, 145, 123-126.	0.4	16
15	Laboratory facility to create reference radon+thoron atmosphere under dynamic exposure conditions. Journal of Environmental Radioactivity, 2017, 166, 181-187.	0.9	16
16	Design and performance of a miniature TDCR counting system. Journal of Radioanalytical and Nuclear Chemistry, 2017, 314, 583-589.	0.7	16
17	Measurement of krypton-85 in water by absorption in polycarbonates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 603, 491-494.	0.7	12
18	Liquid scintillation counting of polycarbonates: A sensitive technique for measurement of activity concentration of some radioactive noble gases. Applied Radiation and Isotopes, 2014, 93, 87-95.	0.7	12

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19	Development and applications of a miniature TDCR acquisition system for in-situ radionuclide metrology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161202.	0.7	12
20	Determination of ²²² Rn absorption properties of polycarbonate foils by liquid scintillation counting. Application to ²²² Rn measurements. Applied Radiation and Isotopes, 2016, 109, 270-275.	0.7	11
21	Performance of portable TDCR systems developed at LNE-LNHB. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1034, 166721.	0.7	11
22	Study of non-equilibrium electron avalanches, application to proportional counters. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 538, 672-685.	0.7	10
23	Traceability of CDs/DVDs used as retrospective ²²² Rn detectors to reference STAR laboratory. Radiation Measurements, 2013, 59, 165-171.	0.7	10
24	Pilot Study of the Application of Plastic Scintillation Microspheres to Rn-222 Detection and Measurement. IEEE Transactions on Nuclear Science, 2016, 63, 1209-1217.	1.2	10
25	Pilot experiments on retrospective thoron measurements by CDs/DVDs. Radiation Measurements, 2013, 50, 218-222.	0.7	8
26	Experimental study of the response of radon track detectors with solid absorbers as radiators. Radiation Measurements, 2013, 50, 141-144.	0.7	8
27	In quest of the optimal coincidence resolving time in TDCR LSC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 987, 164846.	0.7	6
28	SUACG&C&C109: Using EGSnrc Within GATE to Improve the Efficiency Of positron Emission Tomography Simulations. Medical Physics, 2008, 35, 2667-2667.	1.6	6
29	New sensitive technique for measurement of krypton-85 based on absorption in polycarbonates and liquid scintillation counting. , 2009, , .		5
30	Diffusion lengths and partition coefficients of ^{131m} Xe and ⁸⁵ Kr in Makrofol N and Makrofol DE polycarbonates. Applied Radiation and Isotopes, 2018, 134, 269-274.	0.7	5
31	Study of two different coincidence counting algorithms in TDCR measurements. Applied Radiation and Isotopes, 2019, 154, 108895.	0.7	5
32	Partition Coefficients and Diffusion Lengths of ²²² Rn in Some Polymers at Different Temperatures. International Journal of Environmental Research and Public Health, 2019, 16, 4523.	1.2	5
33	Evaluation of synthesis conditions for plastic scintillation foils used to measure alpha- and beta-emitting radionuclides. Journal of Radioanalytical and Nuclear Chemistry, 2019, 319, 135-145.	0.7	5
34	Retrospective Rn-220 measurements by compact discs. , 2012, , .		4
35	Novel approaches in radon and thoron dosimetry. , 2014, , .		4
36	A high-sensitivity method for the measurement of ²²² Rn based on liquid scintillation counting of polycarbonate powder. Radiation Protection Dosimetry, 2014, 160, 188-191.	0.4	4

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37	Metrological tests of a 200 L calibration source for HPGE detector systems for assay of radioactive waste drums. Applied Radiation and Isotopes, 2016, 109, 114-117.	0.7	4
38	Synthesis and characterisation of scintillating microspheres made of polystyrene/polycarbonate for ^{222}Rn measurements. Journal of Radioanalytical and Nuclear Chemistry, 2017, 314, 637-649.	0.7	4
39	Unperturbed, high spatial resolution measurement of Radon-222 in soil-gas depth profile. Journal of Environmental Radioactivity, 2019, 196, 253-258.	0.9	4
40	Methods for the experimental study of ^{220}Rn homogeneity in calibration chambers. Applied Radiation and Isotopes, 2020, 165, 109259.	0.7	4
41	A fast technique for Monte Carlo simulation of the process of gas multiplication in cylindrical proportional counters. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 161-164.	0.7	3
42	Detecting visual differences in reconstructed images using a region-based test for outliers. , 2010, , .		3
43	Influence of the water temperature on measurements of Rn-^{222} in water by liquid scintillation counting of polycarbonates. , 2012, , .		3
44	Numerical modelling of the activity concentration measurements of beta-radioactive noble gases by absorption in polycarbonates and external beta-counting. Radiation Measurements, 2012, 47, 303-310.	0.7	3
45	Optimization of etching conditions of CDs/DVDs used as detectors for ^{222}Rn . Radiation Measurements, 2015, 83, 36-40.	0.7	3
46	Application of scintillation counting using polycarbonates to radon measurements. Radiation Measurements, 2016, 92, 32-38.	0.7	3
47	Testing and Calibration of CDs as Radon Detectors at Highly Variable Radon Concentrations and Temperatures. International Journal of Environmental Research and Public Health, 2019, 16, 3038.	1.2	3
48	Radioactive Noble Gas Detection and Measurement with Plastic Scintillators. Topics in Applied Physics, 2021, , 385-423.	0.4	3
49	Time-domain based evaluation of detection efficiency in liquid scintillation counting. Scientific Reports, 2021, 11, 12424.	1.6	3
50	Measurement of the half-life of excited nuclear states using liquid scintillation counting. Applied Radiation and Isotopes, 2021, 176, 109845.	0.7	3
51	SU-E-I-112: New Algorithm for Identification of Differences between Noisy Medical Images. Medical Physics, 2011, 38, 3421-3421.	1.6	3
52	Measurements of Rn-^{222} in water by liquid scintillation counting of polycarbonates. , 2011, , .		2
53	Measurements of ^{131}I , ^{134}Cs and ^{137}Cs in environmental samples in Bulgaria after the Fukushima accident. , 2011, , .		2
54	Influence of photon energy cuts on PET Monte Carlo simulation results. Medical Physics, 2012, 39, 4175-4186.	1.6	2

