

$^{90}\text{Tc}$        $Z = 43$        $N = 47$       adopted link      ENSDF link

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

BE = 763.502 ( 0.001) MeV

Qbeta+ = 9.448 ( 0.004) MeV

	Energy T	J+	J-	J-other	T1/2
90TC 1				0.000 (8+)	1 49.2 S 4
90TC 2				0.104 (6+)	2
90TC 3	0.144	1+			3 8.7 S 2
90TC 4				0.153 (4-)	4
90TC 5				0.299	5
90TC 6				0.340 (5-)	6
90TC 7				0.494 (9+)	7
90TC 8				0.637	8
90TC 9				0.994 (10+)	9 1.4 PS 5
90TC 10				1.024 (7-)	10
90TC 11				1.486 (11+)	11 5 PS LT
90TC 12				1.614	12
90TC 13				1.632 (9-)	13
90TC 14				1.699	14
90TC 15				1.939 (12+)	15 2.8 PS 5
90TC 16				1.995 (11-)	16 33 PS 4
90TC 17				2.186 (11-)	17 13 PS 2
90TC 18				2.248	18
90TC 19				2.537 (13+)	19 0.7 PS LT
90TC 20				2.558 (12-)	20 0.7 PS LT
90TC 21				2.600 (12-)	21 5.3 PS 8
90TC 22				2.776 (13-)	22 2.7 PS 3
90TC 23				2.947	23
90TC 24				2.982	24
S-p =	2.999 ( 0.004)				
90TC 25				3.168 (14+)	25 1.0 PS 3
90TC 26				3.201	26
90TC 27				3.383 (15+)	27 1.8 PS 4
90TC 28				3.406	28
90TC 29				3.489 (14-)	29 1.4 PS LT
90TC 30				3.593 (15+)	30 1.2 PS 4
90TC 31				3.673 (15-)	31 1.1 PS 3
S-alpha=	4.016 ( 0.006)				
90TC 32				4.486 (16+)	32
90TC 33				4.512 (17+)	33 1.5 PS 3
90TC 34				4.637 (17-)	34 1.6 PS 2
90TC 35				4.865 (17+)	35

90TC 36				5.599	(18+)	36		
90TC 37				5.651	(19+)	37	2.4 PS	1
90TC 38				5.706	(19-)	38	1.3 PS	2
90TC 39				5.808		39		
90TC 40				6.339		40		
-----								
90TC 41				6.455	(20+)	41	0.7 PS	LT
90TC 42				6.885	(21+)	42		
90TC 43				6.994	(21-)	43	0.8 PS	2
90TC 44				7.373		44		
90TC 45				7.440	(22-)	45		
90TC 46				7.679		46		
90TC 47				8.394	(23-)	47		
90TC 48				8.757	(22+)	48		
S-2p	=	9.131	( 0.058)	-----				
90TC 49				9.342		49		
90TC 50				9.804		50		
-----								

S-p = 2.999 ( 0.004)-----  
S-n = 11.401 ( 0.004)-----  
S-2p = 9.131 ( 0.058)-----  
S-2n = 25.197 ( 0.004)-----  
S-alpha= 4.016 ( 0.006)-----

S+p = -4.804 ( 0.002)  
S+n = -13.333 ( 0.003)  
S+2p = -6.852 ( 0.004)  
S+2n = -24.344 ( 0.003)  
S+alpha = -4.608 ( 0.004)

gap p = -1.805 ( 0.005)  
gap n = -1.932 ( 0.005)  
gap 2p = 2.279 ( 0.058)  
gap 2n = 0.853 ( 0.005)  
gap alpha = -0.592 ( 0.007)