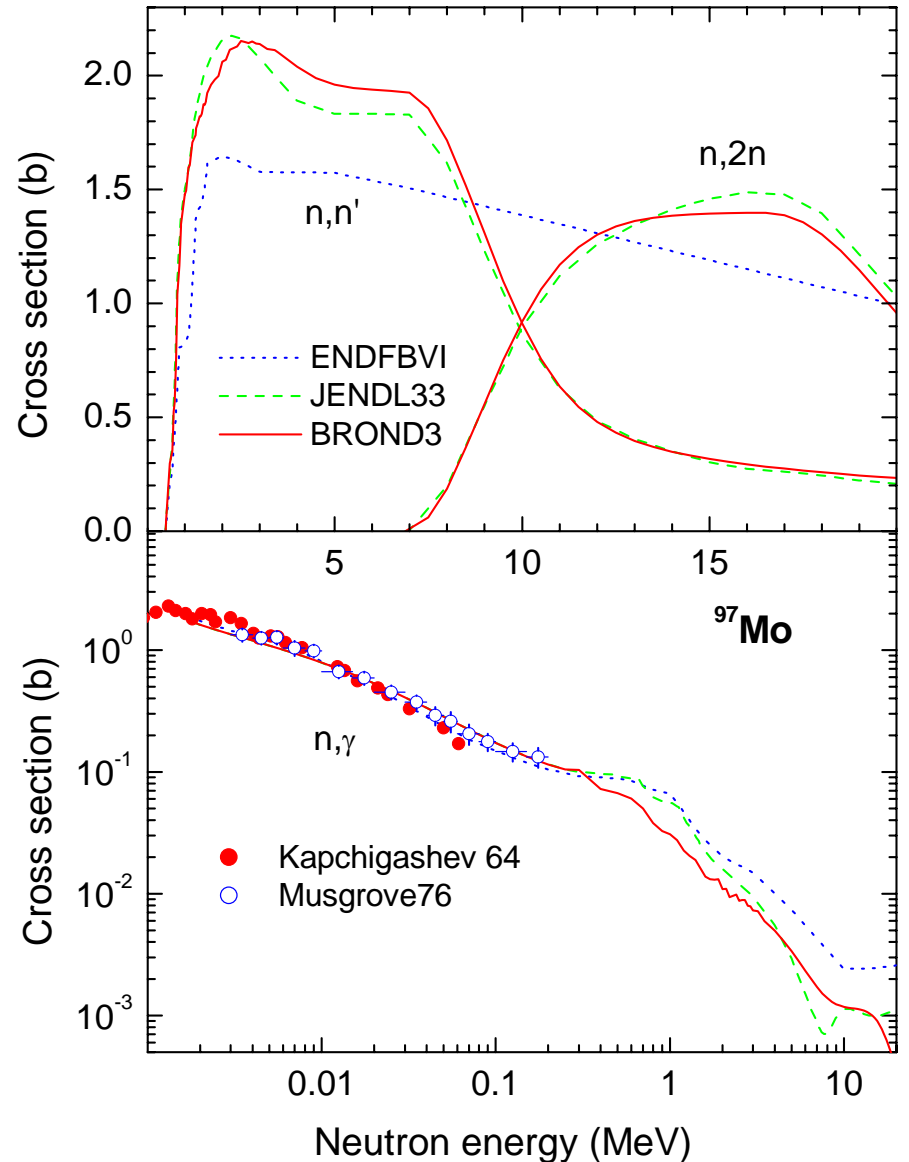
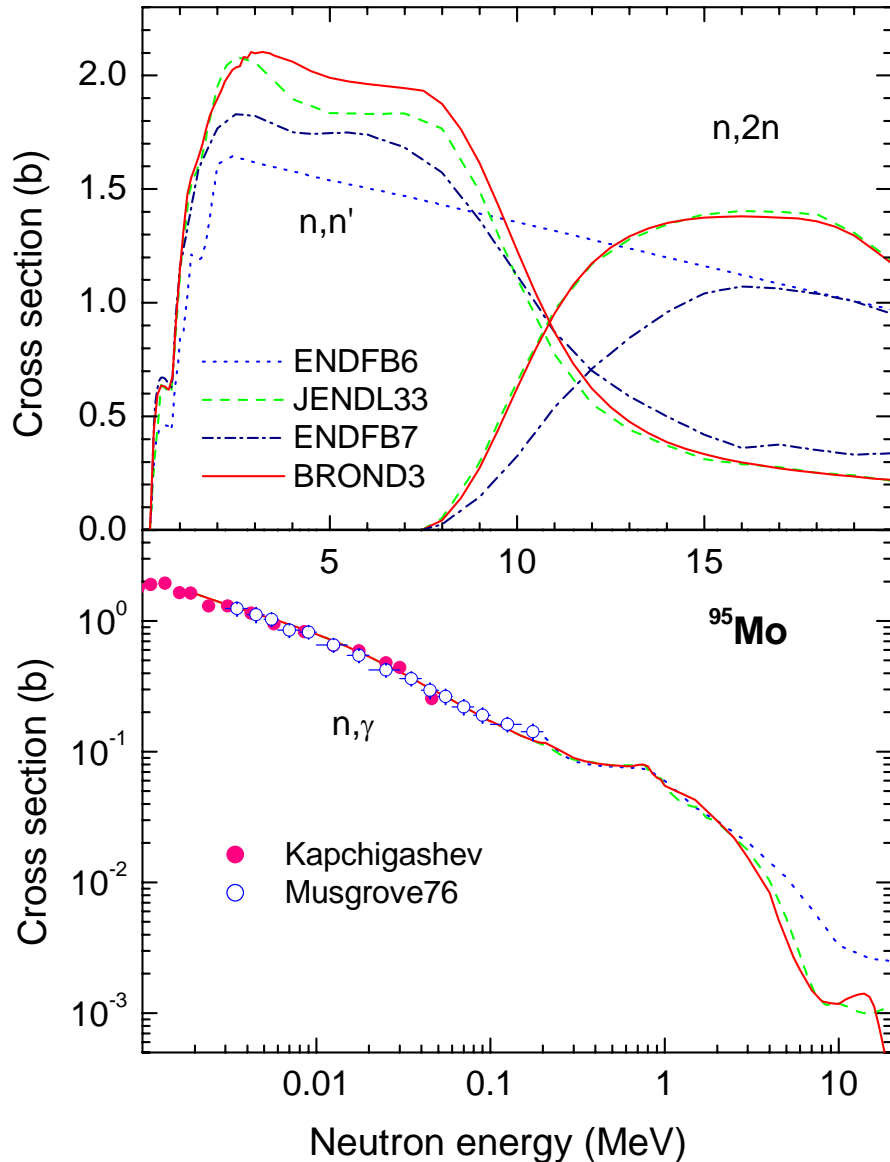


