

JINA Online Journal for Nuclear Data

Data Users (modelers, experimentalists)

- retrieve version tracked groups of data
- read comments, make choices
- reference data in their work (Onl. Jour. Nucl. Astr. Dat 002334-05)

JINA Web-Database

Updated continuously



Editorial Board

- Identifies evaluation needs
- Requests/collects evaluations from referees
- Reviews evaluations before they enter database
- Edits comments section if necessary

Scientific Community

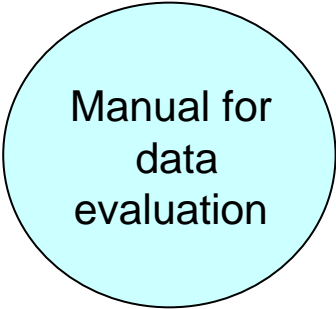
- Comment on data in database
- Contribute new data
- lookup data used in published work (identified through libraries)

Referee Pool

- volunteers
- open to everybody
- flexible workload distribution
- get publication credit

Individuals

Evaluating groups



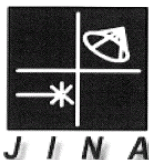
by **A. Sakharuk (JINA/MSU)**

- List of Updates:
- new masses consistent with experimental limits
 - updated NON-SMOKER rates: **1973** p - & α - capture reactions, **972** (p, α) reactions calculated by T. Rauscher
 - updated pf - shell model rates: **25** p -capture reactions
 - **40** p -capture & **4** (p, α) reactions from C.Illadis, ... *Astrophys. J. Suppl.* **134**, 151 (2001) – mainly experimental data
 - **55** reactions from NACRE compilation - C.Angulo, ... *Nucl. Phys.* **A656**, 3 (1999) – experimental data
 - **9** reactions from recent experimental sources (2002-2006)
 - triple alpha capture reaction (experimental data)
 - SEF's for all reactions
 - corrected fit for **17** reactions
 - recalculated more than **40** inverse reaction rates with new Q-values

- Work in progress:
- fit of **11** reaction rates (experimental data)
 - about 70 reactions in pipeline for possible updates
 - shell-model reaction rate calculations for mass region >70

1. Publish rp-process reaction library and make it public using web interface
2. JINA workshop as NIC satellite meeting in Basel (Switzerland):
“Data Needs in Nuclear Astrophysics”
→ discuss further step
3. Establish continuing update procedure for rp-process data base and expand to other processes

→ JINA nuclear astrophysics public data archive
(possibly imbedded, for example, in NNDC and/or nuastrodata.org)



Reaction Rates Database

Reaction Results. Session Library - StarsLib

JINA user! This is the result of your search in the whole database.

Main Menu:

Administrative Tasks

Working with Database

Regular Search for a Rate

Advanced Search

Pick up/Create Library

Page 1 of 1. 7 matching reactions

ADD TO YOUR SESSION LIBRARY

REMOVE FROM YOUR SESSION LIBRARY

Check All on Page

Check All on Page

Uncheck All on Page

Uncheck All on Page

Add Selected On This Page Rates

Delete Selected On This Page Rates

Add All Among 7 Rates Which are Absent in Session Library

Remove All Among 7 Rates Which are in Session Library

Delete	Add	Link	Chap	Reaction	Type	Label	Vers
	<input checked="" type="checkbox"/>	View Detail	4	$p + p \rightarrow d$	exp	cc	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + d \rightarrow \text{he3}$	exp	cf88	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + t \rightarrow \text{he4}$	exp	cf88	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + \text{he3} \rightarrow \text{he4}$	exp	bet+	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + \text{li6} \rightarrow \text{be7}$	exp	cf88	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + \text{be7} \rightarrow \text{b8}$	exp	cf88	1
	<input checked="" type="checkbox"/>	View Detail	4	$p + \text{be9} \rightarrow \text{b10}$	exp	cf88	1

ADD TO YOUR SESSION LIBRARY

REMOVE FROM YOUR SESSION LIBRARY

Check All on Page

Check All on Page

Uncheck All on Page

Uncheck All on Page

Add Selected On This Page Rates

Delete Selected On This Page Rates

Add All Among 7 Rates Which are Absent in Session Library

Remove All Among 7 Rates Which are in Session Library

Generate a text file of these results:

In Reaclib Format

In reaclib2 Format

In XML Format (not yet!)