National Nuclear Data Center



Building 197D

P.O. Box 5000

Upton, NY 11973-5000 U.S.A.

Phone +1 (631) 344-5091

Fax +1 (631) 344-2806

pritychenko@bnl.gov

managed by Brookhaven Science Associates  
for the U.S. Department of Energy

www.bnl.gov

Memo CP-C/410

|  |
| --- |
|  |

**Date:** August 20, 2012

**To**: Distribution

**From:** Boris Pritychenko

**Subject: Subfield5 (Branch) –** COH/IM

I was working on Atlas of Neutron Resonances compilation and discovered a large number of imaginary values for coherent scattering amplitudes: Li-6, B, B-10, Cd, Cd-113, Gd, Gd-155, Gd-157 and Hg-196. Similar data already exist in EXFOR as subentry 11017.002.

Unfortunately, there is no coding for imaginary part of scattering amplitude. Consequently, I will suggest the following solution using Li-6 as an example:

(3-LI-6(N,EL)3-LI-6,COH,,AMP,,,RECOM) for real part

(3-LI-6(N,EL)3-LI-6,COH/IM,,AMP,,,RECOM) for imaginary part.

**Dictionary 36**

COH/IM Imaginary part of scattering amplitude

**References**

[1] S.F. Mughabghab, Atlas of Neutron Resonances, Elsevier (2006).

|  |  |
| --- | --- |
| **Distribution:** |  |
|  |  |
| blokhin@ippe.ru | nrdc@jcprg.org |
| cgc@ciae.ac.cn | oblozinsky@bnl.gov |
| chiba@earth.sgu.ac.jp | ogritzay@kinr.kiev.ua |
| emmeric.dupont@oecd.org | otto.schwerer@aon.at |
| fukahori.tokio@jaea.go.jp | pritychenko@bnl.gov |
| ganesan555@gmail.com | pronyaev@ippe.ru |
| gezg@ciae.ac.cn | r.forrest@iaea.org |
| hongwei@ciae.ac.cn | samaev@obninsk.ru |
| jhchang@kaeri.re.kr | s.babykina@polyn.kiae.su |
| j.roberts@iaea.org | scyang@kaeri.re.kr |
| kaltchenko@kinr.kiev.ua | s.simakov@iaea.org |
| katakura.junichi@jaea.go.jp | stakacs@atomki.hu |
| kato@nucl.sci.hokudai.ac.jp | stanislav.hlavac@savba.sk |
| kiralyb@atomki.hu | sv.dunaeva@gmail.com |
| l.vrapcenjak@iaea.org | taova@expd.vniief.ru |
| kiyoshi.matsumoto@oecd.org | tarkanyi@atomki.hu |
| manuel.bossant@oecd.org | vvvarlamov@gmail.com |
| manokhin@ippe.ru | vlasov@kinr.kiev.ua |
| mmarina@ippe.ru | v.semkova@iaea.org |
| mwherman@bnl.gov | v.zerkin@iaea.org |
| nicolas.soppera@oecd.org | yolee@kaeri.re.kr |
| nklimova@kinr.kiev.ua | zhuangyx@ciae.ac.cn |
| n.otsuka@iaea.org |  |
|  |  |
| **cc:** |  |
| mugabgab@bnl.gov |  |