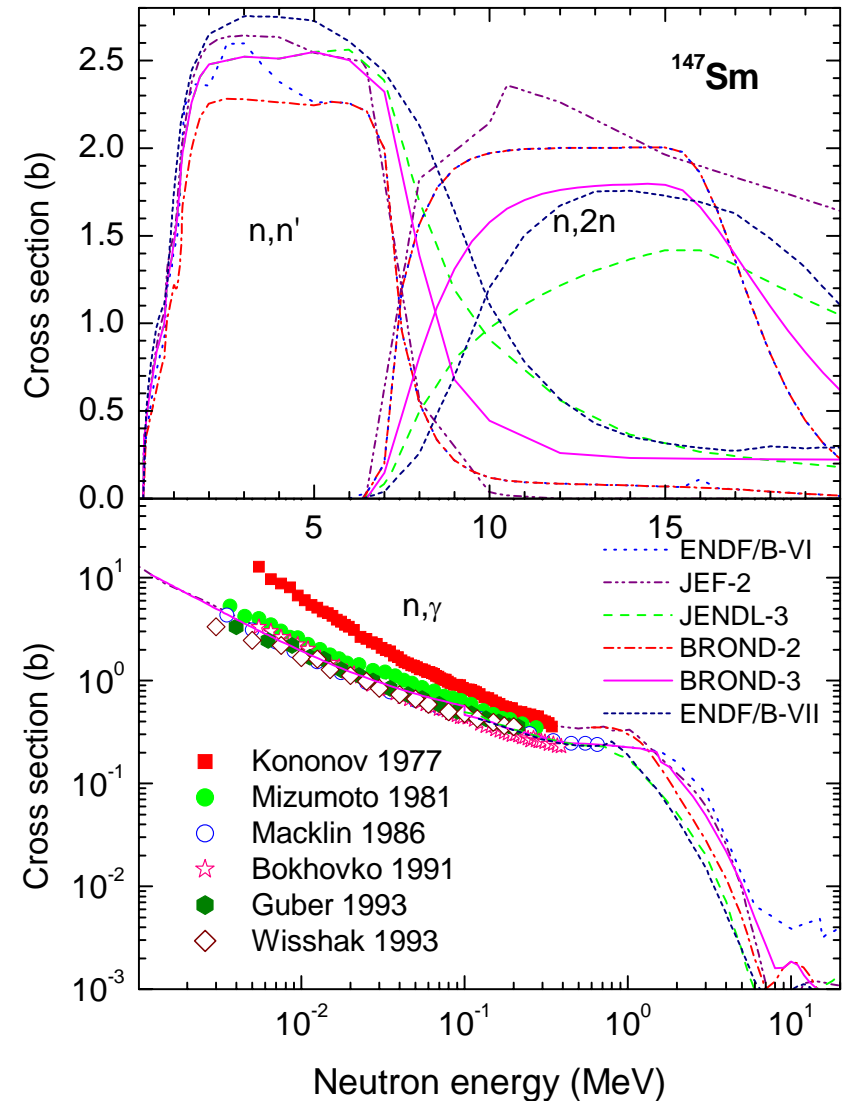
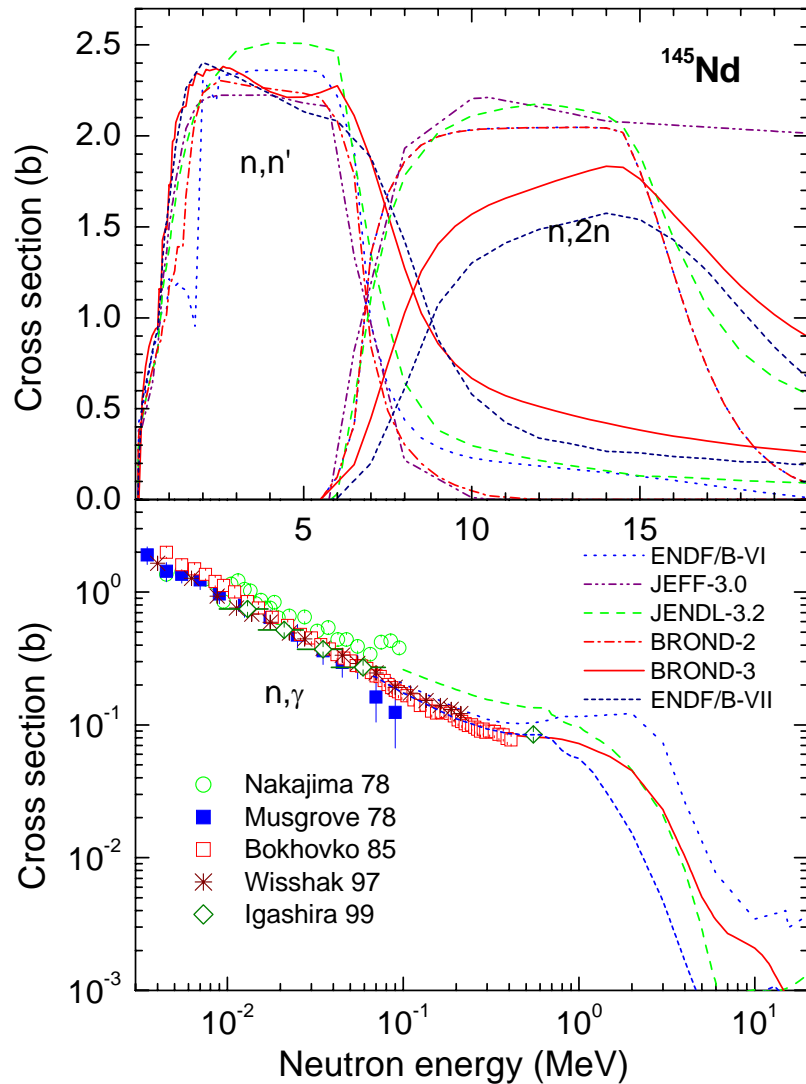
# Status of BROND-3 library (April 2005)

