

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

184AU	184HG	EC	DECAY	2005SA40, 1994IB01, 1978NE1010NDS	201002	#Record 1/1	Ident	Line:1
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-	Hist	H	Record(s): 1
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184AU	H	TYP=FUL\$AUT=CORAL M. BAGLIN\$CIT=NDS 111,275 (2010)\$CUT=1-Oct-2009\$
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#Record 1/1 Hist Line:2

#TYP: FUL //Complete revision of the nuclide

#AUT: Coral M. Baglin

#CIT: NDS 111,275 (2010)

#CUT: 1-Oct-2009

-	GComm	C	Record(s): 8
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184AU D	PARENT T: 30.6 S 3 (1972Fi12), 30.9 S 3 (1994Wa23).
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184AU2D	32.5 S 10 (1970Ha18); from 5535A(T). 32.0 S 10 (1969Ha03).
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184AU3D	WEIGHTED AVERAGE: 30.87 S 26.
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#Record 1/8 GComm 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).
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#Record 2/8 GComm Line:6

Others: 1975Ho03, 1971Hu02, 1969Ha03 (observed 157γ and 237γ).

184AU c	2005Sa40: mass-separated {+184}Hg source from fragmentation of molten
184AU2c	Pb target by 600 MeV or 1 GeV protons; Ge(Li) and Si(Li) detectors,
184AU3c	high resolution 180° magnetic spectrograph; measured E g, I g,
184AU4c	E(ce), I(ce). Additional sources from {+148}Sm({+40}Ar,X); planar Ge
184AU5c	(FWHM=0.9 keV at 122 keV) for E g <1 MeV; two HPGe detectors (FWHM
184AU6c	?2.3 keV at 1.3 MeV) for E g <1.3 MeV; measured x- g-t and g- g-t
184AU7c	events which were sorted to provide prompt-, total- and delayed-
184AU8c	coincidence bidimensional matrices (60 ns or 100 ns time windows).
184AU2c	Supersedes 2003IbZZ; see also 1994Ib01.

#Record 3/8 GComm Line:7[9]

#2005Sa40:: mass-separated ¹⁸⁴Hg 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_γ, I_γ, E(ce), I(ce). Additional sources from ¹⁴⁸Sm(⁴⁰Ar,X); planar Ge (FWHM=0.9 keV at 122 keV) for E_γ≤1 MeV; two HPGe detectors (FWHM ≈2.3 keV at 1.3 MeV) for E_γ≤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
184AU2c	{+40}Ar ions; He-jet transport, iodine aerosol; two HPGe coaxial
184AU3c	detectors, one HPGe x-ray detector; measured singles g and x-ray
184AU4c	spectra, g g(t), x- g(t). See also 1994RoZY.

#Record 4/8 GComm Line:16[4]

#1994Ib01:: mass separated source from bombardment of ¹⁴⁸Sm by 185 Me⁴⁰Ar 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.

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

#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}).

#Record 6/8 GComm Line:22[2]

#1978Ne10:: Mass-separated source; measured E_γ, I_γ, γγ coin, γγ(t)(time resolution 6 ns {I1}).

184AU c

#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

#Record 8/8 GComm Line:25[7]

#The decay: scheme is adopted from 2005Sa40. It differs greatly from that

Show/Hide

☐ L-Fmt☐ G-Fmt☒ Interpret.☒ #Record☐ Hierarchy☒ G-plot☒ G-plot:ok☐ L-plot/V☒ L-plot/H☐ L_n in/out

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.

- 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 ($I(|g+ce)(30.3|g)|?6\%$).

- GComm CG Record(s): 4

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

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

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

184AU cG E(B) From 1978Ne10.

- LComm CL Record(s): 3

184AU cL E From least-squares fit to E|g.

184AU cL J From Adopted Levels.

184AU cL T From $|g|g(t)$ (1978Ne10), except where noted.

- Parent P Record(s): 1

184HG P 0.0 0+ 30.87 S 26 3970 24

- Norm N Record(s): 1

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

184AU PN 3

- UnplacedRadiation G Record(s): 12

184AU G 29.4 1 1.5 3M1 47.2 9

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).

proposed by 1978Ne10. Although $E\gamma$ and $I\gamma$ data from 2005Sa40 and
1978Ne10 are in satisfactory agreement, there exist a number of tran
with $E\gamma<90$ keV which 1978Ne10 could not detect. Also, the lowest e
state reported in 1978Ne10 is actually a 68-keV 2+ isomer, not a 3+ g
the presence of a state just 3.4 keV above the isomer was not recogn
1978Ne10.

#Record 1/1 GComm Line:32[4]

#TI,LOGFT: I($\gamma+ce$) is from intensity imbalance at each level. I($\gamma+ce$)v
<10% may not be reliable due to existence of unplaced transitions, se
which are highly converted ($I(\gamma+ce)(30.3\gamma)\approx6\%$).

#Record 1/4 GComm Line:36

#E,RI: From 2005Sa40, except as noted.

#Record 2/4 GComm Line:37

#M: From $\alpha(K)exp$ values given by 2005Sa40, except as noted.

#Record 3/4 GComm Line:38

#MR: From analysis of ce data by 2005Sa40.

#Record 4/4 GComm Line:39

#E(B): From 1978Ne10.

#Record 1/3 LComm Line:40

#E: From least-squares fit to $E\gamma$.

#Record 2/3 LComm Line:41

#J: From Adopted Levels.

#Record 3/3 LComm Line:42

#T: From $\gamma\gamma(t)$ (1978Ne10), except where noted.

#Record 1/1 Parent Line:43

#Record 1/1 Norm Line:44[3]

#NR: from $\Sigma(I(\gamma+ce)$ to g.s.)=100, assuming no $\epsilon+\beta^+$ feedingto the g.s. ($\Delta J=5$)
or to the 68 or 72 levels ($\Delta J=2$ or 3, $\Delta\pi=no$).

#Record 1/1 PNorm Line:47

#Record 1/12 UnplacedRadiation "29.4" Line:48[5]

E=29.4(± 1)keV

Relative photon intensity:RI=1.5(3)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=47.2(± 9)

\$LC=36.3 7 //Theoretical L-shell conversion coefficient

\$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

Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```
184AU  G 30.3      1 1.7      4M1+E2      0.20      AP      98.1      AP
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).
```

```
184AU  G 43.3      3 4.3      6
184AU  cG      Only weak, mixed electron lines observed (2005Sa40).
```

```
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).
```

```
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).
```

```
$NC=2.10 4 //cc for N shell
$OC=0.386 7 //cc for O shell
$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)
```

```
#Record 2/12 UnplacedRadiation "30.3" Line:53[4]
E=30.3( $\pm .1$ )keV
Relative photon intensity:RI=1.7(4)
Multipolarity of transaction:M=M1+E2
Mixing Ratio:MR $\approx$ 0.20
Total conversion coeff.:CC $\approx$ 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-, Q- 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:  $\alpha(L1)exp=35 \{I10\}$ ,  $\alpha(L3)exp=21 \{I8\}$  (2005Sa40).
```

```
#Record 3/12 UnplacedRadiation "43.3" Line:57[2]
E=43.3( $\pm .3$ )keV
Relative photon intensity:RI=4.3(6)
Only weak, mixed electron lines observed (2005Sa40).
```

```
#Record 4/12 UnplacedRadiation "45.8" Line:59[4]
E=45.8( $\pm .1$ )keV
Relative photon intensity:RI=2.0(3)
Multipolarity of transaction:M=M1(+E2)
Mixing Ratio:MR $\approx$ 0.10
Total conversion coeff.:CC $\approx$ 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).
```

```
#Record 5/12 UnplacedRadiation "110.8" Line:63[4]
E=110.8( $\pm .2$ )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).
```

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

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

#Record 6/12 UnplacedRadiation "112.6" Line:67[4]

E=112.6(±.2)keV

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: $\alpha(K)\exp=3.6 \{I_{10}\}$ (2005Sa40).

```
184AU  G 176.9      3 12      5      B
```

#Record 7/12 UnplacedRadiation "176.9" Line:71

E=176.9(±.3)keV

Relative photon intensity:RI=12(5)

#Record 8/12 UnplacedRadiation "177.3" Line:72[3]

E=177.3(±.2)keV

Relative photon intensity:RI=26(4)

Multipolarity of transaction:M=E1,E2

Total conversion coeff.:CC=0.34(±.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).

```
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).
```

#Record 9/12 UnplacedRadiation "178.1" Line:75[3]

E=178.1(±.2)keV

Relative photon intensity:RI=6(2)

Multipolarity of transaction:M=E1,E2

Total conversion coeff.:CC=0.33(±.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: $\alpha(K)\exp\leq 0.4$ (2005Sa40).

```
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}
184AUxcG (2005Sa40).
```

#Record 10/12 UnplacedRadiation "291.5" Line:78[5]

E=291.5(±.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

\$MC=0.01131 16 //Conversion coefficient for M shell; calculated

\$NC+=0.00337 5 //Summed conversion coefficients of N-, O-, P-, Q-
and R-shells

\$NC=0.00282 4 //cc for N shell

\$OC=0.000518 8 //cc for O shell

\$PC=3.51E-5 5 //cc for P shell

Show/Hide

☐ L-Fmt☐ G-Fmt☒ Interpret.☒ #Record☐ Hierarchy☒ G-plot☒ G-plot:ok☐ L-plot/V☒ L-plot/H☐ L_n in/out

```
184AU  G  331.5      2  10      2(M1)      0.253
184AUS  G  KC=0.209  3$LC=0.0343  5$MC=0.00795 12$NC+=0.00237  4
184AUS  G  NC=0.00198 3$OC=0.000364 6$PC=2.47E-5  4
184AU  cG  M      |a(K)exp=0.32 {I13} (2005Sa40).
```

```
#M:  $\alpha(K)\exp=0.30$  {I9},  $(\alpha(L1)\exp+\alpha(L2)\exp)=0.05$  {I2} (2005Sa40).
```

```
#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; calcul
```

```
$NC+=0.00237 4 //Summed conversion coefficients of N-, O  
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:  $\alpha(K)\exp=0.32$  {I13} (2005Sa40).
```

