

## Interpreted ENSDF: ensdf+

by V.Zerkin, Vienna, 2015-2026, ver-2026-01-22

My ENSDF file

MASS 184

Nuclide 184AU

Dataset /DECAY/ 184AU [184HG EC DECAY]

Ident

NUC-ID&	DSID	DSREF	PUB.	DATE
184AU	184HG EC DECAY	2005SA40, 1994IB01, 1978NE1010NDS		201002

Hist Record(s): 1

184AU H TYP=FUL\$AUT=CORAL M. BAGLIN\$CIT=NDS 111,275 (2010)\$CUT=1-Oct-2009\$

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/1 Line:1

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/1 Line:2  
#TYP: FUL //Complete revision of the nuclide  
#AUT: Coral M. Baglin  
#CIT: NDS 111,275 (2010)  
#CUT: 1-Oct-2009

GComm Record(s): 8

184AU D PARENT T: 30.6 S 3 (1972Fi12), 30.9 S 3 (1994Wa23).  
184AU2D 32.5 S 10 (1970Ha18); from 5535A(T). 32.0 S 10 (1969Ha03).  
184AU3D WEIGHTED AVERAGE: 30.87 S 26.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/8 Line:3[3]

#PARENT T: 30.6 S 3 (1972Fi12), 30.9 S 3 (1994Wa23), 32.5 S 10 (1970Ha18); from 5535A(T). 32.0 S 10 (1969Ha03). WEIGHTED AVERAGE: 30.87 S 26.

184AU c Others: 1975Ho03, 1971Hu02, 1969Ha03 (observed 157|g and 237|g).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 2/8 Line:6  
Others: 1975Ho03, 1971Hu02, 1969Ha03 (observed 157γ and 237γ).

184AU c 2005Sa40: mass-separated {+184}Hg source from fragmentation of molten Pb target by 600 MeV or 1 GeV protons; Ge(Li) and Si(Li) detectors, high resolution 180° magnetic spectrograph; measured E|g, I|g, E(ce), I(ce). Additional sources from {+148}Sm({+40}Ar,X); planar Ge (FWHM=0.9 keV at 122 keV) for E|g|<1 MeV; two HPGe detectors (FWHM ≈ 2.3 keV at 1.3 MeV) for E|g|<1.3 MeV; measured x-|g-t and |g-|g-t events which were sorted to provide prompt-, total- and delayed-coincidence bidimensional matrices (60 ns or 100 ns time windows). Supersedes 2003IbZZ; see also 1994Ib01.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 3/8 Line:7[9]  
#2005Sa40: mass-separated <sup>184</sup>Hg source from fragmentation of molten Pb target by 600 MeV or 1 GeV protons; Ge(Li) and Si(Li) detectors, high resolution 180° magnetic spectrograph; measured Eγ, Iγ, E(ce), I(ce). Additional sources from <sup>148</sup>Sm(<sup>40</sup>Ar,X); planar Ge (FWHM=0.9 keV at 122 keV) for Eγ<1 MeV; two HPGe detectors (FWHM ≈ 2.3 keV at 1.3 MeV) for Eγ<1.3 MeV; measured x-γ-t and γ-γ-t events which were sorted to provide prompt-, total- and delayed- coincidence bidimensional matrices (60 ns or 100 ns time windows). Supersedes 2003IbZZ; see also 1994Ib01.

184AU c 1994Ib01: mass separated source from bombardment of {+148}Sm by 185 MeV <sup>40</sup>Ar ions; He-jet transport, iodine aerosol; two HPGe coaxial detectors, one HPGe x-ray detector; measured singles |g and x-ray spectra, |g|g(t), x-|g(t). See also 1994RoZY.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 4/8 Line:16[4]

#1994Ib01:: mass separated source from bombardment of <sup>148</sup>Sm by 185 Me<sup>40</sup>Ar ions; He-jet transport, iodine aerosol; two HPGe coaxial detectors, one HPGe x-ray detector; measured singles γ and x-ray spectra, γγ(t), x-γ(t). See also 1994RoZY.

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- L<sub>n</sub> in/out

184AU c 1975Ho03: |b strength function deduced from total-absorption |g  
184AU2c measurement

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 5/8 GComm Line:20[2]  
#1975Ho03:: β strength function deduced from total-absorption γ measurement

184AU c 1978Ne10: Mass-separated source; measured E|g, I|g, |g|g coin, |g|g(t)  
184AU2c (time resolution 6 ns {I1}).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 6/8 GComm Line:22[2]  
#1978Ne10:: Mass-separated source; measured Eγ, Iγ, γγ coin, γ(t)(t) resolution 6 ns {I1}.

184AU c

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 7/8 GComm Line:24

184AU c The decay scheme is adopted from 2005Sa40. It differs greatly from  
184AU2c that proposed by 1978Ne10. Although E|g and I|g data from 2005Sa40 and  
184AU3c 1978Ne10 are in satisfactory agreement, there exist a number of  
184AU4c transitions with E|g<90 keV which 1978Ne10 could not detect. Also,  
184AU5c the lowest energy state reported in 1978Ne10 is actually a 68-keV 2+  
184AU6c isomer, not a 3+ g.s., and the presence of a state just 3.4 keV above  
184AU7c the isomer was not recognized by 1978Ne10.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 8/8 GComm Line:25[7]  
#The decay scheme is adopted from 2005Sa40. It differs greatly from that proposed by 1978Ne10. Although Eγ and Iγ data from 2005Sa40 and 1978Ne10 are in satisfactory agreement, there exist a number of transitions with Eγ<90 keV which 1978Ne10 could not detect. Also, the lowest energy state reported in 1978Ne10 is actually a 68-keV 2+ isomer, not a 3+ g.s., and the presence of a state just 3.4 keV above the isomer was not recognized by 1978Ne10.

[ ] GComm CE Record(s): 1

184AU cE TI,LOGFT I(|g+ce) is from intensity imbalance at each level. I(|g+ce)  
184AU2cE values <10% may not be reliable due to existence of unplaced  
184AU3cE transitions, several of which are highly converted  
184AUxcE (I(|g+ce)(30.3|g)|?6%).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/1 GComm Line:32[4]  
#TI,LOGFT: I(|g+ce) is from intensity imbalance at each level. I(|g+ce) values <10% may not be reliable due to existence of unplaced transitions, several of which are highly converted (I(|g+ce)(30.3|g)|?6%).

[ ] GComm CG Record(s): 4

184AU cG E,RI From 2005Sa40, except as noted.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/4 GComm Line:36  
#E,RI: From 2005Sa40, except as noted.

184AU cG M From |a(K)exp values given by 2005Sa40, except as noted.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 2/4 GComm Line:37  
#M: From α(K)exp values given by 2005Sa40, except as noted.

184AU cG MR From analysis of ce data by 2005Sa40.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 3/4 GComm Line:38  
#MR: From analysis of ce data by 2005Sa40.

184AU cG E(B) From 1978Ne10.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 4/4 GComm Line:39  
#E(B): From 1978Ne10.

LComm CL Record(s): 3									
184AU cL E From least-squares fit to E g.		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/3 LComm Line:40		#E: From least-squares fit to E $\gamma$ .	
184AU cL J From Adopted Levels.		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 2/3 LComm Line:41		#J: From Adopted Levels.	
184AU cL T From  g g(t) (1978Ne10), except where noted.		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 3/3 LComm Line:42		#T: From $\gamma\gamma(t)$ (1978Ne10), except where noted.	
Parent P Record(s): 1		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/1 Parent Line:43			
184HG P 0.0 0+ 30.87 S 26 3970 24		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/1 Norm Line:44[3]		#NR: from $\Sigma(I(\gamma+ce) to g.s.)=100$ , assuming no $e^+ + b^{++}$ feeding	
NUCID N ....NR....DE....NT...DNT--BR---DBR....NB.....DNB--..NP..DNP.....		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/1 UnplacedRadiation "29.4" Line:48[5]		#NR: from $\Sigma(I(\gamma+ce) to g.s.)=100$ , assuming no $e^+ + b^{++}$ feeding to the g.s. ( $\Delta J=5$ ) or to the 68 or 72 levels ( $\Delta J=2$ or 3, $\Delta \pi=no$ ).	
184AU N 0.034 3 0.034 3 0.9889 6 1.01122		184AU cN NR from $ S(I( g+ce) to g.s.)=100$ , assuming no $e^+ + b^{++}$ feeding		184AU2cN to the g.s. ( $ DJ=5$ ) or to the 68 or 72 levels ( $ DJ=2$ or 3, $ D p=no$ ).					
PNorm PN Record(s): 1		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/1 PNorm Line:47			
184AU PN 3		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 1/1 UnplacedRadiation "29.4" Line:48[5]		E=29.4( $\pm .1$ )keV	
UnplacedRadiation G Record(s): 12		Relative photon intensity:RI=1.5(3)		Multipolarity of transaction:M=M1		Total conversion coeff:CC=47.2( $\pm .9$ )		\$LC=36.3 7 //Theoretical L-shell conversion coefficient	
NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q		\$MC=8.43 15 //Conversion coefficient for M shell; calculated		\$NC+=2.51 5 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells		\$NC=2.10 4 //cc for N shell		\$OC=0.386 7 //cc for O shell	
184AU G 29.4 1 1.5 3M1 47.2 9		\$PC=0.0260 5 //cc for P shell		\$M: \alpha(L1)exp=38 {I18}, L1:L2=1.0:0.4, \alpha(M1)exp=8.7 {I2}		(2005Sa40).			
184AUS G LC=36.3 7\$MC=8.43 15\$NC+=2.51 5									
184AUS G NC=2.10 4\$OC=0.386 7\$PC=0.0260 5									
184AU cG M  a(L1)exp=38 {I18}, L1:L2=1.0:0.4,  a(M1)exp=8.7 {I2}									
184AUxcG (2005Sa40).									
NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q		#Nuclide: 184AU		#Dataset: 184HG EC DECAY		#Record 2/12 UnplacedRadiation "30.3" Line:53[4]			
184AU G 30.3 1 1.7 4M1+E2 0.20 AP 98.1 AP		E=30.3( $\pm .1$ )keV		Relative photon intensity:RI=1.7(4)		Multipolarity of transaction:M=M1+E2		Mixing Ratio:MR≈0.20	
184AUS G LC AP 74.5\$MC AP 18.4\$NC+ AP 5.31									
184AUS G NC AP 4.53\$OC AP 0.764\$PC AP 0.0233									
184AU cG M  a(L1)exp=35 {I10},  a(L3)exp=21 {I8} (2005Sa40).									

- Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 L<sub>n</sub> in/out

:

Total conversion coeff.:CC≈ 98.1

\$LC AP 74.5 //Theoretical L-shell conversion coefficient  
 \$MC AP 18.4 //Conversion coefficient for M shell; calculated  
 \$NC+ AP 5.31 //Summed conversion coefficients of N-, O-, P- and R-shells  
 \$NC AP 4.53 //cc for N shell  
 \$OC AP 0.764 //cc for O shell  
 \$PC AP 0.0233 //cc for P shell

#M:  $\alpha(L1)\exp=35 \{10\}, \alpha(L3)\exp=21 \{8\}$  (2005Sa40).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 43.3 3 4.3 6  
 184AU cG Only weak, mixed electron lines observed (2005Sa40).

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 3/12 UnplacedRadiation "43.3" Line:57[2]  
 $E=43.3(\pm .3)\text{keV}$

Relative photon intensity:RI=4.3(6)

Only weak, mixed electron lines observed (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 45.8 1 2.0 3M1(+E2) 0.10 AP 14.54 AP  
 184AUS G LC AP 11.14\$MC AP 2.62\$NC+ AP 0.777  
 184AUS G NC AP 0.652\$OC AP 0.1176\$PC AP 0.00698  
 184AU cG M |a(L1)\exp=13 {I3}, L1:L3?1.00:0.12 (2005Sa40).

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 4/12 UnplacedRadiation "45.8" Line:59[4]  
 $E=45.8(\pm .1)\text{keV}$

Relative photon intensity:RI=2.0(3)

Multipolarity of transaction:M=M1(+E2)

Mixing Ratio:MR≈ 0.10

Total conversion coeff.:CC≈ 14.54  
 \$LC AP 11.14 //Theoretical L-shell conversion coefficient  
 \$MC AP 2.62 //Conversion coefficient for M shell; calculated  
 \$NC+ AP 0.777 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
 \$NC AP 0.652 //cc for N shell  
 \$OC AP 0.1176 //cc for O shell  
 \$PC AP 0.00698 //cc for P shell

#M:  $\alpha(L1)\exp=13 \{I3\}, L1:L3\approx 1.00:0.12$  (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 110.8 2 5 1(M1) 5.41  
 184AUS G KC=4.44 7\$LC=0.746 12\$MC=0.173 3\$NC+=0.0516 8  
 184AUS G NC=0.0431 7\$OC=0.00793 12\$PC=0.000535 8  
 184AU cG M |a(K)\exp=7 {I3} (2005Sa40).

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 5/12 UnplacedRadiation "110.8" Line:63[4]  
 $E=110.8(\pm .2)\text{keV}$

Relative photon intensity:RI=5(1)

Multipolarity of transaction:M=(M1)

Total conversion coeff.:CC= 5.41

\$KC=4.44 7 //Theoretical K- conversion coefficient  
 \$LC=0.746 12 //Theoretical L-shell conversion coefficient  
 \$MC=0.173 3 //Conversion coefficient for M shell; calculated  
 \$NC+=0.0516 8 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
 \$NC=0.0431 7 //cc for N shell  
 \$OC=0.00793 12 //cc for O shell  
 \$PC=0.000535 8 //cc for P shell

#M:  $\alpha(K)\exp=7 \{I3\}$  (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 112.6 2 4 1(M1) 5.17  
 184AUS G KC=4.24 7\$LC=0.712 11\$MC=0.1652 25\$NC+=0.0492 8  
 184AUS G NC=0.0412 7\$OC=0.00757 12\$PC=0.000511 8

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 6/12 UnplacedRadiation "112.6" Line:67[4]  
 $E=112.6(\pm .2)\text{keV}$

184AU cG M |a(K)exp=3.6 {I10} (2005Sa40).

Relative photon intensity:RI=4(1)

Multipolarity of transaction:M=(M1)

Total conversion coeff.:CC=5.17

\$KC=4.24 7 //Theoretical K- conversion coefficient

\$LC=0.712 11 //Theoretical L-shell conversion coefficient

\$MC=0.1652 25 //Conversion coefficient for M shell; calculated

\$NC+=0.0492 8 //Summed conversion coefficients of N-, O-, and R-shells

\$NC=0.0412 7 //cc for N shell

\$OC=0.00757 12 //cc for O shell

\$PC=0.000511 8 //cc for P shell

#M:  $\alpha(K)\exp=3.6 \{I10\}$  (2005Sa40).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 176.9 3 12 5

B #Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 7/12 UnplacedRadiation "176.9" Line:71  
E=176.9( $\pm .3$ )keV

Relative photon intensity:RI=12(5)

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 8/12 UnplacedRadiation "177.3" Line:72[3]

E=177.3( $\pm .2$ )keV

Relative photon intensity:RI=26(4)

Multipolarity of transaction:M=E1,E2

Total conversion coeff.:CC=0.34( $\pm .24$ )

\$KC=0.16 8 //Theoretical K- conversion coefficient

\$LC=0.14 13 //Theoretical L-shell conversion coefficient

\$MC=0.04 4 //Conversion coefficient for M shell; calculated

\$NC+=0.011 10 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

#M:  $\alpha(K)\exp<0.3$  (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 177.3 2 26 4 E1,E2 0.34 24  
184AUS G KC=0.16 8\$LC=0.14 13\$MC=0.04 4\$NC+=0.011 10  
184AU cG M |a(K)exp<0.3 (2005Sa40).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 8/12 UnplacedRadiation "177.3" Line:72[3]

E=177.3( $\pm .2$ )keV

Relative photon intensity:RI=26(4)

Multipolarity of transaction:M=E1,E2

Total conversion coeff.:CC=0.34( $\pm .24$ )

\$KC=0.16 8 //Theoretical K- conversion coefficient

\$LC=0.14 13 //Theoretical L-shell conversion coefficient

\$MC=0.04 4 //Conversion coefficient for M shell; calculated

\$NC+=0.011 10 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

#M:  $\alpha(K)\exp<0.3$  (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 178.1 2 6 2 E1,E2 0.33 24  
184AUS G KC=0.15 8\$LC=0.13 12\$MC=0.03 4\$NC+=0.011 10  
184AU cG M |a(K)exp|<0.4 (2005Sa40).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 9/12 UnplacedRadiation "178.1" Line:75[3]

E=178.1( $\pm .2$ )keV

Relative photon intensity:RI=6(2)

Multipolarity of transaction:M=E1,E2

Total conversion coeff.:CC=0.33( $\pm .24$ )

\$KC=0.15 8 //Theoretical K- conversion coefficient

\$LC=0.13 12 //Theoretical L-shell conversion coefficient

\$MC=0.03 4 //Conversion coefficient for M shell; calculated

\$NC+=0.011 10 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

#M:  $\alpha(K)\exp|<0.4$  (2005Sa40).

