TUNL Contributions in the US Nuclear Data Program and NSDD

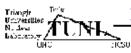
Nuclear Data Evaluation Program

J.H. Kelley, Elaine Kwan (-June), Jim Purcell, and Grace Sheu

Nuclear Structure Evaluation TUNL Nuclear Data Evaluation Project

- We are responsible for nuclear structure evaluation in the A=2-20 mass region
 - Energy Levels of Light Nuclei reviews published in Nuclear Physics A
 - ENSDF files for A=2-20
 - XUNDL from A=2-20
- Web interface for A=3-20 Information





Energy Levels of Light Nuclei, $\Lambda = 3 - 20$

Nuclear Data Evaluation Project

TUNL Nuclear Data Evaluation

Information on mass chains and nuclides available on this website:

4
- 6
8
10
-12
14
16
18
20









- TUNL Nuclear Data Group: Who we are and what we do.

Our publications on Energy Levels of Light Nuclei, A = 5 - 20:



<u>Publications</u>: TUNL evaluations of A = 3 - 20, and modified versions of Fay Ajzenberg-Selove's publications of A = 5 - 20, are available here in PDF format. The most recent HTML documents of A = 3 - 20, and EL diagrams of A = 4 - 20 are also available here. Some reprints and preprints may be requested by mail.

 HTML for Nuclides: HTML documents are available for individual nuclides found within the TUNL or FAS evaluations.

Resources relating to our publications:

- General Tables: General Tables in HTML for A = 5 10 nuclei.
- Energy Level Diagrams are available for A = 4 20 nuclides.
- Tables of Energy Levels: a brief listing of tables of energy levels from the most recent publication for each nuclide A = 4 - 20.
- SiteMap and Complete List of Available TUNL Documents: Trying to find a specific TUNL evaluation or preliminary report, HTML document, General Table, Update List or Energy Level Diagram? Click here for a complete list of what's available on our website.

Applications and databases relating to the A = 3 - 20 nuclides:

- ENSDF: Information for A = 2 20 nuclides available through the National Nuclear Data Center (NNDC) site.
- Thermal Neutron Capture Data: Summary of level and branching intensity data measured in Thermal Neutron Capture.
- Ground-State Decay Data: Summary of half-life, branching intensity, and mass excess data measured in ground state beta- and charged-particle-decay.
- <u>NuDat at BNL</u>: Allows to search and plot nuclear structure and nuclear decay data interactively.
- Palm Pilot Physics Page: Links to Palm applications and databases that are of interest to the Nuclear Physics community.

Helpful links:

- Links Important links to the National Nuclear Data Center, online nuclear physics journals, and other useful sites.
- <u>Citation examples</u> A brief listing of examples of how to format your bibliography, references or citations from the information you obtain from our website.

Recent Evaluation Activities

- Energy Levels of Light Nuclei: A=3
 - http://dx.doi.org/10.1016/j.nuclphysa.2010.08.012
 - NPA 848 (2010) 1-74
- Evaluation of A=11 (early 2011)
 - Manuscript for "Energy Levels of Light Nuclei"
 - ENSDF File
- Other work in progress:
 - A=12 Evaluation for "Energy Levels"
 - A=13 Evaluation for "Energy Levels" (Jim Purcell)

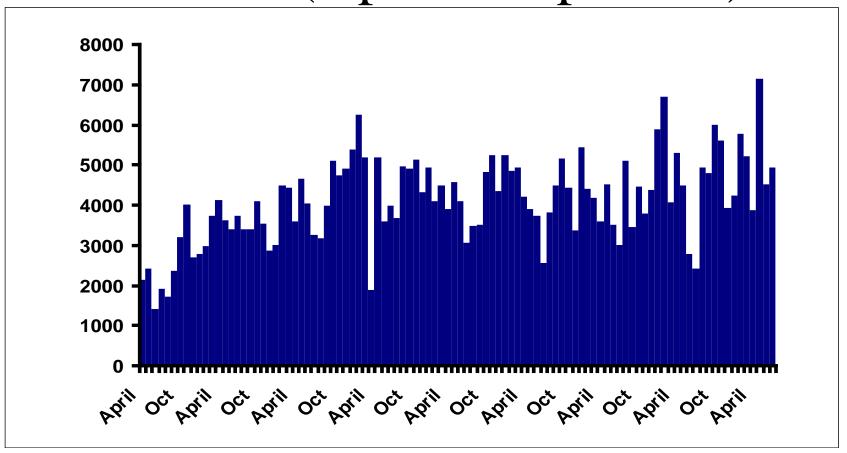


Recent Compilation Activities

- Committed to XUNDL (A=3-20)
 - 65 data sets (5-6/month)

- Compilation of Thermal Neutron Capture references and data
- Compilation of ground state decay & β-decay references and data

WWW (April 02 –present)



Using Analog - finding issues with excluding new search engine "robots"