```
184AU  G      392.4  2 110      20
```

```
B
```

```
#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...Horizontal...
```

Show/Hide

☐ L-Fmt

☐ G-Fmt

☒ Interpret.

☒ #Record

☐ Hierarchy

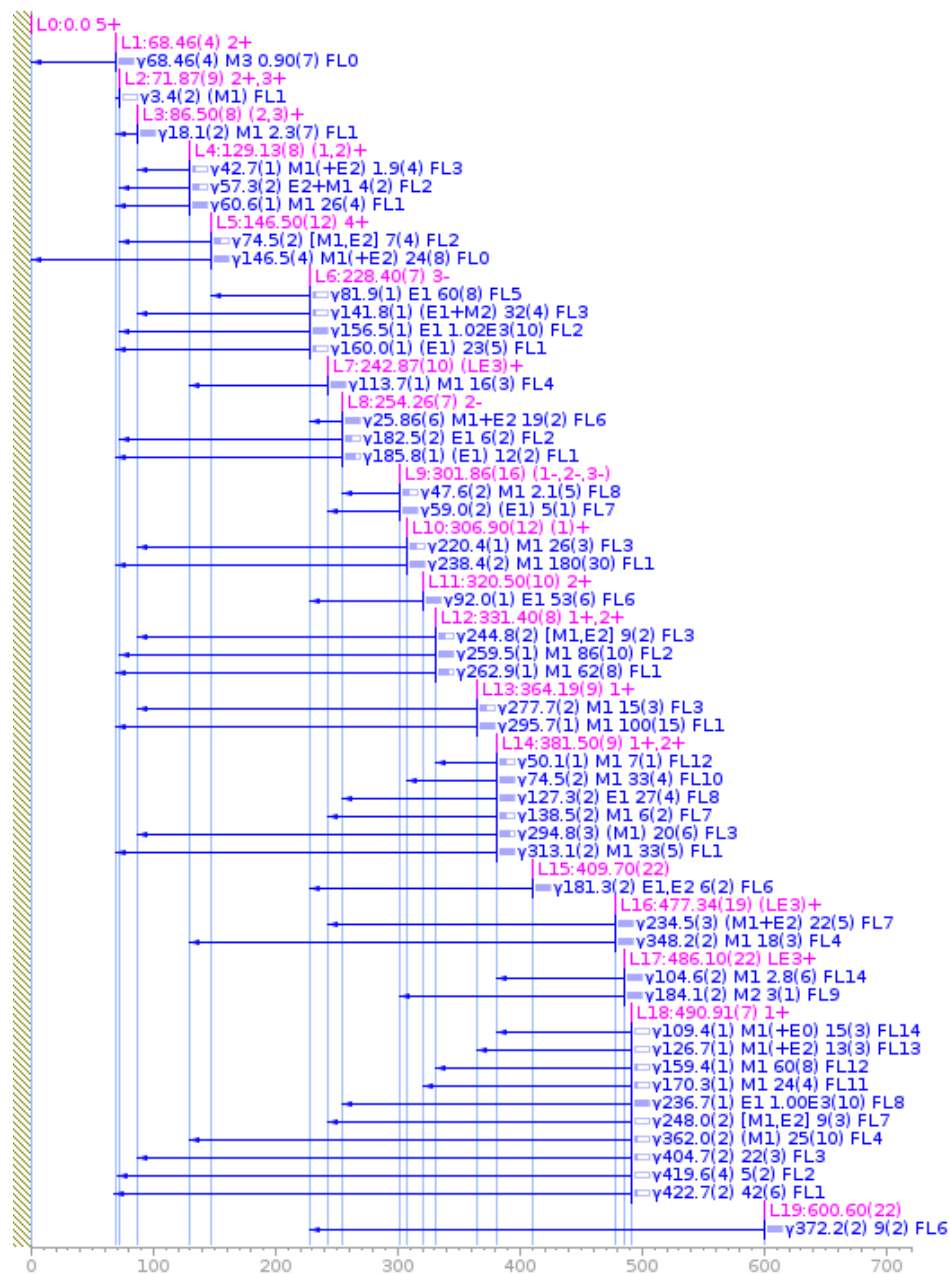
☒ G-plot

☒ G-plot:ok

☐ L-plot/V

☒ L-plot/H

☐ L_n in/out



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

184AU L 68.46 4 2+ 47.6 S 14 M

#Record 1/20 Level "L0:0.0 5+" Line:88[2]
 Energy=0.0keV Spin and parity: $J^{\pi}=5^{+}$ $T_{1/2}=20.6(\pm .9)$ sec
 #T: from Adopted Levels.

#Record 2/20 Level "L1:68.46(4) 2+" Line:90[2] Child:1

184AU cL T from Adopted Levels.

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 $|S(I(|g+ce) \text{ to } 68 \text{ level})=2870 \{I230\}$.
 184AU cG RI from $I(|g+ce) \text{ and } |a$.
 184AU cG M $L3/(L1+L2)=1.6 \{I4\}$, $L2 \ll L1 (1990Ed01)$;
 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.

Energy=68.46(\pm .04)keV Spin and parity: $J^\pi=2^+$

$T_{1/2}=47.6(\pm 1.4)\text{sec}$ Meta:MS=M

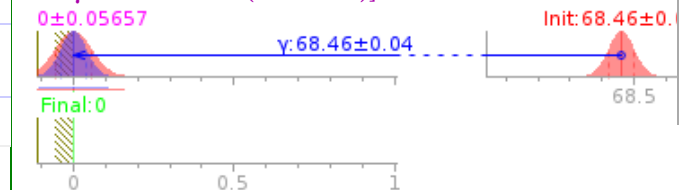
#T: from Adopted Levels.

#Record 1/1 Gamma "68.46(4) M3 0.90(7)" Line:92[10]

E=68.46(\pm .04)keV

Init.Level:L1:68.46(4) 2+ Final.Level:L0:0.0 5+ [E1-E0=68.

E0-E γ =0<1% of L1 (0.685keV)]



.....help1:[68.46,0.04,68.46,0.04,0.0,0.0]

Relative photon intensity:RI=0.90(7)

Multipolarity of transaction:M=M3

Total conversion coeff.:CC=3.19E3

Relative total transition intensity:TI=2.87E+3(23)

\$LC=2.29E3 4 //Theoretical L-shell conversion coefficient

\$MC=694 10 //Conversion coefficient for M shell; calculated

\$NC+=208 3 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=178 3 //cc for N shell

\$OC=29.4 5 //cc for O shell

\$PC=0.774 11 //cc for P shell

#TI: from $\Sigma(I(\gamma+ce) \text{ to } 68 \text{ level})=2870 \{I230\}$.

#RI: from $I(\gamma+ce) \text{ and } \alpha$.

#M: $L3/(L1+L2)=1.6 \{I4\}$, $L2 \ll L1 (1990Ed01)$; $(L1+L2):L3:M:N:O=232 \{I35\}:397 \{I60\}:197 \{I30\}:45 \{I7\}:18 \{I6\} (2005Sa40)$.

$\%I\gamma=0.0303 \{I10\}$ assuming recommended decay scheme normalization.

184AU L 71.87 9 2+,3+

184AU G 3.4 2 (M1) 1.55E3 16
 184AU cG TI from $|S(I(|g+ce) \text{ to } 72 \text{ level})$; no $|e+|b{++}$ expected to
 184AUxcG level.
 184AU cG M N1 and 0 conversion lines observed (2005Sa40).

#Record 3/20 Level "L2:71.87(9) 2+,3+" Line:102 Child:1

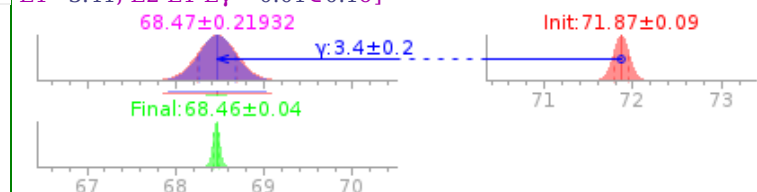
Energy=71.87(\pm .09)keV Spin and parity: $J^\pi=2^+,3^+$

#Record 1/1 Gamma "3.4(2) (M1)" Line:103[4]

E=3.4(\pm .2)keV

Init.Level:L2:71.87(9) 2+,3+ Final.Level:L1:68.46(4) 2+ [E2-

E1=3.41; E2-E1-E γ =0.01 \in 0.1 σ]



.....help1:[71.87,0.09,3.4,0.2,68.46,0.04]

Multipolarity of transaction:M=(M1)

Relative total transition intensity:TI=1.55E3(16)

#TI: from $\Sigma(I(\gamma+ce) \text{ to } 72 \text{ level})$; no $\epsilon+\beta^+$ expected to level.

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


```

184AU  L 86.50      8 (2,3)+
-----
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).

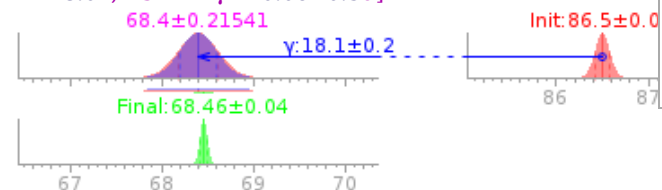
```

#M: N1 and O conversion lines observed (2005Sa40).

```

#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)+
#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+ [E3
E1=18.04; E3-E1-Eγ = -0.06±0.5σ]

```



```

.....help1:[ 86.5,0.08,18.1,0.2,68.46,0.04 ]
Relative photon intensity:RI=2.3(7)
Multipolarity of transition:M=M1
Total conversion coeff.:CC=198(±8)
$LC=152 6 //Theoretical L-shell conversion coefficient
$MC=35.6 13 //Conversion coefficient for M shell; calculated
$NC+=10.6 4 //Summed conversion coefficients of N-, O-, P-, Q- and
R-shells
$NC=8.9 4 //cc for N shell
$OC=1.63 6 //cc for O shell
$PC=0.110 4 //cc for P shell
#M: α(L1)exp=130 {I25}, L1:L2=1.00:0.11 {I1} (2005Sa40).

```

Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```

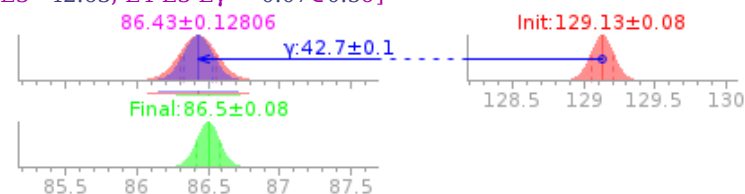
184AU  L 129.13     8 (1,2)+
-----
184AU  E          3.8 25 11 7 5.0 3      15      10
184AUS E EAV=1271 11$CK=0.610 4$CL=0.1059 7$CM+=0.03387 23
-----
184AU  G 42.7      1 1.9      4M1(+E2)      1.4E2 13
184AUS G LC=1.1E2 10$MC=28 25$NC+=8 7
184AUS G NC=7 7$OC=1.1 10$PC=0.005 4
184AU  cG M      |a(L1)exp|<22, |a(L3)exp<1.8 (2005Sa40) allows E1 or M1.