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 291.5 2 17 3M1 0.359  
184AUS G KC=0.296 5\$LC=0.0488 7\$MC=0.01131 16\$NC+=0.00337 5  
184AUS G NC=0.00282 4\$OC=0.000518 8\$PC=3.51E-5 5  
184AU cG M |a(K)exp=0.30 {I9}, (|a(L1)exp+|a(L2)exp)=0.05 {I2}  
184AU cG (2005Sa40).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 10/12 UnplacedRadiation "291.5" Line:78[5]

E=291.5( $\pm .2$ )keV

Relative photon intensity:RI=17(3)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.359

\$KC=0.296 5 //Theoretical K- conversion coefficient

\$LC=0.0488 7 //Theoretical L-shell conversion coefficient

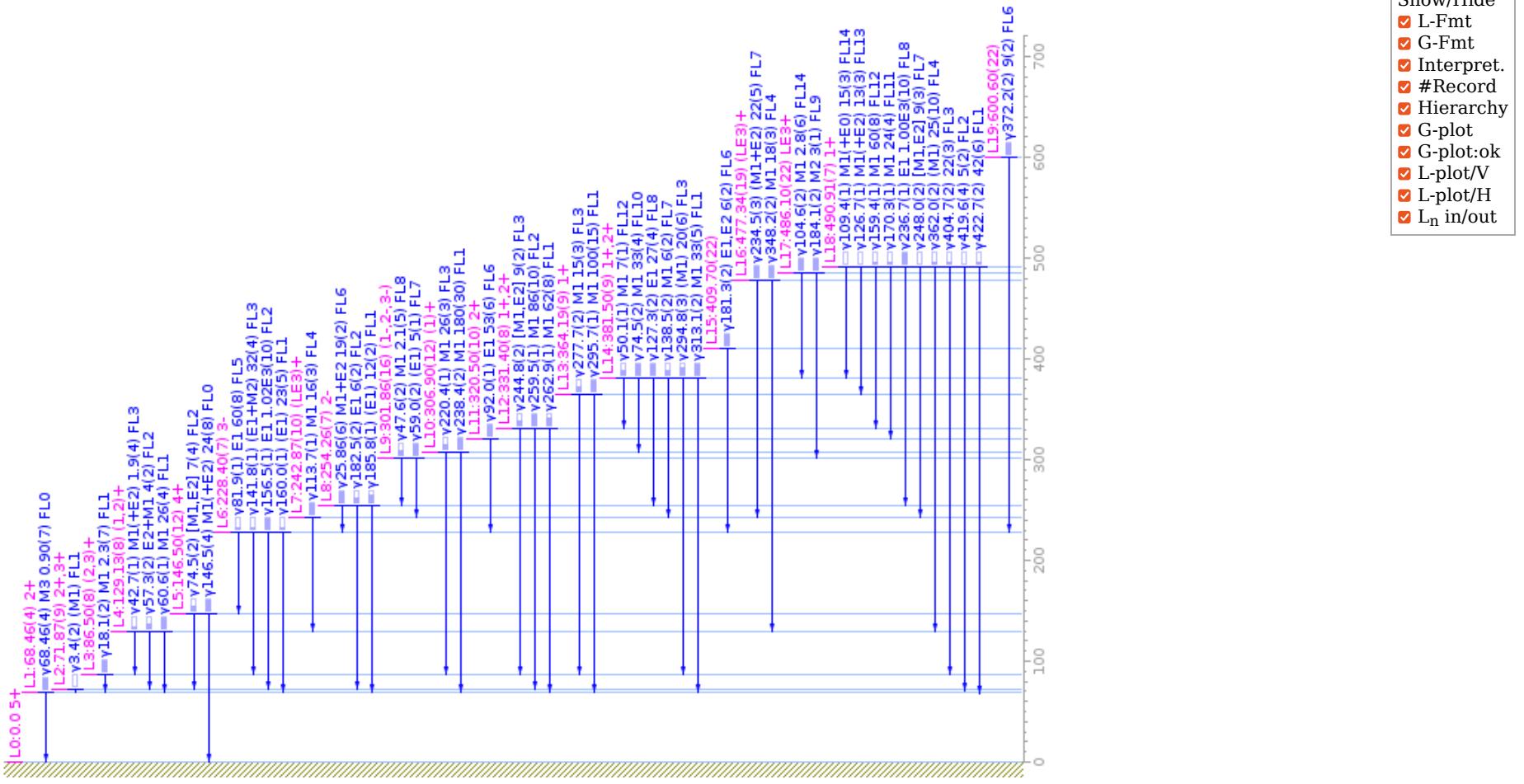
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q #Nuclide: 184AU  
 184AU G 331.5 2 10 2(M1) 0.253 #Dataset: 184HG EC DECAY  
 #Record 11/12 UnplacedRadiation "331.5" Line:83[4]  
 E=331.5( $\pm$ .2)keV  
 Relative photon intensity:RI=10(2)  
 Multipolarity of transaction:M=(M1)  
 Total conversion coeff.:CC=0.253  
 \$KC=0.209 3 //Theoretical K- conversion coefficient  
 \$LC=0.0343 5 //Theoretical L-shell conversion coefficient  
 \$MC=0.00795 12 //Conversion coefficient for M shell; calculated  
 \$NC+=0.00237 4 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
 \$NC=0.00198 3 //cc for N shell  
 \$OC=0.000364 6 //cc for O shell  
 \$PC=2.47E-5 4 //cc for P shell  
 #M:  $\alpha(K)\exp=0.30$  {I9},  $(\alpha(L1)\exp+\alpha(L2)\exp)=0.05$  {I2} (2005Sa40).

Show/Hide :  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 Ln in/out

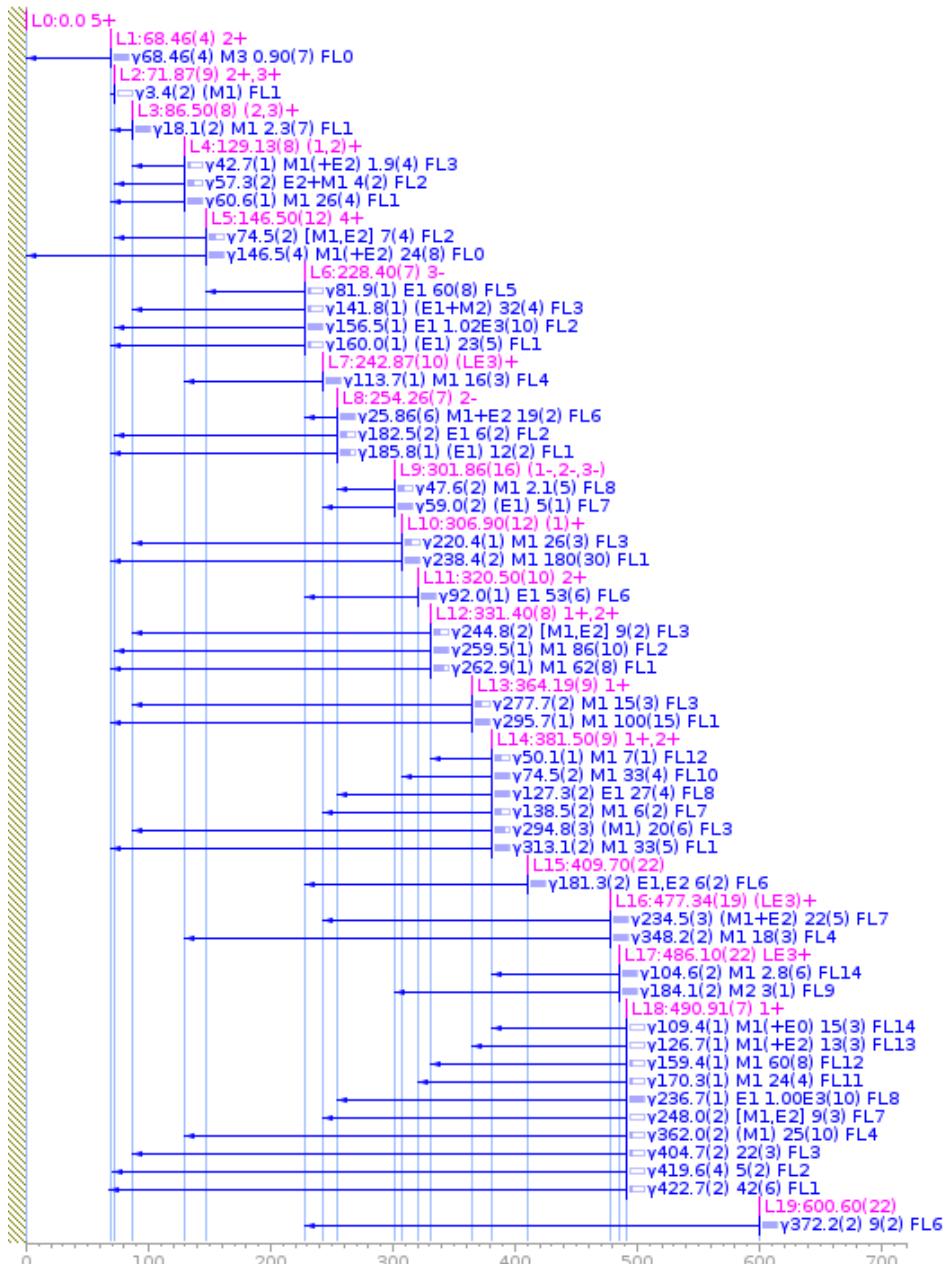
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NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q #Nuclide: 184AU  
 184AU G 392.4 2 110 20 B #Dataset: 184HG EC DECAY  
 #Record 12/12 UnplacedRadiation "392.4" Line:87  
 E=392.4( $\pm$ .2)keV  
 Relative photon intensity:RI=110(20)

Level     L Record(s): 20  
 ...LG-plot:Levels+Gammas...iPlot=1...Vertical...



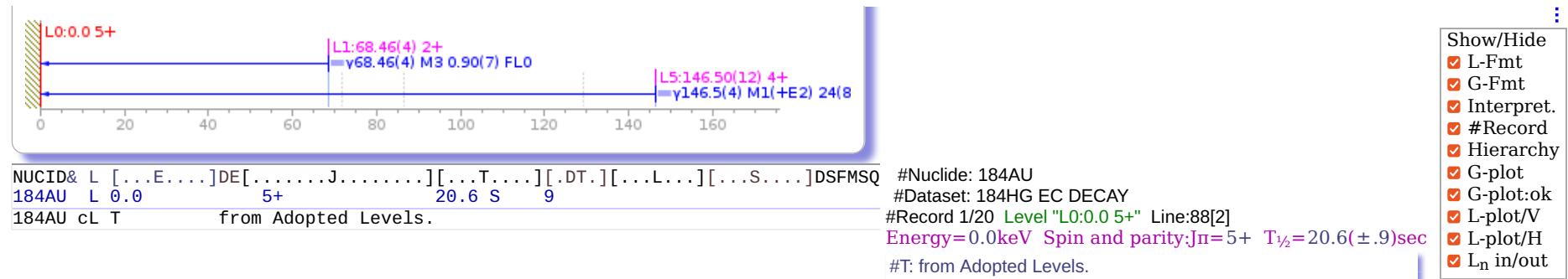
...LG-plot:Levels+Gammas...iPlot=1...Horizontal...



- Show/Hide
- L-Fmt
  - G-Fmt
  - Interpret.
  - #Record
  - Hierarchy
  - G-plot
  - G-plot:ok
  - L-plot/V
  - L-plot/H
  - L<sub>n</sub> in/out

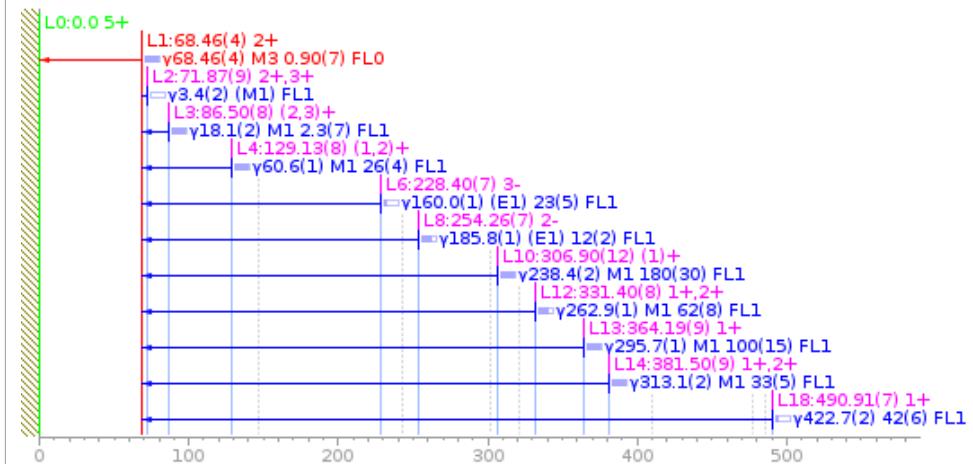
#L0/20 L0:0.0 5+

Level in/out γ-s #L0/20 Plot#1



## #L1/20 L1:68.46(4) 2+

Level in/out γ-s #L1/20 Plot#2

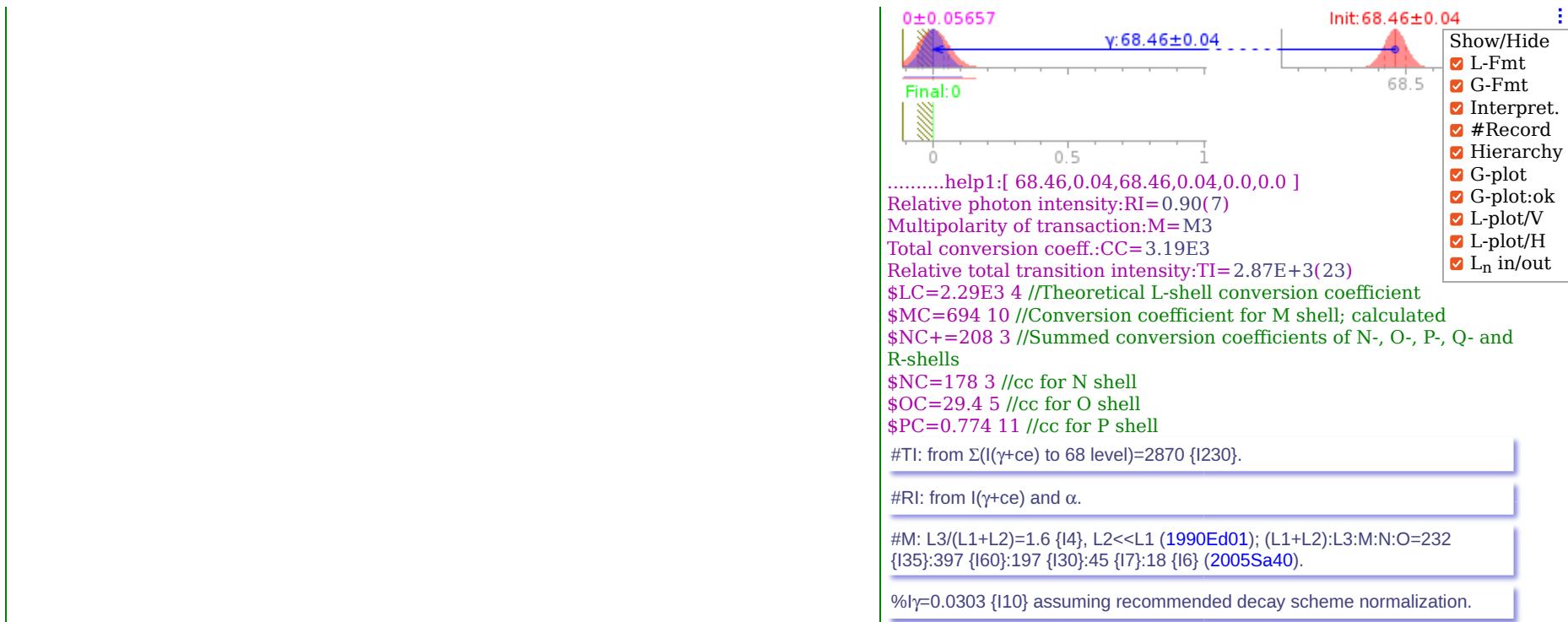


NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
 184AU L 68.46 4 2+ 47.6 S 14 M  
 184AU cL T from Adopted Levels.

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 2/20 Level "L1:68.46(4) 2+" Line:90[2] Child:1  
 Energy=68.46(±.04)keV Spin and parity:Jπ=2+  
 T½=47.6(±1.4)sec Meta:MS=M  
 #T: from Adopted Levels.

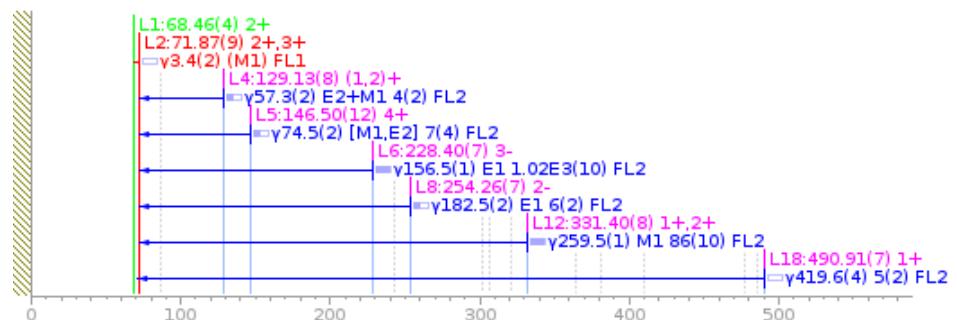
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 68.46 4 0.90 7M3 3.19E3 2.87E+3 23  
 184AUS G LC=2.29E3 4\$MC=694 10\$NC+=208 3  
 184AUS G NC=178 3\$OC=29.4 5\$PC=0.774 11  
 184AU cG TI from |S(I(|g+ce) to 68 level)=2870 {I230}.  
 184AU cG RI from I(|g+ce) and |a.  
 184AU cG M L3/(L1+L2)=1.6 {I4}, L2<<L1 (1990Ed01);  
 184AU2cG (L1+L2):L3:M:N:O=232 {I35}:397 {I60}:197 {I30}:45 {I7}:18 {I6}  
 184AUXcG (2005Sa40).  
 184AU cG %I|g=0.0303 {I10} assuming recommended decay scheme  
 184AU2cG normalization.

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #2/20 Level [ L ] "L1:68.46(4) 2+" nLines=2 nChild=1  
 #Record 1/1 Gamma "68.46(4) M3 0.90(7)" Line:92[10]  
 E=68.46(±.04)keV  
 Init.Level:L1:68.46(4) 2+ Final.Level:L0:0.0 5+ [E1-E0=68.46; E1-E0-Ey = 0<1% of L1 (0.685keV)]



## #L2/20 L2:71.87(9) 2+,3+

Level in/out γ-s #L2/20 Plot#3



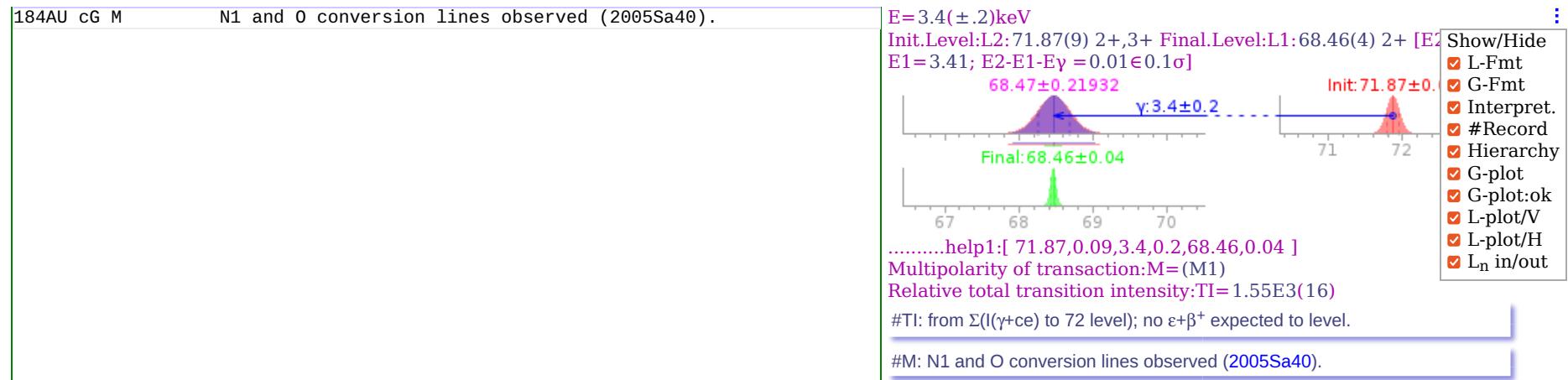
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 71.87 9 2+,3+

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 3.4 2 (M1) 1.55E3 16  
184AU cG TI from |S(I(|g+ce) to 72 level); no |e+|b{++} expected to  
184AUxcG level.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY

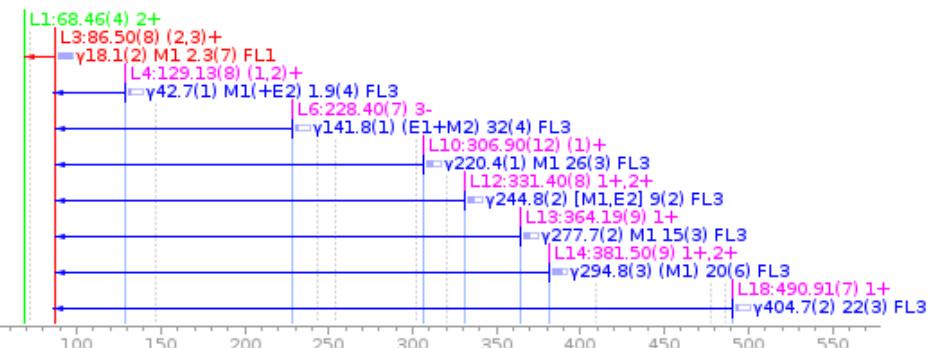
#Record 3/20 Level "L2:71.87(9) 2+,3+" Line:102 Child:1  
Energy=71.87(±.09)keV Spin and parity:Jπ=2+,3+

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #3/20 Level [ L ] "L2:71.87(9) 2+,3+" nLines=1 nChild=1  
#Record 1/1 Gamma "3.4(2) (M1)" Line:103[4]



