^{7}Li(^{98}Sr,α2nγ),(^{98}Rb,^{3}H3nγ) 2015Bo11,2014Bo09

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 145, 25 (2017)	1-Jul-2017

Includes ^{7}Li(^{98}Rb,t3nγ).

Based on XUNDL. Compiled by E.A. McCutchan (NNDC,BNL), October 7, 2015.

E(^{98}Rb)=2.85 MeV/nucleon. Target: Li fluoride enriched in ^{7}Li. Measured Eγ, Iγ, $\gamma\gamma$ and particle γ coincidences using the miniball array of detectors. Reaction mechanism discussed in terms of transfer of a cluster-like particle within a distorted-wave Born approximation framework.

^{99}Y Levels

E(level)	J$^{\pi}$[†]
0.0	(5/2$^+$)
125.1	(7/2$^+$)
283.7	(9/2$^+$)
482.2	(11/2$^+$)
706.1	(13/2$^+$)

[†] From Adopted Levels.

γ(^{99}Y)

E$_\gamma$[†]	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
125[‡#]	125.1	(7/2$^+$)	0.0	(5/2$^+$)
158[‡#]	283.7	(9/2$^+$)	125.1	(7/2$^+$)
198[#]	482.2	(11/2$^+$)	283.7	(9/2$^+$)
224[#]	706.1	(13/2$^+$)	482.2	(11/2$^+$)

[†] Observation of transitions of 125 and 158 keV (in both ^{7}Li(^{98}Rb,^{3}H3nγ) and ^{7}Li(^{98}Sr,α2nγ) reactions) and 198 and 224 keV (only in ^{7}Li(^{98}Sr,α2nγ) reaction). Placement is by evaluators based on Adopted Levels.

[‡] Observed in coincidence with tritons.

[#] Observed in coincidence with α particles.

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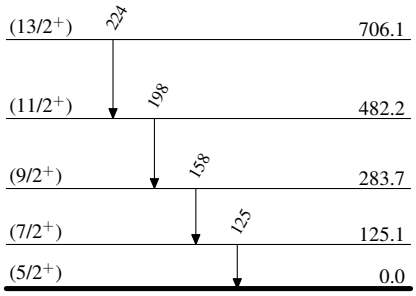
Level Scheme



$^{99}_{39}Y_{60}$