```

```

#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)+
#Record 1/4 EC Line:113[2]
Intensity of β+-decay branch:IB=3.8(±2.5)
Intensity of electron capture branch:IE=11(±7)
The log ft for (ε + β+) transition :LOGFT=5.0(±.3)
Total (ε + β+) decay intensity:TI=15(±10)
$EAV=1271 11 //Average energy of the β+ 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
$CM+=0.03387 23
#Record 2/4 Gamma "42.7(1) M1(+E2) 1.9(4)" Line:115[4]
E=42.7(±.1)keV
Init.Level:L4:129.13(8) (1,2)+ Final.Level:L3:86.50(8) (2,3)+ [E4-
E3=42.63; E4-E3-Eγ = -0.07±0.5σ]

```




```

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
184AUxcG {I15} (2005Sa40).

```

```

184AU  G  60.6      1  26      4M1      5.60
184AUS  G  LC=4.31 7$MC=1.000 15$NC+=0.298 5
184AUS  G  NC=0.249 4$OC=0.0458 7$PC=0.00309 5
184AU  cG  M      |a(L1)exp=4 {I1}, L1:L2:L3=1.00:0.13 {I3}: <0.04,
184AU2cG |a(M1)exp=0.9 {I1} (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(±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
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: α(L1)exp≤22, α(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
- ☐ L_n in/out

```

#Record 3/4 Gamma "57.3(2) E2+M1 4(2)" Line:119[5]
E= 57.3(±.2)keV
Init.Level:L4: 129.13(8) (1,2)+ Final.Level:L2: 71.87(9) 2+,3+ [E4-
E2= 57.26; E4-E2-Ey = -0.04±0.2σ]

```



```

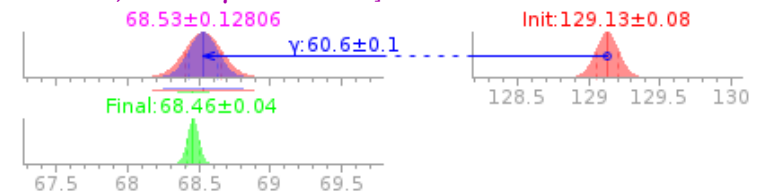
.....help1:[ 129.13,0.08,57.3,0.2,71.87,0.09 ]
Relative photon intensity:RI= 4(2)
Multipolarity of transaction:M= E2+M1
Mixing Ratio:MR≈ 1.2
Total conversion coeff.:CC≈ 40.9
$LC AP 30.7 //Theoretical L-shell conversion coefficient
$MC AP 7.91 //Conversion coefficient for M shell; calculated
$NC+ AP 2.26 //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
#M: α(L2)exp≈α(L3)exp=12 {I6}, L1:L2:L3=1.0:7.2 {I15}:6.9 {I15}
(2005Sa40).

```

```

#Record 4/4 Gamma "60.6(1) M1 26(4)" Line:124[5]
E= 60.6(±.1)keV
Init.Level:L4: 129.13(8) (1,2)+ Final.Level:L1: 68.46(4) 2+ [E4-
E1= 60.67; E4-E1-Ey = 0.07±0.5σ]

```



```

.....help1:[ 129.13,0.08,60.6,0.1,68.46,0.04 ]
Relative photon intensity:RI= 26(4)
Multipolarity of transaction:M= M1
Total conversion coeff.:CC= 5.60

```

```

184AU  L 146.50    12 4+
-----
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
184AUxcG doublet.

```

```

184AU  G 146.5      4 24      8 M1(+E2)          1.8      7
184AUS G KC=1.2 9$LC=0.46 13$MC=0.12 4$NC+=0.034 11
184AUS G NC=0.029 10$OC=0.0048 13$PC=0.00014 11
184AU cG M      |a(K)exp|<3.5, (|a(L1)exp+|a(L2)exp)=0.26 {I10},
184AUxcG |a(L3)exp|<0.08 (2005Sa40).
184AU cG      E|g=146.0 {I3}, I|g=48 {I4}, unplaced |g in 1978Ne10.

```

```

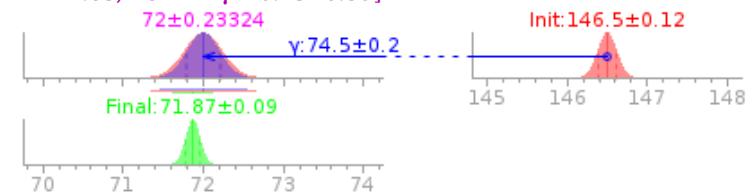
$LC=4.31 7 //Theoretical L-shell conversion coefficient
$MC=1.000 15 //Conversion coefficient for M shell; calculated
$NC+=0.298 5 //Summed conversion coefficients of N-, O-,
and R-shells
$NC=0.249 4 //cc for N shell
$OC=0.0458 7 //cc for O shell
$PC=0.00309 5 //cc for P shell
#M:  $\alpha(L1)exp=4 \{I1\}$ , L1:L2:L3=1.00:0.13 {I3}: <0.04,  $\alpha(M1)exp=0.9 \{$ 
(2005Sa40).

```

```

#Record 6/20 Level "L5:146.50(12) 4+" Line:129 Child:2
Energy=146.50( $\pm .12$ )keV Spin and parity: $J^{\pi}=4^{+}$ 
#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-
E2=74.63; E5-E2-E $\gamma$  =0.13 $\pm$ 0.5 $\sigma$ ]

```



```

.....help1:[ 146.5,0.12,74.5,0.2,71.87,0.09 ]
Relative photon intensity:RI=7(4)
Multipolarity of transaction:M=[M1,E2]
Total conversion coeff.:CC=11( $\pm 8$ )
$LC=8 6 //Theoretical L-shell conversion coefficient
$MC=2.1 15 //Conversion coefficient for M shell; calculated
$NC+=0.6 5 //Summed conversion coefficients of N-, O-, P-, Q- and
R-shells
$NC=0.5 4 //cc for N shell
$OC=0.08 6 //cc for O shell
$PC=0.0010 8 //cc for P shell
#RI: from  $\gamma\gamma$  coin; I $\gamma$ =40 {I4} for doublet (2005Sa40).

```

```

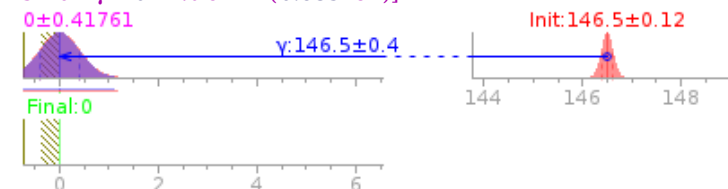
#M:  $\alpha(L1)exp=2.4 \{I4\}$ , M1:M2:M3=1.00:0.21:0.09 (2005Sa40) for doublet.

```

```

#Record 2/2 Gamma "146.5(4) M1(+E2) 24(8)" Line:136[6]
E=146.5( $\pm .4$ )keV
Init.Level:L5:146.50(12) 4+ Final.Level:L0:0.0 5+ [E5-E0=146.5;
E5-E0-E $\gamma$  =0<1% of L1 (0.685keV)]

```



```

.....help1:[ 146.5,0.12,146.5,0.4,0.0,0.0 ]
Relative photon intensity:RI=24(8)
Multipolarity of transaction:M=M1(+E2)
Total conversion coeff.:CC=1.8( $\pm .7$ )

```

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

```

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).

```

```

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).

```

```

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
184AUxcG |D|p=yes from level scheme.
184AU  cG          E|g=141.6 {I3}, I|g=19 {I3} (1978Ne10).

```

```

$KC=1.2 9 //Theoretical K- conversion coefficient
$LC=0.46 13 //Theoretical L-shell conversion coefficient
$MC=0.12 4 //Conversion coefficient for M shell; calculated
$NC+=0.034 11 //Summed conversion coefficients of N-, O-
and R-shells
$NC=0.029 10 //cc for N shell
$OC=0.0048 13 //cc for O shell
$PC=0.00014 11 //cc for P shell
#M:  $\alpha(K)\exp\leq 3.5$ ,  $(\alpha(L1)\exp+\alpha(L2)\exp)=0.26$  {I10},  $\alpha(L3)\exp\leq 0.08$ 
(2005Sa40).

```

$E_\gamma=146.0$ {I3}, $I_\gamma=48$ {I4}, unplaced γ in 1978Ne10.

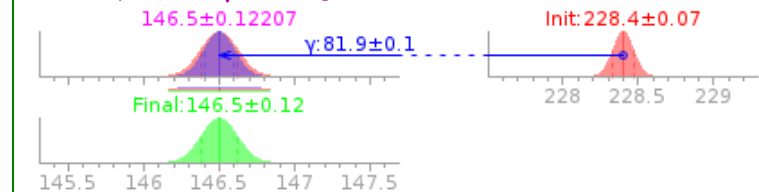
Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

#Record 7/20 Level "L6:228.40(7) 3-" Line:142[4] Child:4
 Energy=228.40(±.07)keV Spin and parity: $J^\pi=3^-$
 $T_{1/2}=69(\pm 6)\cdot 10^{-9}\text{sec}$

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

#Record 1/4 Gamma "81.9(1) E1 60(8)" Line:146[4]
 E=81.9(±.1)keV
 Init.Level:L6: 228.40(7) 3- Final.Level:L5: 146.50(12) 4+ [E6-
 E5=81.9; E6-E5- $E_\gamma=0\in 0\sigma$]



.....help1:[228.4,0.07,81.9,0.1,146.5,0.12]

Relative photon intensity:RI=60(8)

Multipolarity of transition: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

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

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

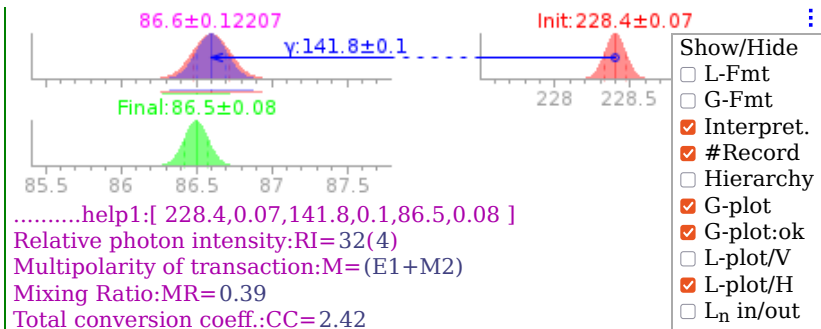
E=141.8(±.1)keV

Init.Level:L6: 228.40(7) 3- Final.Level:L3: 86.50(8) (2,3)+ [E6-
 E3=141.9; E6-E3- $E_\gamma=0.1\in 0.5\sigma$]

```

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.

