



Correction Correction: Ananyev et al. Selection of Fuel Isotope Composition in Heating Injectors of the FNS-ST Compact Fusion Neutron Source. *Appl. Sci.* 2021, 11, 7565

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1. Errors in Figure

We, the authors, wish to make the following corrections to our paper [1].

In the original publication, there were mistakes in Figure 2, Figure 4, Figure 6, as published.

We found that Figure 2a and Figure 2b in the manuscript were of different sizes, which could have misled the reader. On the axis label, we would like to change the signature and replace 1/c with 1/s. We would also like to replace the term "neutron flux" with "neutron intensity", and "bulk plasma" with "plasma core", on the editor's recommendation.

The corrected Figure 2 appears below.



Figure 2. $D/\chi_e = 0.4$ and $n_e = 8.5 \times 10^{20} \text{ m}^{-3}$. The neutron intensity S_{neut} is a function of the fraction of tritium f_{core}^T in the plasma for the D + T (**a**) and D (**b**) beams. Different colors correspond to the neutron intensity components contributing to the total neutron intensity S_{sum} (—). S_{bp} (—) is the intensity due to fast ion interaction with plasma, S_{pp} (—) is the intensity due to the plasma–plasma fusion mechanism, and S_{bb} (—) is the intensity due to interaction between the fast ions.

Additionally, in Figure 4, the values were indicated incorrectly, which requires replacing the figure completely. The corrected Figure 4 appears below.



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Figure 4. (a) Sources of deuterium and tritium in the plasma core, originating from the neutral beam S_{NB} , pellet injection S_{pel} , and divertor region S_{sep} for the D + T (top) and D (bottom) beams. The absolute values of the particle flux sources are given. $n_e = 8.5 \times 10^{19} \text{ m}^{-3}$, $D/\chi_e = 0.4$. For the D + T and D beams, $f_{core}^T = 0.75$ and 0.5, respectively. (b) Fractions of particles from different sources with allowance for their lifetimes.

In Figure 6, mistakes were made in the captions for the axes and legends. Thus, we would like to replace the figure. The corrected Figure 6 appears below.



Figure 6. Amount of tritium at the site as a function of the n_e and D/χ_e parameters for the (**a**) D + T and (**b**) D beams. The scale on the right shows the correspondence of the color and T_{inv} values. The red lines are the level lines for the neutron intensity S_{neut} , shown in Figure 5, and the black lines refer to the accumulated tritium T_{inv} .

2. Errors in References

In addition, mistakes and the use of Cyrillic script were found in the list of references, preventing readers from correctly determining the sources of the citations. In this regard, edits have been made to the list of links for [3,5,13,14].

- 3. Golikov, A.A.; Kuteev, B.V. Selection of parameters of the stationary discharge regime in the compact tokamak. *Probl. At. Sci. Technol. Ser. Thermonucl. Fusion* **2010**, *2*, 50–58.
- Dnestrovskij, A.Y.; Golikov, A.A.; Kuteev, B.V.; Khairutdinov, R.R.; Gryaznevich, M.P. Studies of stationary operating regime of the tokamak-based neutron source. *Probl. At. Sci. Technol. Ser. Thermonucl. Fusion* 2010, *4*, 26–35.
- 13. Dlougach, E.D.; Panasenkov, A.A.; Kuteev, B.V.; Filimonova, E.A. Neutral beam current ratio in the neutron source FNS-ST. *Probl. At. Sci. Technol. Ser. Thermonucl. Fusion* **2021**, *44*, 100–106.
- 14. Panasenkov, A.A.; Ananyev, S.S.; Dlougach, E.D.; Kuteev, B.V. Analysis of the setup and parameters of the FNS-ST tokamak fast atom injector. *Probl. At. Sci. Technol. Ser. Thermonucl. Fusion* **2021**, *44*, 86–99.

The authors apologize for any inconvenience caused and state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Reference

 Ananyev, S.; Dnestrovskij, A.; Kukushkin, A. Selection of Fuel Isotope Composition in Heating Injectors of the FNS-ST Compact Fusion Neutron Source. *Appl. Sci.* 2021, 11, 7565. [CrossRef]