^{176}Yb(^{48}Ca,Xγ),^{176}Yb(^{154}Sm,Xγ) 1999As05,1997Le11,1995St17

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Achterberg, O. A. Capurro, G. V. Marti	NDS 110, 1473 (2009)	31-May-2008

1995St17,1997Le11: ^{176}Yb(^{48}Ca,xγ), E(lab)=250 MeV, target ^{176}Yb with 97.8% enrichment, Gammasphere array with 36 detectors, fragment-γ-γ coincidences.

1999As05: Deep inelastic reactions using ^{176}Yb(^{154}Sm,Xγ) at E=949 MeV. ^{176}Yb enriched to 97.8%. Measured Eγ, Iγ, fragment-$\gamma\gamma$ coincidences using Gammasphere array with 55 high-purity Compton-suppressed Ge detectors. Silicon strip detector for recoils.

Others: 1997Le10.

^{178}Yb Levels

All the reported levels belong to the $K^{\pi}=0^+$ g.s. band.

E(level)†	J$^{\pi}$
0.0	0^+
84.0 *3*	2^+
278.0 *7*	4^+
578.1 *12*	6^+
981.3 *18*	8^+
1483.5 *25*	10^+
2080 *4*	12^+
2770 *4*	14^+

† From γ cascade.

γ(^{178}Yb)

E$_{\gamma}$†	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
84.0 *3*	84.0	2^+	0.0	0^+
194.0 *6*	278.0	4^+	84.0	2^+
300.1 *10*	578.1	6^+	278.0	4^+
403.2 *13*	981.3	8^+	578.1	6^+
502.2 *17*	1483.5	10^+	981.3	8^+
596.0 *20*	2080	12^+	1483.5	10^+
690.0 *23*	2770	14^+	2080	12^+

† Energy uncertainties estimated by evaluators based on the $\Delta E/E\approx 0.8\%$ FWHM quoted in 1997Le11 for the Doppler-corrected γ peaks.

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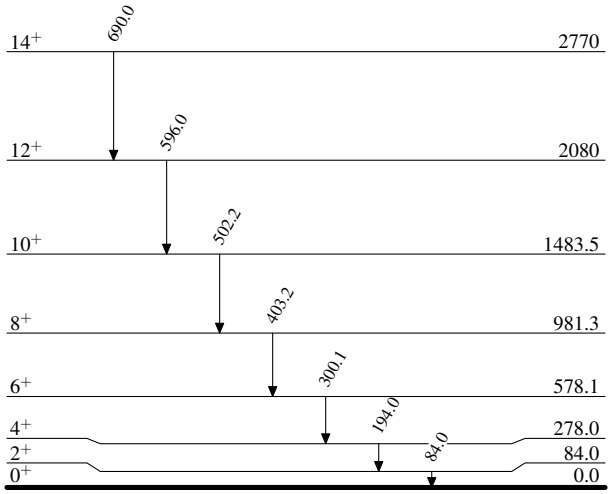
Level Scheme



$^{178}_{70}Yb_{108}$