- 1. Files for separated molybdenum isotopes have been re-evaluated . The double-differential neutron spectra (MF=6) and gamma-ray production data are included into the new evaluations.**
- 2. Revision of evaluations for most important fission products was continued. To the recent evaluations for Zr, Ru, Pd, Nd, and Sm isotopes the updated files of Ag-107, -109 and Eu-151, -152, -153 were added .**

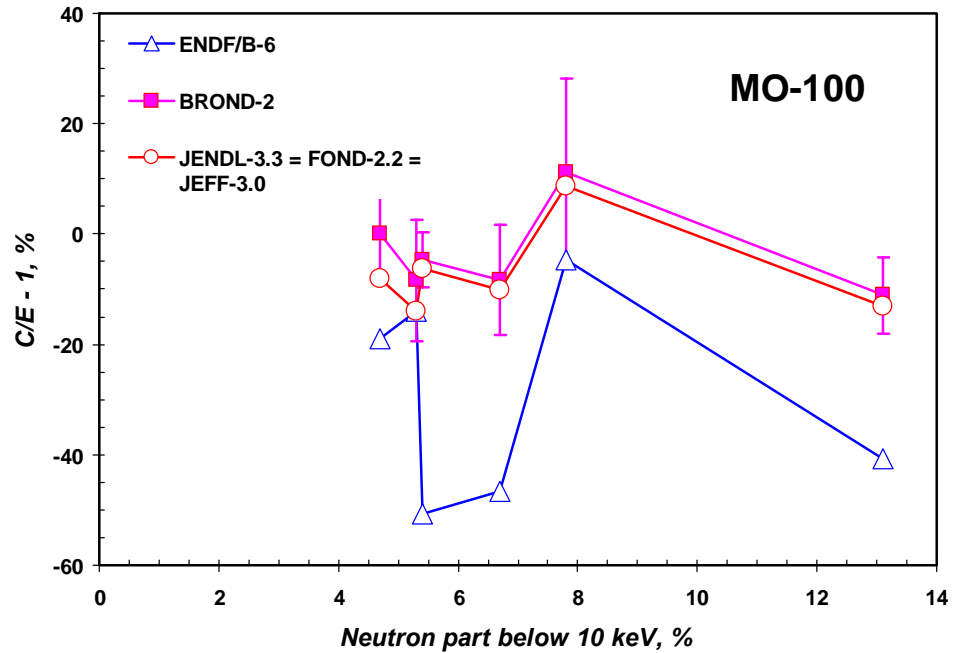
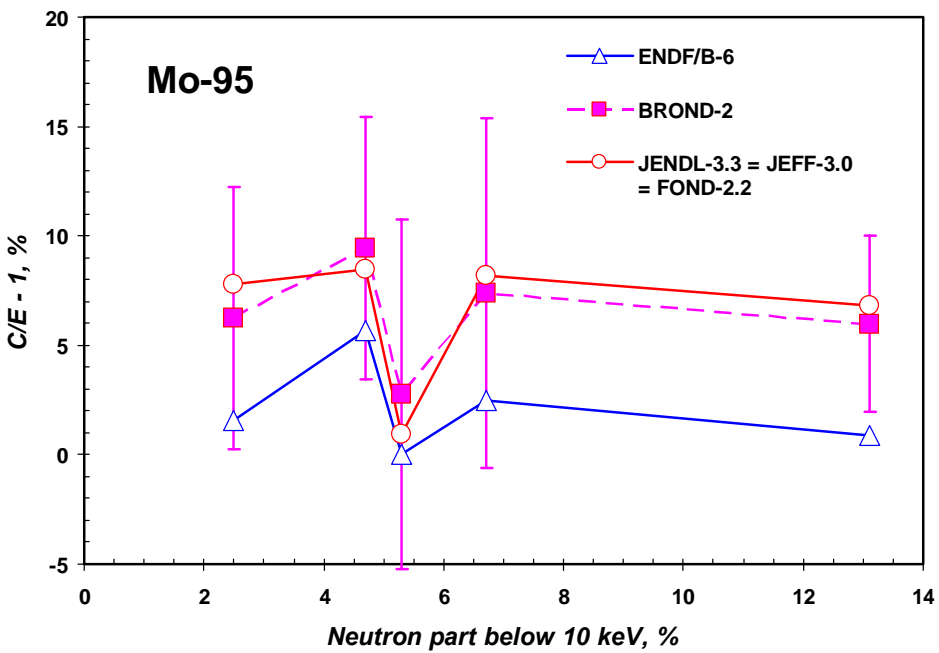
# Evaluations for $^{95}\text{Mo}$ and $^{97}\text{Mo}$ in comparison with the available experimental data



