**Nuclear Data Section**

**International Atomic Energy Agency**

**P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/1073**

**Date:** 7 March 2023

**To:** Distribution

**From:** V. Devi, N. Otsuka

**Subject: Addition to dictionary 236 (Quantities): PAR/L-,DA,G and dictionary 31 (Branches) : L-**

**Reference:** Memo CP-D/1057 (Rev.)

Memo CP-D/1057 discusses the gamma production following quasi-metastable state production.

1. Cascade gammas not following quasi-metastable state (“prompt” component)
2. Cascade gammas following quasi-metastable state (“delayed” component)

The following new codes are proposed:

**Dictionary 236 (Quantities)**

PAR/L-,DA,G Angular distribution of prompt discrete gamma ray transition, excluding

 formation via quasi-metastable state.

**Dictionary 31 (Branches)**

L- Excluding formation via quasi-metastable state production.

**Coding sample (H.Zhou et al.,J,NSE,134,106,2000):**

SUBENT 31492002 20021018 20021204 20050926 0000

BIB 3 4

REACTION 1(82-PB-0(N,X)82-PB-206,**PAR/L-,DA,G**) Prompt.

 2(82-PB-0(N,X)82-PB-206-L,PAR,DA,**DG**) Delayed.

DECAY-DATA (82-PB-206-M,.124MSEC,DG,343.3)

ENDBIB 4

COMMON 3 3

E LVL-INI LVL-FIN

KEV KEV KEV

343.3 1684.1 1340.6

ENDCOMMON 3

DATA 5 3

ANG DATA 1DATA-ERR 1DATA 2DATA-ERR 2

ADEG MB/SR MB/SR MB/SR MB/SR

55. 1.27 .38 5.63 1.13

90. 1.47 .34 3.94 1.58

140. 1.11 .33 4.10 1.64

ENDDATA 5

ENDSUBENT 18

**Distribution:**

|  |  |
| --- | --- |
| a.koning@iaea.orgabhihere@gmail.comaloks279@gmail.comdaniela.foligno@oecd-nea.orgdbrown@bnl.govdraj@barc.gov.inexfor@oecd-nea.orgfukahori.tokio@jaea.go.jpganesan555@gmail.comgezg@ciae.ac.cniwamoto.osamu@jaea.go.jpjmwang@ciae.ac.cnkaltchenko@kinr.kiev.uakimdh@kaeri.re.krkimura.atsushi04@jaea.go.jpl.vrapcenjak@iaea.orgmanuel.bossant@oecd-nea.orgmasaaki@nucl.sci.hokudai.ac.jpmarina-03-08@yandex.rumichael.fleming@oecd-nea.orgmmarina@ippe.runicolas.soppera@oecd-nea.orgn.otsuka@iaea.orgnrdc@jcprg.org | odsurenn@gmail.comogritzay@ukr.netogrudzevich@ippe.ruotto.schwerer@aon.atpikulina@expd.vniief.rupritychenko@bnl.govs.okumura@iaea.orgscyang@kaeri.re.krselyankina@expd.vniief.rusonzogni@bnl.govstakacs@atomki.mta.hustanislav.hlavac@savba.sksv.dunaeva@gmail.comtada@nucl.sci.hokudai.ac.jptaova@expd.vniief.rutarkanyi@atomki.huv.devi@iaea.orgv.zerkin@iaea.orgvidyathakur@yahoo.co.invsemkova@inrne.bas.bgvvvarlamov@gmail.comyolee@kaeri.re.krzholdybayev@inp.kz |