## #L3/20 L3:86.50(8) (2,3)+

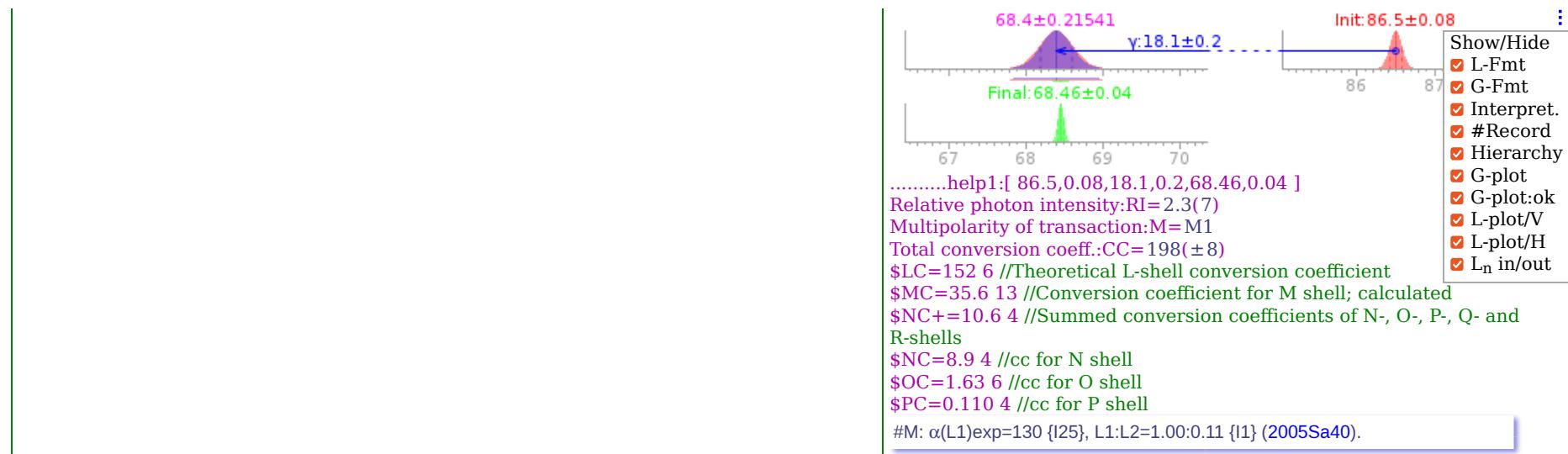
Level in/out γ-s #L3/20 Plot#4



```
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 86.50 8 (2,3)+
```

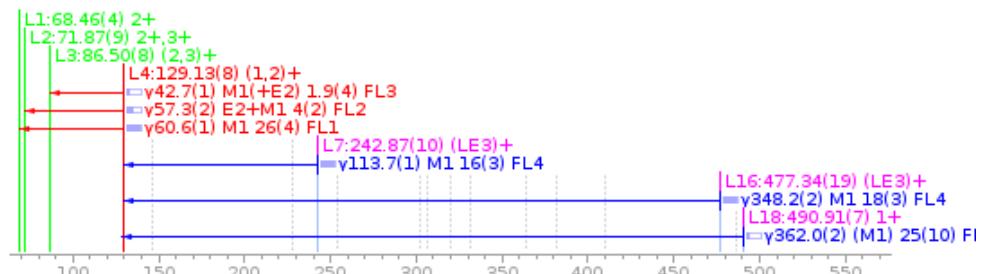
```
NUCID& G [...E....]DE[.RI.]DR[...M....][..MR..][DMR.][CC..]DC[...TI...]DTFC Q
184AU G 18.1 2 2.3 7M1 198 8
184AUS G LC=152 6$MC=35.6 13$NC+=10.6 4
184AUS G NC=8.9 4$OC=1.63 6$PC=0.110 4
184AU cG M |a(L1)exp=130 {I25}, L1:L2=1.00:0.11 {I1} (2005Sa40).
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 4/20 Level "L3:86.50(8) (2,3)+" Line:107 Child:1  
Energy=86.50(±.08)keV Spin and parity:Jπ=(2,3)+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #4/20 Level [ L ] "L3:86.50(8) (2,3)+" nLines=1 nChild=1  
#Record 1/1 Gamma "18.1(2) M1 2.3(7)" Line:108[4]  
E=18.1(±.2)keV  
Init.Level:L3:86.50(8) (2,3)+ Final.Level:L1:68.46(4) 2+[E2]  
E1=18.04; E3-E1-Ey = -0.06 ± 0.5σ



## #L4/20 L4:129.13(8) (1,2)+

Level in/out γ-s #L4/20 Plot#5



```
NUCID& L [ ...E....]DE[ .....J.....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 129.13     8 (1,2)+
```

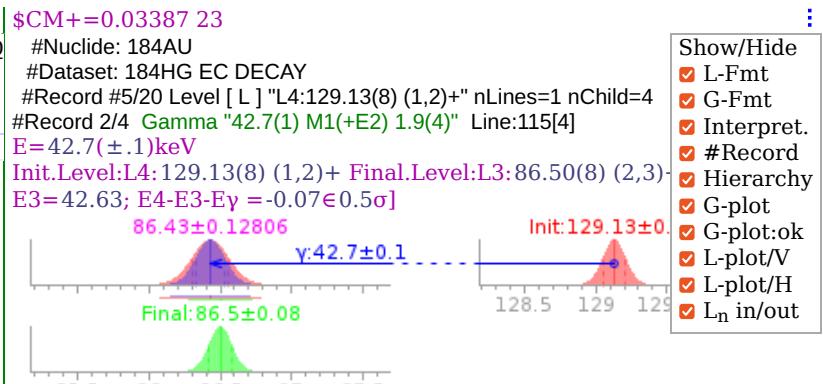
```
NUCID& E ....E....DE...IB..DIB--IE---DIE.LOGFT...DFT-----TI---DTIFUNQ
184AU   E      3.8   25   11    7   5.0   3      15      10
184AUS E EAV=1271 11$CK=0.610 4$CL=0.1059 7$CM+=0.03387 23
```

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 5/20 Level "L4:129.13(8) (1,2)+" Line:112 Child:4  
 Energy=129.13(±.08)keV Spin and parity:Jπ=(1,2)+  
 #Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #5/20 Level [ L ] "L4:129.13(8) (1,2)+" nLines=1 nChild=4  
 #Record 1/4 EC Line:113[2]  
 Intensity of  $\beta^+$ -decay branch: IB=3.8(±2.5)  
 Intensity of electron capture branch:IE=11(±7)  
 The log ft for ( $\epsilon + \beta^+$ ) transition :LOGFT=5.0(±.3)  
 Total ( $\epsilon + \beta^+$ ) decay intensity:TI=15(±10)  
 \$EAV=1271 11 //Average energy of the  $\beta^+$  spectrum  
 \$CK=0.610 4 //Calculated fraction of decay by electron capture from the K shell  
 \$CL=0.1059 7 //Calculated fraction of decay by electron capture from the L shell

```

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 42.7 1 1.9 4M1(+E2) 1.4E2 13
184AUS G LC=1.1E2 10$MC=28 25$NC+=8 7
184AUS G NC=7 7$OC=1.1 10$PC=0.005 4
184AU cG M |a(L1)exp|<22, |a(L3)exp<1.8 (2005Sa40) allows E1 or M1.

```

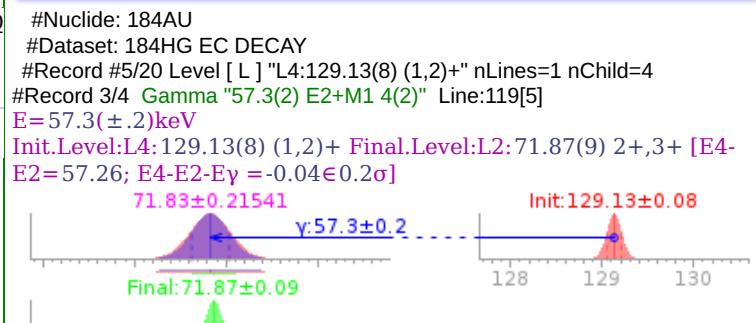


- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

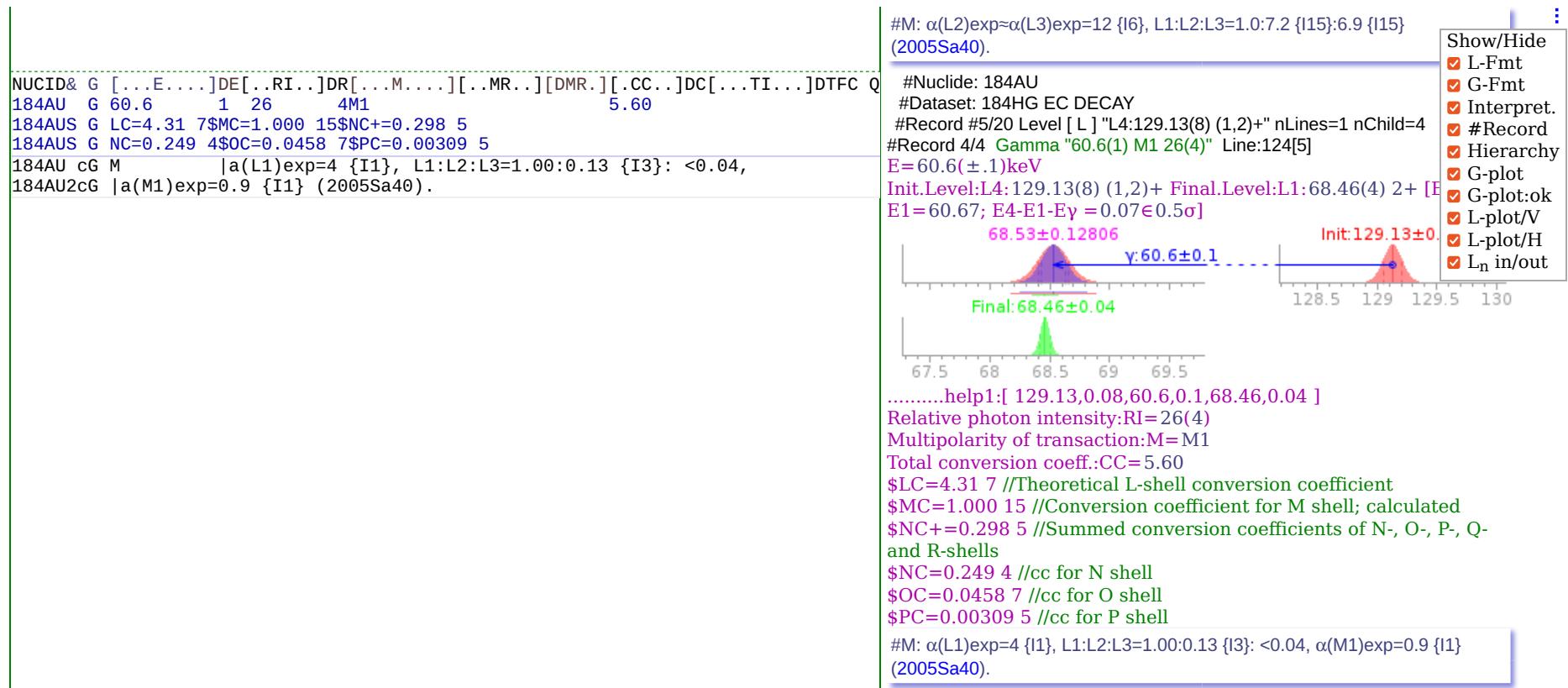
```

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 57.3 2 4 2E2+M1 1.2 AP 40.9 AP
184AUS G LC AP 30.7$MC AP 7.91$NC+ AP 2.26
184AUS G NC AP 1.94$OC AP 0.312$PC AP 0.00181
184AU cG M |a(L2)exp|?|a(L3)exp=12 {I6}, L1:L2:L3=1.0:7.2 {I15}:6.9
184AUx cG {I15} (2005Sa40).

```

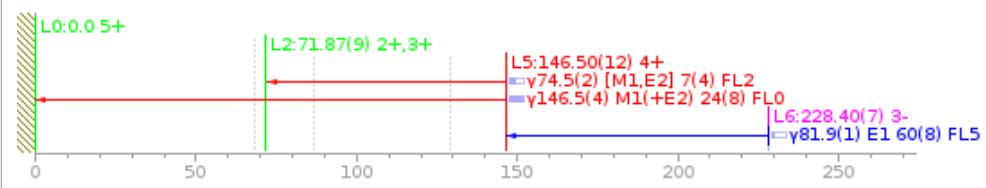


.....help1:[ 129.13,0.08,42.7,0.1,86.5,0.08 ]  
Relative photon intensity:RI=1.9(4)  
Multipolarity of transaction:M=M1(+E2)  
Total conversion coeff.:CC=1.4E2( $\pm 1.3E2$ )  
\$LC=1.1E2 10 //Theoretical L-shell conversion coefficient  
\$MC=28 25 //Conversion coefficient for M shell; calculated  
\$NC+=8 7 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=7 7 //cc for N shell  
\$OC=1.1 10 //cc for O shell  
\$PC=0.005 4 //cc for P shell  
#M:  $\alpha(L1)exp \leq 22, \alpha(L3)exp < 1.8$  (2005Sa40) allows E1 or M1.  
.....help1:[ 129.13,0.08,57.3,0.2,71.87,0.09 ]  
Relative photon intensity:RI=4(2)  
Multipolarity of transaction:M=E2+M1  
Mixing Ratio:MR $\approx$ 1.2  
Total conversion coeff.:CC $\approx$ 40.9  
\$LC AP 30.7 //Theoretical L-shell conversion coefficient  
\$MC AP 7.91 //Conversion coefficient for M shell; calculated  
\$NC+ AP 2.26 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC AP 1.94 //cc for N shell  
\$OC AP 0.312 //cc for O shell  
\$PC AP 0.00181 //cc for P shell



## #L5/20 L5:146.50(12) 4+

Level in/out y-s #L5/20 Plot#6



NUCID& L [...E....]DE[...J....][...T....][.DT.][...L....][...S....]DSFMSQ  
 184AU L 146.50 12 4+

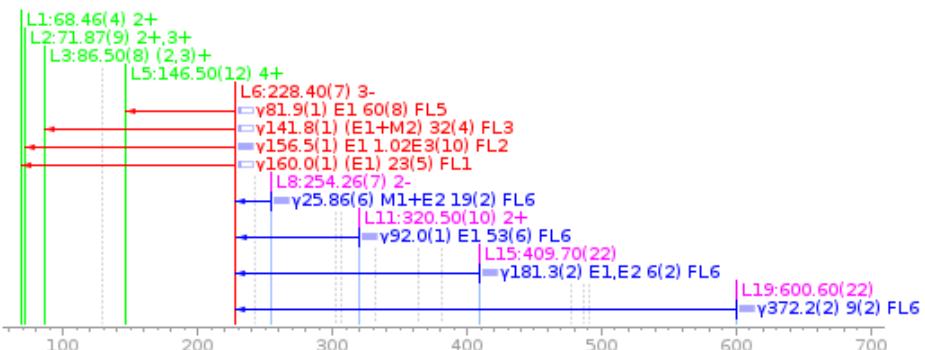
NUCID& G [...E....]DE[...RI...]DR[...M....][...MR...][.CC...]DC[...TI...]DTFC Q  
 184AU G 74.5 2 7 4[M1,E2] 11 8 @  
 184AUS G LC=8 6\$MC=2.1 15\$NC+=0.6 5  
 184AUS G NC=0.5 4\$OC=0.08 6\$PC=0.0010 8  
 184AU cG RI from |g|g coin; I|g=40 {I4} for doublet (2005Sa40).  
 184AU cG M |a(L1)exp=2.4 {I4}, M1:M2:M3=1.00:0.21:0.09 (2005Sa40) for  
 184AU2cG doublet.

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #6/20 Level "L5:146.50(12) 4+" Line:129 Child:2  
 Energy=146.50( $\pm .12$ )keV Spin and parity: J $\pi$ =4+  
 #Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #6/20 Level [ L ] "L5:146.50(12) 4+" nLines=1 nChild=2  
 #Record 1/2 Gamma "74.5(2) [M1,E2] 7(4)" Line:130[6]  
 E=74.5( $\pm .2$ )keV  
 Init.Level:L5: 146.50(12) 4+ Final.Level:L2: 71.87(9) 2+,3+ [E5-]



## #L6/20 L6:228.40(7) 3-

Level in/out y-s #L6/20 Plot#7



- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
 184AU L 228.40 7 3- 69 NS 6  
 184AU cL T from 157|g-237|g(t) (1994Ib01). Other T{-1/2}:  
 184AU2cL 67 ns {I8} (H. Haas (1978), private communication to authors of  
 184AU3cL 1994Ib01); 36 ns {I6} (1978Ne10).

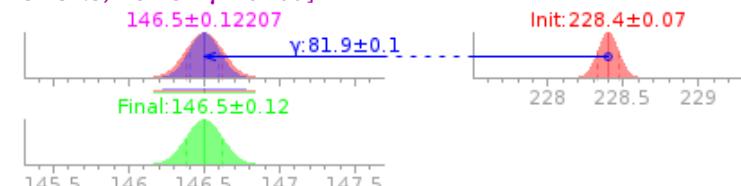
#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 7/20 Level "L6:228.40(7) 3-" Line:142[4] Child:4  
 Energy=228.40( $\pm .07$ )keV Spin and parity:J<sub>P</sub>=3-  
 T<sub>1/2</sub>=69( $\pm 6$ )·10<sup>-9</sup>sec

#T: from 157γ-237γ(t) (1994Ib01). Other T<sub>1/2</sub>: 67 ns {I8} (H. Haas (1978),  
 private communication to authors of 1994Ib01); 36 ns {I6} (1978Ne10).

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 81.9 1 60 8E1 0.670  
 184AUS G KC=0.529 8\$LC=0.1089 16\$MC=0.0254 4\$NC+=0.00731 11  
 184AUS G NC=0.00621 9\$OC=0.001054 16\$PC=4.37E-5 7  
 184AU cG M (|a(L1)exp+|a(L2)exp)|<0.3 (2005Sa40).

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #7/20 Level [ L ] "L6:228.40(7) 3-" nLines=4 nChild=4  
 #Record 1/4 Gamma "81.9(1) E1 60(8)" Line:146[4]

E=81.9( $\pm .1$ )keV  
 Init.Level:L6: 228.40(7) 3- Final.Level:L5: 146.50(12) 4+ [E6-E5=81.9; E6-E5-Ey =0 $\pm 0\sigma$ ]  
 146.5 $\pm 0.12207$



.....help1:[ 228.4,0.07,81.9,0.1,146.5,0.12 ]  
 Relative photon intensity:RI=60(8)  
 Multipolarity of transaction:M=E1  
 Total conversion coeff.:CC=0.670  
 \$KC=0.529 8 //Theoretical K- conversion coefficient  
 \$LC=0.1089 16 //Theoretical L-shell conversion coefficient  
 \$MC=0.0254 4 //Conversion coefficient for M shell; calculated  
 \$NC+=0.00731 11 //Summed conversion coefficients of N-, O-, P-,  
 Q- and R-shells  
 \$NC=0.00621 9 //cc for N shell  
 \$OC=0.001054 16 //cc for O shell  
 \$PC=4.37E-5 7 //cc for P shell

```

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][.CC..]DC[...TI...]DTFC Q
184AU G 141.8 1 32 4(E1+M2) 0.39 2.42
184AUS G KC=1.725 25$LC=0.526 8$MC=0.1314 19$NC+=0.0394 6
184AUS G NC=0.0331 5$OC=0.00595 9$PC=0.000346 5
184AU cG M |a(K)exp=1.8 {I5}, (|a(L1)exp+|a(L2)exp)=0.45 {I9},
184AU2cG |a(L3)exp=0.09 {I4} (2005Sa40). M1+E2 (|d=0.59) also possible, but
184AUxG |D|p=yes from level scheme.
184AU cG E|g=141.6 {I3}, I|g=19 {I3} (1978Ne10).

```

#M: ( $\alpha(L1)\exp + \alpha(L2)\exp \leq 0.3$  (2005Sa40)).

#Nuclide: 184AU

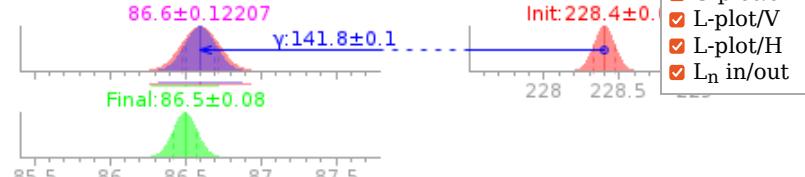
#Dataset: 184HG EC DECAY

#Record #7/20 Level [ L ] "L6:228.40(7) 3-" nLines=4 nChild=4

#Record 2/4 Gamma "141.8(1) (E1+M2) 32(4)" Line:150[7]

E=141.8( $\pm 0.1$ )keV

Init.Level:L6:228.40(7) 3- Final.Level:L3:86.50(8) (2,3)+ [E6]

E3=141.9; E6-E3-Ey = 0.1  $\in 0.5\sigma$ 

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

.....help1:[ 228.4,0.07,141.8,0.1,86.5,0.08 ]

Relative photon intensity:RI=32(4)

Multipolarity of transaction:M=(E1+M2)

Mixing Ratio:MR=0.39

Total conversion coeff.:CC=2.42

\$KC=1.725 25 //Theoretical K- conversion coefficient

\$LC=0.526 8 //Theoretical L-shell conversion coefficient

\$MC=0.1314 19 //Conversion coefficient for M shell; calculated

\$NC+=0.0394 6 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.0331 5 //cc for N shell

\$OC=0.00595 9 //cc for O shell

\$PC=0.000346 5 //cc for P shell

#M:  $\alpha(K)\exp=1.8$  {I5},  $(\alpha(L1)\exp+\alpha(L2)\exp)=0.45$  {I9},  $\alpha(L3)\exp=0.09$  {I4}(2005Sa40). M1+E2 ( $\delta=0.59$ ) also possible, but  $\Delta\pi=\text{yes}$  from level scheme.

Ey=141.6 {I3}, Ig=19 {I3} (1978Ne10).

