ERRATA

Erratum: “Green’s Function Method in the Problem of Complex Configurations in Fermi Systems with Pairing”

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In our calculations, numerical errors were made, which led to overestimating some matrix elements of quasiparticle–phonon interaction in the proton subsystem (within the approximations used). Here, we present, in a tabular form, the integrated features of the $E1$ resonance that were rescaled to Sn isotopes by using the parameter value of $f_{\text{ex}} = -1.4$, which was taken from the calculations for ^{40}Ca , ^{48}Ca , and ^{56}Ni [1]. As might have been expected, there are

Integrated features of the isovector $E1$ resonance in Sn isotopes

Isotope	^{104}Sn		^{120}Sn		^{132}Sn	
	1	2	1	2	1	2
EWSR [%]	108.4	108.3	103.6	103.3	96.1	95.8
$\bar{E}$ [MeV]	15.0	15.2	14.4	14.6	13.2	13.4
Γ [MeV]	4.4	1.6	5.0	2.2	4.0	2.0
σ_{int} (0–12 MeV) [%]	20	7	17	11	24	15
σ_{int} (0– $\bar{E}/2$) [%]	1.3	0.17	4.0	0.37	1.4	0.24

sizable distinctions (not greater than 50%, as a rule) only for a pygmy dipole resonance. As to Figs. 1–3, the behavior of the curves there did not undergo any significant changes, with the exception of what is concerned with a sharp peak at $E \simeq 19$ MeV in the region of ^{104}Sn [in a full calculation, the height of this peak decreased to $\sigma(E = 19 \text{ MeV}) = 120 \text{ mb}$].

The corrected results introduce virtually no changes in the conclusions drawn from our study. In particular, the most interesting conclusion that the inclusion of complex configurations is necessary for describing a pygmy resonance remains in force.

In expression (33), the function $G_1^+(\epsilon)$ was erroneously omitted in the integrand, so that the correct integral must have the form

$$\int \frac{d\epsilon}{2\pi i} G_1^+(\epsilon) M_1^+(\epsilon) G_1^+(\epsilon) M_1^+(\epsilon) G_1^+(\epsilon) G_2^-(\epsilon - \omega),$$

where $G_1^+(\epsilon)$ and $M_1^+(\epsilon)$ are the pole parts of the relevant Green’s function and mass operator, respectively.

REFERENCES

1. S. Kamerdzhev, J. Speth, and G. Tertychny, Nucl. Phys. A **624**, 328 (1997).

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