

INDC(CCP)-371

Jadernye Konstanty (Nuclear Constants), Issue No. 1, 1993

The Activity of the Nuclear Data Commission. The information about regular conference of the Nuclear Data Commission is presented which took place in Obninsk, FEI 22 22 December 1992.

Center of Radio-nuclide Data. The information about the Center of Radio-nuclide Data organized in the Radium Institute named after V.G. Khlopin is given. The Center activity trends and tasks are considered. Technology of Evaluated Data on Radio-nuclide Decay and Radiation are paid attention to.

Neutron Radiative Cross Sections for ^{232}Th and ^{197}Au between 0.37-1 MeV. With the help of the Activation Method the Cross Section of a Radiative capture of Neutrons for Thorium 232 in the Energy Range from 0.37-1 MeV Relative to $\sigma_{n\gamma}$ ^{197}Au and σ_{nf} ^{235}U have been measured. As the neutron source served the reaction $T(p,n)^3\text{He}$. The induced activity recording was made with the Ge(Li) detector according to the gamma-line ^{233}U with $E=312\text{keV}$. At the same time the cross section of the radiative capture for ^{197}Au relative to σ_{nf} ^{235}U has been determined. See INDC(CCP)-389 for full translation.

Neutron Radiative Capture Cross-Sections for Even Isotopes of Neodymium in the Energy Range from 0.5 TO 2.2. MeV. For stable Isotopes of Neodymium-146, 148 and 150 Neutron Radiative Capture Cross-Sections have been measured by activation method as a function of neutron energy between 0.5 TO 2.2. MeV. Enriched samples have been irradiated with neutrons from $^3\text{H}(p,n)^3\text{He}$ reaction using Van de Graaf accelerator. The measurements were made relative reactions $^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ and $^{115}\text{In}(n,n')^{115\text{m}}\text{In}$. See INDC(CCP)-390 for full translation.

Evaluation of Thermal Neutron Cross-Sections and Resonance Integrals of Protactinium, Americium, Curium and Berkelium Isotopes. The review and analysis of data on the thermal neutron fission and capture cross sections as well as their corresponding resonance integrals are carried out in this paper. The values are classified according to the form of neutron spectra under investigation. The mean weighted values of cross sections and resonance integrals for every type of neutron spectra were taken as evaluated data. See INDC(CCP)-391 for full translation.

Compilation of Leakage Neutron Spectrum Measurements for Spherical Assemblies with $T(d,n)$ and ^{252}Cf Neutron Sources. See INDC(CCP)-392 for full translation.

Evaluation of Photonuclear Reaction Cross-Sections using the
Reduction Method for Large Systematic Uncertainties.
See INDC(CCP)-393 for full translation.