

^{97}Zr $Z = 40$ $N = 57$ adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 834.561 (0.000) MeV

Qbeta- = 2.666 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
97ZR	1	0.000	1/2+		1 16.749 H 8
97ZR	2	1.103	3/2+		2
97ZR	3	1.264	7/2+		3 102.8 NS 24
97ZR	4			1.400 (3/2+,5/2+)	4
97ZR	5			1.807 (7/2-)	5
97ZR	6			1.848 (7/2+,9/2+)	6
97ZR	7			1.859 (3/2+,5/2+)	7 8.9 PS LT
97ZR	8			1.996 (5/2+)	8 2 PS LT
97ZR	9			2.058 (5/2+)	9
97ZR	10			2.234 (7/2+)	10
97ZR	11			2.264 (11/2-)	11 1.7 NS 3
97ZR	12			2.338 (7/2,9/2)	12
97ZR	13			2.509 (7/2+,9/2+)	13
97ZR	14			2.593	14
97ZR	15			2.625	15
97ZR	16			2.626 (7/2+)	16
97ZR	17			2.629	17
97ZR	18			2.743 (1/2,3/2)	18
97ZR	19			2.814 (7/2,9/2,11/2)	19
97ZR	20			2.830 (1/2-,3/2-)	20
97ZR	21			2.839 (7/2+,9/2,11/2+)	21
97ZR	22			2.870 (7/2,9/2,11/2+)	22
97ZR	23			3.014	23
97ZR	24			3.026	24
97ZR	25			3.082	25
97ZR	26			3.135	26
97ZR	27			3.145	27
97ZR	28			3.160 1/2-,3/2-	28
97ZR	29			3.161 (7/2+,9/2+)	29
97ZR	30			3.185	30
97ZR	31			3.288 (3/2-)	31
97ZR	32			3.401 (3/2-)	32 6.2 PS LT
97ZR	33			3.402	33
97ZR	34			3.424 (7/2-,9/2,11/2+)	34
97ZR	35			3.469	35
97ZR	36			3.550 (1/2,3/2)	36
97ZR	37			3.652	37

97ZR	38	|	|	|	3.731	9/2-, 11/2-	38
97ZR	39	|	|	|	3.780		39
97ZR	40	|	|	|	3.875		40

97ZR	41	|	|	|	3.963	(7/2+, 9/2+, 11/2	41+)
97ZR	42	|	|	|	4.046	(7/2+)	42
97ZR	43	|	|	|	4.118	(9/2+, 11/2+)	43
97ZR	44	|	|	|	4.586		44
97ZR	45	|	|	|	4.621	(23/2-)	45
97ZR	46	|	|	|	4.690		46
S-alpha=	5.276	(	0.008)	-----			
S-n	5.569	(	0.000)	-----			
97ZR	47	|	|	|	5.570	(25/2-)	47
97ZR	48	|	|	|	5.607	(27/2-)	48
97ZR	49	|	|	|	6.597	(27/2+)	49
97ZR	50	|	|	|	6.764	(29/2-)	50

97ZR	51	|	|	|	7.128	(31/2+)	51
97ZR	52	|	|	|	7.296	(33/2)	52

S-p	=	11.896	(	0.006)	-----		
S-n	=	5.569	(	0.000)	-----		
S-2p	=	22.397	(	0.006)	-----		
S-2n	=	13.419	(	0.001)	-----		
S-alpha=	5.276	(	0.008)	-----			

S+p	=	-7.877	(	0.005)			
S+n	=	-6.416	(	0.008)			
S+2p	=	-17.611	(	0.000)			
S+2n	=	-10.823	(	0.011)			
S+alpha	=	-3.008	(	0.000)			

gap p	=	4.019	(	0.008)			
gap n	=	-0.847	(	0.008)			
gap 2p	=	4.786	(	0.006)			
gap 2n	=	2.597	(	0.011)			
gap alpha	=	2.268	(	0.008)			