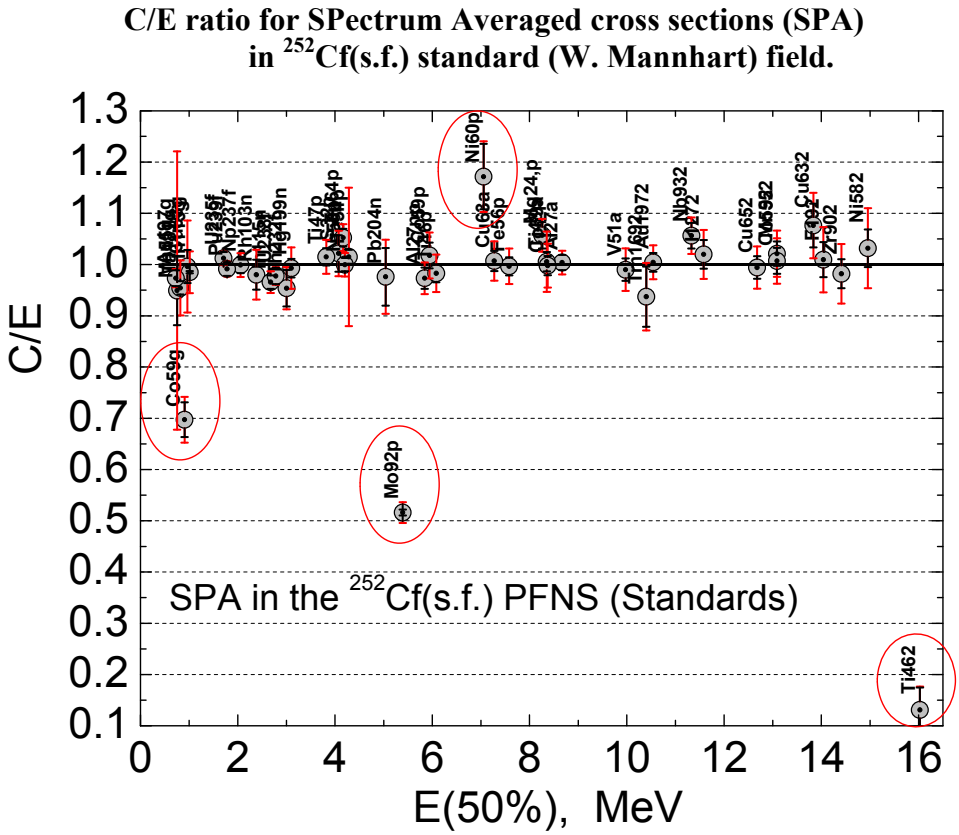

Fig. 1. C/E ratio in ^{252}Cf(s.f.) field: obvious outliers: ^{59}Co(n,γ), ^{92}Mo(n,p), ^{60}Ni(n,p) and ^{46}Ti(n,2n).

