Erratum: Enhanced Fusion-Evaporation Cross Sections in Neutron-Rich ^{132}Sn on ^{64}Ni

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We have discovered an error in our data analysis that affects the result presented in our recent letter [Phys. Rev. Lett. 91, 152701 (2003)]. The evaporation residue cross sections were calculated using the residue yield and the integrated beam. Because elements of the data array used to store the integrated beam did not have sufficient range (maximum 2^{16}), an overflow caused the integrated beam to be counted incorrectly. This was discovered by repeating some of the measurements and checked by reanalyzing the previous data with an appropriately sized data array, and using the originally sized data array but breaking up the analysis into smaller subsets. The correct cross section is presented here in Fig. 1 which replaces Fig.2 of the original paper. Fusion is still enhanced in ^{132}Sn on ^{64}Ni at sub-barrier energies with respect to a one-dimensional barrier penetration model prediction. The enhancement of fusion relative to lighter Sn isotopes is no larger than would be expected due to the larger nuclear radius of ^{132}Sn.

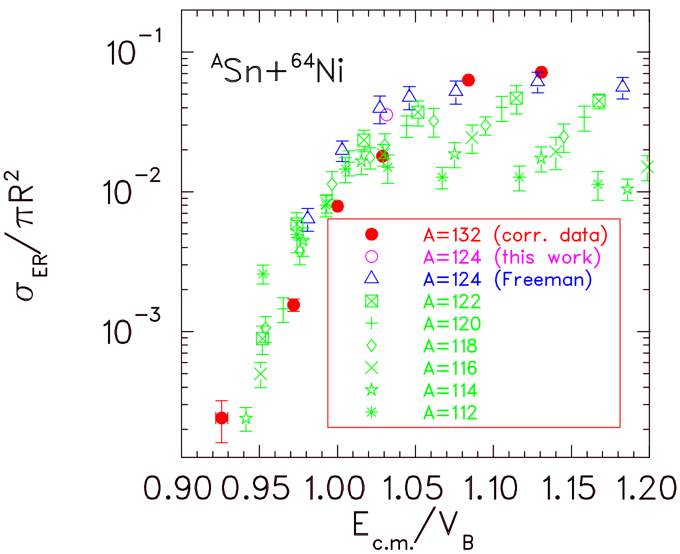

FIG. 1: Fusion-evaporation excitation functions of ^{132}Sn+^{64}Ni and ^{64}Ni on even $^{112-124}$Sn[1]. The reaction energy is scaled by the fusion barrier predicted by the Bass model[2] and the ER cross section is scaled by the size of the reactants using $R = 1.2(A_p^{1/3} + A_t^{1/3})$, where A_p (A_t) is the mass of the projectile (target). The filled circles are corrected data and the open circle is our measurement using a ^{124}Sn beam.

[1] W. S. Freeman *et al.*, Phys. Rev. Lett. **50**, 1563 (1983).
[2] R. Bass, Nucl. Phys. **A231**, 45 (1974).