

<sup>24</sup>Mg(<sup>24</sup>Mg,3pn $\gamma$ ) 2008Sa04,2008Sa44

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 190,1 (2023)	20-Jun-2023

2008Sa04,2008Sa44: E=91.72 MeV (for ON resonance) and 92.62 MeV (for OFF resonance) beams were provided by Legnaro XTU Tandem accelerator. Charged particles were detected with the PRISMA spectrometer and  $\gamma$  were detected with the CLARA array. Measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. Deduced levels.

Decay of a narrow 36<sup>+</sup> resonance in <sup>24</sup>Mg(<sup>24</sup>Mg,X) system at 45.7 MeV (c.m.) with  $\Gamma=170$  keV.

<sup>44</sup>Sc Levels

E(level) <sup>†</sup>	J $\pi$ <sup>‡</sup>	T <sub>1/2</sub>	Comments
0	2 <sup>+</sup>		
68	1 <sup>-</sup>		
235	2 <sup>-</sup>		
271	6 <sup>+</sup>	58.61 h 10	T <sub>1/2</sub> : from the Adopted Levels.
350	4 <sup>+</sup>		
425	3 <sup>-</sup>		
631	4 <sup>-</sup>		
968	7 <sup>+</sup>		
1197	5 <sup>-</sup>		
2672	9 <sup>+</sup>		
3567	11 <sup>+</sup>		
4113	(10 <sup>+</sup> )		

<sup>†</sup> From E $\gamma$  data and adopted level scheme in the Adopted dataset.

<sup>‡</sup> From the Adopted Levels.

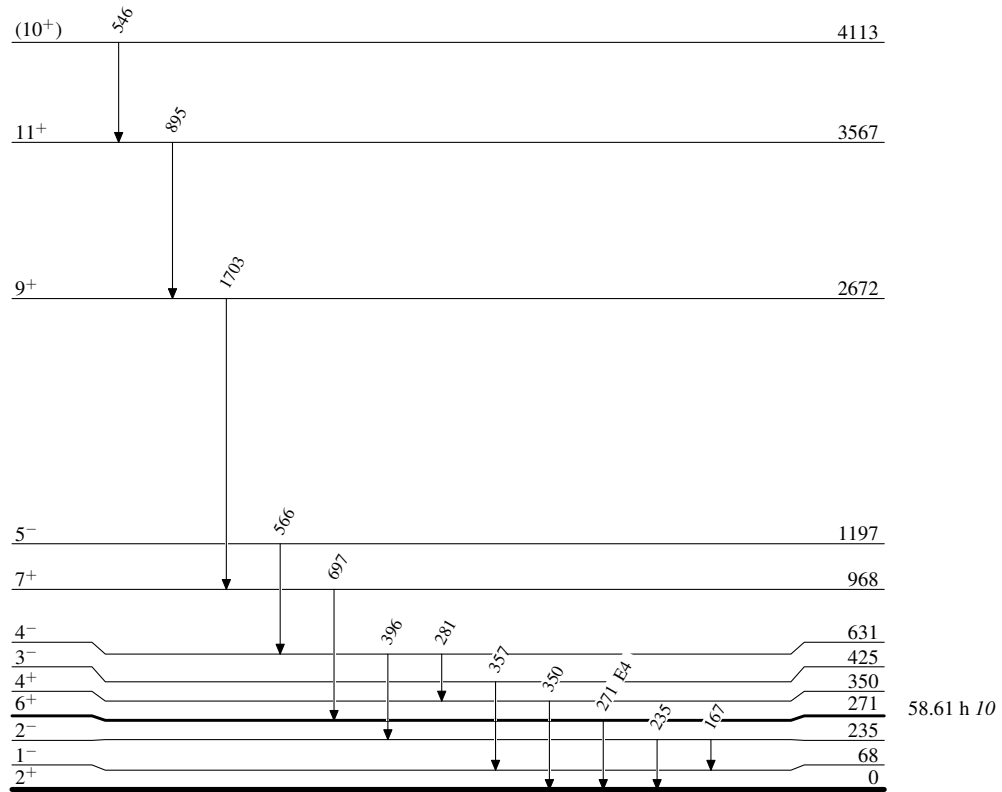
$\gamma$ (<sup>44</sup>Sc)

E $\gamma$ <sup>†</sup>	E <sub>i</sub> (level)	J $\pi$ <sub>i</sub>	E <sub>f</sub>	J $\pi$ <sub>f</sub>	Mult.	Comments
167	235	2 <sup>-</sup>	68	1 <sup>-</sup>		
235	235	2 <sup>-</sup>	0	2 <sup>+</sup>		
271	271	6 <sup>+</sup>	0	2 <sup>+</sup>	E4	Mult.: from the Adopted Gammas.
281	631	4 <sup>-</sup>	350	4 <sup>+</sup>		
350	350	4 <sup>+</sup>	0	2 <sup>+</sup>		
357	425	3 <sup>-</sup>	68	1 <sup>-</sup>		
396	631	4 <sup>-</sup>	235	2 <sup>-</sup>		
546	4113	(10 <sup>+</sup> )	3567	11 <sup>+</sup>		
566	1197	5 <sup>-</sup>	631	4 <sup>-</sup>		
697	968	7 <sup>+</sup>	271	6 <sup>+</sup>		
895	3567	11 <sup>+</sup>	2672	9 <sup>+</sup>		
1703	2672	9 <sup>+</sup>	968	7 <sup>+</sup>		

<sup>†</sup> From 2008Sa04, placed by the evaluators based on the Adopted Gammas.

${}^{24}\text{Mg}({}^{24}\text{Mg},3\text{pn}\gamma)$  2008Sa04,2008Sa44

## Level Scheme

 ${}^{44}_{21}\text{Sc}_{23}$