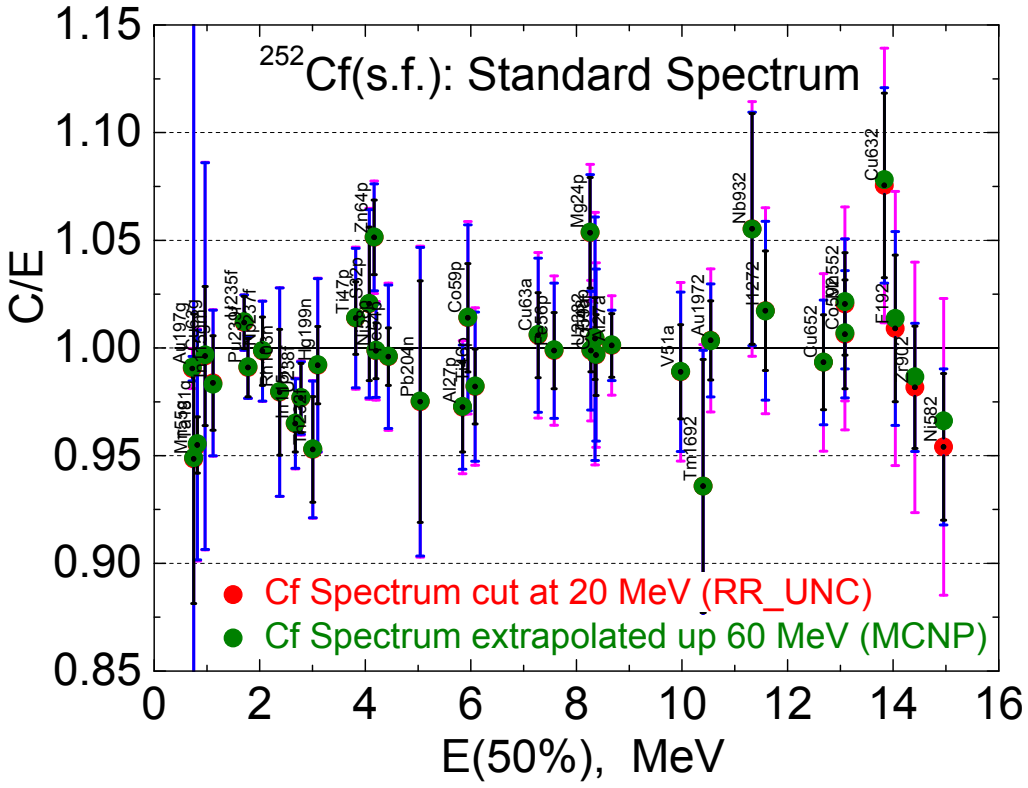

Fig. 2. C/E ratio in ^{252}Cf(s.f.) field: all measured data but without obvious outliers.
Error bars include only experimental (black), additionally IRDFF-1.03 evaluated XS (blue) and Cf(s.,f.) spectrum (pink) uncertainties. C/E for outliers ^{59}Co(n,γ), ^{92}Mo(n,p), ^{60}Ni(n,p) and ^{46}Ti(n,2n) are located outside of Figure.

The same but for U-235 field
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C/E ratio for spectrum averaged cross sections (SPA) in $^{235}U(n_{th},f)$ field

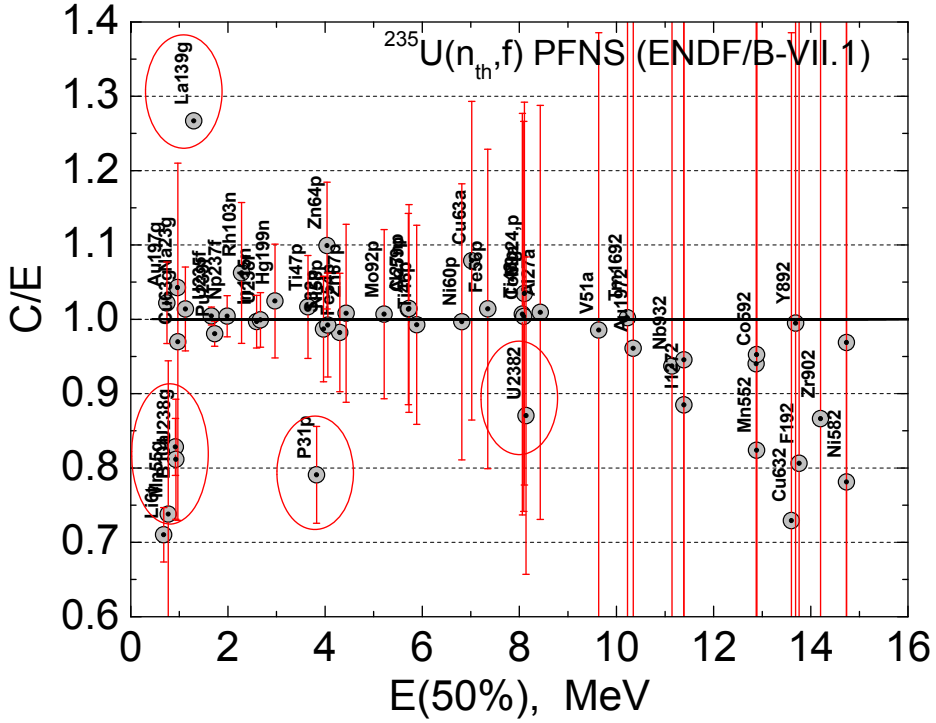

Fig. 1. C/E ratio in $^{235}U(n_{th},f)$ field: obvious outliers: $^{55}Mn(n,\gamma)$, $^{238}U(n,\gamma)$, $^{139}La(n,\gamma)$, $^{31}P(n,p)$ and $^{238}U(n,2n)$. Error bars include only experimental (black) and additionally IRDFF XS and ENDF/B-VII.1 spectrum (red) uncertainties. **$^{6}Li(n,\alpha)$, $^{10}B(n,\alpha)$ are not outliers, since inclusion of other α-production reactions increase C/E up to 1.0 !**

