

Status Report of the Nuclear Structure and Decay Data Evaluation in CNDC

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1. Members

The present members of CNDC group for the evaluation of Nuclear Structure and Decay Data are following: Huang Xiaolong, Kang Mengxiao. Mr. Kang Mengxiao is a graduate student, he can help us by participating some parts of the evaluation work.

2. Mass Chain Evaluation

The NSDD group in China Nuclear Data Center (CNDC) has permanent responsibility for evaluating and updating NSDD for A=51,62,195-198; temporary participating A=174. In recent 2 years, the mass chain A=195 has been revised using available experimental decay and reaction data. A=198 is in review. A=51 is being updated.

A=62 was assigned to CNDC from Jilin University (JLU, China) group in 2011 NSDD meeting. A=62 was evaluated by Dr. B.Singh et al. in 2012.

The status is as follows:

Table 1 Status of Mass Chain Evaluation in CNDC

Mass chain A	Status	Evaluators
51	NDS,107,2131(2006)	Huang Xiaolong, being updated
62	NDS, 113, 973 (2012)	B.Singh et al.
195	NDS, 121, 395 (2014)	Huang Xiaolong, Kang Mengxiao
196	NDS,108,1093(2007)	Huang Xiaolong
197	NDS,104,283(2005)	Huang Xiaolong, Zhou Chunmei
198	NDS,110,2533(2009)	Huang Xiaolong, Post Review
174	Being updated	F.G.Kondev, T.Kibedi, Huang Xiaolong

3. Decay Data Evaluation

In recent 2 years, the decay data for ^{68}Ga , ^{125}Sb , ^{227}Th , ^{229}Th , ^{233}U nuclides have been updated and recommended using available experimental data. The recommended data and evaluated comments for ^{227}Th , ^{229}Th , ^{233}U nuclides will be published in DDEP website.

Also CNDC has updated the main relative γ -ray intensities for ^{56}Co and ^{66}Ga considered China measurements for high energy calibration of Ge detectors.

The evaluation the half-life and delayed neutron emission probability for ^{139}I , ^{140}I , ^{141}I , ^{141}Xe , ^{142}Xe , ^{145}Xe and ^{147}Xe precursors have been done in 2014.