

# Erratum: Precise measurement of the $\beta$ decay and electron capture of $^{22}\text{Na}$ , $^{198}\text{Au}$ , and $^{196}\text{Au}$ in low-temperature metal hosts, and reexamination of lifetime modifications [Phys. Rev. C **77**, 065502 (2008)]

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(Received 10 July 2008; published 3 September 2008)

DOI: [10.1103/PhysRevC.78.039901](https://doi.org/10.1103/PhysRevC.78.039901)

PACS number(s): 23.40.-s, 21.10.Dr, 27.30.+t, 99.10.Cd

In the caption of Table I, we erroneously wrote “half-life changes,” but the numbers in the “Theory” and “Measurement” columns for the  $\beta$  and  $\alpha$  emitters are actually “decay rate changes” (the last row is correct). The same applies to the formulas for  $k$  in the text. Therefore, the caption of Table I should begin with

“Predictions and measurements of decay rate changes. . .,” and the last number in Table I (“60%”) can either be read as the half-life change or replaced by the decay rate change, which is “−38%”. The corrected table is shown below. In the text, the sentence before the formulas for  $k$  should begin with

“Therefore, the correction factor  $k$  for the decay rate is. . .”

The results and conclusions of the article are not affected by these changes.

TABLE I. Predictions and measurements of decay rate changes between room temperature and 12 K in different host metals where a significant change has been reported. The expectation for  $^{196}\text{Au}$  in Au is also listed to be compared with our results.

Nuclide	Decay	Host	Theory	Measurement
$^{22}\text{Na}$	90% $\beta^+$	Pd	11%	$(1.2 \pm 0.2)\%$ [6]
$^{198}\text{Au}$	100% $\beta^-$	Au	−34%	$(-4.0 \pm 0.7)\%$ [7]
$^{210}\text{Po}$	100% $\alpha$	Cu	3300%	$(6.3 \pm 1.4)\%$ [8]
$^{196}\text{Au}$	93% EC	Au	−38%	—

[6] B. Limata *et al.*, Eur. Phys. J. A **28**, 251 (2006).

[7] T. Spillane *et al.*, Eur. Phys. J. A **31**, 203 (2007).

[8] F. Raiola *et al.*, Eur. Phys. J. A **32**, 51 (2007).