ENTRY O1669 20091126 20100128 20100120 O040

SUBENT O1669001 20091126 20100128 20100120 O040

BIB 13 42

TITLE Level densities in Fe-56,57 and Mo-96,97.

AUTHOR (A.Schiller, E.Algin, L.A.Bernstein, P.E.Garrett,

M.Guttormsen, M.Hjorth-Jensen, C.W.Johnson,

G.E.Mitchell, J.Rekstad, S.Siem, A.Voinov, W.Younes)

REFERENCE (J,PR/C,68,054326,2003)

(J,PR/C,78,054321,2008) The same data

(S,AIP-1090,66,2009)

INSTITUTE (1USALRL)

(1USANCS)

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(2TUKTUK) Departament of Physics, Osmangazi University,

Meselik, Turkey

(2NOROSL)

(1USASDC)

(4ZZZDUB)

SAMPLE The self-supporting targets were isotopically enriched

to 94.7% and 94.2% and had a thickness of 3.4 mg/cm\*\*2

and 2.1 mg/cm\*\*2 for Fe-57 and Mo-97, respectively.

FACILITY (CYCLO,2NOROSL) To accelerate He-3 to 45 MeV at Oslo

Cyclotron Laboratory.

DETECTOR (TELES,SI,SILI) The detector system CACTUS, contains of

eight Si delta-E-E telescopes. The thickness of the

front and end detectors were thickness 140 and 3000 mum

respectively.

(NAICR) The gamma-rays were detected in 28 collimated

5"\*5" NAI(Tl) detector array, having a resolution of

approx. 6% at gamma energy 1.3 MeV and a total

efficiency of approx. 15%.

(HPGE) One 60% HPGE detector were used to monitor the

spin distribution and selectivity of the reactions.

ANALYSIS (UNFLD).Corrected for response of NaI detectors

(PGS).Level density from primary gamma matrix

METHOD (COINC)

COMMENT \*By compiler\*.The data for this reactions were

reanalysed by authors in 2008 and new data are report

in Data-section.

REL-REF (N,,A.Schiller+,J,NIM/A,447,498,2000) Method of

extract level density from gamma spectra.

STATUS (TABLE) Data taken from Oslo's compilation

http://ocl.uio.no

HISTORY (20081014C) SB

(20091126A).New Reference was added.

ENDBIB 42

NOCOMMON 0 0

ENDSUBENT 45

SUBENT O1669002 20081014 20081219 20081219 O037

BIB 4 5

REACTION (26-FE-56(0,0),,LD)

Derived from Fe-57(He3,a)Fe-56\* reaction

PART-DET (A,G)

EN-SEC (E-EXC,26-FE-56)

ERR-ANALYS (DATA-ERR).The error is reported by authors.

ENDBIB 5

NOCOMMON 0 0

DATA 3 40

E-EXC DATA DATA-ERR

MEV 1/MEV 1/MEV

0.002 0.252 0.233E-01

0.240 0.353 0.290E-01

0.479 0.427 0.412E-01

0.717 0.708 0.494E-01

0.955 0.956 0.582E-01

1.193 0.999 0.824E-01

1.432 0.894 0.987E-01

1.670 0.990 0.124

1.908 0.197E+01 0.197

2.147 0.380E+01 0.238

2.385 0.474E+01 0.345

2.623 0.587E+01 0.411

2.862 0.682E+01 0.500

3.100 0.814E+01 0.896

3.338 0.159E+02 0.135E+01

3.577 0.209E+02 0.157E+01

3.815 0.230E+02 0.215E+01

4.053 0.233E+02 0.302E+01

4.292 0.329E+02 0.413E+01

4.530 0.362E+02 0.441E+01

4.768 0.615E+02 0.671E+01

5.007 0.449E+02 0.692E+01

5.245 0.670E+02 0.100E+02

5.483 0.879E+02 0.124E+02

5.722 0.825E+02 0.159E+02

5.960 0.100E+03 0.213E+02

6.198 0.111E+03 0.298E+02

6.437 0.140E+03 0.413E+02

6.675 0.156E+03 0.430E+02

6.913 0.210E+03 0.749E+02

7.152 0.315E+03 0.891E+02

7.390 0.295E+03 0.126E+03

7.628 0.334E+03 0.204E+03

7.867 0.340E+03 0.201E+03

8.105 0.390E+03 0.309E+03

8.343 0.833E+03 0.409E+03

8.582 0.174E+04 0.664E+03

8.820 0.205E+04 0.801E+03

9.058 0.263E+04 0.134E+04

9.297 0.164E+04 0.171E+04

ENDDATA 42

ENDSUBENT 52

ENDENTRY 2