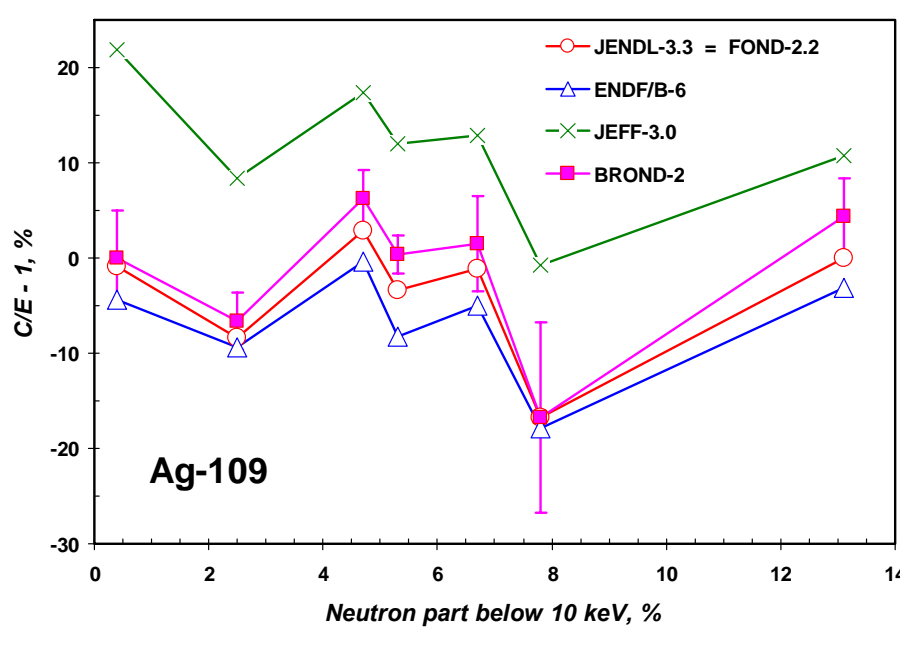
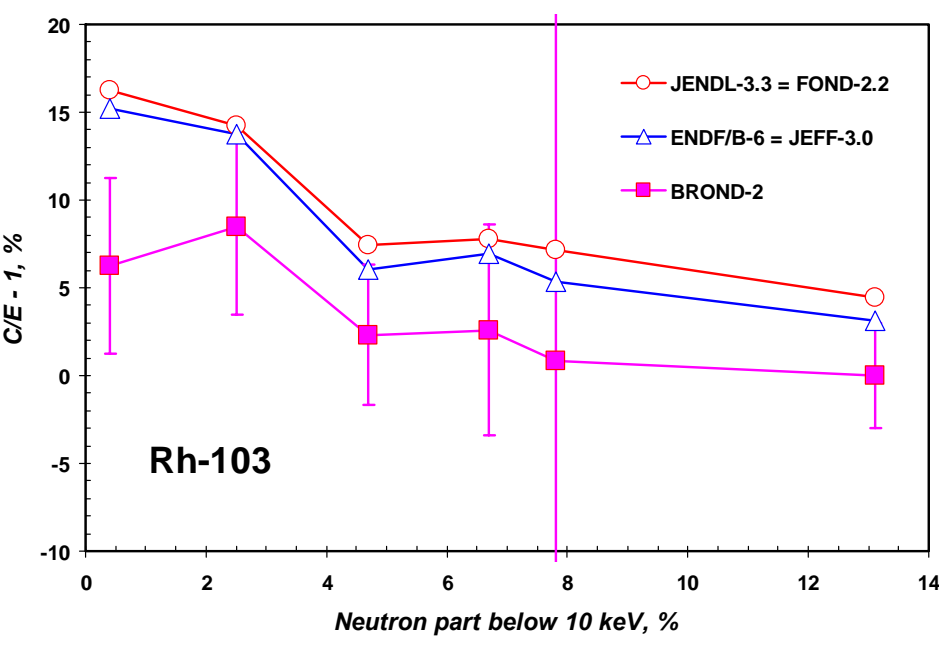
# Evaluations for $^{146}\text{Nd}$ and $^{147}\text{Sm}$ in comparison with the available experimental data



