

$^{74}\text{Se}(\text{p},\text{p}')$ 1986Og01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Ameenah R. Farhan		NDS 107, 1923 (2006)	30-Apr-2006

$^{74}\text{Se}(\text{pol p},\text{p}')$ E=64.8 MeV (1983Ma59,1982OgZZ).

Main data from 1986Og01. See also 1983Og02 from the same laboratory.

Magnetic spectrograph used to analyze protons. Resolution=20 keV. $\sigma(\theta)$ data from 8° to 60° (lab) In steps of 4° . DWBA and coupled-channel calculations. Absolute cross sections accurate to 10%. Deformation parameters given as β_{LR} , where R=nuclear radius. Uncertainties on deformation parameters are $\approx 10\%$.

Other: 1983Pa10. E=5.9 MeV. The authors measure $T_{1/2}$ of 856 level.

 ^{74}Se Levels

E(level)	$J^\pi^\dagger$	$T_{1/2}$	L	β_{LR} (1986Og01)	Comments
0	0^+				
635 2	2^+		2 [#]	1.38 14	$\beta_2=0.26$ 4 (rotational model), 0.27 4 (vibrational model) (1983Ma59).
856 [‡] 2	0^+	0.52 ns 6	0		$T_{1/2}$: centroid-shift method (1983Pa10).
1268 2	2^+		2	0.23 3	
1363 2	4^+		4 [#]	0.09 1	$\beta_4=0.019$ 8 (rotational model), 0.017 7 (vibrational model) (1983Ma59).
2350 2	3^-		3 [#]	0.77 8	$\sigma(\theta)$ and analyzing powers measured in (pol p,p') reaction (1982OgZZ).
2844 2			3	0.43 5	
2903 2			4	0.23 3	
3002 4					
3080 4			4	0.14 2	
3259 4			4	0.42 5	
3529 4			5		
3579 [‡] 4			(2)	0.08 1	
3602 4			5		
3749 4			4	0.11 1	
3780 4			4	0.15 2	
3845 4			3	0.22 3	
3920 4					
3980 [‡] 4			(6)		
4005 [‡] 4			(2)		
4118 4					
4224 [‡] 4					
4279 4			4	0.14 2	
4337 [‡] 4			(2)		
4362 [‡] 4					
4595 4			4	0.10 1	
4677 4			3	0.17 2	
4758 4			(3)		
5146 4			3	0.10 1	
5426 4			3	0.16 2	

[†] From L-values and 'Adopted Levels'.

[‡] Weakly populated level.

[#] From (pol p,p') (1983Ma59,1982OgZZ). Same value in 1986Og01.