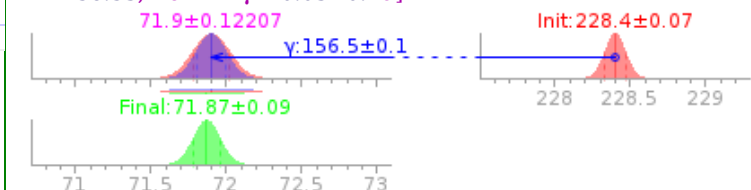
```



```

#Record 3/4 Gamma "156.5(1) E1 1.02E3(10)" Line:157[6]
E=156.5(±.1)keV
Init.Level:L6:228.40(7) 3- Final.Level:L2:71.87(9) 2+,3+ [E6-
E2=156.53; E6-E2-E $\gamma$ =0.03±0.2σ]

```



```

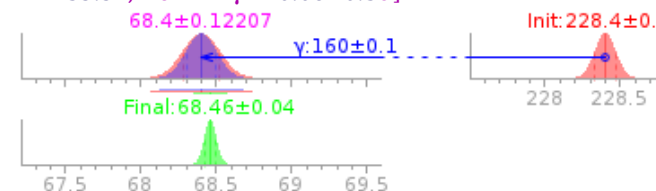
184AU  G 160.0      1 23      5(E1)              0.1262
184AUS  G KC=0.1028 15$LC=0.0180 3$MC=0.00417 6$NC+=0.001215 18
184AUS  G NC=0.001026 15$OC=0.000180 3$PC=9.04E-6 13
184AU  cG M          |a(K)exp=0.3 {I2} (2005Sa40).
184AU  cG          E|g=159.2 {I4}, I|g=10 {I3} (1978Ne10).

```

#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-E_γ = -0.06±0.5σ]



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

.....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: α(K)exp=0.3 {I2} (2005Sa40).

E_γ=159.2 {I4}, I_γ=10 {I3} (1978Ne10).

```

184AU  L 242.87     10 (LE3)+
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).

```

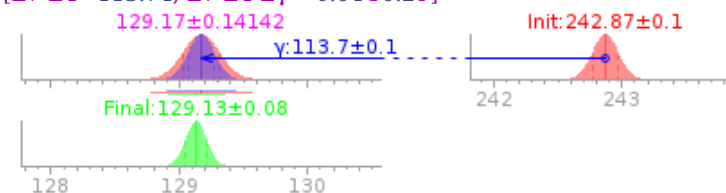
#Record 8/20 Level "L7:242.87(10) (LE3)+" Line:168 Child:1

Energy=242.87(±.10)keV Spin and parity:J^π=(LE3)+

#Record 1/1 Gamma "113.7(1) M1 16(3)" Line:169[4]

E=113.7(±.1)keV

Init.Level:L7:242.87(10) (LE3)+ Final.Level:L4:129.13(8) (1,2)+
 [E7-E4=113.74; E7-E4-E_γ = 0.04±0.2σ]



.....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

```

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

```

```

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).

```

```

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).

```

#M: $\alpha(K)\text{exp}=4.6$ {I6}, $\alpha(L1)\text{exp}=1.0$ {I4} (2005Sa40).

#Record 9/20 Level "L8:254.26(7) 2-" Line:173[7] Child:3
 Energy=254.26(± 0.07)keV Spin and parity: $J^\pi=2^-$
 The intensity imbalance of 12% {I7} at this level may arise from an incomplete decay scheme and/or the acute dependence of $I(\gamma+ce)$ from this level on $\delta(26\gamma)$. $\%e+\%b^+<0.25$ is expected for the possible 1U branch to this level, based on $\log\{I_f^{1u}\}>8.5$.

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

#Record 1/3 Gamma "25.86(6) M1+E2 19(2)" Line:180[5]
 E=25.86(± 0.06)keV
 Init.Level:L8:254.26(7) 2- Final.Level:L6:228.40(7) 3- [E8-E6=25.86; E8-E6-E γ = 0 \pm 0.1 σ]



.....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(± 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

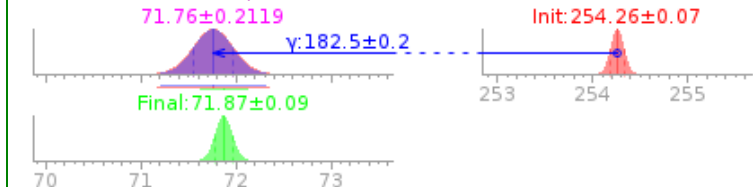
\$PC=0.0380 6 //cc for P shell

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

#Record 2/3 Gamma "182.5(2) E1 6(2)" Line:185[4]

E=182.5(± 0.2)keV

Init.Level:L8:254.26(7) 2- Final.Level:L2:71.87(9) 2+,3+ [E8-E2=182.39; E8-E2-E γ = -0.11 \pm 0.5 σ]



.....help1:[254.26,0.07,182.5,0.2,71.87,0.09]

Relative photon intensity:RI=6(2)

Multipolarity of transaction:M=E1

Total conversion coeff.:CC=0.0906

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

```

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).

```

```

$KC=0.0741 11 //Theoretical K- conversion coefficient
$LC=0.01273 19 //Theoretical L-shell conversion coefficient
$MC=0.00295 5 //Conversion coefficient for M shell; calculated
$NC+=0.000861 13 //Summed conversion coefficients of N-,
Q- and R-shells
$NC=0.000726 11 //cc for N shell
$OC=0.0001279 19 //cc for O shell
$PC=6.63E-6 10 //cc for P shell
#M:  $\alpha(K)\exp<0.15$  (2005Sa40).

```

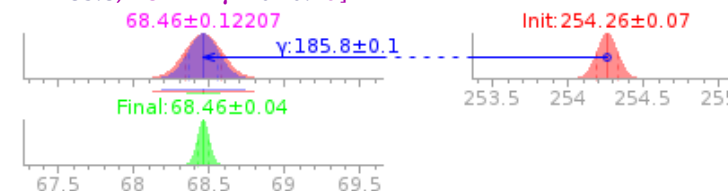
Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```

#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-Eγ = 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).

```

```

184AU  L 301.86 16 (1-,2-,3-)

```

```

#Record 10/20 Level "L9:301.86(16) (1-,2-,3-)" Line:193 Child:2
Energy= 301.86(±.16)keV Spin and parity:Jπ=(1-,2-,3-) Q=?
(questionable)

```

```

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).

```

```

#Record 1/2 Gamma "47.6(2) M1 2.1(5)" Line:194[4]
E= 47.6(±.2)keV
Init.Level:L9:301.86(16) (1-,2-,3-) Final.Level:L8:254.26(7) 2- [E9-
E8= 47.6; E9-E8-Eγ = 0±0.1σ]

```



```

.....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(±.22)


```

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).

```

```

$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-
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).

```

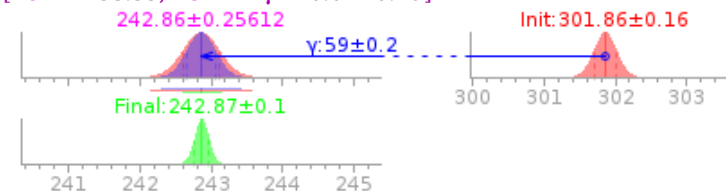
Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```

#Record 2/2 Gamma "59.0(2) (E1) 5(1)" Line:198[4]
E= 59.0(±.2)keV
Init.Level:L9:301.86(16) (1-,2-,3-) Final.Level:L7:242.87(10)
[E9-E7=58.99; E9-E7-Eγ =-0.01±0.1σ]

```



```

.....help1: [ 301.86,0.16,59.0,0.2,242.87,0.1 ]

```

```

Relative photon intensity:RI=5(1)
Multipolarity of transition:M=(E1)
Total conversion coeff.:CC=0.346(±.006)
$LC=0.266 5 //Theoretical L-shell conversion coefficient
$MC=0.0625 11 //Conversion coefficient for M shell; calculated
$NC+=0.0178 3 //Summed conversion coefficients of N-, O-, P-, Q-
and R-shells
$NC=0.0152 3 //cc for N shell
$OC=0.00252 5 //cc for O shell
$PC=9.26E-5 15 //cc for P shell
#M: L1 and L3 conversion electrons not observed (2005Sa40).

```

```

184AU  L  306.90    12 (1)+
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

```

```

#Record 11/20 Level "L10:306.90(12) (1)+ " Line:202 Child:3
Energy=306.90(±.12)keV Spin and parity:Jπ=(1)+
#Record 1/3 EC Line:203[2]

```

```

Intensity of β+-decay branch:IB=1.5(±.4)
Intensity of electron capture branch:IE=5.4(±1.5)
The log ft for (ε + β+) transition :LOGFT=5.32(±.12)
Total (ε + β+) decay intensity:TI=6.9(±1.9)
$EAV=1191 11 //Average energy of the β+ 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

```

```

184AU  G  220.4      1  26      3M1      0.775
184AUS  G  KC=0.638  9$LC=0.1059  15$MC=0.0245  4$NC+=0.00732  11
184AUS  G  NC=0.00612  9$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(±.1)keV
Init.Level:L10:306.90(12) (1)+ Final.Level:L3:86.50(8) (2,3)+ [E10-
E3=220.4; E10-E3-Eγ =0±0.1σ]

```

```

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 {I2}, |a(M)exp=0.02 {I1}
184AUxcG (2005Sa40).

```

```

184AU  L 320.50      10 2+      2 NS      LT
184AU  cL T      from |g delayed coin (1978Ne10).

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

```



```

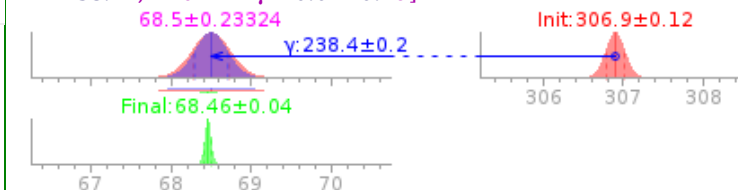
.....help1:[ 306.9,0.12,220.4,0.1,86.5,0.08 ]
Relative photon intensity:RI=26(3)
Multipolarity of transaction:M=M1
Total conversion coeff.:CC=0.775
$KC=0.638 9 //Theoretical K- conversion coefficient
$LC=0.1059 15 //Theoretical L-shell conversion coefficient
$MC=0.0245 4 //Conversion coefficient for 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: α(K)exp=0.54 {I12}, (α(L1)exp+α(L2)exp)=0.11 {I3} (2005Sa40).