# Difference between experimental and calculated values of the reactivity coefficients for the BFS assemblies with the samples of $^{95}\text{Mo}$ and $^{100}\text{Mo}$



# Difference between experimental and calculated values of the reactivity coefficients for the BFS assemblies with the samples of $^{103}\text{Rh}$ and $^{109}\text{Ag}$



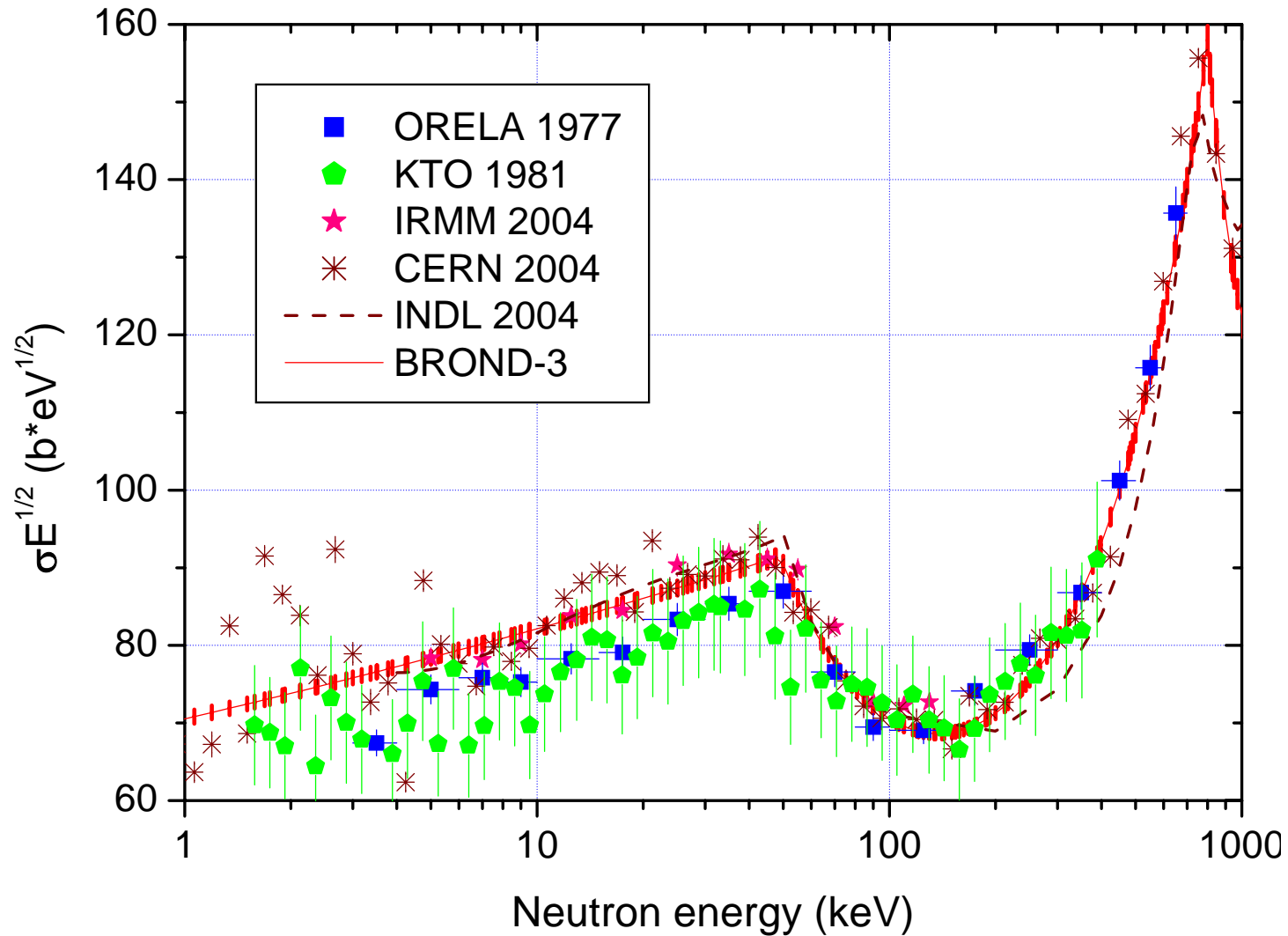
# Major and minor actinides

1. **We are working now on a revision of U-235, Pu-239 and Pu-241 files connected with the new recommended standards for the fission cross sections;**
2. **Energy dependences of the delayed fission-neutron parameters was re-evaluated for plutonium and americium isotopes on the basis of the recent experimental data obtained at the IPPE;**

