Erratum: Enhanced Fusion-Evaporation Cross Sections in Neutron-Rich ^{132}Sn on ^{64}Ni [Phys. Rev. Lett. 91, 152701 (2003)]

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We have discovered an error in our data analysis that affects the result presented in our recent Letter. 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 Letter. The size of the correction increases as the beam energy decreases because measurements at lower energies take longer times. At the lowest energy, the corrected cross section is a factor of 4 less than the previously published value. Since a thick target was used, the effective reaction energy was deduced by taking a cross-section-weighted average over the range of the energy loss in the target. The corrected excitation function has a steeper slope at lower energies; therefore, the calculated effective reaction energy is shifted to higher values. 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 and transfer does not appear to play a major role in the sub-barrier fusion for this system.

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

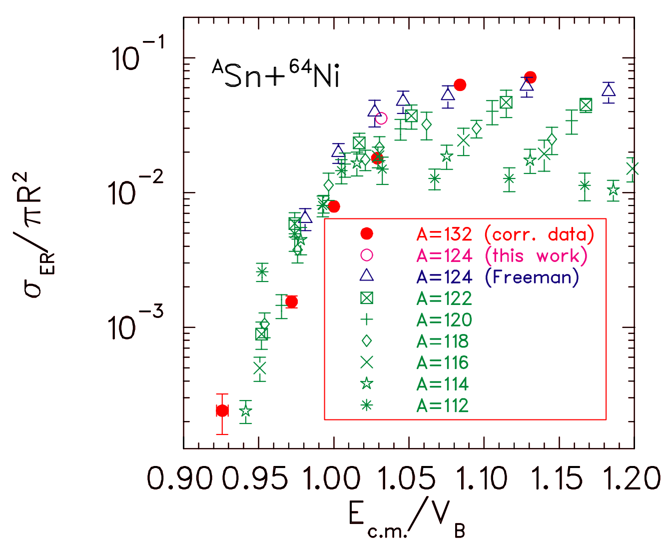

FIG. 1 (color online). Fusion-evaporation excitation functions of ^{132}Sn + ^{64}Ni and ^{64}Ni on even $^{112-124}$Sn [1]. The reaction energy is scaled by the fusion barrier predicted by the Bass model [2] and the evaporation residue (ER) cross section is scaled by the size of the reactants using $R = 1.2(A_p^{1/3} + A_t^{1/3})$, 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.