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55	Portal image registration using the phase correlation method. , 2013, , .		2
56	Development of a portable scintillation spectrometer with alpha-/beta- and neutron-/gamma-pulse-shape discrimination capabilities. , 2018, , .		2
57	Identifying radon priority areas and dwellings with radon exceedances in Bulgaria using stored CD/DVDs. Journal of Environmental Radioactivity, 2019, 196, 274-280.	0.9	2
58	Tuning the decay time of liquid scintillators. Journal of Luminescence, 2021, 235, 118021.	1.5	2
59	Approaches for reduction of the temperature bias on radon detectors packed in anti-thoron polymer membranes. Applied Radiation and Isotopes, 2021, 177, 109915.	0.7	2
60	Study of ^{222}Rn Absorption and Detection Properties of EJ-212 and BC-400 Plastic Scintillators. IEEE Transactions on Nuclear Science, 2017, , 1-1.	1.2	2
61	Significance of the corrections for accidental coincidences in liquid scintillation counting measurements. Journal of Radioanalytical and Nuclear Chemistry, 2022, 331, 3303-3311.	0.7	2
62	A Monte Carlo Simulation of PET of a Real Patient with GATE. , 2010, , .		1
63	Design, production, metrological tests and certification of a large-volume (200L) calibration source for gamma-spectrometry systems for assay of radioactive waste drums. , 2010, , .		1
64	On the possibility to detect some radioactive noble gases by Cherenkov counting of polycarbonates. , 2013, , .		1
65	Influence of the type of CD case on the track density distribution in CDs exposed to thoron. Applied Radiation and Isotopes, 2016, 109, 393-396.	0.7	1
66	Retrospective Rn-220 Measurements by Compact Discs. IEEE Transactions on Nuclear Science, 2016, 63, 333-340.	1.2	1
67	Electronic circuits for the high voltage supply and additional sensors for the polyphemus ^{222}Rn in soil-gas scintillation detector. , 2017, , .		1
68	Design and Field Tests of Scintillation Spectrometer for Continuous Radon in Soil-gas Monitoring. , 2018, , .		1
69	SU-FF-I-147: Monte Carlo Based Evaluation of 3D PET Quantification Inaccuracy for the Lung. Medical Physics, 2009, 36, 2468-2469.	1.6	1
70	Results of the CCRI(II)-K2. H-3 key comparison 2018: measurement of the activity concentration of a tritiated-water source. Metrologia, 2020, 57, 06004.	0.6	1
71	An Algorithm for Automatic Counting of Electrochemically Etched Tracks in Compact Disks Used for Retrospective Measurements of Rn-222. , 2008, , .		0
72	Efficient photon transport in positron emission tomography simulations using VMC++. Journal of Physics: Conference Series, 2008, 102, 012014.	0.3	0

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73	Study of the influence of photon energy cuts on the PET simulation results. , 2009, , .		0
74	A GATE Simulation of a GE Discovery LS PET Scanner with NEMA Image Quality Phantom. , 2010, , .		0
75	Monte Carlo simulations and experimental study of a symmetric AGATA prototype detector. , 2011, , .		0
76	Measurement of Xe-133 in air by absorption in polycarbonates - detection limits and potential applications. , 2011, , .		0
77	NUMERICS: An online image registration and image comparison platform. , 2012, , .		0
78	A synthetic image phantom for evaluation of the performance of numerical algorithms for comparison of noisy medical images. , 2012, , .		0
79	Determination of scaling factors for low and intermediate level dry radioactive waste from kozloduy nuclear power plant. , 2012, , .		0
80	Quantitative comparison of liquid scintillation counting spectra. , 2013, , .		0
81	An approach to study the distribution of radon in natural materials containing radium. , 2013, , .		0
82	Common organics as samples to measure radon after nuclear emergency. , 2015, , .		0
83	High Voltage Power Supply for Photomultipliers with Extended Functionality. , 2018, , .		0
84	Characterization of filters for efficiency variation in TDCR. , 2018, , .		0
85	RADON-222 IN SOIL-GAS MEASUREMENTS BY COMPACT DISCS. COMPARISON TO DIFFUSION CHAMBER MEASUREMENTS. Radiation Protection Dosimetry, 2018, 181, 38-41.	0.4	0