```

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][.CC..]DC[...TI...]DTFC Q
184AU G 156.5 1 1.02E3 10 E1 0.1335
184AUS G KC=0.1087 16$LC=0.0191 3$MC=0.00442 7$NC+=0.001288 19
184AUS G NC=0.001088 16$OC=0.000190 3$PC=9.53E-6 14
184AU cG M |a(K)exp=0.10 {I2}, (|a(L1)exp+|a(L2)exp)=0.012 {I4}
184AU2cG (2005Sa40); |a(K)exp|=0.10 (1970FIZZ).
184AU cG E|g=156.2 {I2}, I|g=910 {I90} in 1978Ne10.

```

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record #7/20 Level [ L ] "L6:228.40(7) 3-" nLines=4 nChild=4

#Record 3/4 Gamma "156.5(1) E1 1.02E3(10)" Line:157[6]

E=156.5( $\pm 0.1$ )keV

Init.Level:L6:228.40(7) 3- Final.Level:L2:71.87(9) 2+,3+ [E6]

E2=156.53; E6-E2-Ey = 0.03  $\in 0.2\sigma$ 

.....help1:[ 228.4,0.07,156.5,0.1,71.87,0.09 ]

Relative photon intensity:RI=1.02E3(10)

Multipolarity of transaction:M=E1

Total conversion coeff.:CC=0.1335

\$KC=0.1087 16 //Theoretical K- conversion coefficient

\$LC=0.0191 3 //Theoretical L-shell conversion coefficient

```

$MC=0.00442 7 //Conversion coefficient for M shell; calculated
$NC+=0.001288 19 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells
$NC=0.001088 16 //cc for N shell
$OC=0.000190 3 //cc for O shell
$PC=9.53E-6 14 //cc for P shell
#M:  $\alpha(K)exp=0.10$  {I2},  $(\alpha(L1)exp+\alpha(L2)exp)=0.012$  {I4} (2005Sa40);
 $\alpha(K)exp \approx 0.10$  (1970FIZZ).

E $\gamma$ =156.2 {I2}, I $\gamma$ =910 {I90} in 1978Ne10.

NUCID& G [...E....]DE[...RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 160.0 1 23 5(E1) 0.1262
184AUS G KC=0.1028 15$LC=0.0180 3$MC=0.00417 6$NC+=0.001215 18
184AUS G NC=0.001026 15$OC=0.000180 3$PC=9.04E-6 13
184AU cG M |a(K)exp=0.3 {I2} (2005Sa40).
184AU cG E|g=159.2 {I4}, I|g=10 {I3} (1978Ne10).

#Nuclide: 184AU
#Dataset: 184HG EC DECAY
#Record #7/20 Level [ L ] "L6:228.40(7) 3-" nLines=4 nChild=4
#Record 4/4 Gamma "160.0(1) (E1) 23(5)" Line:163[5]
E=160.0(±.1)keV
Init.Level:L6:228.40(7) 3- Final.Level:L1:68.46(4) 2+
[E6-E1=159.94; E6-E1-Ey =-0.06±0.5σ]
68.4±0.12207
y:160±0.1
Init: 228.4±0.07
Final: 68.46±0.04
.....help1:[ 228.4,0.07,160.0,0.1,68.46,0.04 ]
Relative photon intensity:RI=23(5)
Multipolarity of transaction:M=(E1)
Total conversion coeff.:CC=0.1262
$KC=0.1028 15 //Theoretical K- conversion coefficient
$LC=0.0180 3 //Theoretical L-shell conversion coefficient
$MC=0.00417 6 //Conversion coefficient for M shell; calculated
$NC+=0.001215 18 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells
$NC=0.001026 15 //cc for N shell
$OC=0.000180 3 //cc for O shell
$PC=9.04E-6 13 //cc for P shell
#M:  $\alpha(K)exp=0.3$  {I2} (2005Sa40).

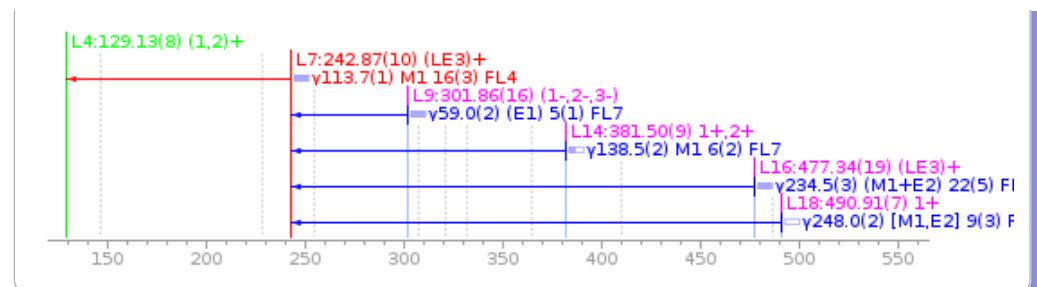
E $\gamma$ =159.2 {I4}, I $\gamma$ =10 {I3} (1978Ne10).

```

Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 Ln in/out

#L7/20 L7:242.87(10) (LE3)+

Level in/out y-s #L7/20 Plot#8



```
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L...][...S....]DSFMSQ
184AU L 242.87 10 (LE3)+
```

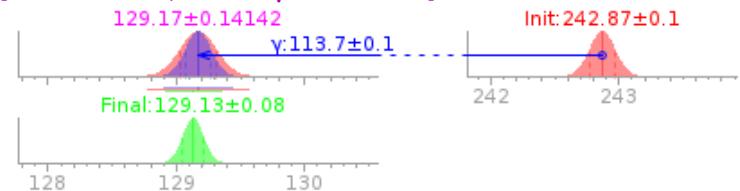
```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 113.7 1 16 3M1 5.02
184AUS G KC=4.12 6$LC=0.692 10$MC=0.1607 23$NC+=0.0479 7
184AUS G NC=0.0400 6$OC=0.00736 11$PC=0.000497 7
184AU cG M |a(K)exp=4.6 {I6}, |a(L1)exp=1.0 {I4} (2005Sa40).
```

Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 Ln in/out

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 8/20 Level "L7:242.87(10) (LE3)+" Line:168 Child:1  
Energy=242.87( $\pm .10$ )keV Spin and parity:J $\pi$ =(LE3)+

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #8/20 Level [ L ] "L7:242.87(10) (LE3)+" nLines=1 nChild=1  
#Record 1/1 Gamma "113.7(1) M1 16(3)" Line:169[4]

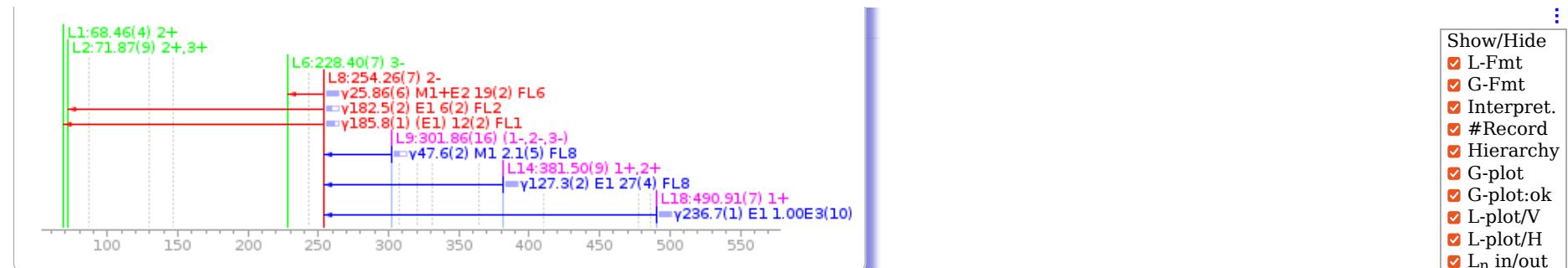
E=113.7( $\pm .1$ )keV  
Init.Level:L7:242.87(10) (LE3)+ Final.Level:L4:129.13(8) (1,2)+  
[E7-E4=113.74; E7-E4-E $\gamma$ =0.04 $\in 0.2\sigma$ ]



.....help1:[ 242.87,0.1,113.7,0.1,129.13,0.08 ]  
Relative photon intensity:RI=16(3)  
Multipolarity of transaction:M=M1  
Total conversion coeff.:CC=5.02  
\$KC=4.12 6 //Theoretical K- conversion coefficient  
\$LC=0.692 10 //Theoretical L-shell conversion coefficient  
\$MC=0.1607 23 //Conversion coefficient for M shell; calculated  
\$NC+=0.0479 7 //Summed conversion coefficients of N-, O-, P-, Q-  
and R-shells  
\$NC=0.0400 6 //cc for N shell  
\$OC=0.00736 11 //cc for O shell  
\$PC=0.000497 7 //cc for P shell  
#M:  $\alpha(K)exp=4.6 \{I6\}$ ,  $\alpha(L1)exp=1.0 \{I4\}$  (2005Sa40).

## #L8/20 L8:254.26(7) 2-

Level in/out  $\gamma$ -s #L8/20 Plot#9



NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 254.26 7 2-

184AU cL The intensity imbalance of 12% {I7} at this level may arise 184AU2cL from an incomplete decay scheme and/or the acute dependence of 184AU3cL I(|g+ce) from this level on |d(26|g). %|e+|b{++}<0.25 is expected for 184AU4cL the possible 1U branch to this level, based on log| {If{+1u}t}>8.5.

184AU DL 1.1 6 11 6 6.7 3 12 7 1U  
184AU2DL EAV=1194 11\$CK=0.7343 20\$CL=0.1325 5\$CM+=0.04269 14

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record 9/20 Level "L8:254.26(7) 2-" Line:173[7] Child:3

Energy=254.26( $\pm .07$ )keV Spin and parity:J<sub>P</sub>=2-

The intensity imbalance of 12% {I7} at this level may arise from an incomplete decay scheme and/or the acute dependence of I(|g+ce) from this level on |d(26|g). %|e+|b{++}<0.25 is expected for the possible 1U branch to this level, based on log| {If{+1u}t}>8.5.

1.1 6 11 6 6.7 3 12 7 1UEAV=1194 11\$CK=0.7343 20\$CL=0.1325  
5\$CM+=0.04269 14

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI....]DTFC Q  
184AU G 25.86 6 19 2M1+E2 0.041 +11-1574 4

184AUS G LC=57 3\$MC=13.4 7\$NC+=3.96 19

184AUS G NC=3.32 16\$OC=0.60 3\$PC=0.0380 6

184AU cG M |a(L1)exp=52 {I10}, |a(L2)exp=6.3 {I10}, L2:L3=1.00:0.36

184AU2cG {I10}, (M1+M2):M3=1.00:0.04 {I1} (2005Sa40).

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record #9/20 Level [ L ] "L8:254.26(7) 2-" nLines=7 nChild=3

#Record 1/3 Gamma "25.86(6) M1+E2 19(2)" Line:180[5]

E=25.86( $\pm .06$ )keV

Init.Level:L8:254.26(7) 2- Final.Level:L6:228.40(7) 3- [E8-E6=25.86; E8-E6-Ey = 0E0.1σ]



.....help1:[ 254.26,0.07,25.86,0.06,228.4,0.07 ]

Relative photon intensity:RI=19(2)

Multipolarity of transaction:M=M1+E2

Mixing Ratio:MR=0.041(+.011-.015)

Total conversion coeff.:CC=74( $\pm 4$ )

\$LC=57 3 //Theoretical L-shell conversion coefficient

\$MC=13.4 7 //Conversion coefficient for M shell; calculated

\$NC+=3.96 19 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=3.32 16 //cc for N shell

\$OC=0.60 3 //cc for O shell

\$PC=0.0380 6 //cc for P shell

#M: α(L1)exp=52 {I10}, α(L2)exp=6.3 {I10}, L2:L3=1.00:0.36 {I10}, (M1+M2):M3=1.00:0.04 {I1} (2005Sa40).

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI....]DTFC Q

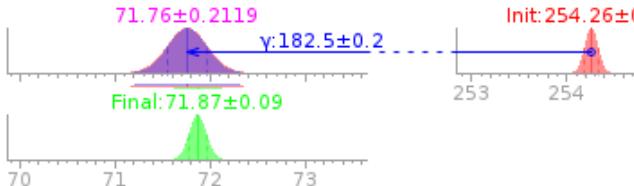
#Nuclide: 184AU

```

184AU G 182.5 2 6 2E1 0.0906
184AUS G KC=0.0741 11$LC=0.01273 19$MC=0.00295 5$NC+=0.000861 13
184AUS G NC=0.000726 11$OC=0.0001279 19$PC=6.63E-6 10
184AU cG M |a(K)exp<0.15 (2005Sa40).

```

#Dataset: 184HG EC DECAY  
#Record #9/20 Level [ L ] "L8:254.26(7) 2-" nLines=7 nChild=3  
#Record 2/3 Gamma "182.5(2) E1 6(2)" Line:185[4]  
E=182.5(±.2)keV  
Init.Level:L8:254.26(7) 2- Final.Level:L2:71.87(9) 2+,3+ [E:  
E2=182.39; E8-E2-Ey =-0.11±0.5σ]



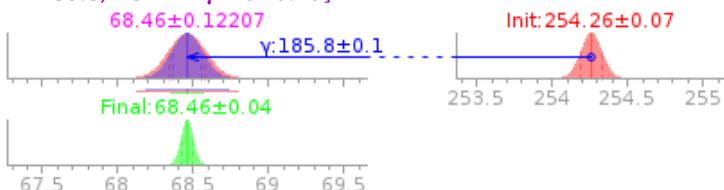
- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

```

NUCID& G [...E....]DE[...RI...]DR[...M....][..MR..][DMR.][.CC...]DC[...TI...]DTFC Q
184AU G 185.8 1 12 2(E1) 0.0866
184AUS G KC=0.0709 10$LC=0.01215 17$MC=0.00282 4$NC+=0.000822 12
184AUS G NC=0.000693 10$OC=0.0001221 18$PC=6.36E-6 9
184AU cG M |a(K)exp<0.17 (2005Sa40).

```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #9/20 Level [ L ] "L8:254.26(7) 2-" nLines=7 nChild=3  
#Record 3/3 Gamma "185.8(1) (E1) 12(2)" Line:189[4]  
E=185.8(±.1)keV  
Init.Level:L8:254.26(7) 2- Final.Level:L1:68.46(4) 2+ [E8-  
E1=185.8; E8-E1-Ey =0±0.1σ]

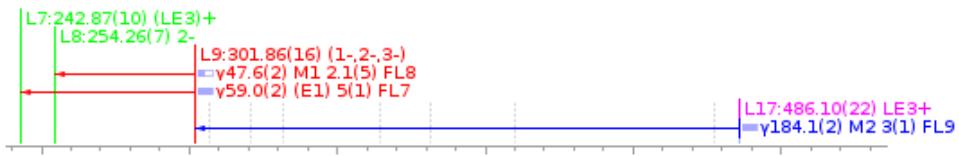


.....help1:[ 254.26,0.07,185.8,0.1,68.46,0.04 ]  
Relative photon intensity:RI=12(2)  
Multipolarity of transaction:M=(E1)  
Total conversion coeff.:CC=0.0866  
\$KC=0.0709 10 //Theoretical K- conversion coefficient  
\$LC=0.01215 17 //Theoretical L-shell conversion coefficient  
\$MC=0.00282 4 //Conversion coefficient for M shell; calculated  
\$NC+=0.000822 12 //Summed conversion coefficients of N-, O-, P-,  
Q- and R-shells  
\$NC=0.000693 10 //cc for N shell  
\$OC=0.0001221 18 //cc for O shell  
\$PC=6.36E-6 9 //cc for P shell

#M:  $\alpha(K) \exp < 0.17$  (2005Sa40).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

## #L9/20 L9:301.86(16) (1-,2-,3-)

Level in/out  $\gamma$ -s #L9/20 Plot#10

```
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 301.86 16 (1-,2-,3-)
```

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 47.6 2 2.1 5M1 11.39 22
184AUS G LC=8.75 17$MC=2.03 4$NC+=0.605 12
184AUS G NC=0.506 10$OC=0.0930 18$PC=0.00628 12
184AU cG M |a(L1)exp=8 {I2}, |a(M1)exp=1.9 {I10} (2005Sa40).
```

#Nuclide: 184AU

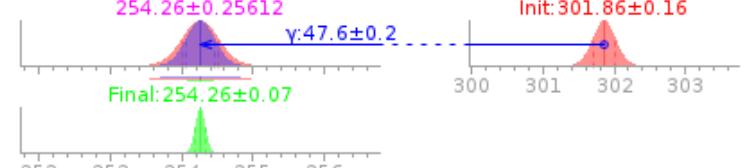
#Dataset: 184HG EC DECAY

#Record 10/20 Level "L9:301.86(16) (1-,2-,3-)" Line:193 Child:2 Energy=301.86( $\pm 0.16$ )keV Spin and parity:J $\pi$ =(1-,2-,3-) Q=? (questionable)

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record #10/20 Level [ L ] "L9:301.86(16) (1-,2-,3-)" nLines=1 nChild=2 #Record 1/2 Gamma "47.6(2) M1 2.1(5)" Line:194[4]

E=47.6( $\pm 0.2$ )keVInit.Level:L9:301.86(16) (1-,2-,3-) Final.Level:L8:254.26(7) 2- [E9-E8=47.6; E9-E8-Ey = 0  $\in 0.1\sigma$ ]

.....help1:[ 301.86,0.16,47.6,0.2,254.26,0.07 ]

Relative photon intensity:RI= 2.1(5)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC= 11.39( $\pm 0.22$ )

\$LC=8.75 17 //Theoretical L-shell conversion coefficient

\$MC=2.03 4 //Conversion coefficient for M shell; calculated

\$NC+=0.605 12 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.506 10 //cc for N shell

\$OC=0.0930 18 //cc for O shell

\$PC=0.00628 12 //cc for P shell

#M:  $\alpha(L1)exp=8 \{I2\}$ ,  $\alpha(M1)exp=1.9 \{I10\}$  (2005Sa40).