```

```

#Record 3/3 Gamma "238.4(2) M1 180(30)" Line:210[5]
E=238.4(±.2)keV
Init.Level:L10:306.90(12) (1)+ Final.Level:L1:68.46(4) 2+ [E10-
E1=238.44; E10-E1-Eγ =0.04±0.2σ]

```



```

.....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: α(K)exp=0.46 {I11}, α(L)exp=0.08 {I2}, α(M)exp=0.02 {I1} (2005Sa40).

```

```

#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<2·10⁻⁹sec
#T: from γ delayed coin (1978Ne10).

```

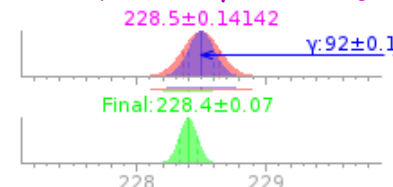
```

#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-

```

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).

E6=92.1; E11-E6-E_γ = 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

E_γ=91.5 {I5}, I_γ=47 {I8} (1978Ne10).

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

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

184AU L 331.40 8 1+, 2+

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

#Record 13/20 Level "L12:331.40(8) 1+,2+" Line:222 Child:3

Energy=331.40(±.08)keV Spin and parity:J^π=1+,2+

#Record 1/3 Gamma "244.8(2) [M1,E2] 9(2)" Line:223[3]

E=244.8(±.2)keV

Init.Level:L12:331.40(8) 1+,2+ Final.Level:L3:86.50(8) (2,3)+ [E12-E3=244.9; E12-E3-E_γ = 0.1 ± 0.5σ]



.....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(±.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

#Record 2/3 Gamma "259.5(1) M1 86(10)" Line:226[6]

E=259.5(±.1)keV

Init.Level:L12:331.40(8) 1+,2+ Final.Level:L2:71.87(9) 2+,3+ [E12-E2=259.53; E12-E2-E_γ = 0.03 ± 0.2σ]

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

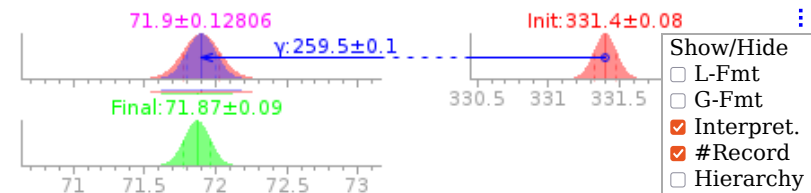
184AUS G NC=0.00388 6\$OC=0.000714 10\$PC=4.83E-5 7

184AU cG M |a(K)exp=0.39 {I7}, (|a(L1)exp+|a(L2)exp)=0.06 {I7}

```
184AU2cG (2005Sa40); |a(K)exp|?0.25 (1970FiZZ).
184AU cG E|g=259.0 {I1}, I|g=84 {I10} (1978Ne10).
```

```
184AU G 262.9 1 62 8M1 0.476
184AUS G KC=0.392 6$LC=0.0649 10$MC=0.01503 22$NC+=0.00448 7
184AUS G NC=0.00375 6$OC=0.000689 10$PC=4.66E-5 7
184AU cG M |a(K)exp=0.38 {I7}, (|a(L1)exp+|a(L2)exp)=0.07 {I2}
184AU2cG (2005Sa40); |a(K)exp|?0.25 (1970FiZZ).
184AU cG E|g=262.3 {I1}, I|g=67 {I8} (1978Ne10).
```

```
184AU L 364.19 9 1+
```



```
.....help1:[ 331.4,0.08,259.5,0.1,71.87,0.09 ]
```

Relative photon intensity:RI=86(10)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.494

\$KC=0.406 6 //Theoretical K- conversion coefficient

\$LC=0.0672 10 //Theoretical L-shell conversion coefficient

\$MC=0.01558 22 //Conversion coefficient for M shell; calculated

\$NC+=0.00465 7 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00388 6 //cc for N shell

\$OC=0.000714 10 //cc for O shell

\$PC=4.83E-5 7 //cc for P shell

#M: $\alpha(K)exp=0.39$ {I7}, ($\alpha(L1)exp+\alpha(L2)exp$)=0.06 {I7} (2005Sa40);
 $\alpha(K)exp=0.25$ (1970FiZZ).

E γ =259.0 {I1}, I γ =84 {I10} (1978Ne10).

#Record 3/3 Gamma "262.9(1) M1 62(8)" Line:232[6]

E=262.9(±.1)keV

Init.Level:L12:331.40(8) 1+,2+ Final.Level:L1:68.46(4) 2+ [E12-
 E1=262.94; E12-E1-E γ =0.04±0.5 σ]



```
.....help1:[ 331.4,0.08,262.9,0.1,68.46,0.04 ]
```

Relative photon intensity:RI=62(8)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.476

\$KC=0.392 6 //Theoretical K- conversion coefficient

\$LC=0.0649 10 //Theoretical L-shell conversion coefficient

\$MC=0.01503 22 //Conversion coefficient for M shell; calculated

\$NC+=0.00448 7 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00375 6 //cc for N shell

\$OC=0.000689 10 //cc for O shell

\$PC=4.66E-5 7 //cc for P shell

#M: $\alpha(K)exp=0.38$ {I7}, ($\alpha(L1)exp+\alpha(L2)exp$)=0.07 {I2} (2005Sa40);
 $\alpha(K)exp=0.25$ (1970FiZZ).

E γ =262.3 {I1}, I γ =67 {I8} (1978Ne10).

#Record 14/20 Level "L13:364.19(9) 1+" Line:238 Child:3

```
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
```

```
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).
```

```
184AU  G 295.7 1 100 15M1      0.345
184AUS  G KC=0.284 4$LC=0.0469 7$MC=0.01087 16$NC+=0.00324 5
184AUS  G NC=0.00271 4$OC=0.000498 7$PC=3.38E-5 5
184AU  cG M      |a(K)exp=0.28 {I8}, (|a(L1)exp+|a(L2)exp)=0.08 {I3}
184AUxcG (2005Sa40).
184AU  cG      E|g=295.1 {I1}, I|g=160 {I20} (1978Ne10), |a(K)exp=0.04 {I2}
184AU2cG (1970FiZZ) for line which may be a 294.8|g+295.7|g doublet.
```

Energy=364.19(±.09)keV Spin and parity:J π =1+

#Record 1/3 EC Line:239[2]

Intensity of β^+ -decay branch: IB=0.74(±.21)

Intensity of electron capture branch: IE=2.9(±.8)

The log ft for ($\epsilon + \beta^+$) transition :LOGFT=5.58(±.12)

Total ($\epsilon + \beta^+$) decay intensity: TI=3.6(±1.0)

\$EAV=1166 11 //Average energy of the β^+ spectrum

\$CK=0.647 4 //Calculated fraction of decay by electron capt from the K shell

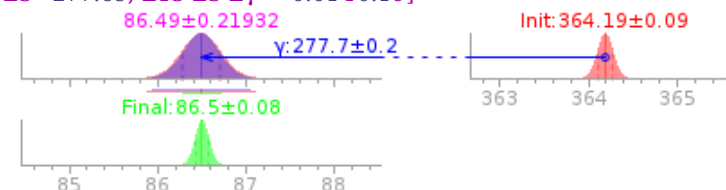
\$CL=0.1125 7 //Calculated fraction of decay by electron cap from the L shell

\$CM+=0.03601 22

#Record 2/3 Gamma "277.7(2) M1 15(3)" Line:241[5]

E=277.7(±.2)keV

Init.Level:L13:364.19(9) 1+ Final.Level:L3:86.50(8) (2,3)+ [E13-E3=277.69; E13-E3-E γ =-0.01 ϵ 0.1 σ]



.....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

\$NC+=0.00385 6 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00322 5 //cc for N shell

\$OC=0.000592 9 //cc for O shell

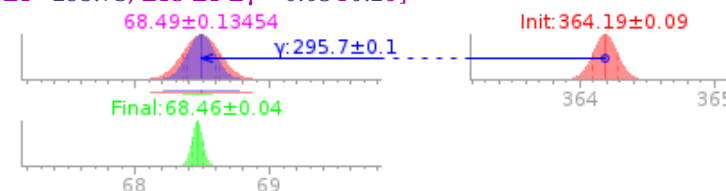
\$PC=4.01E-5 6 //cc for P shell

#M: α (K)exp=0.37 {I9}, (α (L1)exp+ α (L2)exp)=0.04 {I2} (2005Sa40).

#Record 3/3 Gamma "295.7(1) M1 100(15)" Line:246[7]

E=295.7(±.1)keV

Init.Level:L13:364.19(9) 1+ Final.Level:L1:68.46(4) 2+ [E13-E1=295.73; E13-E1-E γ =0.03 ϵ 0.2 σ]



.....help1:[364.19,0.09,295.7,0.1,68.46,0.04]

Relative photon intensity:RI=100(15)

Multipolarity of transaction:M=M1

Total conversion coeff.:CC=0.345

\$KC=0.284 4 //Theoretical K- conversion coefficient

- Show/Hide
- ☐ L-Fmt
 - ☐ G-Fmt
 - ☒ Interpret.
 - ☒ #Record
 - ☐ Hierarchy
 - ☒ G-plot
 - ☒ G-plot:ok
 - ☐ L-plot/V
 - ☒ L-plot/H
 - ☐ L $_n$ in/out

184AU L 381.50 9 1+,2+

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(L1)exp:|a(L2)exp=1.00:0.13 {I2}

184AUxcG (2005Sa40).

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.

\$LC=0.0469 7 //Theoretical L-shell conversion coefficient
\$MC=0.01087 16 //Conversion coefficient for M shell; calculated
\$NC+=0.00324 5 //Summed conversion coefficients of N-, O- and R-shells
\$NC=0.00271 4 //cc for N shell
\$OC=0.000498 7 //cc for O shell
\$PC=3.38E-5 5 //cc for P shell

#M: $\alpha(K)\exp=0.28 \{I8\}$, $(\alpha(L1)\exp+\alpha(L2)\exp)=0.08 \{I3\}$ (2005Sa40).

$E_\gamma=295.1 \{I1\}$, $I_\gamma=160 \{I20\}$ (1978Ne10), $\alpha(K)\exp=0.04 \{I2\}$ (1970FizZ)
which may be a $294.8\gamma+295.7\gamma$ doublet.