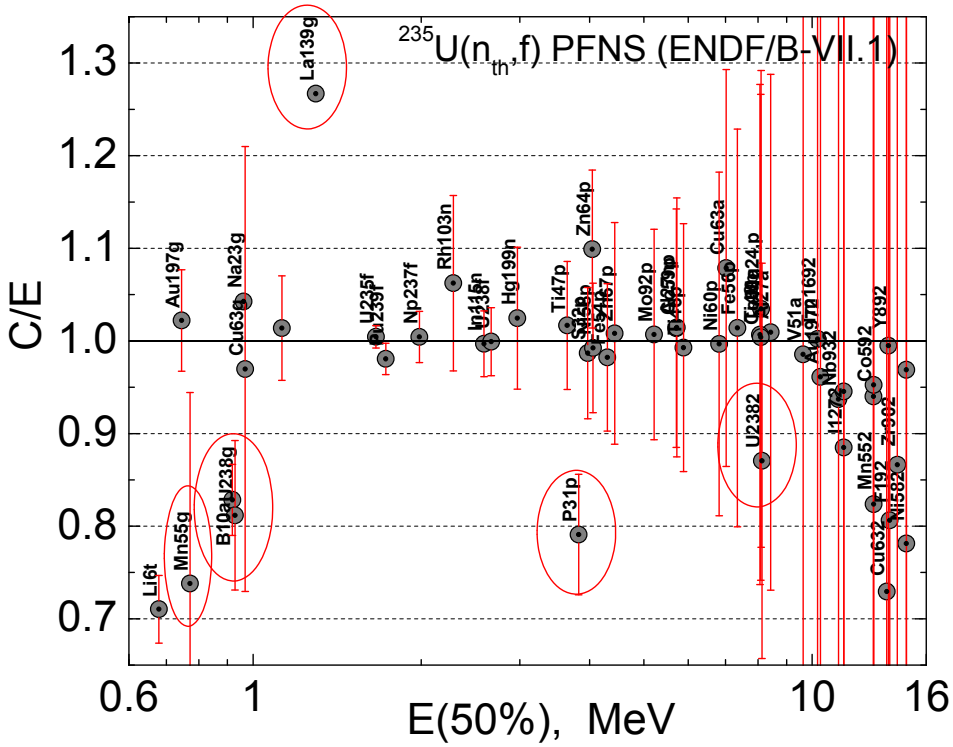

Fig. 2. The same as Fig. 1, but log scale for energy.