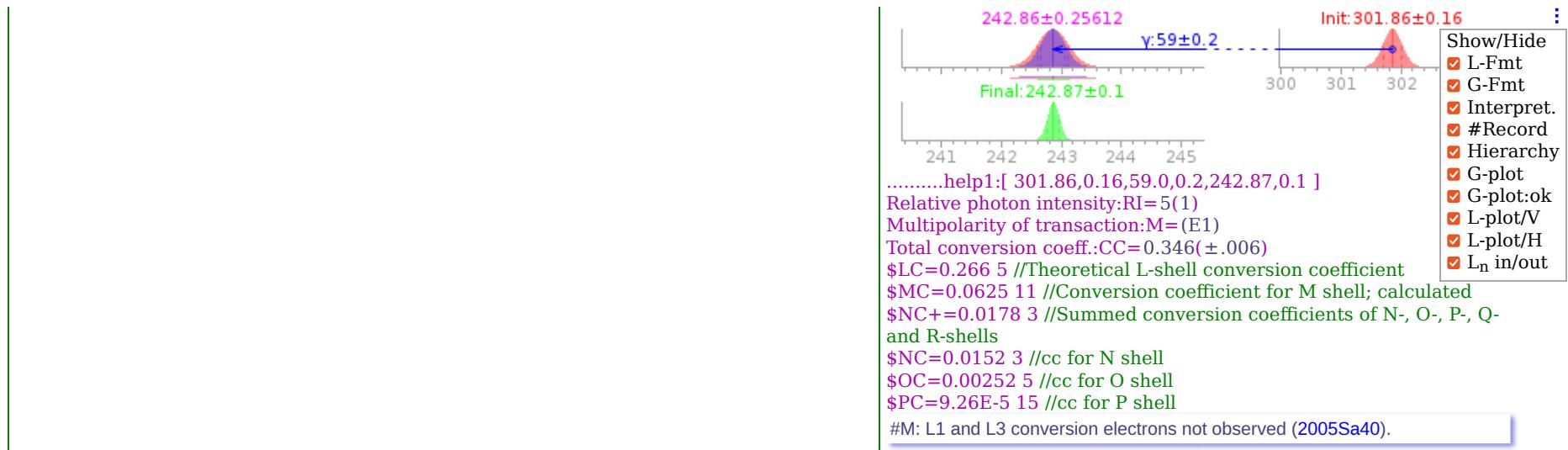
#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record #10/20 Level [ L ] "L9:301.86(16) (1-,2-,3-)" nLines=1 nChild=2 #Record 2/2 Gamma "59.0(2) (E1) 5(1)" Line:198[4]

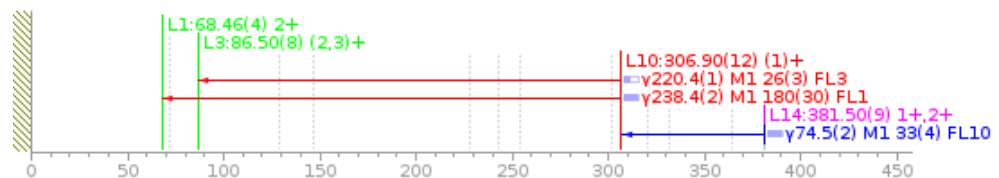
E=59.0( $\pm 0.2$ )keVInit.Level:L9:301.86(16) (1-,2-,3-) Final.Level:L7:242.87(10) (LE3)+ [E9-E7=58.99; E9-E7-Ey = -0.01  $\in 0.1\sigma$ ]

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 59.0 2 5 1(E1) 0.346 6
184AUS G LC=0.266 5$MC=0.0625 11$NC+=0.0178 3
184AUS G NC=0.0152 3$OC=0.00252 5$PC=9.26E-5 15
184AU cG M L1 and L3 conversion electrons not observed (2005Sa40).
```



## #L10/20 L10:306.90(12) (1)+

Level in/out  $\gamma$ -s #L10/20 Plot#11



```
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 306.90 12 (1)+
```

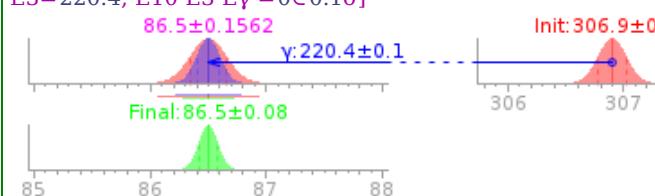
```
NUCID& E ....E....DE...IB..DIB--IE---DIE.LOGFT---DFT-----TI---DTIFUNQ
184AU E 1.5 4 5.4 15 5.32 12 6.9 19
184AUS E EAV=1191 11$CK=0.638 4$CL=0.1109 7$CM+=0.03550 22
```

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 220.4 1 26 3M1 0.775
184AUS G KC=0.638 9$LC=0.1059 15$MC=0.0245 4$NC+=0.00732 11
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 11/20 Level "L10:306.90(12) (1)+" Line:202 Child:3  
Energy=306.90(±.12)keV Spin and parity:Jπ=(1)+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #11/20 Level [ L ] "L10:306.90(12) (1)+" nLines=1 nChild=3  
#Record 1/3 EC Line:203[2]  
Intensity of  $\beta^+$ -decay branch: IB=1.5(±.4)  
Intensity of electron capture branch:IE=5.4(±1.5)  
The log ft for ( $\epsilon + \beta^+$ ) transition :LOGFT=5.32(±.12)  
Total ( $\epsilon + \beta^+$ ) decay intensity:TI=6.9(±1.9)  
\$EAV=1191 11 //Average energy of the  $\beta^+$  spectrum  
\$CK=0.638 4 //Calculated fraction of decay by electron capture from the K shell  
\$CL=0.1109 7 //Calculated fraction of decay by electron capture from the L shell  
\$CM+=0.03550 22  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #11/20 Level [ L ] "L10:306.90(12) (1)+" nLines=1 nChild=3

```
184AUS G NC=0.00612 9$OC=0.001125 16$PC=7.61E-5 11
184AU cG M |a(K)exp=0.54 {I12}, ((|a(L1)exp+|a(L2)exp)=0.11 {I3}
184AUXcG (2005Sa40).
```

#Record 2/3 Gamma "220.4(1) M1 26(3)" Line:205[5]  
 $E=220.4(\pm .1)\text{keV}$   
 Init.Level:L10:306.90(12) (1)+ Final.Level:L3:86.50(8) (2,3)  
 $E3=220.4; E10-E3-Ey = 0 \pm 0.1\sigma$



- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

.....help1:[ 306.9,0.12,220.4,0.1,86.5,0.08 ]

Relative photon intensity:RI=26(3)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.775

\$KC=0.638 9 //Theoretical K- conversion coefficient

\$LC=0.1059 15 //Theoretical L-shell conversion coefficient

\$MC=0.0245 4 //Conversion coefficient for M shell; calculated

\$NC+=0.00732 11 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00612 9 //cc for N shell

\$OC=0.001125 16 //cc for O shell

\$PC=7.61E-5 11 //cc for P shell

#M:  $\alpha(K)\exp=0.54 \{I12\}, (\alpha(L1)\exp+\alpha(L2)\exp)=0.11 \{I3\}$  (2005Sa40).

```
NUCID& G [...E....]DE[...RI...]DR[...M....][...MR...][DMR.][.CC...]DC[...TI...]DTFC Q
184AU G 238.4 2 180 30M1 0.624
184AUS G KC=0.513 8$LC=0.0851 12$MC=0.0197 3$NC+=0.00588 9
184AUS G NC=0.00491 7$OC=0.000904 13$PC=6.11E-5 9
184AU cG M |a(K)exp=0.46 {I11}, |a(L)exp=0.08 {I12}, |a(M)exp=0.02 {I11}
184AUXcG (2005Sa40).
```

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #11/20 Level [ L ] "L10:306.90(12) (1)+ nLines=1 nChild=3  
 #Record 3/3 Gamma "238.4(2) M1 180(30)" Line:210[5]

$E=238.4(\pm .2)\text{keV}$

Init.Level:L10:306.90(12) (1)+ Final.Level:L1:68.46(4) 2+ [E10-E1=238.44; E10-E1-Ey = 0.04 \pm 0.2\sigma]



.....help1:[ 306.9,0.12,238.4,0.2,68.46,0.04 ]

Relative photon intensity:RI=180(30)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.624

\$KC=0.513 8 //Theoretical K- conversion coefficient

\$LC=0.0851 12 //Theoretical L-shell conversion coefficient

\$MC=0.0197 3 //Conversion coefficient for M shell; calculated

\$NC+=0.00588 9 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00491 7 //cc for N shell

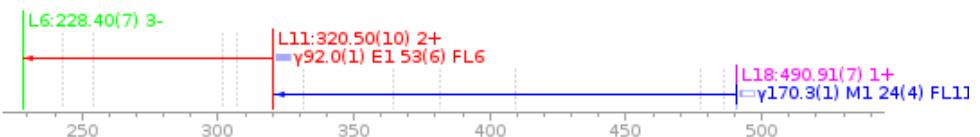
\$OC=0.000904 13 //cc for O shell

\$PC=6.11E-5 9 //cc for P shell

#M:  $\alpha(K)\exp=0.46 \{I11\}, \alpha(L)\exp=0.08 \{I12\}, \alpha(M)\exp=0.02 \{I11\}$  (2005Sa40).

## #L11/20 L11:320.50(10) 2+

Level in/out γ-s #L11/20 Plot#12



NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 320.50 10 2+ 2 NS LT  
184AU cL T from |g delayed coin (1978Ne10).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record 12/20 Level "L11:320.50(10) 2+" Line:215[2] Child:1

Energy=320.50(±.10)keV Spin and parity:Jπ=2+ T½&lt;2·10⁻⁹sec

#T: from γ delayed coin (1978Ne10).

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 92.0 1 53 6E1 0.511  
184AUS G KC=0.407 6\$LC=0.0794 12\$MC=0.0185 3\$NC+=0.00533 8  
184AUS G NC=0.00453 7\$OC=0.000774 11\$PC=3.33E-5 5  
184AU cG E|g=91.5 {I5}, I|g=47 {I8} (1978Ne10).  
184AU cG M |a(L1)exp|<0.1, |a(L3)exp|<0.05 (2005Sa40).

#Nuclide: 184AU

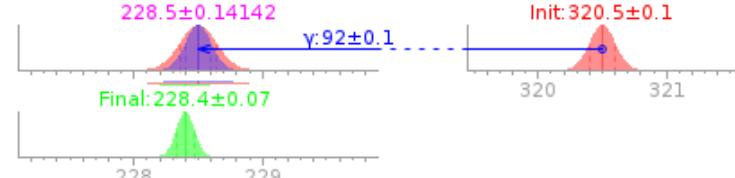
#Dataset: 184HG EC DECAY

#Record #12/20 Level [ L ] "L11:320.50(10) 2+" nLines=2 nChild=1

#Record 1/1 Gamma "92.0(1) E1 53(6)" Line:217[5]

E=92.0(±.1)keV

Init.Level:L11:320.50(10) 2+ Final.Level:L6:228.40(7) 3- [E11-E6=92.1; E11-E6-Ey = 0.1 ∈ 0.5σ]



.....help1:[ 320.5,0.1,92.0,0.1,228.4,0.07 ]

Relative photon intensity:RI=53(6)

Multipolarity of transaction:M=E1

Total conversion coeff.:CC=0.511

\$KC=0.407 6 //Theoretical K- conversion coefficient

\$LC=0.0794 12 //Theoretical L-shell conversion coefficient

\$MC=0.0185 3 //Conversion coefficient for M shell; calculated

\$NC+=0.00533 8 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00453 7 //cc for N shell

\$OC=0.000774 11 //cc for O shell

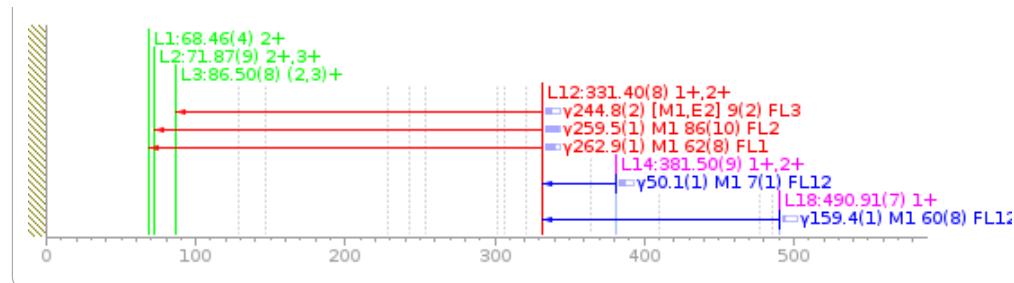
\$PC=3.33E-5 5 //cc for P shell

Ey=91.5 {I5}, Iy=47 {I8} (1978Ne10).

#M: α(L1)exp≤0.1, α(L3)exp≤0.05 (2005Sa40).

## #L12/20 L12:331.40(8) 1+,2+

Level in/out γ-s #L12/20 Plot#13



- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

```
NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 331.40 8 1+,2+
```

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 244.8 2 9 2[M1,E2] 0.39 20
184AUS G KC=0.29 19$LC=0.073 6$MC=0.0177 7$NC+=0.0052 3
184AUS G NC=0.00439 19$OC=0.00077 8$PC=3.4E-5 23
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 13/20 Level "L12:331.40(8) 1+,2+" Line:222 Child:3  
Energy=331.40( $\pm 0.08$ )keV Spin and parity:J $\pi$ =1+,2+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #13/20 Level [ L ] "L12:331.40(8) 1+,2+" nLines=1 nChild=3  
#Record 1/3 Gamma "244.8(2) [M1,E2] 9(2)" Line:223[3]  
E=244.8( $\pm .2$ )keV  
Init.Level:L12:331.40(8) 1+,2+ Final.Level:L3:86.50(8) (2,3)+ [E12-E3=244.9; E12-E3-Ey = 0.1  $\in$  0.5 $\sigma$ ]

.....help1:[ 331.4,0.08,244.8,0.2,86.5,0.08 ]  
Relative photon intensity:RI=9(2)  
Multipolarity of transaction:M=[M1,E2]  
Total conversion coeff.:CC=0.39( $\pm .20$ )  
\$KC=0.29 19 //Theoretical K- conversion coefficient  
\$LC=0.073 6 //Theoretical L-shell conversion coefficient  
\$MC=0.0177 7 //Conversion coefficient for M shell; calculated  
\$NC+=0.0052 3 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=0.00439 19 //cc for N shell  
\$OC=0.00077 8 //cc for O shell  
\$PC=3.4E-5 23 //cc for P shell

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 259.5 1 86 10M1 0.494
184AUS G KC=0.406 6$LC=0.0672 10$MC=0.01558 22$NC+=0.00465 7
184AUS G NC=0.00388 6$OC=0.000714 10$PC=4.83E-5 7
184AU cG M |a(K)exp=0.39 {I7}, (|a(L1)exp+|a(L2)exp)=0.06 {I7}
184AUcG (2005Sa40); |a(K)exp|=0.25 (1970Fizz).
184AU cG E|g=259.0 {I1}, I|g=84 {I10} (1978Ne10).
```

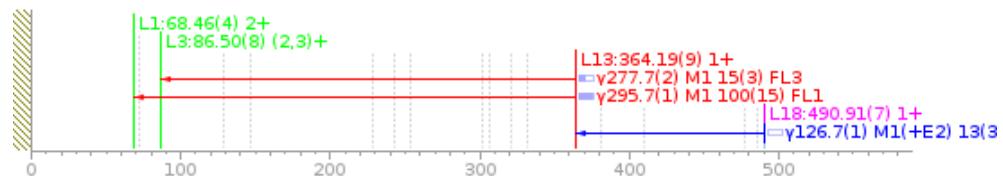
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #13/20 Level [ L ] "L12:331.40(8) 1+,2+" nLines=1 nChild=3  
#Record 2/3 Gamma "259.5(1) M1 86(10)" Line:226[6]  
E=259.5( $\pm .1$ )keV  
Init.Level:L12:331.40(8) 1+,2+ Final.Level:L2:71.87(9) 2+,3+ [E12-E2=259.53; E12-E2-Ey = 0.03  $\in$  0.2 $\sigma$ ]



E $\gamma$ =262.3 {1}, I $\gamma$ =67 {18} (1978Ne10).

- Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 L<sub>n</sub> in/out

## #L13/20 L13:364.19(9) 1+

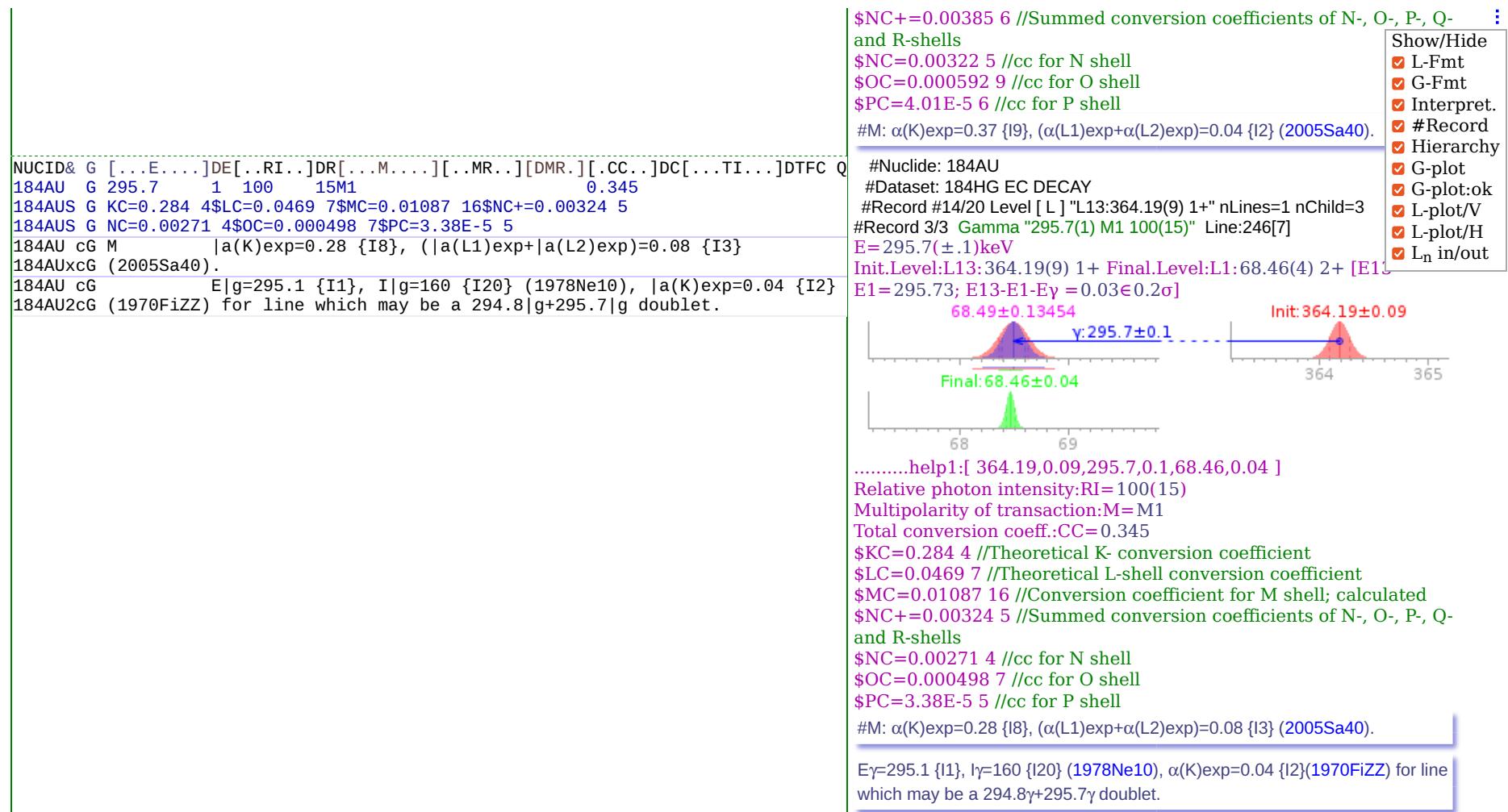
Level in/out  $\gamma$ -s #L13/20 Plot#14

```
NUCID& L [ ... E.... ] DE[ ..... J..... ] [ ... T.... ] [ .DT. ] [ ... L.... ] [ ... S.... ] DSFMSQ
184AU L 364.19      9 1+
```

```
NUCID& E .... E.....DE...IB..DIB--IE---DIE.LOGFT...DFT-----TI-----DTIFUNQ
184AU E 0.74 21 2.9 8 5.58 12 3.6 10
184AUS E EAV=1166 11$CK=0.647 4$CL=0.1125 7$CM+=0.03601 22
```

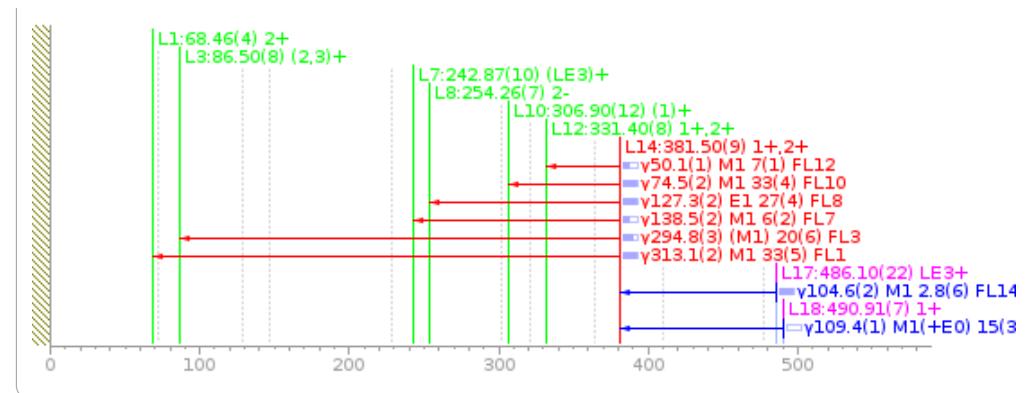
```
NUCID& G [ ... E.... ] DE[ ..RI.. ] DR[ ... M.... ] [ ..MR.. ] [ DMR. ] [ .CC.. ] DC[ ... TI.... ] DTFC Q
184AU G 277.7 2 15 3M1 0.410
184AUS G KC=0.337 5$LC=0.0558 8$MC=0.01292 19$NC+=0.00385 6
184AUS G NC=0.00322 5$OC=0.000592 9$PC=4.01E-5 6
184AU cG M |a(K)exp=0.37 {I9}, (|a(L1)exp+|a(L2)exp)=0.04 {I2}
184AUxcG (2005Sa40).
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 14/20 Level "L13:364.19(9) 1+" Line:238 Child:3  
Energy=364.19( $\pm$ .09)keV Spin and parity:J $\pi$ =1+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #14/20 Level [ L ] "L13:364.19(9) 1+" nLines=1 nChild=3  
#Record 1/3 EC Line:239[2]  
Intensity of  $\beta^+$ -decay branch: IB=0.74( $\pm$ .21)  
Intensity of electron capture branch:IE=2.9( $\pm$ .8)  
The log ft for ( $\epsilon$  +  $\beta^+$ ) transition :LOGFT=5.58( $\pm$ .12)  
Total ( $\epsilon$  +  $\beta^+$ ) decay intensity:TI=3.6( $\pm$ 1.0)  
\$EAV=1166 11 //Average energy of the  $\beta^+$  spectrum  
\$CK=0.647 4 //Calculated fraction of decay by electron capture from the K shell  
\$CL=0.1125 7 //Calculated fraction of decay by electron capture from the L shell  
\$CM+=0.03601 22  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #14/20 Level [ L ] "L13:364.19(9) 1+" nLines=1 nChild=3  
#Record 2/3 Gamma "277.7(2) M1 15(3)" Line:241[5]  
E=277.7( $\pm$ .2)keV  
Init.Level:L13: 364.19(9) 1+ Final.Level:L3: 86.50(8) (2,3)+ [E13-E3=277.69; E13-E3-Ey = -0.01  $\pm$  0.1 $\sigma$ ]  
  
.....help1:[ 364.19,0.09,277.7,0.2,86.5,0.08 ]  
Relative photon intensity:RI=15(3)  
Multipolarity of transaction:M=M1  
Total conversion coeff.:CC=0.410  
\$KC=0.337 5 //Theoretical K- conversion coefficient  
\$LC=0.0558 8 //Theoretical L-shell conversion coefficient  
\$MC=0.01292 19 //Conversion coefficient for M shell; calculated



## #L14/20 L14:381.50(9) 1+,2+

Level in/out  $\gamma$ -s #L14/20 Plot#15



- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- L<sub>n</sub> in/out

NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 381.50 9 1+,2+

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 50.1 1 7 1M1 9.80  
184AUS G LC=7.53 12\$MC=1.75 3\$NC+=0.521 8  
184AUS G NC=0.435 7\$OC=0.0800 13\$PC=0.00540 9  
184AU cG M |a(L1)exp=8.5 {I15}, |a(L2)exp=1.00:0.13 {I2}  
184AUxCG (2005Sa40).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 15/20 Level "L14:381.50(9) 1+,2+" Line:253 Child:6  
Energy=381.50( $\pm$ .09)keV Spin and parity:J $\pi$ =1+,2+

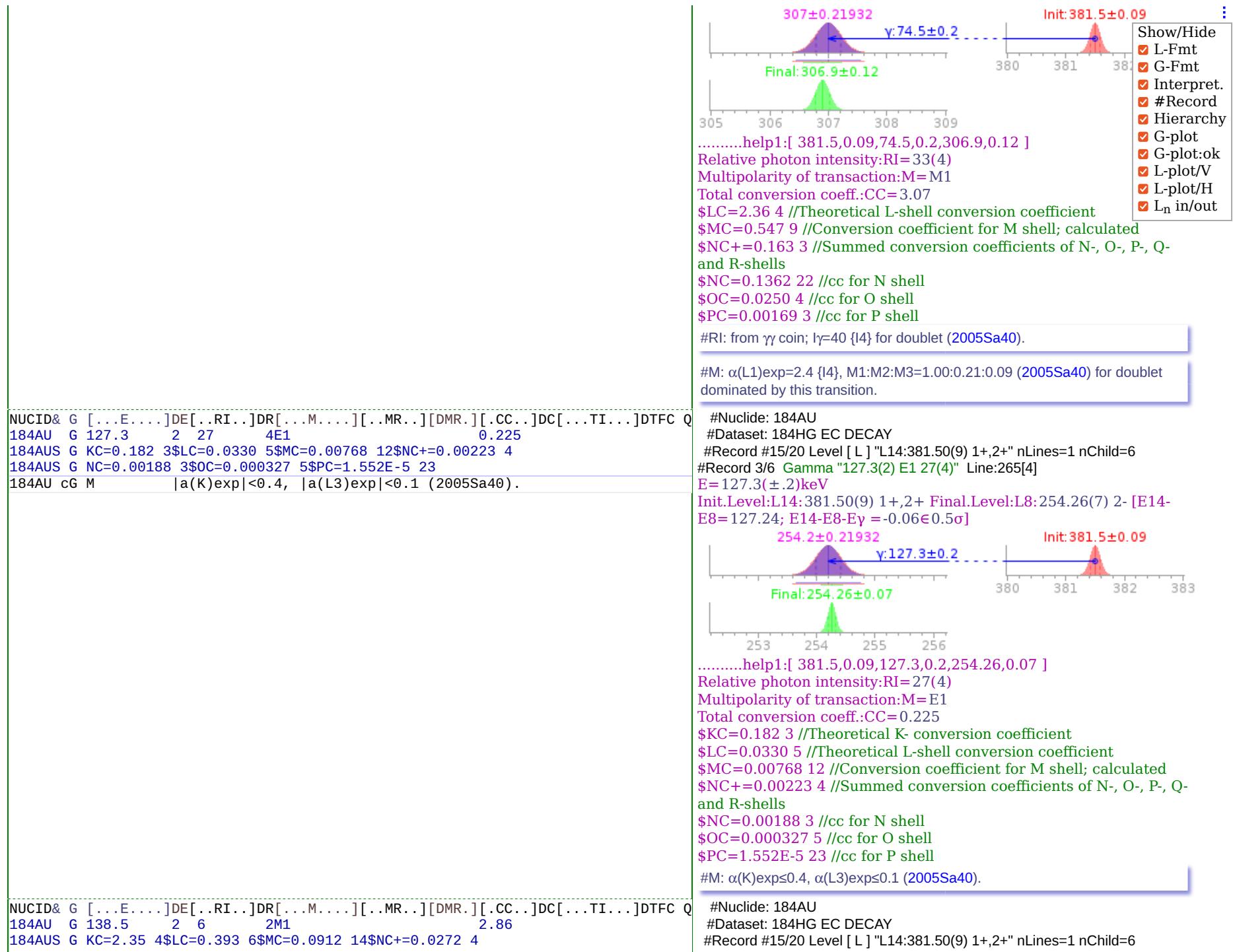
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #15/20 Level [ L ] "L14:381.50(9) 1+,2+" nLines=1 nChild=6  
#Record 1/6 Gamma "50.1(1) M1 7(1)" Line:254[5]  
E=50.1( $\pm$ .1)keV  
Init.Level:L14:381.50(9) 1+,2+ Final.Level:L12: 331.40(8) 1+,2+  
[E14-E12=50.1; E14-E12-Ey = 0 $\in$ 0 $\sigma$ ]



.....help1:[ 381.5,0.09,50.1,0.1,331.4,0.08 ]  
Relative photon intensity:RI=7(1)  
Multipolarity of transaction:M=M1  
Total conversion coeff.:CC=9.80  
\$LC=7.53 12 //Theoretical L-shell conversion coefficient  
\$MC=1.75 3 //Conversion coefficient for M shell; calculated  
\$NC+=0.521 8 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=0.435 7 //cc for N shell  
\$OC=0.0800 13 //cc for O shell  
\$PC=0.00540 9 //cc for P shell  
#M:  $\alpha(L1)exp=8.5$  {I15},  $\alpha(L1)exp:\alpha(L2)exp=1.00:0.13$  {I2} (2005Sa40).

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 74.5 2 33 4M1 3.07 @  
184AUS G LC=2.36 4\$MC=0.547 9\$NC+=0.163 3  
184AUS G NC=0.1362 22\$OC=0.0250 4\$PC=0.00169 3  
184AU cG RI from |g|g coin; I|g=40 {I4} for doublet (2005Sa40).  
184AU cG M |a(L1)exp=2.4 {I4}, M1:M2:M3=1.00:0.21:0.09 (2005Sa40) for  
184AU2cG doublet dominated by this transition.

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #15/20 Level [ L ] "L14:381.50(9) 1+,2+" nLines=1 nChild=6  
#Record 2/6 Gamma "74.5(2) M1 33(4)" Line:259[6]  
E=74.5( $\pm$ .2)keV  
Init.Level:L14:381.50(9) 1+,2+ Final.Level:L10: 306.90(12) (1)+  
[E14-E10=74.6; E14-E10-Ey = 0.1 $\in$ 0.5 $\sigma$ ]



184AUS G NC=0.0227 4\$OC=0.00418 7\$PC=0.000282 5  
 184AU cG M |a(K)exp=2.9 {I8} (2005Sa40).

#Record 4/6 Gamma "138.5(2) M1 6(2)" Line:269[4]

E=138.5( $\pm .2$ )keVInit.Level:L14:381.50(9) 1+,2+ Final.Level:L7:242.87(10) (I  
 [E14-E7=138.63; E14-E7-E $\gamma$ =0.13 $\in$ 0.5 $\sigma$ ])243 $\pm 0.21932$ y:138.5 $\pm 0.2$ Final:242.87 $\pm 0.1$ Init:381.5 $\pm 0.1$ 

380 381 382 383

241 242 243 244 245

.....help1:[ 381.5,0.09,138.5,0.2,242.87,0.1 ]

Relative photon intensity:RI=6(2)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=2.86

\$KC=2.35 4 //Theoretical K- conversion coefficient

\$LC=0.393 6 //Theoretical L-shell conversion coefficient

\$MC=0.0912 14 //Conversion coefficient for M shell; calculated

\$NC+=0.0272 4 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.0227 4 //cc for N shell

\$OC=0.00418 7 //cc for O shell

\$PC=0.000282 5 //cc for P shell

#M:  $\alpha(K)exp=2.9$  {I8} (2005Sa40).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

NUCID& G [...E....]DE[...RI...]DR[...M....][...MR...] [DMR.][.CC...]DC[...TI...]DTFC Q  
 184AU G 294.8 3 20 6(M1) 0.348  
 184AUS G KC=0.287 4\$LC=0.0473 7\$MC=0.01096 16\$NC+=0.00327 5  
 184AUS G NC=0.00273 4\$OC=0.000502 8\$PC=3.40E-5 5  
 184AU cG M |a(K)exp=0.30 {I15} (2005Sa40).  
 184AU cG See comment on 295.7|g.

#Nuclide: 184AU

#Dataset: 184HG EC DECAY

#Record #15/20 Level [ L ] "L14:381.50(9) 1+,2+" nLines=1 nChild=6

#Record 5/6 Gamma "294.8(3) (M1) 20(6)" Line:273[5]

E=294.8( $\pm .1$ )keV

Init.Level:L14:381.50(9) 1+,2+ Final.Level:L3:86.50(8) (2,3)+ [E14-

E3=295.0; E14-E3-E $\gamma$ =0.2 $\in$ 1 $\sigma$ ]86.7 $\pm 0.31321$ y:294.8 $\pm 0.3$ Final:86.5 $\pm 0.08$ Init:381.5 $\pm 0.09$ 

380 381 382 383

.....help1:[ 381.5,0.09,294.8,0.3,86.5,0.08 ]

Relative photon intensity:RI=20(6)

Multipolarity of transaction:M=(M1)

Total conversion coeff.:CC=0.348

\$KC=0.287 4 //Theoretical K- conversion coefficient

\$LC=0.0473 7 //Theoretical L-shell conversion coefficient

\$MC=0.01096 16 //Conversion coefficient for M shell; calculated

\$NC+=0.00327 5 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00273 4 //cc for N shell

\$OC=0.000502 8 //cc for O shell

\$PC=3.40E-5 5 //cc for P shell

#M:  $\alpha(K)exp=0.30$  {I15} (2005Sa40).

```

NUCID& G [...E....]DE[...RI..]DR[...M....][..MR..][.CC..]DC[...TI...]DTFC Q
184AU G 313.1 2 33 5M1 0.296
184AUS G KC=0.243 4$LC=0.0401 6$MC=0.00929 14$NC+=0.00277 4
184AUS G NC=0.00231 4$OC=0.000426 6$PC=2.89E-5 4
184AU CG M |a(K)exp=0.22 {I6}, (|a(L1)exp+|a(L2)exp)=0.05 {I2}
184AUXcG (2005Sa40).

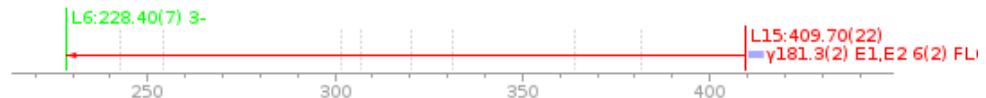
```

See comment on 295.7 $\gamma$ .

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #15/20 Level [ L ] "L14:381.50(9) 1+,2+" nLines=1 nChild=0  
#Record 6/6 Gamma "313.1(2) M1 33(5)" Line:278[5]  
E=313.1( $\pm .2$ )keV  
Init.Level:L14:381.50(9) 1+,2+ Final.Level:L1:68.46(4) 2+  
E1=313.04; E14-E1-Ey = -0.06  $\in$  0.5 $\sigma$   
68.4 $\pm$ 0.21932 Init:381.5 $\pm$ 0.  
y:313.1 $\pm$ 0.2  
Final:68.46 $\pm$ 0.04  
.....help1:[ 381.5,0.09,313.1,0.2,68.46,0.04 ]  
Relative photon intensity:RI=33(5)  
Multipolarity of transaction:M=M1  
Total conversion coeff.:CC=0.296  
\$KC=0.243 4 //Theoretical K- conversion coefficient  
\$LC=0.0401 6 //Theoretical L-shell conversion coefficient  
\$MC=0.00929 14 //Conversion coefficient for M shell; calculated  
\$NC+=0.00277 4 //Summed conversion coefficients of N-, O-, P-, Q-  
and R-shells  
\$NC=0.00231 4 //cc for N shell  
\$OC=0.000426 6 //cc for O shell  
\$PC=2.89E-5 4 //cc for P shell  
#M:  $\alpha(K)exp=0.22$  {I6}, ( $\alpha(L1)exp+\alpha(L2)exp$ )=0.05 {I2} (2005Sa40).

- Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 Ln in/out

## #L15/20 L15:409.70(22)

Level in/out  $\gamma$ -s #L15/20 Plot#16

```

NUCID& L [...E....]DE[...J....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 409.70 22

```

```

NUCID& E ....E....DE...IB..DIB--IE--DIE.LOGFT...-DFT-----TI---DTIFUNQ
184AU E 0.051 22 0.21 9 6.71 19 0.26 11
184AUS E EAV=1145 11$CK=0.654 4$CL=0.1138 7$CM+=0.03642 22

```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 16/20 Level [ L ] "L15:409.70(22)" Line:283 Child:2  
Energy=409.70( $\pm .22$ )keV  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #16/20 Level [ L ] "L15:409.70(22)" nLines=1 nChild=2  
#Record 1/2 EC Line:284[2]  
Intensity of  $\beta^+$ -decay branch: IB=0.051( $\pm .022$ )  
Intensity of electron capture branch:IE=0.21( $\pm .09$ )  
The log ft for ( $\varepsilon + \beta^+$ ) transition :LOGFT=6.71( $\pm .19$ )  
Total ( $\varepsilon + \beta^+$ ) decay intensity:TI=0.26( $\pm .11$ )  
\$EAV=1145 11 //Average energy of the  $\beta^+$  spectrum  
\$CK=0.654 4 //Calculated fraction of decay by electron capture

```

NUCID& G [...E....]DE[...RI...]DR[...M....][...MR...][DMR.][.CC...]DC[...TI...]DTFC Q
184AU G 181.3 2 6 2 E1,E2 0.31 22
184AUS G KC=0.15 8$LC=0.12 12$MC=0.03 3$NC+=0.010 9
184AU cG M |a(K)exp<0.3 (2005Sa40) implies mult=E1,E2.

