

Publications

Articles published in refereed journals:

J.P. Hayward and D.K. Wehe, "Inter-strip interpolation measurements in a high-purity germanium double-sided strip detector," *IEEE Transactions on Nuclear Science*, Vol. 56, No. 3, 2009, pp. 800-807.

J. P. Hayward and D. K. Wehe, "Charge loss correction in a high-purity germanium double-sided strip detector," *IEEE Transactions on Nuclear Science*, Vol. 55, No. 5, 2008, pp. 2789-2797.

J. P. Hayward and D.K. Wehe, "Incomplete charge collection in a high-purity germanium double-sided strip detector," *Nuclear Instruments and Methods A*, Vol. 586, 2008, pp. 215-223.

J.P. Hayward and D.K. Wehe, "Observation of charge-sharing in a high-purity germanium double-sided strip detector," *Nuclear Instruments and Methods A*, Vol. 579, 2007, pp. 99-109.

Papers presented at conferences:

J.P. Hayward, K.P. Ziock, N. Abdul-Jabbar, A. Solodov, J. Carrigan, S. Smith, A. Raffo-Caiado, "Feasibility study of coded-aperture imaging and 3D-DIV for nuclear materials accountancy in enrichment plants," presented at 50th INMM Annual Meeting, Tucson, AZ, July 2009.

J.P. Hayward and D.K. Wehe, "Inter-strip interpolation simulations in a high-purity germanium double-sided strip detector," presented at IEEE Nuclear Science Symposium, Dresden, Germany, October 2008. (poster)

K.P. Ziock, M. Cunningham, L. Fabris, J. Hayward, T. Karnowski, "Motion correction for ship-to-ship, passive inspections," Presented at Radsensing, Upton, NY, June 2008. (poster)

J.P. Hayward and D.K. Wehe, "Inter-strip interpolation measurements in a high-purity germanium double-sided strip detector," presented at SORMA West, Berkeley, CA, June 2008.

J.P. Hayward and D.K. Wehe, "Charge loss correction in a high-purity germanium double-sided strip detector," presented at IEEE Nuclear Science Symposium, Honolulu, HI, October 2007.

J.P. Hayward and D.K. Wehe, "Observation of charge-sharing in a high-purity germanium double-sided strip detector," presented at Symposium for Radiation Measurements and Applications, Ann Arbor, MI, May 2006.

Articles in conference proceedings:

J.P. Hayward, K.P. Ziock, N. Abdul-Jabbar, A. Solodov, J. Carrigan, S.E. Smith, A.C. Raffo-Caiado, "Feasibility study of coded-aperture imaging and 3D-DIV for nuclear materials accountancy in enrichment plants," Proc. of 50th INMM Annual Meeting, Tucson, AZ, July 2009.

J. Bevins, J.P. Hayward, J. Mihalcz, "Monte Carlo simulations of passive time correlation measurements for monitoring HEU in large storage arrays," Proc. of 50th INMM Annual Meeting, Tucson, AZ, July 2009.

B. Goddard, A.L. Thornton, J.P. Hayward, "Mass verification method for samples containing uranium, plutonium, and other actinides using an active well coincidence counter," Proc. of 50th INMM Annual Meeting, Tucson, AZ, July 2009.

Research reports submitted to sponsors:

B.C. Senter and J.P. Hayward, "Charge collection efficiency mapping in a quasi-hemispherical CdZnTe detector," report submitted to ICx Radiation, January 2009.

J.P. Hayward, L. Leal, A. Thornton, B. Goddard, "NDA measurement considerations and nuclear data needs for safeguarding of complex material forms," report submitted to DOE NNSA sponsor, July 2008.

J.P. Hayward and G. Roach, "The state-of-the-art of nuclear batteries and potential for future Naval application," report submitted to the Office of Naval Research, November 2004.