# Intermediate energy evaluations

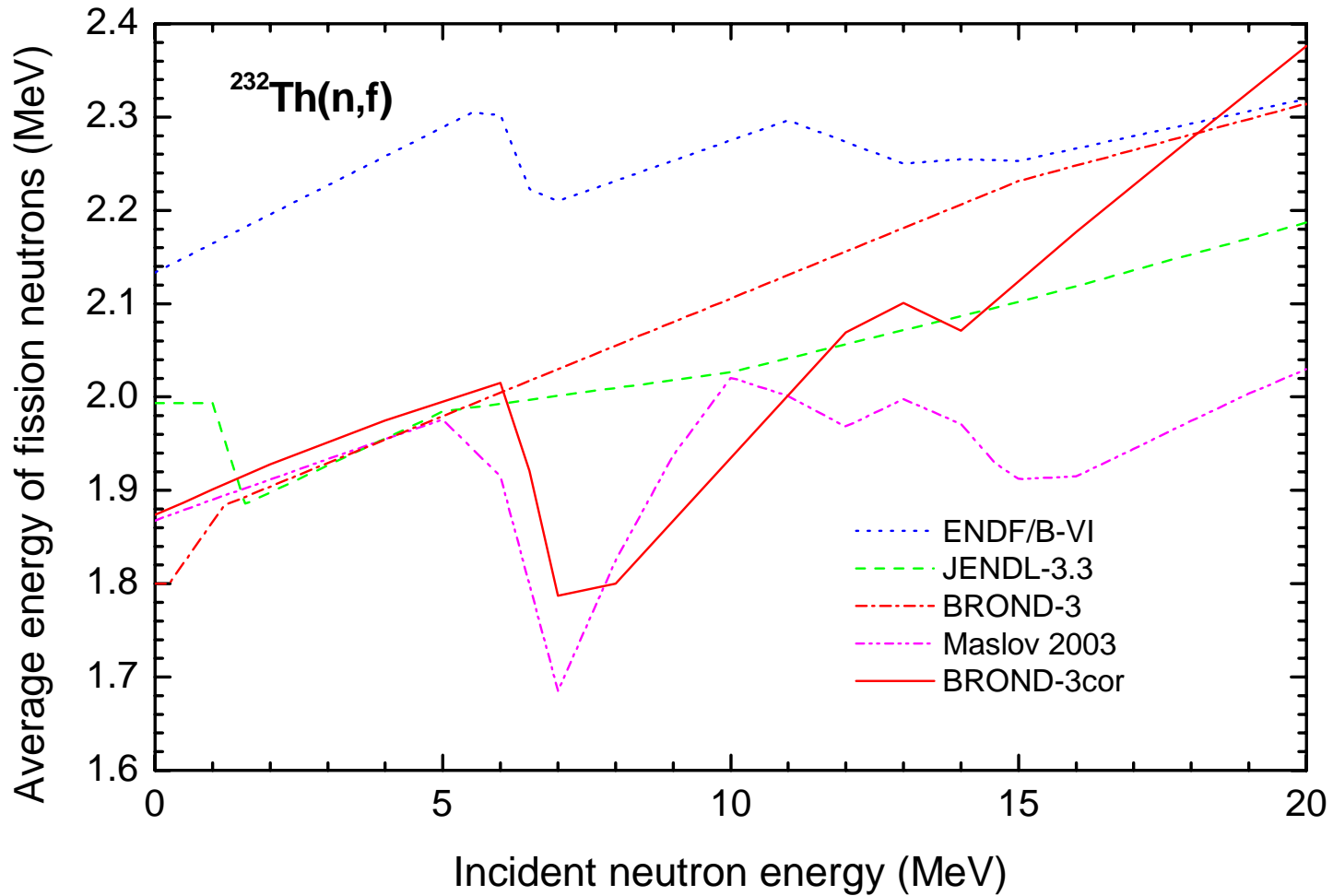
1. **The BROND-3 high-energy file for Th-232 was re-evaluated in collaboration with the CERN ;**
2. **The high-energy file for Am-241 was completed during the last year;**
3. **We are going to prepare similar files for remaining plutonium and americium isotopes important for the analysis of minor actinides transmutation in accelerator-driven systems during of this and next years.**

