

$^{24}\text{Mg}(^{24}\text{Mg},2\alpha2p\gamma)$ 2008Sa04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 152, 1 (2018)	30-Sep-2017

2008Sa04: E=91.72 MeV (for ON resonance), 92.62 MeV (for OFF resonance) beams were provided by Legnaro XTU Tandem accelerator. Target was a $40 \mu\text{g}/\text{cm}^2$ ^{24}Mg film on a $15 \mu\text{g}/\text{cm}^2$ carbon backing. Fragments were detected with the PRIMA spectrometer and γ rays were detected with the CLARA array. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. Deduced levels.

Decay of a narrow 36^+ resonance in $^{24}\text{Mg}(^{24}\text{Mg},X)$ system at 45.7 MeV (c.m.) with $\Gamma=170$ keV (2008Sa04).

Level scheme from Adopted Levels is used for placement of γ rays from 2008Sa04, at 106, 670, 1643, 1822 and 2167 keV from the decay of a $J^\pi=36^+$ resonance in $^{24}\text{Mg}+^{24}\text{Mg}$ system.

 ^{38}Ar Levels

E(level)	J^π
0	0^+
2167	2^+
3810	3^-
4480	4^-
4586	5^-
6408	6^+

 $\gamma(^{38}\text{Ar})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
106	4586	5^-	4480	4^-
670	4480	4^-	3810	3^-
1643	3810	3^-	2167	2^+
1822	6408	6^+	4586	5^-
2167	2167	2^+	0	0^+

${}^{24}\text{Mg}({}^{24}\text{Mg}, 2\alpha 2p\gamma)$ 2008Sa04Level Scheme