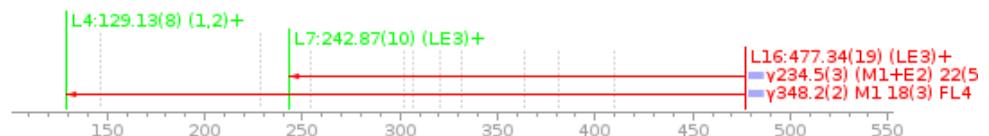
```

from the K shell  
 $\$CL=0.1138\ 7$  //Calculated fraction of decay by electron cap  
from the L shell  
 $\$CM+=0.03642\ 22$   
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #16/20 Level [ L ] "L15:409.70(22)" nLines=1 nChild=2  
#Record 2/2 Gamma "181.3(2) E1,E2 6(2)" Line:286[3]  
 $E=181.3(\pm .2)\text{keV}$   
Init.Level:L15:409.70(22) Final.Level:L6:228.40(7) 3- [E15-  
E6=181.3; E15-E6-Ey =0±0.1σ]  
228.4±0.29732 Init:409.7±0.  
y:181.3±0.2  
Final:228.4±0.07  
.....help1:[ 409.7,0.22,181.3,0.2,228.4,0.07 ]  
Relative photon intensity:RI=6(2)  
Multipolarity of transaction:M=E1,E2  
Total conversion coeff.:CC=0.31(±.22)  
\$KC=0.15 8 //Theoretical K- conversion coefficient  
\$LC=0.12 12 //Theoretical L-shell conversion coefficient  
\$MC=0.03 3 //Conversion coefficient for M shell; calculated  
\$NC+=0.010 9 //Summed conversion coefficients of N-, O-, P-, Q-  
and R-shells  
#M: α(K)exp<0.3 (2005Sa40) implies mult=E1,E2.

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

## #L16/20 L16:477.34(19) (LE3)+

Level in/out γ-s #L16/20 Plot#17



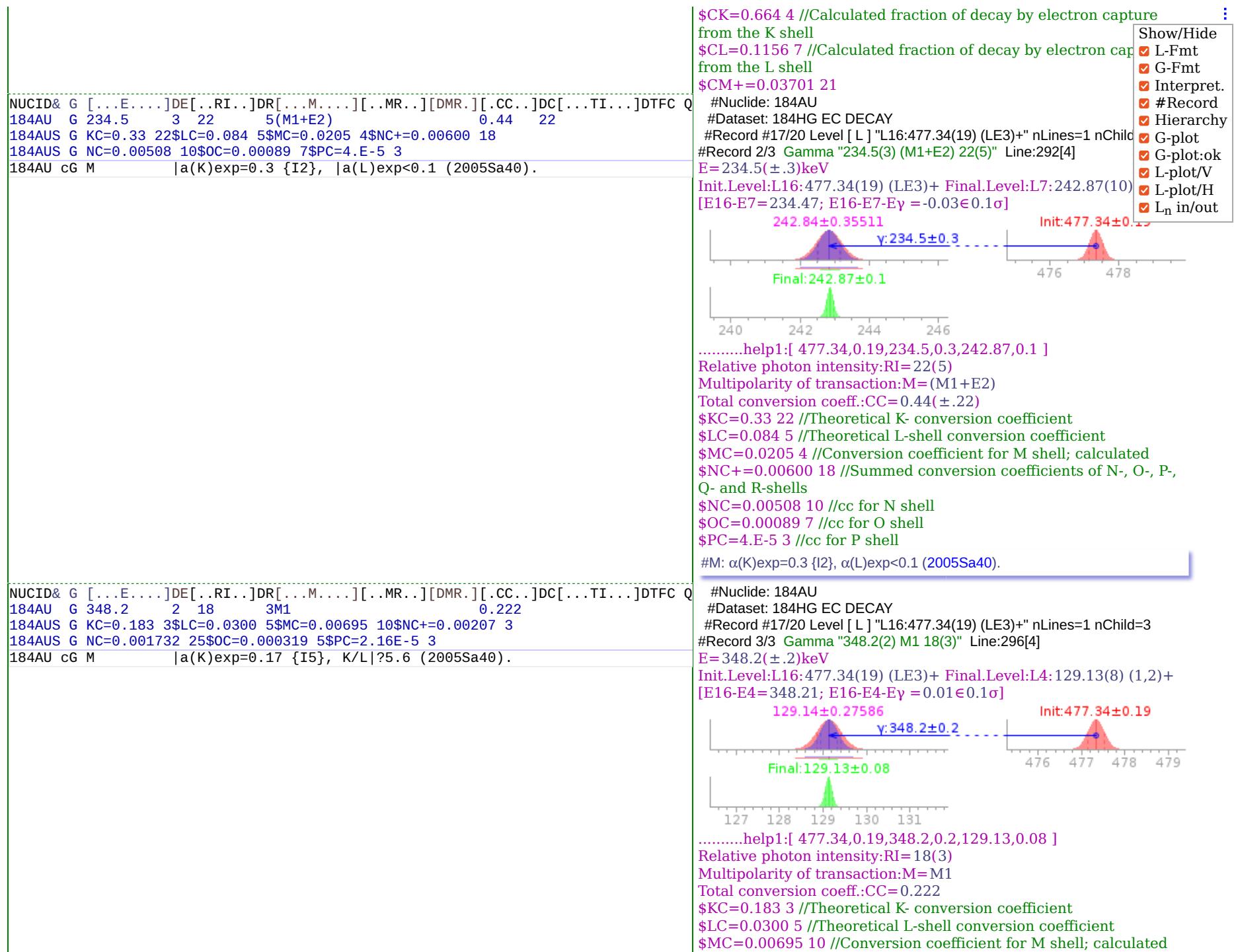
```

NUCID& L [...E....]DE[...J....][...T....][.DT.][...L....][...S....]DSFMSQ
184AU L 477.34 19 (LE3)+
```

```

NUCID& E ....E....DE...IB..DIB--IE---DIE.LOGFT---DFT-----TI---DTIFUNQ
184AU E 0.33 7 1.5 3 5.85 10 1.8 4
184AUS E EAV=1115 11$CK=0.664 4$CL=0.1156 7$CM+=0.03701 21
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 17/20 Level "L16:477.34(19) (LE3)+" Line:289 Child:3  
Energy=477.34(±.19)keV Spin and parity:Jπ=(LE3)+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #17/20 Level [ L ] "L16:477.34(19) (LE3)+" nLines=1 nChild=3  
#Record 1/3 EC Line:290[2]  
Intensity of β+ -decay branch: IB=0.33(±.07)  
Intensity of electron capture branch:IE=1.5(±.3)  
The log ft for (ε + β+) transition :LOGFT=5.85(±.10)  
Total (ε + β+) decay intensity:TI=1.8(±.4)  
\$EAV=1115 11 //Average energy of the β+ spectrum



\$NC+=0.00207 3 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=0.001732 25 //cc for N shell  
\$OC=0.000319 5 //cc for O shell  
\$PC=2.16E-5 3 //cc for P shell  
#M:  $\alpha(K) \exp=0.17$  {I5}, K/L≈5.6 (2005Sa40).

Show/Hide  
 L-Fmt  
 G-Fmt  
 Interpret.  
 #Record  
 Hierarchy  
 G-plot  
 G-plot:ok  
 L-plot/V  
 L-plot/H  
 Ln in/out

## #L17/20 L17:486.10(22) LE3+

Level in/out y-s #L17/20 Plot#18



NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 486.10 22 LE3+

NUCID& E ....E....DE...IB..DIB--IE---DIE.LOGFT...-DFT-----TI---DTIFUNQ  
184AU E 0.20 9 0.9 4 6.06 20 1.1 5  
184AUS E EAV=1111 11\$CK=0.665 4\$CL=0.1158 7\$CM+=0.03709 21

NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
184AU G 104.6 2 2.8 6M1 6.38  
184AUS G KC=5.23 8\$LC=0.880 14\$MC=0.204 3\$NC+=0.0609 10  
184AUS G NC=0.0509 8\$OC=0.00936 14\$PC=0.000632 10  
184AU cG M |a(K)exp=6.8 {I20}, |a(L1)exp=1.3 {I6} (2005Sa40).

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 18/20 Level "L17:486.10(22) LE3+" Line:300 Child:3  
Energy=486.10(±.22)keV Spin and parity:Jπ=LE3+  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #18/20 Level [ L ] "L17:486.10(22) LE3+" nLines=1 nChild=3  
#Record 1/3 EC Line:301[2]  
Intensity of β+-decay branch: IB=0.20(±.09)  
Intensity of electron capture branch:IE=0.9(±.4)  
The log ft for (ε + β+) transition :LOGFT=6.06(±.20)  
Total (ε + β+) decay intensity:TI=1.1(±.5)  
\$EAV=1111 11 //Average energy of the β+ spectrum  
\$CK=0.665 4 //Calculated fraction of decay by electron capture from the K shell  
\$CL=0.1158 7 //Calculated fraction of decay by electron capture from the L shell  
\$CM+=0.03709 21  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #18/20 Level [ L ] "L17:486.10(22) LE3+" nLines=1 nChild=3  
#Record 2/3 Gamma "104.6(2) M1 2.8(6)" Line:303[4]

E=104.6(±.2)keV  
Init.Level:L17:486.10(22) LE3+ Final.Level:L14:381.50(9) 1+,2+  
[E17-E14=104.6; E17-E14-Eγ = 0 ∈ 0σ]



.....help1:[ 486.1,0.22,104.6,0.2,381.5,0.09 ]  
Relative photon intensity:RI=2.8(6)  
Multipolarity of transaction:M=M1

```

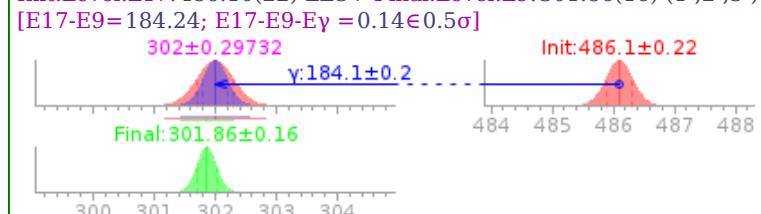
NUCID& G [...E....]DE[...RI...]DR[...M....][...MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 184.1 2 3 1M2 6.76 ??
184AUS G KC=4.94 8$LC=1.373 20$MC=0.340 5$NC+=0.1019 15
184AUS G NC=0.0855 13$OC=0.01546 23$PC=0.000925 14
184AU cG M |a(K)exp=6 {I2}, (|a(L1)exp+|a(L2)exp)=1.7 {I8} (2005Sa40).

```

Total conversion coeff.:CC= 6.38  
\$KC=5.23 8 //Theoretical K- conversion coefficient  
\$LC=0.880 14 //Theoretical L-shell conversion coefficient  
\$MC=0.204 3 //Conversion coefficient for M shell; calculated  
\$NC+=0.0609 10 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=0.0509 8 //cc for N shell  
\$OC=0.00936 14 //cc for O shell  
\$PC=0.000632 10 //cc for P shell  
#M:  $\alpha(K)\exp=6$  {I2},  $\alpha(L1)\exp=1.3$  {I6} (2005Sa40).

- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #18/20 Level [ L ] "L17:486.10(22) LE3+" nLines=1 nChild=3  
#Record 3/3 Gamma "184.1(2) M2 3(1)" Line:307[4]  
E=184.1(±.2)keV  
Init.Level:L17:486.10(22) LE3+ Final.Level:L9:301.86(16) (1-,2-,3-)  
[E17-E9=184.24; E17-E9-Ey = 0.14±0.5σ]



.....help1:[ 486.1,0.22,184.1,0.2,301.86,0.16 ]

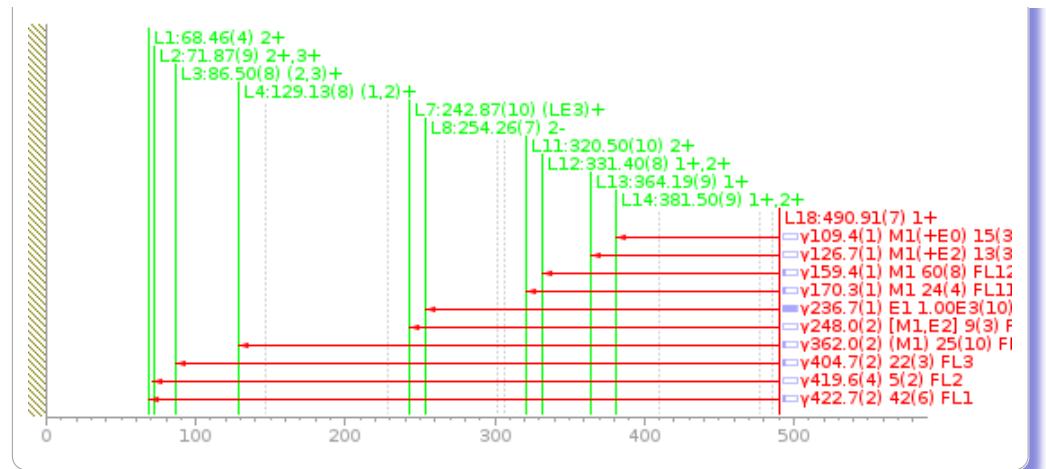
Relative photon intensity:RI=3(1)  
Multipolarity of transaction:M=M2  
Total conversion coeff.:CC= 6.76

\$KC=4.94 8 //Theoretical K- conversion coefficient  
\$LC=1.373 20 //Theoretical L-shell conversion coefficient  
\$MC=0.340 5 //Conversion coefficient for M shell; calculated  
\$NC+=0.1019 15 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
\$NC=0.0855 13 //cc for N shell  
\$OC=0.01546 23 //cc for O shell  
\$PC=0.000925 14 //cc for P shell

#M:  $\alpha(K)\exp=6$  {I2},  $(\alpha(L1)\exp+\alpha(L2)\exp)=1.7$  {I8} (2005Sa40).

## #L18/20 L18:490.91(7) 1+

Level in/out γ-s #L18/20 Plot#19



- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- Ln in/out

NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
 184AU L 490.91 7 1+ 2 NS LT  
 184AU cL T from |g delayed coin (1978Ne10).

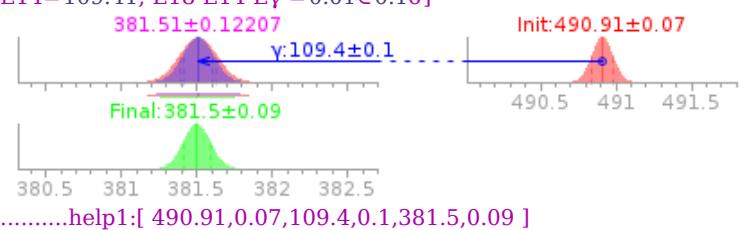
NUCID& E ....E....DE...IB..DIB--IE---DIE.LOGFT...DFT-----TI---DTIFUNQ  
 184AU E 11 1 47 6 4.33 6 58 7  
 184AUS E EAV=1109 11\$CK=0.666 4\$CL=0.1160 7\$CM+=0.03713 21

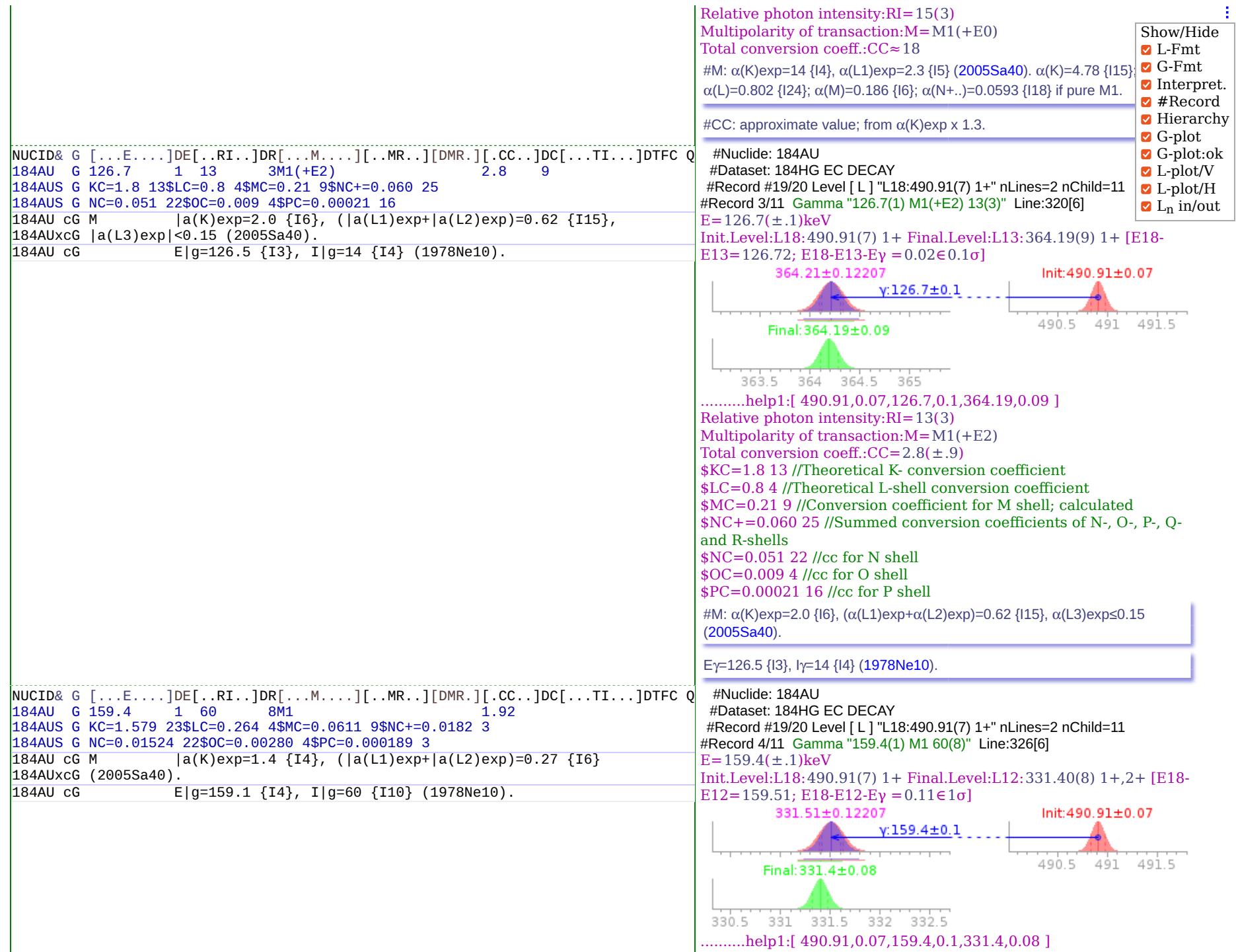
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q  
 184AU G 109.4 1 15 3 M1(+E0) 18 AP  
 184AU cG M |a(K)exp=14 {I4}, |a(L1)exp=2.3 {I5} (2005Sa40).  
 184AU2cG |a(K)=4.78 {I15}; |a(L)=0.802 {I24}; |a(M)=0.186 {I6}; |a(N+..)=0.0593  
 184AUxcG {I18} if pure M1.  
 184AU cG CC approximate value; from |a(K)exp x 1.3.

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record 19/20 Level "L18:490.91(7) 1+" Line:311[2] Child:11  
 Energy=490.91( $\pm .07$ )keV Spin and parity:Jn=1+ T<sub>1/2</sub><2·10<sup>-9</sup>sec  
 #T: from  $\gamma$  delayed coin (1978Ne10).

