

Adopted Levels, Gammas

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2008

Q(β^-)=4492 14; S(n)=6239 19; S(p)=8460 17; Q(α)=-4.95×10³ 3 [2012Wa38](#)

Note: Current evaluation has used the following Q record 4.51E+3 116230 1180.39×10³ 16-4.96e+311 [2003Au03](#).

¹⁰⁸Rh Levels

Cross Reference (XREF) Flags

- A ¹⁰⁸Ru β^- decay
- B ¹⁷³Yb(²⁴Mg,X γ)
- C ¹⁷⁶Yb(²⁸Si,X γ)

E(level)	J $^\pi$	T _{1/2}	XREF	Comments
0.0	1 ⁺	16.8 s 5	A	% β^- =100 J $^\pi$: log ft=5.5 to 0 ⁺ . T _{1/2} : from 1962Pi02 . Others: 17 s 1 (1976KaYO), 17 s 1 (1978Fr16) 17.5 s (1958Ba02), 18 s 1 (1955Ba19).
14.54 17			A	
73.65? 14			A	E(level): order of 73.65 and 91.33 transitions not established. The level could be at 91.33.
164.98 14	1 ⁺		A	J $^\pi$: log ft=4.4 from 0 ⁺ .
0.0+x	(5 ⁺)	6.0 min 3	BC	% β^- =100; %IT=? E(level): 1995Au04 give -60 110; % β^- : no it Decay branch observed. J $^\pi$: log ft=6.6 to 6 ⁺ and log ft=6.6 to 1335 level. π is from shell model. T _{1/2} : from 1969Pi08 . Other: 5.9 min 2 (1984Bh02). E(level): x=115 18 (2012Au07) from mass measurement.
142.80+x 20	(6 ⁻)		BC	
244.7+x 3	(7 ⁻)		BC	
307.7+x [†] 10	(8 ⁻)		BC	E(level): 245-455 (2003Fo09) from systematics of 8 ⁻ states in ¹⁰⁰ Rh, ¹⁰² Rh and ¹⁰⁴ Rh; if 63 γ taken from literature is non-existent.
490.1+x [‡] 11	(9 ⁻)		BC	
802.5+x [†] 11	(10 ⁻)		BC	
1085.6+x [‡] 11	(11 ⁻)		BC	
1467.9+x [†] 11	(12 ⁻)		BC	
1859.5+x [‡] 11	(13 ⁻)		BC	
2286.5+x [†] 15	(14 ⁻)		C	

[†] Band(A): $\pi g_{9/2} \nu h_{11/2}$, $\alpha=0$.

[‡] Band(a): $\pi g_{9/2} \nu h_{11/2}$, $\alpha=1$.

$\gamma(^{108}\text{Rh})$

E _i (level)	J $^\pi$ _i	E $_\gamma$	I $_\gamma$	E _f	J $^\pi$ _f
14.54		14.6 3	100	0.0	1 ⁺
73.65?		73.65 20	100	0.0	1 ⁺
164.98	1 ⁺	91.33 7	8.5 2	73.65?	
		150.46 15	28 1	14.54	
		164.95 22	100 3	0.0	1 ⁺

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Adopted Levels, Gammas (continued) $\gamma(^{108}\text{Rh})$ (continued)