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

#Record 15/20 Level "L14:381.50(9) 1+,2+" Line:253 Child:6

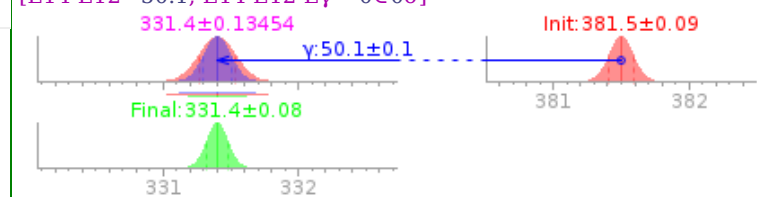
Energy=381.50(±.09)keV Spin and parity: $J^\pi=1+,2+$

#Record 1/6 Gamma "50.1(1) M1 7(1)" Line:254[5]

E=50.1(±.1)keV

Init.Level:L14:381.50(9) 1+,2+ Final.Level:L12:331.40(8) 1+,2+

[E14-E12=50.1; E14-E12- $E_\gamma=0 \in 0\sigma$]



.....help1:[381.5,0.09,50.1,0.1,331.4,0.08]

Relative photon intensity:RI=7(1)

Multipolarity of transition: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

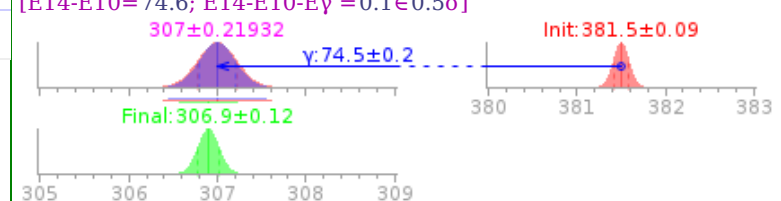
#M: $\alpha(L1)\exp=8.5 \{I15\}$, $\alpha(L1)\exp:\alpha(L2)\exp=1.00:0.13 \{I2\}$ (2005Sa40).

#Record 2/6 Gamma "74.5(2) M1 33(4)" Line:259[6]

E=74.5(±.2)keV

Init.Level:L14:381.50(9) 1+,2+ Final.Level:L10:306.90(12) (1)+

[E14-E10=74.6; E14-E10- $E_\gamma=0.1 \in 0.5\sigma$]



.....help1:[381.5,0.09,74.5,0.2,306.9,0.12]

Relative photon intensity:RI=33(4)

Multipolarity of transition:M=M1

Total conversion coeff.:CC=3.07

```

184AU  G 127.3  2 27  4E1  0.225
184AUS  G KC=0.182 3$LC=0.0330 5$MC=0.00768 12$NC+=0.00223 4
184AUS  G NC=0.00188 3$OC=0.000327 5$PC=1.552E-5 23
184AU  cG M |a(K)exp|<0.4, |a(L3)exp|<0.1 (2005Sa40).

```

```

184AU  G 138.5  2 6  2M1  2.86
184AUS  G KC=2.35 4$LC=0.393 6$MC=0.0912 14$NC+=0.0272 4
184AUS  G NC=0.0227 4$OC=0.00418 7$PC=0.000282 5
184AU  cG M |a(K)exp=2.9 {I8} (2005Sa40).

```

```

$LC=2.36 4 //Theoretical L-shell conversion coefficient
$MC=0.547 9 //Conversion coefficient for M shell; calculate
$NC+=0.163 3 //Summed conversion coefficients of N-, O-,
and R-shells
$NC=0.1362 22 //cc for N shell
$OC=0.0250 4 //cc for O shell
$PC=0.00169 3 //cc for P shell

```

#RI: from $\gamma\gamma$ coin; $I_\gamma=40$ {I4} for doublet (2005Sa40).

#M: $\alpha(L1)\exp=2.4$ {I4}, M1:M2:M3=1.00:0.21:0.09 (2005Sa40) for do
dominated by this transition.

#Record 3/6 Gamma "127.3(2) E1 27(4)" Line:265[4]

E=127.3($\pm .2$)keV

Init.Level:L14:381.50(9) 1+,2+ Final.Level:L8:254.26(7) 2- [E14-
E8=127.24; E14-E8-E γ = -0.06 \in 0.5 σ]



.....help1:[381.5,0.09,127.3,0.2,254.26,0.07]

Relative photon intensity:RI=27(4)

Multipolarity of transaction:M=E1

Total conversion coeff.:CC=0.225

\$KC=0.182 3 //Theoretical K- conversion coefficient

\$LC=0.0330 5 //Theoretical L-shell conversion coefficient

\$MC=0.00768 12 //Conversion coefficient for M shell; calculated

\$NC+=0.00223 4 //Summed conversion coefficients of N-, O-, P-, Q-
and R-shells

\$NC=0.00188 3 //cc for N shell

\$OC=0.000327 5 //cc for O shell

\$PC=1.552E-5 23 //cc for P shell

#M: $\alpha(K)\exp\leq 0.4$, $\alpha(L3)\exp\leq 0.1$ (2005Sa40).

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

E=138.5($\pm .2$)keV

Init.Level:L14:381.50(9) 1+,2+ Final.Level:L7:242.87(10) (LE3)+
[E14-E7=138.63; E14-E7-E γ = 0.13 \in 0.5 σ]



.....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

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


```

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.

```

```

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).

```

```

$MC=0.0912 14 //Conversion coefficient for M shell; calculated
$NC+=0.0272 4 //Summed conversion coefficients of N-, O-
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: α(K)exp=2.9 {I8} (2005Sa40).

```

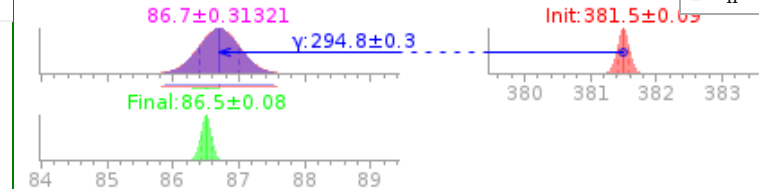
Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```

#Record 5/6 Gamma "294.8(3) (M1) 20(6)" Line:273[5]
E= 294.8(±.3)keV
Init.Level:L14:381.50(9) 1+,2+ Final.Level:L3:86.50(8) (2,3
E3= 295.0; E14-E3-Eγ = 0.2±1σ]

```



```

.....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: α(K)exp=0.30 {I15} (2005Sa40).

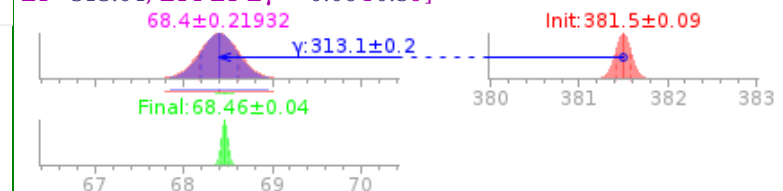
```

See comment on 295.7γ.

```

#Record 6/6 Gamma "313.1(2) M1 33(5)" Line:278[5]
E= 313.1(±.2)keV
Init.Level:L14:381.50(9) 1+,2+ Final.Level:L1:68.46(4) 2+ [E14-
E1= 313.04; E14-E1-Eγ = -0.06±0.5σ]

```



```

.....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-

```

184AU L 409.70 22

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

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.

184AU L 477.34 19 (LE3)+

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

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).

#Record 16/20 Level "L15:409.70(22)" Line:283 Child:2

Energy=409.70($\pm .22$)keV

#Record 1/2 EC Line:284[2]

Intensity of β^+ -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 β^+ spectrum

\$CK=0.654 4 //Calculated fraction of decay by electron capture from the K shell

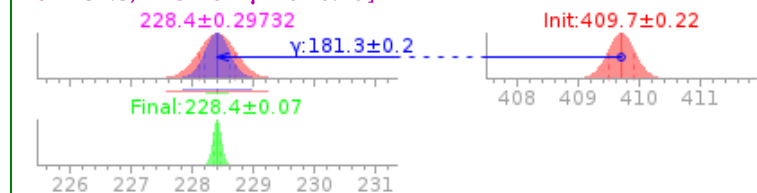
\$CL=0.1138 7 //Calculated fraction of decay by electron capture from the L shell

\$CM+=0.03642 22

#Record 2/2 Gamma "181.3(2) E1,E2 6(2)" Line:286[3]

E=181.3($\pm .2$)keV

Init.Level:L15:409.70(22) Final.Level:L6:228.40(7) 3- [E15-
E6=181.3; E15-E6-E γ =0 \pm 0.1 σ]



.....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($\pm .22$)

\$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: $\alpha(K)\exp<0.3$ (2005Sa40) implies mult=E1,E2.

#Record 17/20 Level "L16:477.34(19) (LE3)+" Line:289 Child:3

Energy=477.34($\pm .19$)keV Spin and parity:J π =(LE3)+

#Record 1/3 EC Line:290[2]

Intensity of β^+ -decay branch: IB=0.33($\pm .07$)

Intensity of electron capture branch:IE=1.5($\pm .3$)

The log ft for ($\varepsilon + \beta^+$) transition :LOGFT=5.85($\pm .10$)

Total ($\varepsilon + \beta^+$) decay intensity:TI=1.8($\pm .4$)

\$EAV=1115 11 //Average energy of the β^+ spectrum

\$CK=0.664 4 //Calculated fraction of decay by electron capture from the K shell

- Show/Hide
- ☐ L-Fmt
 - ☐ G-Fmt
 - ☒ Interpret.
 - ☒ #Record
 - ☐ Hierarchy
 - ☒ G-plot
 - ☒ G-plot:ok
 - ☐ L-plot/V
 - ☒ L-plot/H
 - ☐ L $_n$ in/out

```

184AU  G  234.5      3  22      5(M1+E2)      0.44  22
184AUS  G  KC=0.33 22$LC=0.084 5$MC=0.0205 4$NC+=0.00600 18
184AUS  G  NC=0.00508 10$OC=0.00089 7$PC=4.E-5 3
184AU  cG  M      |a(K)exp=0.3 {I2}, |a(L)exp<0.1 (2005Sa40).

```

```

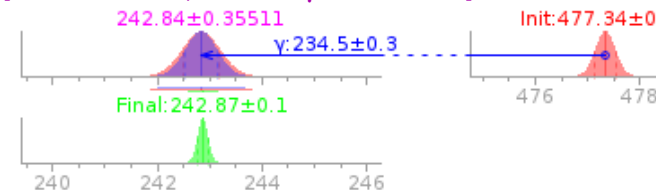
184AU  G  348.2      2  18      3M1      0.222
184AUS  G  KC=0.183 3$LC=0.0300 5$MC=0.00695 10$NC+=0.00207 3
184AUS  G  NC=0.001732 25$OC=0.000319 5$PC=2.16E-5 3
184AU  cG  M      |a(K)exp=0.17 {I5}, K/L/?5.6 (2005Sa40).

```