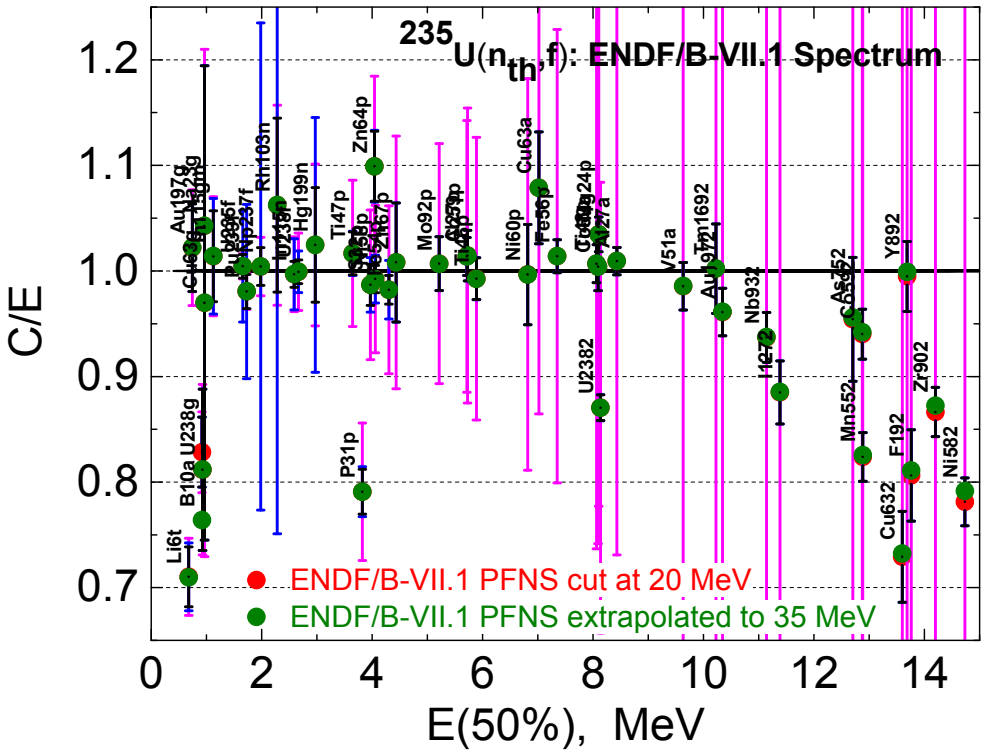

Fig. 3. C/E with IRDFF-1.03 cross sections averaged in the $^{235}U(n_{th},f)$ PFNS from ENDF/B-VII.1 [1]. Uncertainties: experimental SPA (black bars), IRDFF-1.03 cross sections (blue), evaluated spectra (pink) - not shown.

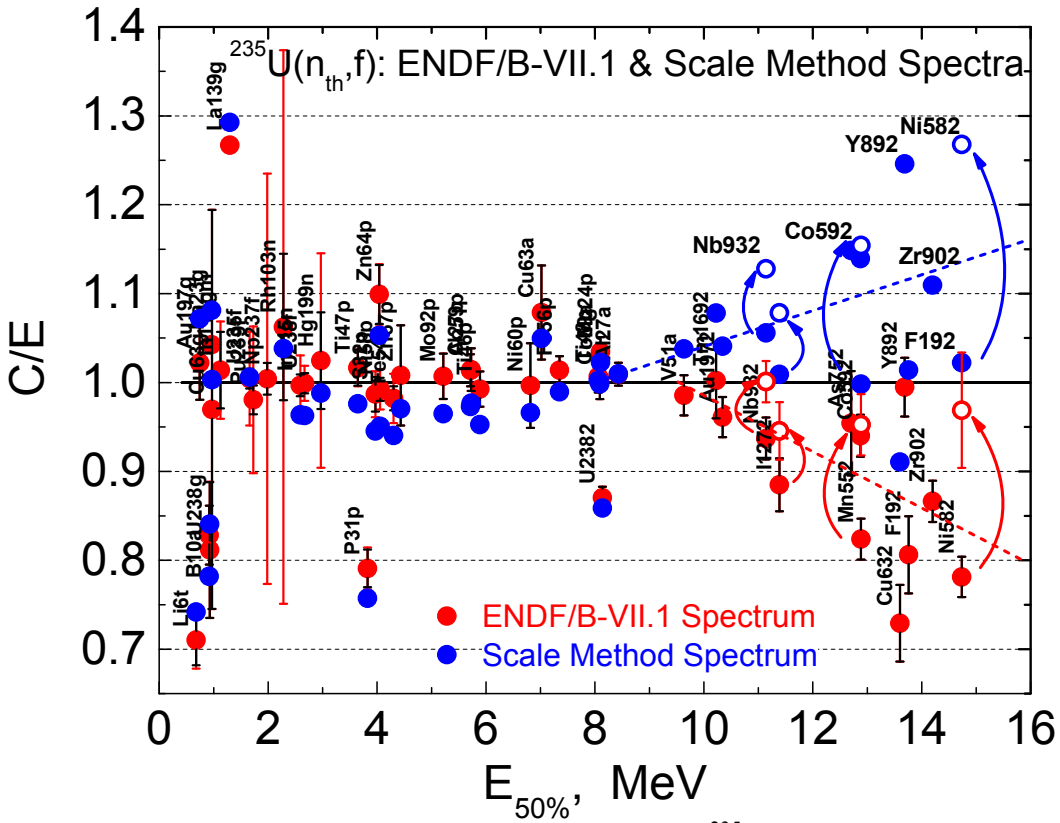

Fig. 4. C/E with IRDFF-1.03 cross sections averaged in the $^{235}U(n_{th},f)$ PFNS from ENDF/B-VII.1 [1] and Scale method [2]. Uncertainties: experimental SPA (black bars), IRDFF-1.03 cross sections (red), evaluated spectra - not shown. Three curved arrows show the change of C/E for $^{127}I(n,2n)$, $^{55}Mn(n,2n)$ and $^{58}Ni(n,2n)$ when SPA recommended by W. Mannhart are replaced with K. Zolotarev values.

Date: Jan 2014 – Sep 2014

Reference

1. M.B. Chadwick, M. Herman et al., Nuclear Data Sheets, **112**, 2887 (2011)
2. N.V. Kornilov, Nucl. Sci. Eng., **169**, 290 (2011)

The same but for Cf-252 field
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