

$^{64}\text{Zn}(\text{p},\text{n})$ 1974Ha42

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 178, 41 (2021).	12-Nov-2021

1974Ha42: E(p)=8.0-10.5 MeV, time of flight, $\sigma(\theta)$ (3.5° to 159°).

Others:

1975Ca18: E(p)=22.8 MeV, time of flight, $\sigma(\theta)$. Data for IAS of g.s. and first 2^+ state of ^{64}Zn .

1975Wo01: E(p)=22 MeV. $\sigma(\theta)$ for IAS of first 2^+ state in ^{64}Zn .

Additional information 1.

 ^{64}Ga Levels

E(level)	J^π [†]	$\sigma(\text{mb})$ ^b	E(level)	J^π [†]	$\sigma(\text{mb})$ ^b	E(level)	J^π [†]
0	0^+ [‡]	1.6 3	667 6	1^+ [‡]	2.4 5	1035 6	
43 2	(2^+) [‡]	4.9 5	709 5			1063 10	
128 3	1^+ [‡]	2.7 5	719 5			1140 [#] 10	
172 3	(3)	5.2 5	766 7	$(3,2^+)$	3.1 ^c 3	1250 [#] 10	
322 3	$(2^+,1^+)$	5.4 5	818 5			1290 [#] 10	
427 4	1^+ [‡]	2.6 5	830 8			1950 [@]	(0^+) ^{&}
535 5			855 8	$(2^+,1^+)$	3.4 ^c 3	2940 [@]	(2^+) ^a
549 5			943 5	$(1^+,0^+)$	1.87 ^c 20		
607 5	$(2^+,3^-)$	3.3 7	1023 6				

[†] From comparison of σ and $\sigma(\theta)$ data with Hauser-Feshbach calculations (1974Ha42). The first value is more probable when two values are given.

[‡] From the Adopted Levels, also consistent with analysis of $\sigma(\theta)$ data with Hauser-Feshbach calculations.

[#] Level seen at forward angles only (1974Ha42); energy from the figure shown by 1974Ha42; uncertainty is estimated (evaluators).

[@] From IAS data of 1975Ca18. Energy deduced (evaluators) from Q value quoted (but not measured) by 1975Ca18.

[&] IAS of g.s. of ^{64}Zn and $\sigma(\theta)$ (1975Ca18).

^a IAS of first 2^+ state of ^{64}Zn and $\sigma(\theta)$ (1975Ca18).

^b At 10.0 MeV, unless otherwise stated.

^c At 10.5 MeV.