

^{72}Se $Z = 34$ $N = 38$ adopted link ENSDF link

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

BE = 622.403 (0.002) MeV

Qbeta+ = 0.362 (0.005) MeV

	Energy T	J+		J-		J-other		T1/2	
72SE	1	0.000	0+					1	8.40 D 8
72SE	2	0.862	2+					2	2.82 PS 20
72SE	3	0.937	0+					3	17.5 NS 17
72SE	4	1.317	2+					4	8.7 PS 3
72SE	5	1.637	4+					5	2.07 PS 16
72SE	6					1.876	(2,4)	6	
72SE	7	1.999	2+					7	
72SE	8					2.150	(2+)	8	
72SE	9					2.294	(2)	9	1.0 PS LT
72SE	10					2.372		10	
72SE	11			2.406	3-			11	1.0 PS LT
72SE	12			2.434	3-			12	1.0 PS LT
72SE	13	2.467	6+					13	1.24 PS 8
72SE	14					2.586	(3)	14	
72SE	15			2.843	5-			15	
72SE	16			2.929	3-			16	
72SE	17					2.966		17	
72SE	18					3.124	(4+)	18	
72SE	19			3.173	5-			19	1.0 PS LT
72SE	20					3.214	(2+,3,4+)	20	
72SE	21					3.226	(2,3,4+)	21	
72SE	22					3.232		22	
72SE	23					3.239		23	
S-alpha=	3.314	(0.003)							
72SE	24			3.350	5-			24	1.0 PS LT
72SE	25					3.383		25	
72SE	26	3.425	8+					26	0.51 PS 5
72SE	27	3.450	2+					27	
72SE	28			3.522	6-			28	2.9 PS 3
72SE	29	3.762	4+					29	
72SE	30			3.770	7-			30	2.8 PS 2
72SE	31			3.917	7-			31	0.79 PS 17
72SE	32					4.093		32	
72SE	33					4.218		33	
72SE	34	4.310	6+					34	
72SE	35					4.326		35	
72SE	36	4.504	10+					36	0.22 PS 2

72SE	37						4.713			37
72SE	38						4.763	(9-)		38 0.59 PS 8
72SE	39		5.710		12+					39 0.14 PS 2
72SE	40						5.831	(11-)		40 0.83 PS 10

72SE	41						6.687	(11-)		41
72SE	42		7.038		14+					42 0.097 PS 8
72SE	43						7.042	(13-)		43 0.69 PS LT
72SE	44						7.191	(12-)		44
S-p	=		7.264		(0.005)		-----			
72SE	45						7.796	(13-)		45
72SE	46						8.090	(14-)		46
72SE	47		8.495		16+					47 0.040 PS 7

S-p = 7.264 (0.005)-----
 S-n = 12.793 (0.003)-----
 S-2p = 11.884 (0.002)-----
 S-2n = 22.081 (0.003)-----
 S-alpha= 3.314 (0.003)-----

S+p = -3.067 (0.007)
 S+n = -8.431 (0.008)
 S+2p = -9.042 (0.003)
 S+2n = -20.488 (0.002)
 S+alpha = -3.570 (0.004)

gap p = 4.197 (0.008)
 gap n = 4.362 (0.008)
 gap 2p = 2.843 (0.004)
 gap 2n = 1.593 (0.003)
 gap alpha = -0.256 (0.005)