^{92}Mo(α,nγ),(^{6}Li,p2nγ) 1985Ch28,1971Le20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni	NDS 111, 2555 (2010)	30-Jun-2009

1971Le20: Eα=23,30 MeV. Measured γ's, $\gamma\gamma$-coincidences, and γ(t); Ge(Li).
1985Ch28: E(^{6}Li)=28-34 MeV. Measured excitation function, γ's, $\gamma\gamma$-coin, $\gamma(\theta)$, and γ(t); Ge(Li).
All information is from 1985Ch28, except as noted. Other: 1965Ch26.

^{95}Ru Levels

E(level)	J$^{\pi}$[†]	E(level)	J$^{\pi}$[†]	T$_{1/2}$[‡]	E(level)	J$^{\pi}$[†]
0.0	5/2^{+}[#]	2246	(11/2^{+})		2774	(15/2^{-})
941 *1*	7/2^{+}[#]	2285[@]	17/2^{+}	3.05 ns *28*	3057	(17/2^{+})
1352	9/2^{+}	2450	(11/2^{-})		3370	(17/2^{-})
2030	13/2^{+}	2493	(13/2^{-})		3577	(19/2^{-})
2067	(11/2^{+})	2540[@]	21/2^{+}	10.05 ns *14*		

[†] From $\gamma(\theta)$, comparison with shell-model calculations, and systematics of other odd-A Ru isotopes, except as noted.
[‡] From γ(t) using ^{6}Li pulsed beams with a 250-ns repetition period and a ≈2−ns pulse width. The pulsed beam measurements also excluded the existence of high multipolarity decay transitions. Other: 8.3 ns *10* (1971Le20) for the unresolved doublet.
[#] From the Adopted Levels.
[@] g(255γ)=+0.821 *16* (1976Le30. DPAD; NaI) assuming T$_{1/2}$(255γ)=8.3 ns *10* and only one 255γ. The coincidence data of 1985Ch28 indicated that the 255γ was in coincidence with itself.

γ(^{95}Ru)

Coincidences shown on the drawing are from 1971Le20 and 1985Ch28.

E$_{\gamma}$	I$_{\gamma}$	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$	Mult.[†]
43		2493	(13/2^{-})	2450	(11/2^{-})	
207[‡]	4 *1*	3577	(19/2^{-})	3370	(17/2^{-})	(D+Q)
247[‡]	6 *1*	2493	(13/2^{-})	2246	(11/2^{+})	(D+Q)
255[b@] *1*	59[b] *6*	2285	17/2^{+}	2030	13/2^{+}	E2[#]
255[b@] *1*	59[b] *6*	2540	21/2^{+}	2285	17/2^{+}	E2[#]
281	8 *1*	2774	(15/2^{-})	2493	(13/2^{-})	(D+Q)
283	3 *1*	3057	(17/2^{+})	2774	(15/2^{-})	(D+Q)
313[‡]	5 *1*	3370	(17/2^{-})	3057	(17/2^{+})	(D+Q)
383		2450	(11/2^{-})	2067	(11/2^{+})	
411	3 *1*	1352	9/2^{+}	941	7/2^{+}	D+Q
678[@] *1*	62 *6*	2030	13/2^{+}	1352	9/2^{+}	Q
715	5 *1*	2067	(11/2^{+})	1352	9/2^{+}	(D+Q)
894	8[a] *1*	2246	(11/2^{+})	1352	9/2^{+}	(D+Q)
941	26.0 *26*	941	7/2^{+}	0.0	5/2^{+}	D+Q
1098		2450	(11/2^{-})	1352	9/2^{+}	
1292[‡]	12.0 *12*	3577	(19/2^{-})	2285	17/2^{+}	(D+Q)
1305	4[a] *1*	2246	(11/2^{+})	941	7/2^{+}	(Q)
1352[&]	100 *10*	1352	9/2^{+}	0.0	5/2^{+}	Q

[†] From $\gamma(\theta)$, except as noted.

Continued on next page (footnotes at end of table)

^{92}Mo(α,nγ),(^{6}Li,p2nγ) 1985Ch28,1971Le20 (continued)

γ(^{95}Ru) (continued)

‡ 207γ placed from 3168, 23/2$^+$; 247γ, from 2991?, (19/2$^+$); 313γ, from 2961, 21/2$^+$; and 1292γ placed, 3832, 25/2$^+$, state by 1990Go15. See (α,3nγ).
# Q from $\gamma(\theta)$; ≠M2 from comparison to RUL.
@ From 1971Le20.
& Other: 1346 *1* (1971Le20).
a Discrepant with adopted Iγ(895γ)/Iγ(1305γ)=0.96 *10*.
b Multiply placed with undivided intensity.

