


Erratum: Observation of annual modulation induced by γ rays from (α, γ) reactions at the Soudan Underground Laboratory [Phys. Rev. C **96**, 044609 (2017)]

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In Fig. 5 of the original article a typographical error appeared on the vertical axis in the unit for the cross section of the γ yield. The unit should read (mb) [not (barn)]. The complete Fig. 5 is reprinted here.

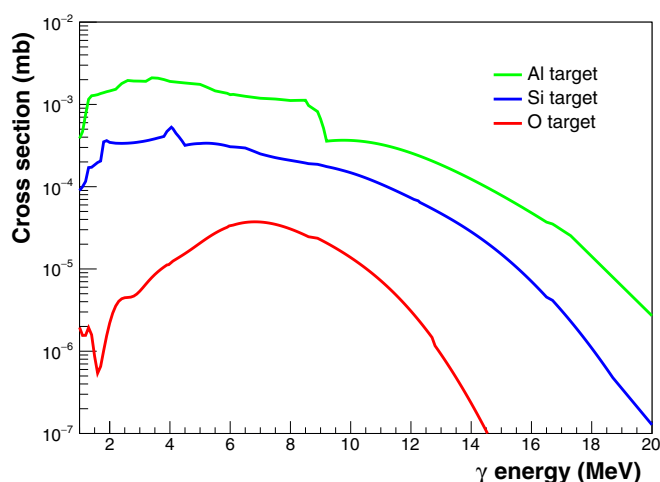


FIG. 5. Calculation of the cross section of the (α, γ) reaction when the incident α particle has an energy of 4 MeV for different targets using the TALYS code [35]. The green (upper) line is the cross-sectional plot for the aluminum target, the blue (middle) line is for silicon, and the red (lower) line is for the oxygen target.

In Table I of the original article four typographical errors appeared in the upper part of Table I for the values of α energy (MeV). The values should be E_α [not Q_α]. The complete Table I is reprinted here.

TABLE I. Energy of α particles generated from radon ($^{222}_{86}\text{Rn}$) and thoron ($^{220}_{86}\text{Rn}$) decay chains [29].

Decay mode (radon)	α energy (MeV)
$^{222}_{86}\text{Rn} \rightarrow ^{218}_{84}\text{Po} + \alpha$	5.489
$^{218}_{84}\text{Po} \rightarrow ^{214}_{82}\text{Pb} + \alpha$	6.002
$^{214}_{84}\text{Po} \rightarrow ^{210}_{82}\text{Pb} + \alpha$	7.687
$^{210}_{84}\text{Po} \rightarrow ^{206}_{82}\text{Pb} + \alpha$	5.304
Decay mode (thoron)	
α energy (MeV)	
$^{220}_{86}\text{Rn} \rightarrow ^{216}_{84}\text{Po} + \alpha$	6.288
$^{216}_{84}\text{Po} \rightarrow ^{212}_{82}\text{Pb} + \alpha$	6.778
$^{212}_{83}\text{Bi} \rightarrow ^{208}_{81}\text{Tl} + \alpha$	6.090
$^{212}_{84}\text{Po} \rightarrow ^{208}_{82}\text{Pb} + \alpha$	8.784

The results and conclusions of the article are not affected.

- [29] National Nuclear Data Center, NuDat 2.1 database (Brookhaven National Laboratory, Upton, NY, 2005).
- [35] A. J. Koning, S. Hilaire, and M. C. Duijvestijn, in *International Conference on Nuclear Data for Science and Technology*, edited by R. C. Haight, M. B. Chadwick, T. Kawano, and P. Talou, AIP Conf. Proc. No. 769 (AIP, New York, 2005), p. 1154.