

$^{45}\text{Sc}(^{16}\text{O},\text{p}2\text{n}\gamma)$  1975SmZU

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh		NDS 111,897 (2010)	12-Jan-2010

1975SmZU:  $^{45}\text{Sc}(^{16}\text{O},\text{p}2\text{n}\gamma)$  E=46 MeV. Measured:  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$  and  $\gamma(\theta)$ .

Additional information 1.

 $^{58}\text{Ni}$  Levels

E(level) <sup>†</sup>	$J^{\pi\ddagger}$
0.0	0 <sup>+</sup>
1454.0 10	2 <sup>+</sup>
2459.1 13	4 <sup>+</sup>
3620.0 13	4 <sup>+</sup>
4382.9 14	(5 <sup>+</sup> )&
5127.5# 15	6 <sup>+</sup> @
6067.5 17	(7 <sup>+</sup> )@
6604.5 17	(8 <sup>+</sup> )@
7444.5 20	

<sup>†</sup> From least-squares fit to  $E\gamma$ 's, assuming  $\Delta(E\gamma)=1$  keV for each  $\gamma$ .

<sup>‡</sup> From 'Adopted Levels'.

# 1975SmZU seemed to define a separate level near this energy decaying by 2668 $\gamma$ , but according to 1999Vi12 there is only one level deexciting by 745 $\gamma$  and 2668 $\gamma$ .

@ (4,6) in 1975SmZU.

& (3,5) in 1975SmZU.

 $\gamma(^{58}\text{Ni})$ 

$E_{\gamma}$	$I_{\gamma}$	$E_i(\text{level})$	$J_i^{\pi}$	$E_f$	$J_f^{\pi}$	$E_{\gamma}$	$I_{\gamma}$	$E_i(\text{level})$	$J_i^{\pi}$	$E_f$	$J_f^{\pi}$
537	15	6604.5	(8 <sup>+</sup> )	6067.5	(7 <sup>+</sup> )	1161	26	3620.0	4 <sup>+</sup>	2459.1	4 <sup>+</sup>
745	26	5127.5	6 <sup>+</sup>	4382.9	(5 <sup>+</sup> )	1454	100	1454.0	2 <sup>+</sup>	0.0	0 <sup>+</sup>
763	31	4382.9	(5 <sup>+</sup> )	3620.0	4 <sup>+</sup>	1477	5	6604.5	(8 <sup>+</sup> )	5127.5	6 <sup>+</sup>
840	10	7444.5		6604.5	(8 <sup>+</sup> )	1924	7	4382.9	(5 <sup>+</sup> )	2459.1	4 <sup>+</sup>
940	15	6067.5	(7 <sup>+</sup> )	5127.5	6 <sup>+</sup>	2166	5	3620.0	4 <sup>+</sup>	1454.0	2 <sup>+</sup>
1005	77	2459.1	4 <sup>+</sup>	1454.0	2 <sup>+</sup>	2668	20	5127.5	6 <sup>+</sup>	2459.1	4 <sup>+</sup>

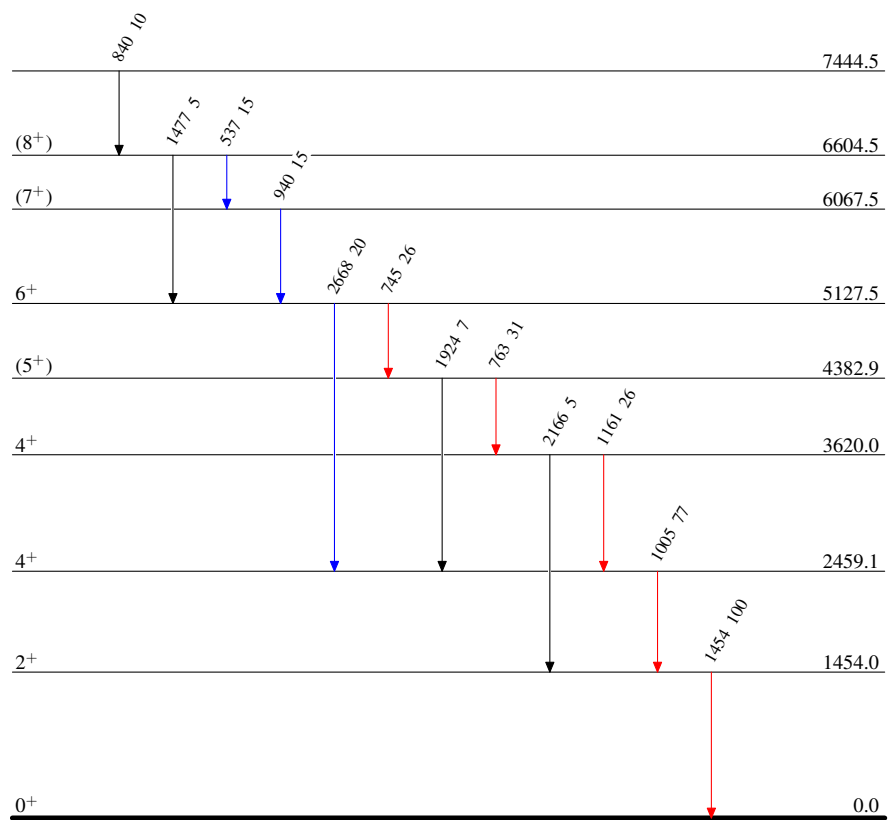
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## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

- $\blacktriangleright$   $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $\color{blue}\blacktriangleright$   $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $\color{red}\blacktriangleright$   $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

 $^{58}_{28}\text{Ni}_{30}$