```

$CL=0.1156 7 //Calculated fraction of decay by electron capture
from the L shell
$CM+=0.03701 21
#Record 2/3 Gamma "234.5(3) (M1+E2) 22(5)" Line:292[4]
E= 234.5(±.3)keV
Init.Level:L16:477.34(19) (LE3)+ Final.Level:L7:242.87(10)
[E16-E7=234.47; E16-E7-E $\gamma$  = -0.03±0.1 $\sigma$ ]

```



```

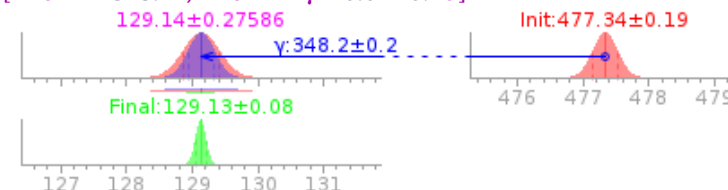
.....help1:[ 477.34,0.19,234.5,0.3,242.87,0.1 ]
Relative photon intensity:RI=22(5)
Multipolarity of transaction:M=(M1+E2)
Total conversion coeff.:CC=0.44(±.22)
$KC=0.33 22 //Theoretical K- conversion coefficient
$LC=0.084 5 //Theoretical L-shell conversion coefficient
$MC=0.0205 4 //Conversion coefficient for M shell; calculated
$NC+=0.00600 18 //Summed conversion coefficients of N-, O-, P-,
Q- and R-shells
$NC=0.00508 10 //cc for N shell
$OC=0.00089 7 //cc for O shell
$PC=4.E-5 3 //cc for P shell
#M:  $\alpha$ (K)exp=0.3 {I2},  $\alpha$ (L)exp<0.1 (2005Sa40).

```

```

#Record 3/3 Gamma "348.2(2) M1 18(3)" Line:296[4]
E= 348.2(±.2)keV
Init.Level:L16:477.34(19) (LE3)+ Final.Level:L4:129.13(8) (1,2)+
[E16-E4=348.21; E16-E4-E $\gamma$  = 0.01±0.1 $\sigma$ ]

```



```

.....help1:[ 477.34,0.19,348.2,0.2,129.13,0.08 ]
Relative photon intensity:RI=18(3)
Multipolarity of transaction:M=M1
Total conversion coeff.:CC=0.222
$KC=0.183 3 //Theoretical K- conversion coefficient
$LC=0.0300 5 //Theoretical L-shell conversion coefficient
$MC=0.00695 10 //Conversion coefficient for M shell; calculated
$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
 - ☐ L_n in/out

```

184AU  L 486.10    22 LE3+
-----
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

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).

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).

```

#Record 18/20 Level "L17:486.10(22) LE3+" Line:300 Child:3
 Energy=486.10(±.22)keV Spin and parity:J^π=LE3+
 #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 capt
 from the K shell
 \$CL=0.1158 7 //Calculated fraction of decay by electron cap
 from the L shell
 \$CM+=0.03709 21

#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-E_γ = 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

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: α(K)exp=6.8 {I20}, α(L1)exp=1.3 {I6} (2005Sa40).

#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-E_γ = 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

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

```

184AU  L 490.91  7 1+ 2 NS LT
184AU  cL T      from |g delayed coin (1978Ne10).

-----
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

-----
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.

-----
184AU  G 126.7  1 13 3M1(+E2) 2.8 9
184AUS G KC=1.8 13$LC=0.8 4$MC=0.21 9$NC+=0.060 25
184AUS G NC=0.051 22$OC=0.009 4$PC=0.00021 16
184AU  cG M      |a(K)exp=2.0 {I6}, (|a(L1)exp+|a(L2)exp)=0.62 {I15},
184AUxcG |a(L3)exp|<0.15 (2005Sa40).
184AU  cG      E|g=126.5 {I3}, I|g=14 {I4} (1978Ne10).

```

```

$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; calculate
$NC+=0.1019 15 //Summed conversion coefficients of N-, C
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: α(K)exp=6 {I2}, (α(L1)exp+α(L2)exp)=1.7 {I8} (2005Sa40).

```

Show/Hide

- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

```

#Record 19/20 Level "L18:490.91(7) 1+" Line:311[2] Child:11
Energy=490.91(±.07)keV Spin and parity:Jπ=1+ T½<2·10-6 sec
#T: from γ delayed coin (1978Ne10).

```

```

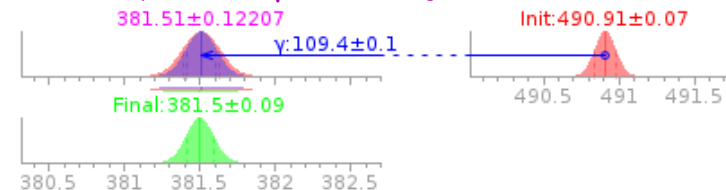
#Record 1/11 EC Line:313[2]
Intensity of β+-decay branch: IB=11(±1)
Intensity of electron capture branch:IE=47(±6)
The log ft for (ε + β+) transition :LOGFT=4.33(±.06)
Total (ε + β+) decay intensity:TI=58(±7)
$EAV=1109 11 //Average energy of the β+ spectrum
$CK=0.666 4 //Calculated fraction of decay 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

```

```

#Record 2/11 Gamma "109.4(1) M1(+E0) 15(3)" Line:315[5]
E=109.4(±.1)keV
Init.Level:L18:490.91(7) 1+ Final.Level:L14:381.50(9) 1+,2+ [E18-
E14=109.41; E18-E14-Eγ = 0.01±0.1σ]

```



```

.....help1:[ 490.91,0.07,109.4,0.1,381.5,0.09 ]

```

```

Relative photon intensity:RI=15(3)
Multipolarity of transaction:M=M1(+E0)
Total conversion coeff.:CC≈18

```

```

#M: α(K)exp=14 {I4}, α(L1)exp=2.3 {I5} (2005Sa40). α(K)=4.78 {I15};
α(L)=0.802 {I24}; α(M)=0.186 {I6}; α(N+..)=0.0593 {I18} if pure M1.

```

```

#CC: approximate value; from α(K)exp x 1.3.

```

```

#Record 3/11 Gamma "126.7(1) M1(+E2) 13(3)" Line:320[6]
E=126.7(±.1)keV
Init.Level:L18:490.91(7) 1+ Final.Level:L13:364.19(9) 1+ [E18-
E13=126.72; E18-E13-Eγ = 0.02±0.1σ]

```

```

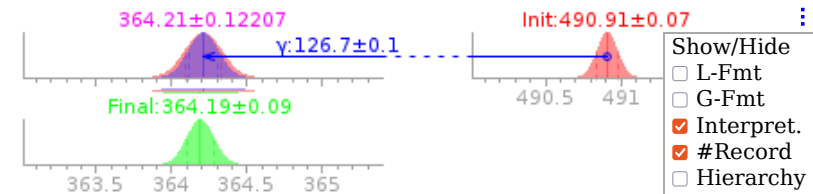
184AU  G  159.4      1  60      8M1      1.92
184AUS  G  KC=1.579 23$LC=0.264 4$MC=0.0611 9$NC+=0.0182 3
184AUS  G  NC=0.01524 22$OC=0.00280 4$PC=0.000189 3
184AU  cG  M      |a(K)exp=1.4 {I4}, (|a(L1)exp+|a(L2)exp)=0.27 {I6}
184AUxcG (2005Sa40).
184AU  cG      E|g=159.1 {I4}, I|g=60 {I10} (1978Ne10).

```

```

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

```



.....help1:[490.91,0.07,126.7,0.1,364.19,0.09]

Relative photon intensity:RI=13(3)

Multipolarity of transaction:M=M1(+E2)

Total conversion coeff.:CC=2.8(±.9)

\$KC=1.8 13 //Theoretical K- conversion coefficient

\$LC=0.8 4 //Theoretical L-shell conversion coefficient

\$MC=0.21 9 //Conversion coefficient for M shell; calculated

\$NC+=0.060 25 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.051 22 //cc for N shell

\$OC=0.009 4 //cc for O shell

\$PC=0.00021 16 //cc for P shell

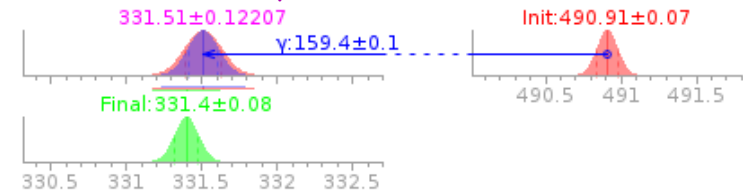
#M: $\alpha(K)exp=2.0$ {I6}, $(\alpha(L1)exp+\alpha(L2)exp)=0.62$ {I15}, $\alpha(L3)exp\leq 0.15$ (2005Sa40).

$E_\gamma=126.5$ {I3}, $I_\gamma=14$ {I4} (1978Ne10).

#Record 4/11 Gamma "159.4(1) M1 60(8)" Line:326[6]

$E=159.4(\pm.1)keV$

Init.Level:L18:490.91(7) 1+ Final.Level:L12:331.40(8) 1+,2+ [E18-E12=159.51; E18-E12- $E_\gamma=0.11\in 1\sigma$]



.....help1:[490.91,0.07,159.4,0.1,331.4,0.08]

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).

#Record 5/11 Gamma "170.3(1) M1 24(4)" Line:332[5]

$E=170.3(\pm.1)keV$

Init.Level:L18:490.91(7) 1+ Final.Level:L11:320.50(10) 2+ [E18-

```
184AU cG M      |a(K)exp=1.3 {I3} (2005Sa40).
184AU cG      E|g=170.1 {I2}, I|g=21 {I3} (1978Ne10).
```

E11=170.41; E18-E11-E γ = 0.11 \pm 0.5 σ

320.61 \pm 0.12207

γ 170.3 \pm 0.1

Final: 320.5 \pm 0.1

Init: 490.91 \pm 0.

490.5 491

.....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: α (K)exp=1.3 {I3} (2005Sa40).

E γ =170.1 {I2}, I γ =21 {I3} (1978Ne10).

