Errata

Erratum: Single nucleon emission in relativistic nucleus-nucleus reactions

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Erratum: Charge dependence and electric quadrupole effects on single-nucleon removal in relativistic and intermediate energy nuclear collisions
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In the two papers to which this Erratum pertains, a small mistake was made in the calculation of the escape probabilities $P_{\text{esc}}$ for single nucleon removal due to the strong interaction.

In the first paper the escape probabilities in Table I, written as Target ($P_{\text{esc}}$), should be $^{238}\text{U}$ (0.672), $^{197}\text{Au}$ (0.679), $^{89}\text{Y}$ (0.709), $^{59}\text{Co}$ (0.727), and $^{12}\text{C}$ (0.811). Thus the probabilities are now independent of the projectile as they should be. The new values for the columns involving $P_{\text{esc}}$ can easily be recalculated with the above values.

In the second paper this changes the column for $\sigma_{\text{nuclear}}$ in Table I. I shall simply quote the new values with the old values written in parentheses in the order in which they appear going down the $\sigma_{\text{nuclear}}$ column: 136 (132), 145 (140), 128 (124), 136 (131), 149 (142), 156 (149), 180 (169), 180 (177), 132 (128), 132 (128), 102 (98), 110 (105), 123 (115), 130 (121), 91 (87), 99 (94), 119 (110), 142 (129), 64 (59), 72 (66), 92 (83), and 116 (102).

None of the conclusions in either paper changes.

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Erratum: Particle multiplicity dependence of high-energy photon production in a heavy-ion reaction


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We discovered two errors in our data analysis, which affect our results. In our previous analysis cosmic ray events were suppressed by the small coincidence resolving time (between the particle and the photon detection arrays) and further suppressed by rejecting events if both photon detectors (positioned one on top of the other) registered a large pulse height. This logic did not provide adequate suppression of events resulting from cosmic-ray showers triggering both the particle and photon detection arrays. We have found that such events produce a significant background of low particle multiplicity events. A background correction (obtained by collecting the data between rf pulses) has now been applied. We now observe a statistically significant decrease in the slope parameter with decreasing particle multiplicity. Figure 1 displays these corrected data and Table I lists the slope parameters (before unfolding for detector response). Unfolding increases the slope parameters by about 15%. This yields values for the middle and high multiplicity bins in agreement with those we reported previously.

Secondly, an error in the analysis code generated incorrect multiplicity distributions. These incorrect distributions