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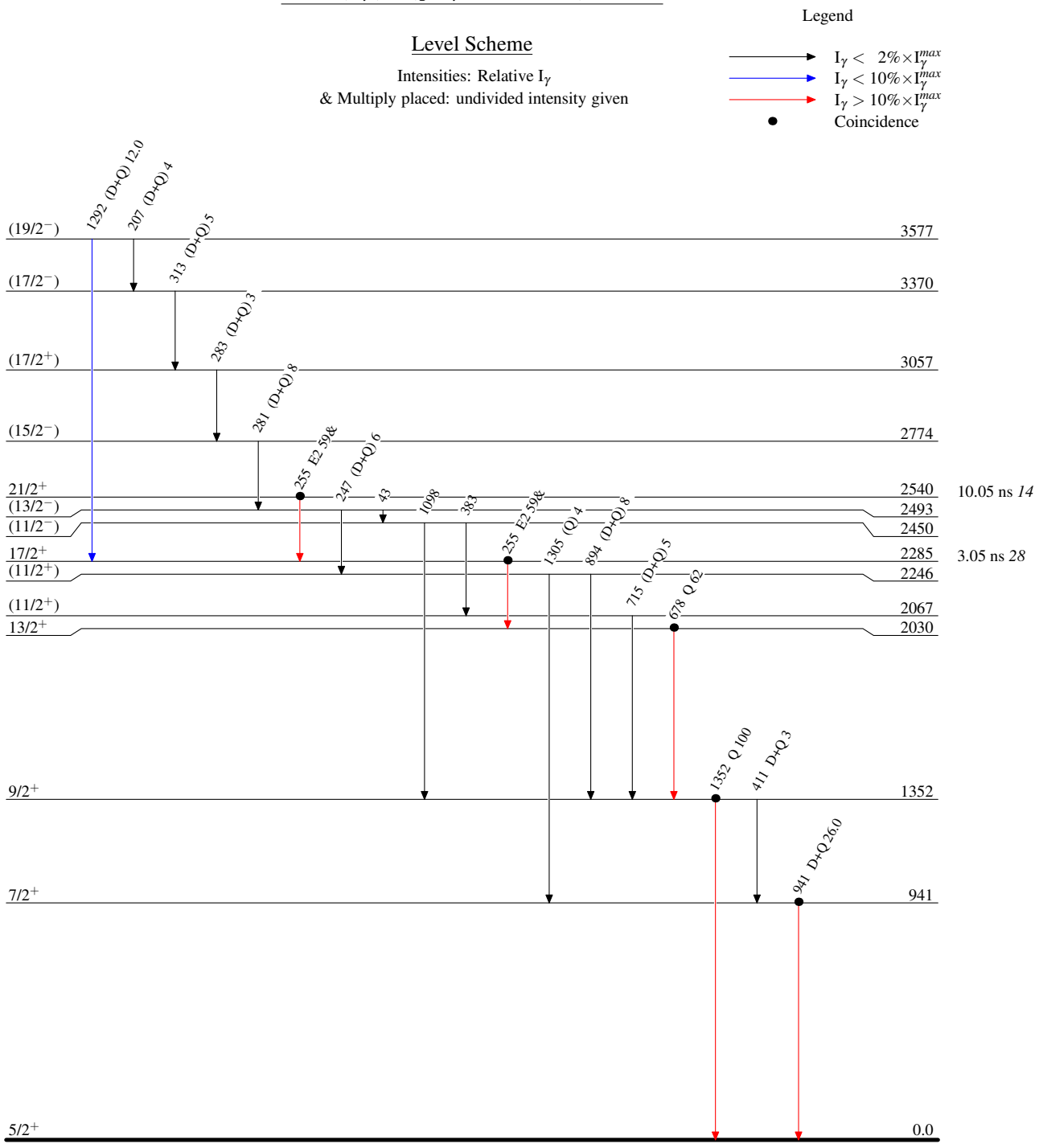

$^{95}_{44}Ru_{51}$