

# P K Sarkar

## List of Publications by Year in descending order

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38  
papers

372  
citations

840776

11  
h-index

888059

17  
g-index

38  
all docs

38  
docs citations

38  
times ranked

157  
citing authors

#	ARTICLE	IF	CITATIONS
1	Neutron dosimetry in the particle accelerator environment. Radiation Measurements, 2010, 45, 1476-1483.	1.4	33
2	Measurement of fast neutron spectrum using CR-39 detectors and a new image analysis program (autoTRAK_n). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 729, 444-450.	1.6	30
3	Activation foils unfolding for neutron spectrometry: Comparison of different deconvolution methods. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 583, 421-425.	1.6	28
4	Neutron spectrum unfolding using genetic algorithm in a Monte Carlo simulation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 737, 76-86.	1.6	24
5	Measurement of $^{241}\text{Am}$ Be spectra (bare and Pb-covered) using TLD pairs in multi-spheres: Spectrum unfolding by different methods. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 598, 556-560.	1.6	23
6	Neutron production from thick targets bombarded by alpha particles: Experiment and theoretical analysis of neutron energy spectra. Physical Review C, 1991, 43, 1855-1866.	2.9	21
7	Analysis of 3-dimensional track parameters from 2-dimensional images of etched tracks in solid polymeric track detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 690, 58-67.	1.6	15
8	Measurement and analysis of neutron spectra from a thick Ta target bombarded by $^{7.2}\text{AMeV}^{16}\text{O}$ ions. Physical Review C, 2001, 63, .	2.9	14
9	LET spectrometry of 14MeV ( $\text{D}^{\text{t}}$ ) neutrons using CR-39 track detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 708, 46-50.	1.6	13
10	Systematics and empirical expressions for neutron emission from thick targets in $\alpha$ -induced reactions. Physical Review C, 2005, 71, .	2.9	11
11	Estimation of angular distribution of neutron dose using time-of-flight for system at 110MeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 576, 380-388.	1.6	11
12	Angular distribution of preequilibrium neutron emissions from heavy-ion reactions. Physical Review C, 1999, 60, .	2.9	10
13	Directional distribution of the ambient neutron dose equivalent from 145-MeV $^{19}\text{F}$ projectiles incident on thick Al target. Radiation Protection Dosimetry, 2011, 143, 4-11.	0.8	9
14	Use of prompt gamma emissions from polyethylene to estimate neutron ambient dose equivalent. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 785, 135-142.	1.6	9
15	Measurement and analysis of neutron spectra from thick targets of Al and Ti bombarded by $^{30}\text{MeV}^{50}\text{Ti}$ particles. Physical Review C, 2003, 67, .	2.9	8
16	Neutron dose distribution from $^{12}\text{C}$ induced reactions on Ti and Ag using proton recoil scintillator. Radiation Measurements, 2010, 45, 1276-1280.	1.4	8
17	Use of borated polyethylene to improve low energy response of a prompt gamma based neutron dosimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 139-143.	1.6	8
18	Thick target neutron dose evaluation for $^{19}\text{F}+\text{Al}$ system. Radiation Protection Dosimetry, 2007, 123, 277-282.	0.8	7

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19	Measurement and analysis of energy and angular distributions of thick target neutron yields from 110 MeV $^{19}\text{F}$ reaction. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 43, 1278-1284.	2.9	7
20	Neutron dose equivalent from 100MeV $^{19}\text{F}$ projectiles on thick Cu target. Radiation Measurements, 2008, 43, 1278-1284.	1.4	6
21	Thick target double differential neutron energy distribution from $^{12}\text{C} + ^{27}\text{Al}$ at 115 MeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 800, 29-33.	1.6	6
22	Improvement of the response of a rem-meter based on prompt gamma ray detection to high-energy neutrons up to 1 GeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 870, 140-147.	1.6	6
23	Estimation of neutron energy distributions from prompt gamma emissions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 871, 83-89.	1.6	6
24	Photo-peak area ratios for estimation of elemental concentration in aqueous solutions using prompt gamma measurements. Applied Radiation and Isotopes, 2017, 128, 6-12.	1.5	6
25	Estimation of Population Variance in Contribution Monte Carlo. Nuclear Science and Engineering, 1984, 87, 136-151.	1.1	5
26	Concepts in computation of preequilibrium neutron emission from heavy ion reactions. Physical Review E, 2000, 61, 7161-7168.	2.1	5
27	FLUKA simulations of a moderated reduced weight high energy neutron detection system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 682, 54-58.	1.6	5
28	Measurement of Neutron Energy Distributions From $p + \text{Be}$ Reaction at 20 MeV Using Threshold Activation Foils. IEEE Transactions on Nuclear Science, 2016, 63, 2283-2292.	2.0	5
29	A prototype neutron dose measuring instrument based on prompt gamma detection. European Physical Journal Plus, 2018, 133, 1.	2.6	5
30	Sensitivity studies of air scattered neutron dose from particle accelerators. Journal of Statistical Computation and Simulation, 1997, 57, 261-270.	1.2	4
31	Analysis of neutron emission spectra for $^{30}\text{Si}$ $^{50}\text{MeV}$ $\alpha$ -particle induced reactions in thick targets. Physical Review C, 2003, 67, .	2.9	4
32	Accelerator driven systems from the radiological safety point of view. Pramana - Journal of Physics, 2007, 68, 225-233.	1.8	4
33	A quasi random search technique for functional fitting of detector responses. Pramana - Journal of Physics, 1985, 24, 643-655.	1.8	3
34	Selection of neutron-absorbing materials to improve the low-energy response of a Zr-based extended neutron monitor using Monte Carlo simulations. Radiation Protection Dosimetry, 2015, 163, 160-165.	0.8	3
35	Estimation of neutron energy distributions from measured prompt gamma intensities: Experimental validation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 969, 164101.	1.6	3
36	A technique of solving an ill-posed inverse problem of neutron spectrum unfolding using a genetic algorithm search within Monte Carlo iterations. European Physical Journal Plus, 2021, 136, 1.	2.6	3

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37	Interaction of positronium with Co <sup>2+</sup> and Cu <sup>2+</sup> ions in aqueous solutions. Journal of Radioanalytical and Nuclear Chemistry, 1994, 181, 201-209.	1.5	2
38	Quantum molecular dynamics approach to estimate spallation yield from <sup>208</sup> Pb reaction at 800 MeV. Pramana - Journal of Physics, 2003, 61, 675-684.	1.8	2