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #19/20 Level [ L ] "L18:490.91(7) 1+" nLines=2 nChild=11  
 #Record 1/11 EC Line:313[2]  
 Intensity of  $\beta^+$ -decay branch: IB=11( $\pm 1$ )  
 Intensity of electron capture branch: IE=47( $\pm 6$ )  
 The log ft for ( $\varepsilon + \beta^+$ ) transition :LOGFT=4.33( $\pm .06$ )  
 Total ( $\varepsilon + \beta^+$ ) decay intensity: TI=58( $\pm 7$ )  
 \$EAV=1109 11 //Average energy of the  $\beta^+$  spectrum  
 \$CK=0.666 4 //Calculated fraction of decay by electron capture from the K shell  
 \$CL=0.1160 7 //Calculated fraction of decay by electron capture from the L shell  
 \$CM+=0.03713 21

#Nuclide: 184AU  
 #Dataset: 184HG EC DECAY  
 #Record #19/20 Level [ L ] "L18:490.91(7) 1+" nLines=2 nChild=11  
 #Record 2/11 Gamma "109.4(1) M1(+E0) 15(3)" Line:315[5]  
 E=109.4( $\pm .1$ )keV  
 Init.Level:L18:490.91(7) 1+ Final.Level:L14:381.50(9) 1+,2+[E18-E14=109.41; E18-E14-Ey = 0.01  $\in$  0.1  $\sigma$ ]  
 381.51 $\pm$ 0.12207





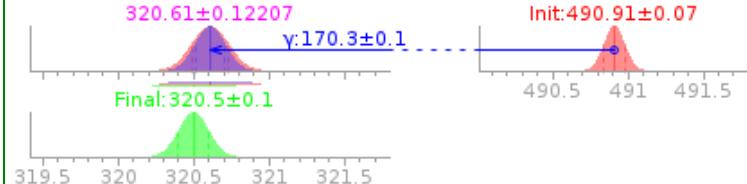
- Show/Hide
- L-Fmt
- G-Fmt
- Interpret.
- #Record
- Hierarchy
- G-plot
- G-plot:ok
- L-plot/V
- L-plot/H
- L<sub>n</sub> in/out

Relative photon intensity:RI=60(8)  
 Multipolarity of transaction:M=M1  
 Total conversion coeff.:CC=1.92  
 $\$KC=1.579\ 23$  //Theoretical K- conversion coefficient  
 $\$LC=0.264\ 4$  //Theoretical L-shell conversion coefficient  
 $\$MC=0.0611\ 9$  //Conversion coefficient for M shell; calculated  
 $\$NC+=0.0182\ 3$  //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
 $\$NC=0.01524\ 22$  //cc for N shell  
 $\$OC=0.00280\ 4$  //cc for O shell  
 $\$PC=0.000189\ 3$  //cc for P shell  
#M:  $\alpha(K)\exp=1.4$  {I4},  $(\alpha(L1)\exp+\alpha(L2)\exp)=0.27$  {I6} (2005Sa40).

$E\gamma=159.1$  {I4},  $I\gamma=60$  {I10} (1978Ne10).

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 170.3 1 24 4M1 1.595
184AUS G KC=1.310 19$LC=0.219 3$MC=0.0507 8$NC+=0.01511 22
184AUS G NC=0.01263 18$OC=0.00232 4$PC=0.0001569 23
184AU cG M |a(K)exp=1.3 {I3} (2005Sa40).
184AU cG E|g=170.1 {I2}, I|g=21 {I3} (1978Ne10).
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #19/20 Level [ L ] "L18:490.91(7) 1+" nLines=2 nChild=11  
#Record 5/11 Gamma "170.3(1) M1 24(4)" Line:332[5]  
 $E=170.3(\pm.1)\text{keV}$   
Init.Level:L18:490.91(7) 1+ Final.Level:L11:320.50(10) 2+ [E18-E11=170.41; E18-E11-Ey = 0.11±0.5σ]  
 $320.61\pm0.12207$   
 $y:170.3\pm0.1$   
Init:490.91±0.07

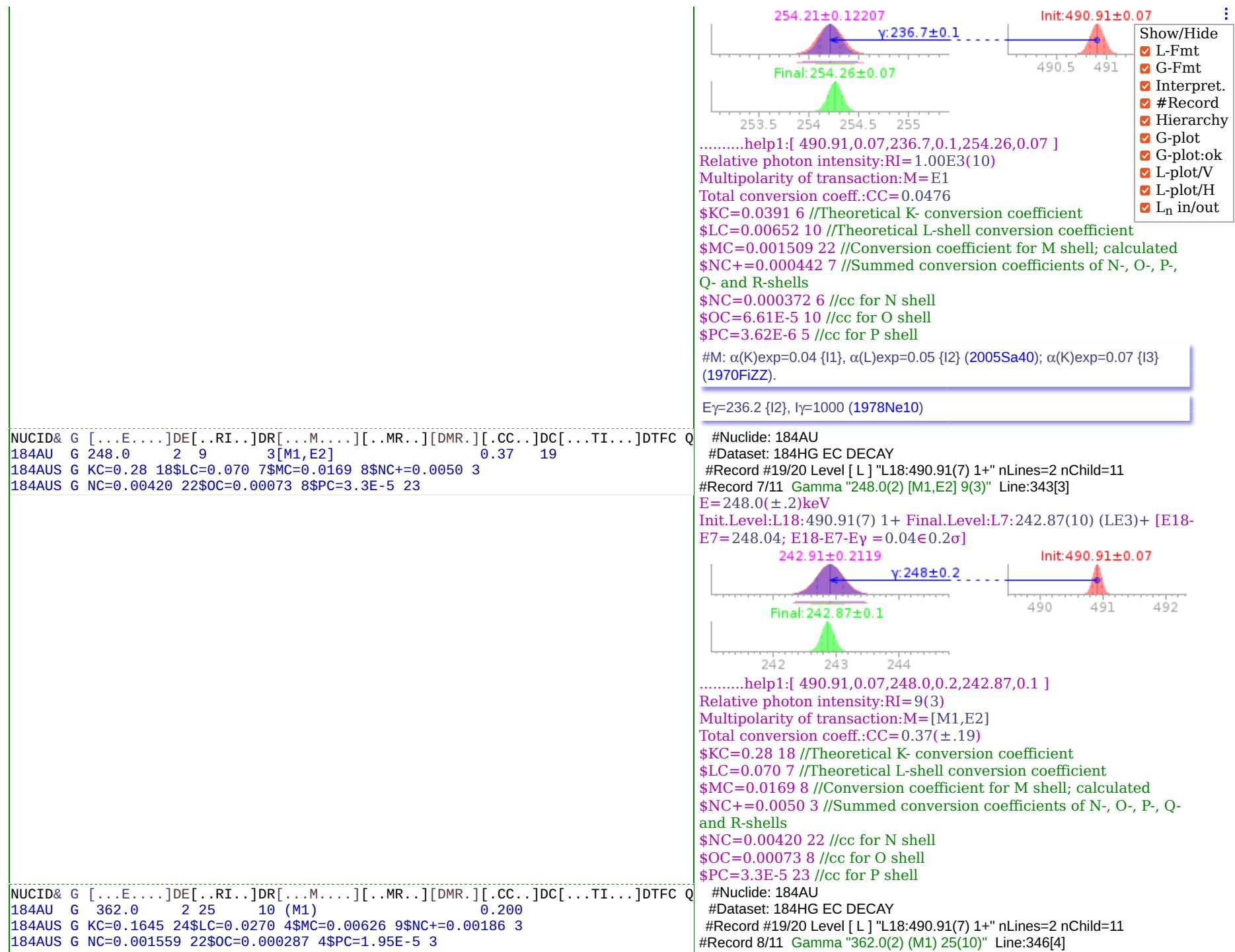


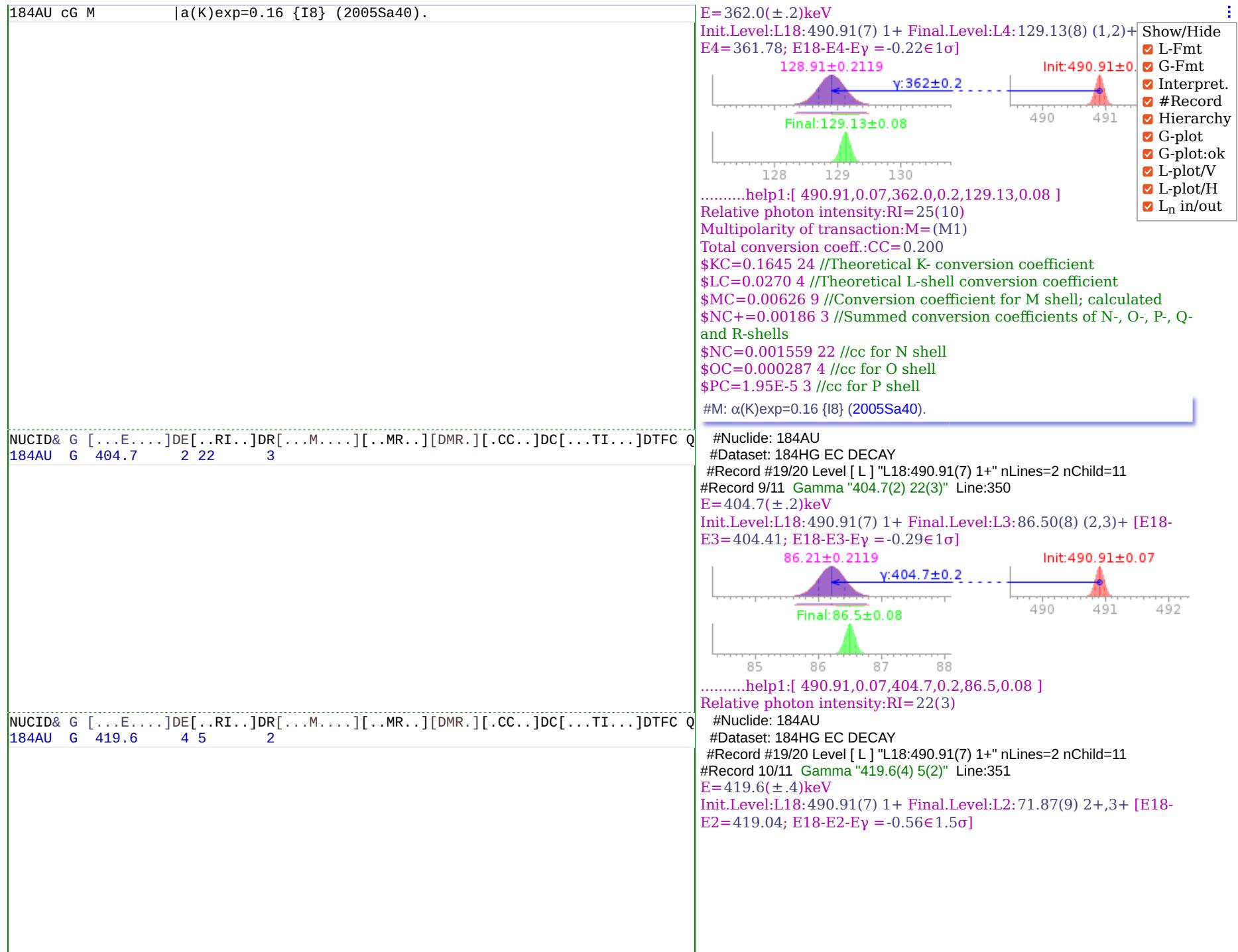
.....help1:[ 490.91,0.07,170.3,0.1,320.5,0.1 ]  
Relative photon intensity:RI=24(4)  
Multipolarity of transaction:M=M1  
Total conversion coeff.:CC=1.595  
 $\$KC=1.310\ 19$  //Theoretical K- conversion coefficient  
 $\$LC=0.219\ 3$  //Theoretical L-shell conversion coefficient  
 $\$MC=0.0507\ 8$  //Conversion coefficient for M shell; calculated  
 $\$NC+=0.01511\ 22$  //Summed conversion coefficients of N-, O-, P-, Q- and R-shells  
 $\$NC=0.01263\ 18$  //cc for N shell  
 $\$OC=0.00232\ 4$  //cc for O shell  
 $\$PC=0.0001569\ 23$  //cc for P shell  
#M:  $\alpha(K)\exp=1.3$  {I3} (2005Sa40).

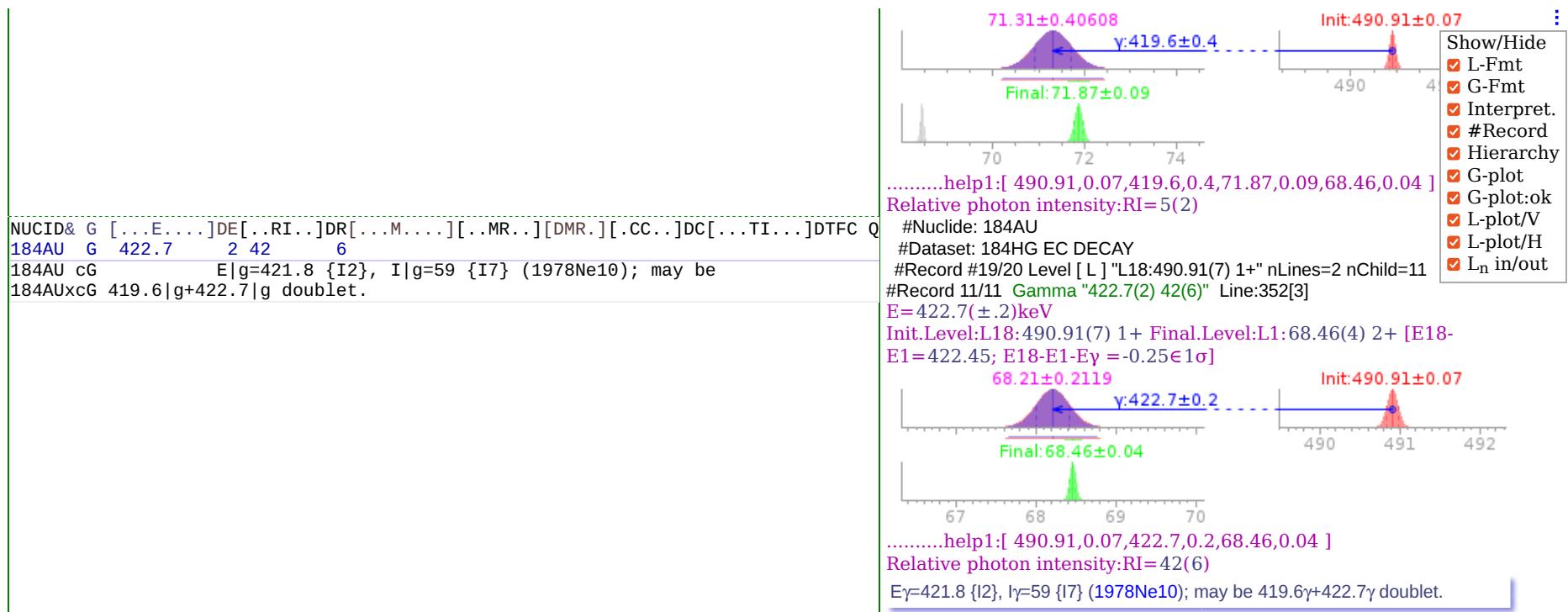
$E\gamma=170.1$  {I2},  $I\gamma=21$  {I3} (1978Ne10).

```
NUCID& G [...E....]DE[..RI..]DR[...M....][..MR..][DMR.][.CC..]DC[...TI...]DTFC Q
184AU G 236.7 1 1.00E3 10E1 0.0476
184AUS G KC=0.0391 6$LC=0.00652 10$MC=0.001509 22$NC+=0.000442 7
184AUS G NC=0.000372 6$OC=6.61E-5 10$PC=3.62E-6 5
184AU cG M |a(K)exp=0.04 {I1}, |a(L)exp=0.05 {I2} (2005Sa40);
184AU xcG |a(K)exp=0.07 {I3} (1970Fizz).
184AU cG E|g=236.2 {I2}, I|g=1000 (1978Ne10)
```

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #19/20 Level [ L ] "L18:490.91(7) 1+" nLines=2 nChild=11  
#Record 6/11 Gamma "236.7(1) E1 1.00E3(10)" Line:337[6]  
 $E=236.7(\pm.1)\text{keV}$   
Init.Level:L18:490.91(7) 1+ Final.Level:L8:254.26(7) 2- [E18-E8=236.65; E18-E8-Ey = -0.05±0.5σ]

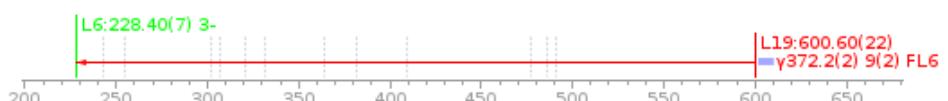






## #L19/20 L19:600.60(22)

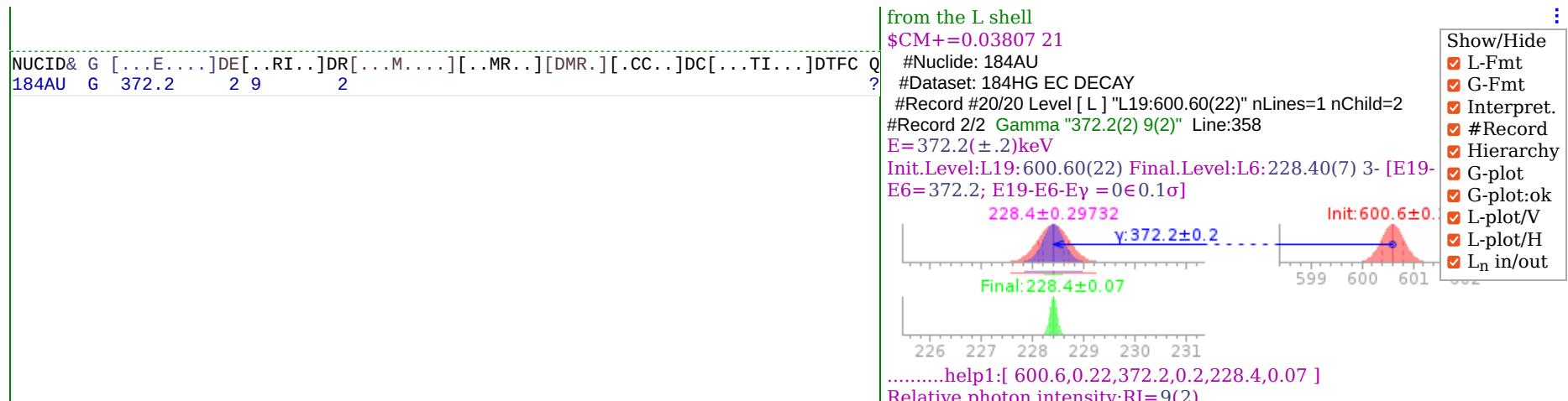
Level in/out γ-s #L19/20 Plot#20



NUCID& L [...E....]DE[.....J.....][...T....][.DT.][...L....][...S....]DSFMSQ  
184AU L 600.60 22

NUCID& E ....E....DE...IB..DIB--IE--DIE.LOGFT...-DFT-----TI---DTIFUNQ  
184AU E 0.03 3 0.13 13 6.9 5 0.16 16 ?  
184AUS E EAV=1060 11\$CK=0.681 4\$CL=0.1189 7\$CM+=0.03807 21

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 20/20 Level "L19:600.60(22)" Line:355 Child:2  
Energy=600.60(±.22)keV Q=? (questionable)  
#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record #20/20 Level [ L ] "L19:600.60(22)" nLines=1 nChild=2  
#Record 1/2 EC Line:356[2]  
Intensity of β+-decay branch: IB=0.03(±.03)  
Intensity of electron capture branch:IE=0.13(±.13)  
The log ft for (ε + β+) transition :LOGFT=6.9(±.5)  
Total (ε + β+) decay intensity:TI=0.16(±.16)  
\$EAV=1060 11 //Average energy of the β+ spectrum  
\$CK=0.681 4 //Calculated fraction of decay by electron capture from the K shell  
\$CL=0.1189 7 //Calculated fraction of decay by electron capture



-] End

#Nuclide: 184AU  
#Dataset: 184HG EC DECAY  
#Record 1/1 End Line:359

Total: Nuclides:1 Datasets:1 Records:110 Cards:359

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