#Record 6/11 Gamma "236.7(1) E1 1.00E3(10)" Line:337[6]

E= 236.7(\pm .1)keV

Init.Level:L18:490.91(7) 1+ Final.Level:L8:254.26(7) 2- [E18-E8=236.65; E18-E8-E γ = -0.05 \pm 0.5 σ]

254.21 \pm 0.12207

γ 236.7 \pm 0.1

Final: 254.26 \pm 0.07

Init: 490.91 \pm 0.07

253.5 254 254.5 255

.....help1: [490.91,0.07,236.7,0.1,254.26,0.07]

Relative photon intensity:RI= 1.00E3(10)

Multipolarity of transaction:M= E1

Total conversion coeff.:CC= 0.0476

\$KC=0.0391 6 //Theoretical K- conversion coefficient

\$LC=0.00652 10 //Theoretical L-shell conversion coefficient

\$MC=0.001509 22 //Conversion coefficient for M shell; calculated

\$NC+=0.000442 7 //Summed conversion coefficients of N-, O-, P-,

Q- and R-shells

\$NC=0.000372 6 //cc for N shell

\$OC=6.61E-5 10 //cc for O shell

\$PC=3.62E-6 5 //cc for P shell

#M: α (K)exp=0.04 {I1}, α (L)exp=0.05 {I2} (2005Sa40); α (K)exp=0.07 {I3} (1970FiZZ).

E γ =236.2 {I2}, I γ =1000 (1978Ne10)

#Record 7/11 Gamma "248.0(2) [M1,E2] 9(3)" Line:343[3]

E= 248.0(\pm .2)keV

```
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);
184AUxcG |a(K)exp=0.07 {I3} (1970FiZZ).
184AU cG      E|g=236.2 {I2}, I|g=1000 (1978Ne10)
```

```
184AU G 248.0      2 9      3[M1,E2]      0.37 19
184AUS G KC=0.28 18$LC=0.070 7$MC=0.0169 8$NC+=0.0050 3
```

Show/Hide

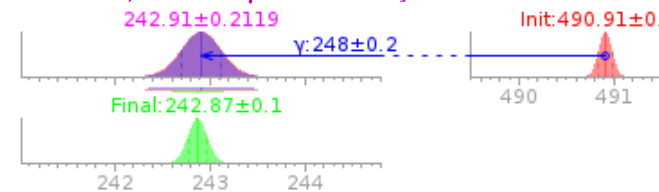
- ☐ L-Fmt
- ☐ G-Fmt
- ☒ Interpret.
- ☒ #Record
- ☐ Hierarchy
- ☒ G-plot
- ☒ G-plot:ok
- ☐ L-plot/V
- ☒ L-plot/H
- ☐ L_n in/out

184AUS G NC=0.00420 22\$OC=0.00073 8\$PC=3.3E-5 23

184AU G 362.0 2 25 10 (M1) 0.200
 184AUS G KC=0.1645 24\$LC=0.0270 4\$MC=0.00626 9\$NC+=0.00186 3
 184AUS G NC=0.001559 22\$OC=0.000287 4\$PC=1.95E-5 3
 184AU cG M |a(K)exp=0.16 {I8} (2005Sa40).

184AU G 404.7 2 22 3

Init.Level:L18:490.91(7) 1+ Final.Level:L7:242.87(10) (LE3)+ [E18-
 E7=248.04; E18-E7-E γ = 0.04 \in 0.2 σ]



.....help1:[490.91,0.07,248.0,0.2,242.87,0.1]

Relative photon intensity:RI=9(3)

Multipolarity of transaction:M=[M1,E2]

Total conversion coeff.:CC=0.37(\pm .19)

\$KC=0.28 18 //Theoretical K- conversion coefficient

\$LC=0.070 7 //Theoretical L-shell conversion coefficient

\$MC=0.0169 8 //Conversion coefficient for M shell; calculated

\$NC+=0.0050 3 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.00420 22 //cc for N shell

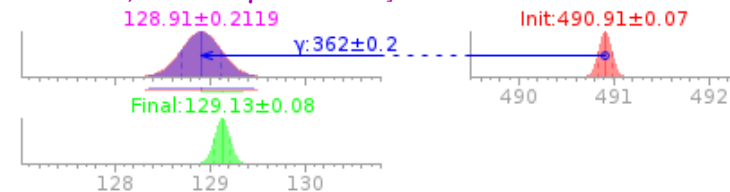
\$OC=0.00073 8 //cc for O shell

\$PC=3.3E-5 23 //cc for P shell

#Record 8/11 Gamma "362.0(2) (M1) 25(10)" Line:346[4]

E=362.0(\pm .2)keV

Init.Level:L18:490.91(7) 1+ Final.Level:L4:129.13(8) (1,2)+ [E18-
 E4=361.78; E18-E4-E γ = -0.22 \in 1 σ]



.....help1:[490.91,0.07,362.0,0.2,129.13,0.08]

Relative photon intensity:RI=25(10)

Multipolarity of transaction:M=(M1)

Total conversion coeff.:CC=0.200

\$KC=0.1645 24 //Theoretical K- conversion coefficient

\$LC=0.0270 4 //Theoretical L-shell conversion coefficient

\$MC=0.00626 9 //Conversion coefficient for M shell; calculated

\$NC+=0.00186 3 //Summed conversion coefficients of N-, O-, P-, Q- and R-shells

\$NC=0.001559 22 //cc for N shell

\$OC=0.000287 4 //cc for O shell

\$PC=1.95E-5 3 //cc for P shell

#M: α (K)exp=0.16 {I8} (2005Sa40).

#Record 9/11 Gamma "404.7(2) 22(3)" Line:350

E=404.7(\pm .2)keV

Init.Level:L18:490.91(7) 1+ Final.Level:L3:86.50(8) (2,3)+ [E18-
 E3=404.41; E18-E3-E γ = -0.29 \in 1 σ]

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

184AU G 419.6 4 5 2

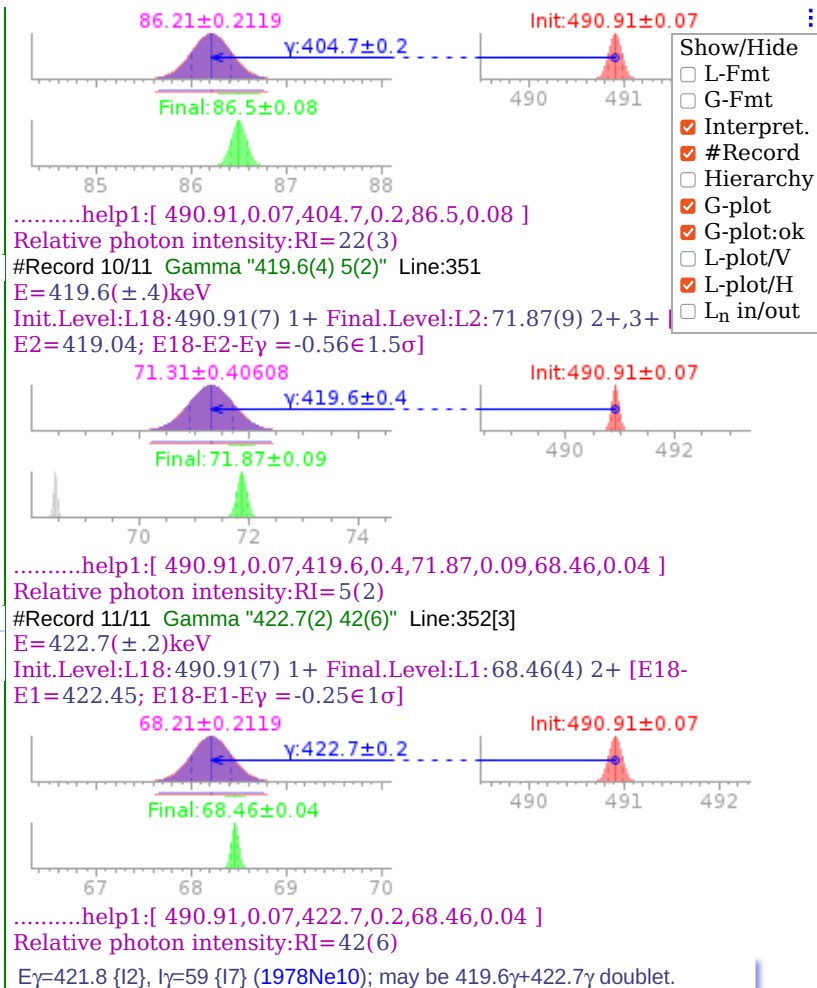
184AU G 422.7 2 42 6

184AU cG E|g=421.8 {I2}, I|g=59 {I7} (1978Ne10); may be
184AUxcG 419.6|g+422.7|g doublet.

184AU L 600.60 22

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

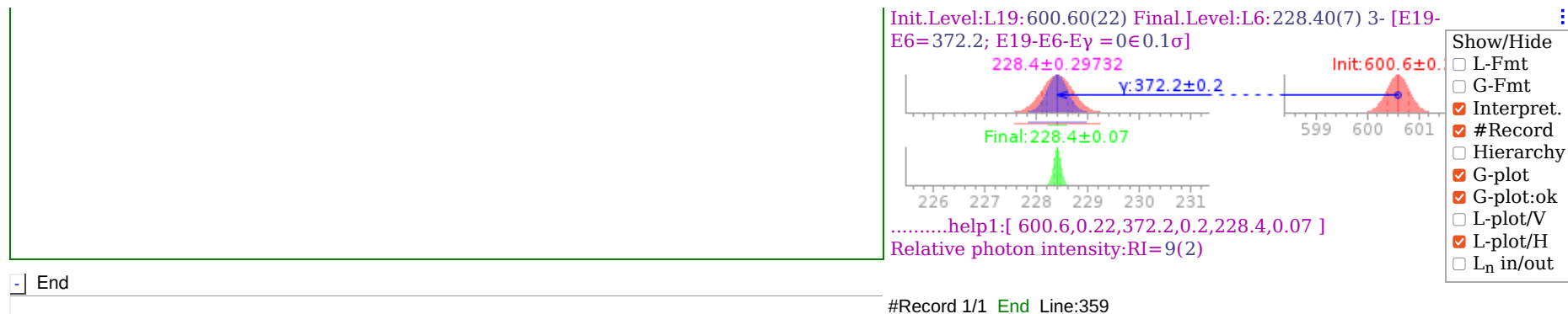
184AU G 372.2 2 9 2



? #Record 20/20 Level "L19:600.60(22)" Line:355 Child:2
Energy=600.60(±.22)keV Q=? (questionable)

? #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
from the L shell
\$CM+=0.03807 21

? #Record 2/2 Gamma "372.2(2) 9(2)" Line:358
E=372.2(±.2)keV



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

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Last updated: 02/05/2026 17:32:32