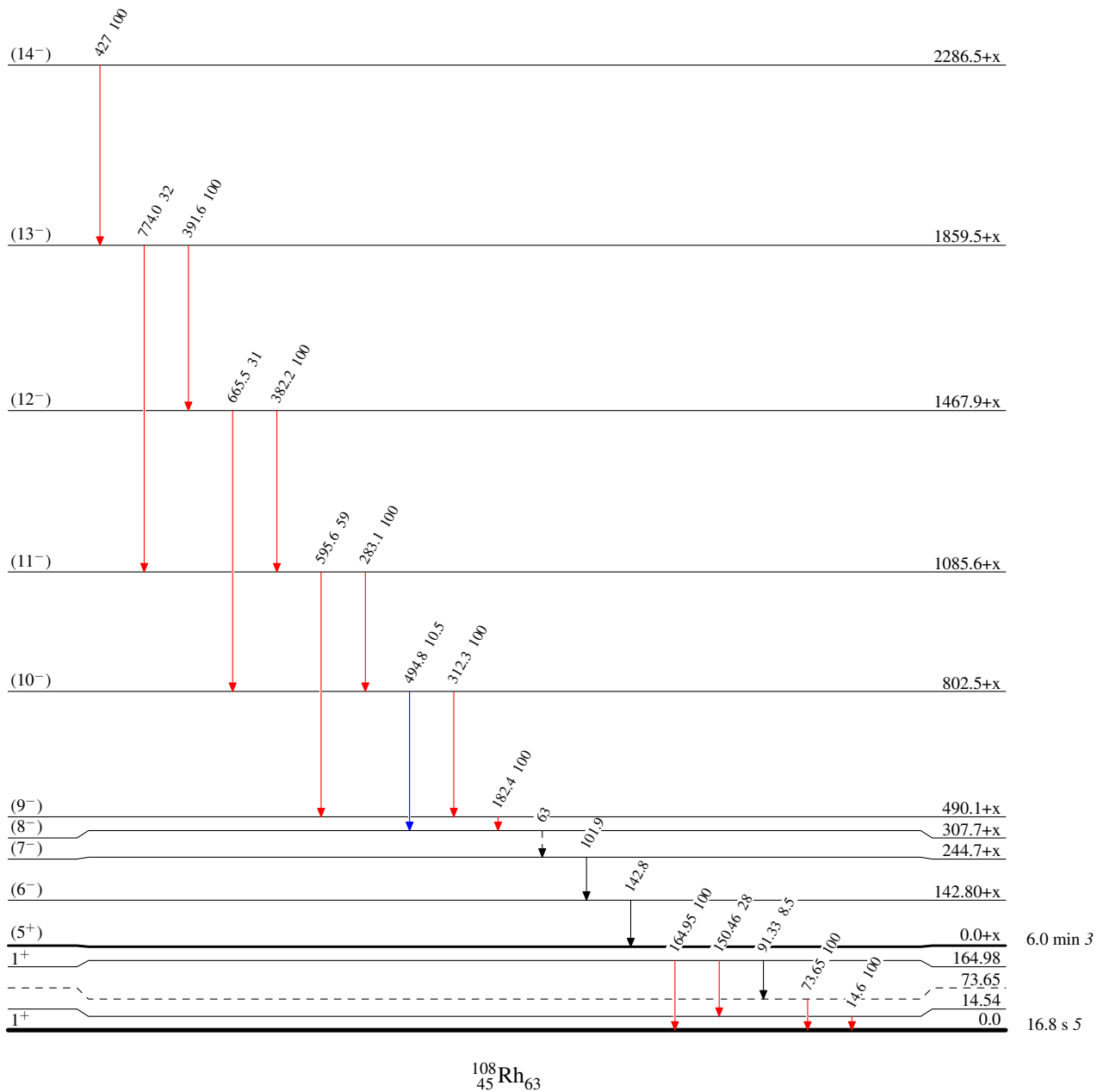
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Comments
142.80+x	(6 ⁻)	142.8 2		0.0+x	(5 ⁺)	
244.7+x	(7 ⁻)	101.9 2		142.80+x	(6 ⁻)	
307.7+x	(8 ⁻)	(63)		244.7+x	(7 ⁻)	E_γ : from literature; not reported by 2003Fo09 .
490.1+x	(9 ⁻)	182.4 2	100	307.7+x	(8 ⁻)	
802.5+x	(10 ⁻)	312.3 2	100 <i>11</i>	490.1+x	(9 ⁻)	
		494.8 6	10.5 <i>19</i>	307.7+x	(8 ⁻)	
1085.6+x	(11 ⁻)	283.1 2	100 <i>17</i>	802.5+x	(10 ⁻)	
		595.6 2	59 7	490.1+x	(9 ⁻)	
1467.9+x	(12 ⁻)	382.2 2	100 <i>12</i>	1085.6+x	(11 ⁻)	
		665.5 6	31 5	802.5+x	(10 ⁻)	
1859.5+x	(13 ⁻)	391.6 2	100 <i>17</i>	1467.9+x	(12 ⁻)	
		774.0 6	32 6	1085.6+x	(11 ⁻)	
2286.5+x	(14 ⁻)	427 1	100	1859.5+x	(13 ⁻)	

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Legend

Level Scheme
 Intensities: Type not specified

- ▶ $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - -▶ γ Decay (Uncertain)



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