

^{93}Zr $Z = 40$ $N = 53$ adopted link ENSDF link

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

BE = 806.461 (0.000) MeV

Qbeta- = 0.091 (0.002) MeV

	Energy T	J+	J-	J-other	T1/2
93ZR 1	0.000	5/2+			1 1.61E+6 Y 5
93ZR 2	0.267	3/2+			2 1.45 NS 5
93ZR 3	0.947	1/2+			3
93ZR 4				0.950 (9/2+)	4
93ZR 5	1.018	1/2+			5
93ZR 6	1.169	1/2+			6
93ZR 7	1.222	1/2+			7
93ZR 8				1.425 3/2+,5/2+	8
93ZR 9				1.450 (1/2+,3/2,5/2+	9)
93ZR 10				1.463 7/2+,9/2+	10
93ZR 11				1.470 (1/2+,3/2,5/2+)	11
93ZR 12				1.598 7/2+,9/2+	12
93ZR 13				1.642 3/2+,5/2+	13
93ZR 14				1.735	14
93ZR 15	1.910	1/2+			15
93ZR 16				1.918 (1/2,3/2,5/2+)	16
93ZR 17				2.025 9/2-,11/2-	17
93ZR 18				2.040 7/2+,9/2+	18
93ZR 19				2.047	19
93ZR 20				2.075	20
93ZR 21				2.078 7/2+,9/2+	21
93ZR 22	2.095	1/2+			22
93ZR 23				2.185 (1/2+,3/2)	23
93ZR 24				2.276	24
93ZR 25				2.284 (13/2+)	25
93ZR 26				2.302	26
93ZR 27				2.363 9/2-,11/2-	27
93ZR 28				2.375 (11/2-)	28
93ZR 29	2.391	1/2+			29
93ZR 30				2.457 (1/2+,3/2)	30
93ZR 31				2.474	31
93ZR 32				2.486 (15/2-)	32
93ZR 33				2.531 3/2+,5/2+	33
93ZR 34				2.548 3/2+,5/2+	34
93ZR 35				2.601	35
93ZR 36				2.638 7/2+,9/2+	36
93ZR 37				2.662 9/2-,11/2-	37

93ZR 38				2.716	9/2-, 11/2-	38
93ZR 39				2.770	(3/2)+	39
93ZR 40				2.774	(13/2+)	40

93ZR 41				2.873	9/2-, 11/2-	41
93ZR 42				2.919	(3/2+, 5/2+)	42
93ZR 43				2.990	(15/2+, 17/2+)	43
93ZR 44				2.991	7/2+, 9/2+	44
93ZR 45				3.044	7/2+, 9/2+	45
93ZR 46		3.077	1/2+			46
93ZR 47				3.184	3/2+, 5/2+	47
93ZR 48				3.215	1/2-, 3/2-	48
93ZR 49				3.230	7/2+, 9/2+	49
93ZR 50				3.265	(17/2+, 21/2+)	50

93ZR 51				3.274	3/2+, 5/2+	51
93ZR 52				3.322	7/2+, 9/2+	52
93ZR 53				3.330	(19/2+)	53
S-alpha=	3.338	(0.000)	-----			
93ZR 54				3.363	1/2-, 3/2-	54
93ZR 55				3.391	3/2+, 5/2+	55
93ZR 56				3.421	5/2-, 7/2-	56
93ZR 57				3.486	1/2-, 3/2-	57
93ZR 58				3.576	5/2-, 7/2-	58
93ZR 59				3.605		59
93ZR 60				3.649	1/2-, 3/2-	60

93ZR 61				3.657	(21/2+)	61
93ZR 62				3.697	3/2+, 5/2+	62
93ZR 63				3.791	(3/2+, 5/2+)	63
93ZR 64				3.830	7/2+, 9/2+	64
93ZR 65				3.870	9/2-, 11/2-	65
93ZR 66				3.910	(3/2+, 5/2+)	66
93ZR 67				3.966	5/2-, 7/2-	67
93ZR 68				3.989	(3/2+, 5/2+)	68
93ZR 69				4.035	7/2+, 9/2+	69
93ZR 70				4.061	5/2-, 7/2-	70

93ZR 71				4.118	9/2-, 11/2-	71
93ZR 72				4.141	5/2-, 7/2-	72
93ZR 73				4.218		73
93ZR 74				4.282	5/2-, 7/2-	74
93ZR 75				4.419	5/2-, 7/2-	75
93ZR 76				4.486	(23/2+)	76
93ZR 77				4.618		77
93ZR 78				4.691	5/2-, 7/2-	78
93ZR 79				4.716	(25/2+)	79
93ZR 80				4.785	1/2-, 3/2-	80

93ZR 81				4.840	5/2-, 7/2-	81

93ZR	82				4.932	82
93ZR	83				5.479	83
93ZR	84				5.488	84
93ZR	85				6.647	85
S-n	=	6.734	(0.000)	-----		
93ZR	86				7.294	86
S-p	=	9.594	(0.009)	-----		
S-n	=	6.734	(0.000)	-----		
S-2p	=	18.048	(0.005)	-----		
S-2n	=	15.369	(0.000)	-----		
S-alpha	=	3.338	(0.000)	-----		
S+p	=	-6.536	(0.002)			
S+n	=	-8.219	(0.000)			
S+2p	=	-15.168	(0.000)			
S+2n	=	-14.681	(0.001)			
S+alpha	=	-2.848	(0.000)			
gap p	=	3.058	(0.009)			
gap n	=	-1.484	(0.001)			
gap 2p	=	2.880	(0.005)			
gap 2n	=	0.689	(0.001)			
gap alpha	=	0.490	(0.001)			