Prelim 1420, Entry 14324

Boris Pritychenko National Nuclear Data Center, BNL, Upton, NY 11973



a passion for discovery



Question on EXFOR Compilations

- We have the very nice Oak Ridge data that has been published in ND2010 as cross sections and compared with ENDF/B-VII library.
- Certain folks insist that these data should be compiled as raw because not all possible corrections have been implemented.
- Later, capture Reaction Cross Sections should be replaced with Reaction Yields divided by Areal Density and write memos without consulting because there are at least two papers that follow this convention.
- In real life, this notation will break a few computer codes and confuse physicists who will ignore these data. D. Brown: if it looks like a duck, if it walks like a duck then lets called it a duck.
- Again, later the same folks, insist these data should be compiled with SF8=RAW modifier.
- Y. Danon: CS can be produced from Reaction Yields divided by Areal Density for thin targets; these data are Brookhaven Science Associates and cross sections.

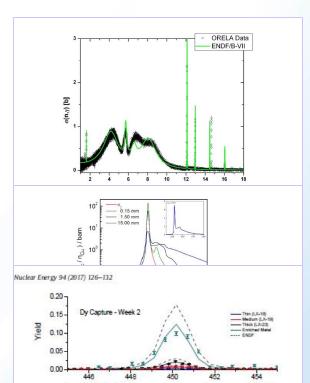


Fig. 5. Epithermal capture and transmission near the 450 eV resonance in ³⁶⁴Dy. The fits demonstrate a reduction in the radiation width relative to ENDF while the neutron width is similar to that of ENDF (see Table 6). Only the data for the second week of capture are shown along with the metal sample enriched in ³⁶⁴Dy.