^{96}Mo(pol γ,γ') 2004Fr30

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 109,2501 (2008)	1-Apr-2008

E=2.80, 3.30, 3.43, 3.60, 3.90 MeV; nearly monoenergetic, 100% linearly polarized photon beams from HIγS source. Measured γ with a large HPGe detector. Relative nuclear resonance fluorescence (NRF) intensities were measured with an array of four HPGe γ-ray detectors.

^{96}Mo Levels

E(level)[†]	J$^\pi$[‡]
0.0	0^+
2794.5	1^+
3300.1	1^+
3424.8	1^+
3599.7	1^-
3895.3	1^-

[†] The observed 1^+ excitations in ^{96}Mo are interpreted as fragments of the 1^+ member of the mixed-symmetry two-phonon multiplet of ^{96}Mo, based upon similarities of summed M1 excitation strengths for ^{96}Mo with those for ^{94}Mo.
[‡] Parities are determined from the azimuthal asymmetry of the corresponding nrf intensity.

$\gamma(^{96}$Mo)

E$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.[†]	Comments
2794.5	2794.5	1^+	0.0	0^+	M1	R(asymmetry)=0.68 *15*.
3300.1	3300.1	1^+	0.0	0^+	M1	R(asymmetry)=0.93 *3*.
3424.8	3424.8	1^+	0.0	0^+	M1	R(asymmetry)=0.76 *4*.
3599.7	3599.7	1^-	0.0	0^+	E1	R(asymmetry)=−0.81 *6*.
3895.3	3895.3	1^-	0.0	0^+	E1	R(asymmetry)=−0.91 *3*.

[†] From R(asymmetry)=$I_{parallel} - I_{perpendicular} / I_{parallel} + I_{perpendicular}$.

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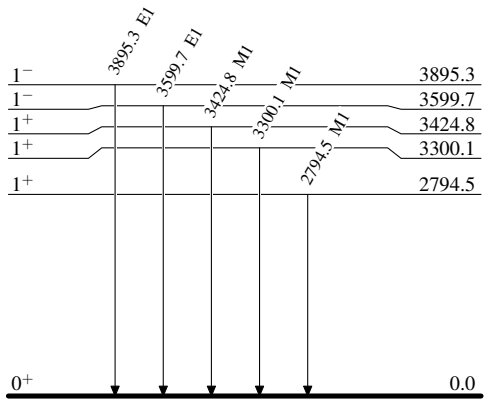
Level Scheme



$^{96}_{42}Mo_{54}$