# Evaluations of the radiative capture cross section of $^{232}\text{Th}$ in comparison with experimental data

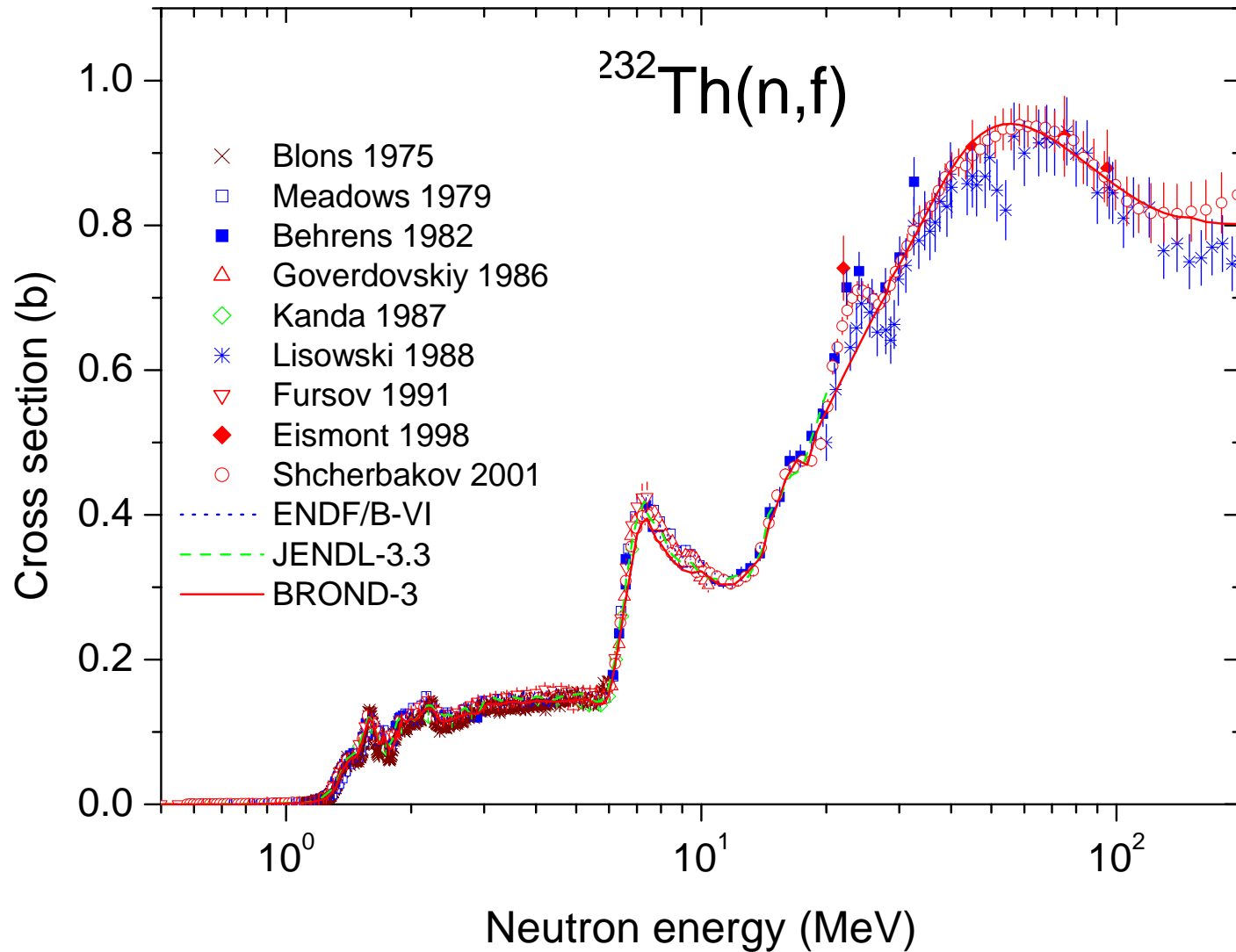


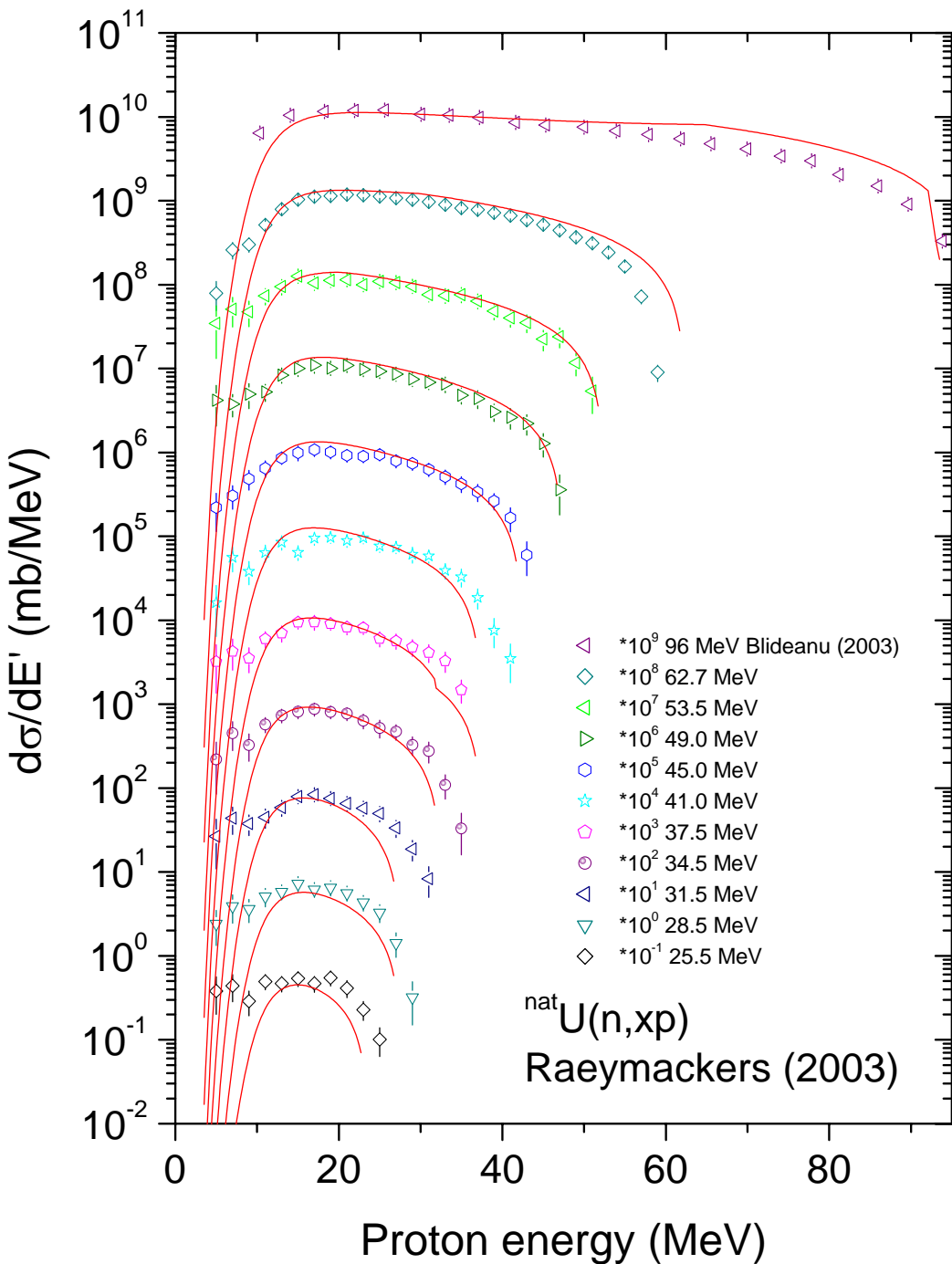


# Energy dependence of the averaged energy of fission neutrons

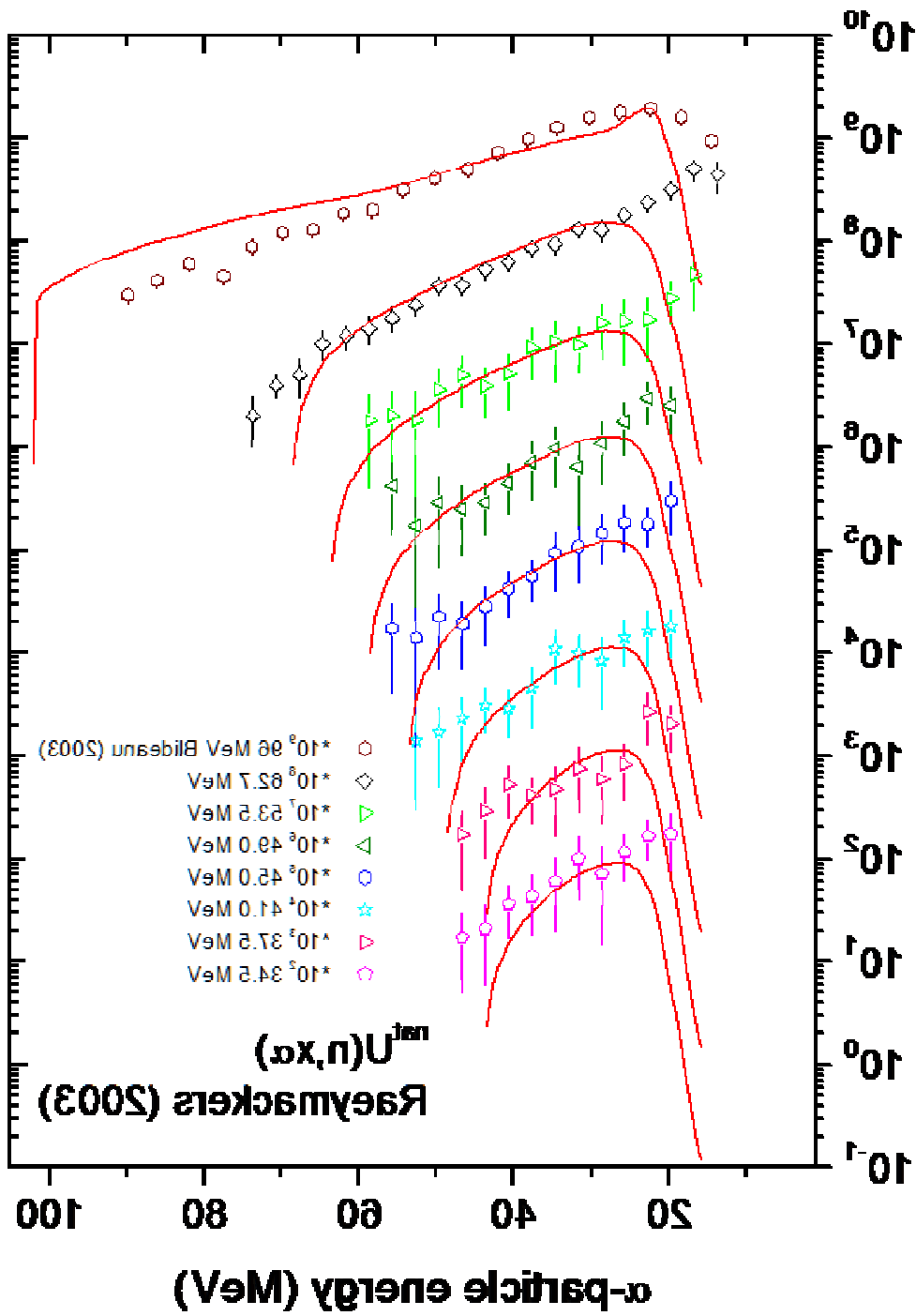


# Evaluations of the fission cross section of $^{232}\text{Th}$ at high energies





Calculated spectra of secondary  
 protons at different energies of  
 incident neutrons bombarding  
 $^{238}\text{U}$  in comparison with the  
 experimental data for  $^{nat}\text{U}$



$(\text{e}/\text{MeV}/\text{dm}^2)$

Calculated spectra of secondary  $\alpha$ -particles at different energies of incident neutrons bombarding  ${}^{238}\text{U}$  in comparison with the experimental data for  ${}^{\text{nat}}\text{U}$

Energy dependence of the  $\alpha$ -particle production cross sections for  $^{238}\text{U}$  in comparison with the experimental data for  $\text{natU}$  and  $^{209}\text{Bi}$

