

Recent publications of the IRMM in Neutron Metrology

1. Total characterization of neutron detectors with a ^{252}Cf source and a new light output determination, N. Kornilov et al., *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 599 (2009) 226-233
2. Properties of the reaction $^{238}\text{U}(n, f)$ at the vibrational resonances, E. Birgersson et al., *Nuclear Physics A* 817 (2009) 1-34
3. Prompt fission neutron multiplicity and spectrum calculations for thermal and fast neutron induced reactions on $^{233,231}\text{Pa}$ nuclei, A. Tudora et al., *Annals of Nuclear Energy* 35 (2008) 1131-1139
4. Experimental study of the $\text{Zr}91(n, \gamma)$ reaction up to 26 keV, G. Tagliente et al., *Physical Review C - Nuclear Physics* 78, 045804 (2008)
5. Neutron resonance capture and neutron diffraction analysis of Roman bronze water taps, P. A. C. Schut, *Journal of Radioanalytical and Nuclear Chemistry* 278 (2008) 151-164
6. The new PADC based fast neutron dosimetry system of the INFN-LNF, R. Bedogni et al., *Radiation Measurements* 43 (2008) S491-S494
7. Comment on "neutron multiplicity in the fission of $\text{U}238$ and $\text{U}235$ with neutrons up to 200MeV", N. Kornilov, F.-J. Hamsch, *Physical Review Letters* 101, 039201 (2008)
8. An intercomparison of Monte Carlo codes used in gamma-ray spectrometry, T. Vidmar et al., *Applied Radiation and Isotopes* 66 (2008) 764-768
9. Neutron capture cross section of $\text{Zr}90$: Bottleneck in the s-process reaction flow, G. Tagliente et al., *Physical Review C - Nuclear Physics* 77, 035802 (2008)
10. Thin liquid sample fabrication for neutron resonance spectroscopy, G. Noguere et al., *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 587 (2008) 52-59
11. The measurement of the $^{206}\text{Pb}(n, \gamma)$ cross section and stellar implications, C. Domingo-Pardo et al., *Journal of Physics G: Nuclear and Particle Physics* 35 (2008) 014020
12. Nuclear physics for the Re/Os clock, M. Mosconi et al., *Journal of Physics G: Nuclear and Particle Physics* 35 (2008) 014015
13. Identification of a shape isomer in $\text{U}235$, A. Oberstedt et al., *Physical Review Letters* 99, 042502 (2007)
14. Light fission-fragment mass distribution from the reaction $^{251}\text{Cf}(nth, f)$, E. Birgersson et al., *Nuclear Physics A* 791 (2007) 1-23
15. Energy degrader technique for light-charged particle spectroscopy at LOHENGRIN, A. Oberstedt, S. Oberstedt, *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 570 (2007) 51-54
16. Measurement of the radiative neutron capture cross section of $\text{Pb}206$ and its astrophysical implications, C. Domingo-Pardo et al., *Physical Review C - Nuclear Physics* 76, 045805 (2007)
17. Measurement of neutron excitation functions using wide energy neutron beams, G. Lövestam et al., *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 580 (2007) 1400-1409
18. The use of $\text{C}6\text{D}6$ detectors for neutron induced capture cross-section measurements in the resonance region, A. Borella et al., *Nuclear Instruments and Methods in Physics*

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19. High-resolution neutron transmission and capture measurements of the nucleus Pb206, A. Borella et al., *Physical Review C - Nuclear Physics* 76, 014605 (2007)
20. The $^{10}\text{B}(n,\alpha^0)/^{10}\text{B}(n,\alpha^1\gamma)$ branching ratio, F.-J. Hamsch, I. Ruskov, *Nuclear Science and Engineering* 156 (2007) 103-114
21. Neutron resonance capture applied to some prehistoric bronze axes, H. Postma et al., *Nuovo Cimento della Societa Italiana di Fisica C* 30 (2007) 105-112
22. The recoil proton telescope in non-coincidence mode for neutron fluence measurements, G. Lövestam, *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 566 (2006) 609-614