

$^{86}\text{Sr}({}^3\text{He},\text{t})$ **1983Fi04**

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh	NDS 124, 1 (2015)	30-Nov-2014

1983Fi04: E=42.8 MeV. Enriched target. Magnetic spectrometer, FWHM=50 keV. Measured $\sigma(\theta)$, DWBA calculations.

 ^{86}Y Levels

E(level)	J^π [‡]	L [†]	β_L [†]	Comments
0	4 ⁻	5	0.014	J^π : from Adopted Levels.
214 [#] 20	5 ⁻ &8 ⁺	(5+8)	0.012,0.016	
252 20	(1 ⁺ ,2 ⁺)	2	0.010	
292 20	(5 ⁺ ,6 ⁺)	6	0.019	
353 20	(3 ⁺ ,4 ⁺)	4	0.018	
465 [#] 20	(5 ⁺ ,6 ⁺)&(≤2)	6+(≤2)	0.008	β_L : for L=6.
536 20	(3 ⁺ ,4 ⁺)	4	0.017	
643 20				
671 20	(4 ⁻ ,5 ⁻)	5	0.019	
741 [#] 20	(4 to 7)	5+7	0.009+0.012	
885 [#] 20	(2 ⁻ ,3 ⁻)&(9 ⁺)	(3+10)	0.006	β_L : for L=3.
978 20	(1 ⁺ ,2 ⁺)	2	0.005	
1058 20	(1 ⁺ ,2 ⁺)	2	0.008	
1156 20	(4 ⁻ ,5 ⁻)	5	0.012	
1221 20	(4 ⁻ ,5 ⁻)	5	0.015	E(level): from figures 1 and 2 of 1983Fi04 ; table 2 lists 1211.
1277 20				
1346 [#] 20	(3 ⁺ ,4 ⁺)&(6 ⁻ ,7,8 ⁺)	4+7	0.007+0.008	
1393 20	(≤2)	(≤2)		J^π : from low L-value suggested by $\sigma(\theta)$ pattern.
1455 20				

[†] From DWBA calculations.

[‡] As proposed by **1983Fi04**, based on a general rule that unnatural parity states populated in (${}^3\text{He},\text{t}$) have $\sigma(\theta)$ distributions similar to the next higher-spin natural parity states.

Unresolved doublet.