

Center of Nuclear Physics Data (CNPd), RFNC-VNIIEF

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Compilation activity

Thirteen final files TRANS.F099, TRANS.F100, TRANS. A110, TRANS.A111, TRANS.A112, TRANS.A113, TRANS.A114, TRANS.A115, TRANS.A116, TRANS.A117, TRANS.A118, TRANS.A119 and TRANS.A120 have been submitted for the EXFOR data library within the last period. Files with letter “A” include the revised entries only. Files with letter “F” include both new and the revised entries.

When compiling entries for the Exfor library, close cooperation with the authors was provided. For the most new entries in TRANS.F099 and TRANS.F100 the author’s approval was received. In general 34 new entries were prepared for the Exfor.

SoftwareEXFOR-Editor

Development of the EXFOR-Editor has been continued. The last version of EXFOR-Editor 4.02.2 was submitted to the Nuclear Data Section and placed in the open area (www.nds.iaea.org/nrdc/nrdc_sft). A significant difference between the last version and the previous ones is designing of a new data processing mode – creation of TRANS exchange file. This mode provides all functions appropriate for an editor: addition, editing, checking. Thus, a total cycle of preparation of experimental data array to input into the EXFOR library was implemented, starting from formation of a separate Entry structure and ending with creation of TRANS exchange file.

At present testing of the new EXFOR-Editor version is being continued. We thank J. Wang, A. Kimura, B. Pritychenko, S. Selyankina, S. Dunaeva and N. Otsuka for the feedbacks. We actively work on elimination of revealed bugs.

The update of dictionaries and checking codes (CHEX and JANIS TRANS Checker) is being carried out on continuing basis.

General

G. Pikulina, S. Selyankina and S. Taova took part in the Workshop on Compilation of Experimental Nuclear Reaction Data (December, 3-6, 2024, Vienna). G. Pikulina and S. Taova prepared a report “Examples of Exchange File Processing by EXFOR-Editor 4.02”. It includes the detailed manual on processing the experimental data in TRANS mode.

Two Memos CP-F/025 and CP-F/026 with proposals on input and update of codes for Dictionaries “Institutes” and “Journals” were issued.

G. Pikulina and S. Taova prepared a paper to the International Conference on Physics “Nucleus-2025” which would be held in Saint-Peterburg in July 1-6 this year. The paper “Development of EXFOR-Editor package for entering information on nuclear reactions” describes changes in the program operation due to incorporation of the mode of TRANS data processing.

Scanning of journals “Izvestiya Akademii Nauk” and “Yadernaya Fizika” is being performed regularly to reveal articles relevant to be compiled to Exfor library.