

^{164}W $Z = 74$ $N = 90$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1304.038 (0.010) MeV

Qbeta+ = 5.047 (0.030) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-5.278	(0.014)	-----		
164W	1 0.000	0+			1 6.3 S 2
164W	2 0.332	2+			2 18 PS 12
164W	3 0.822	4+			3
164W	4 1.429	6+			4
164W	5			1.480 (2-)	5
164W	6			1.758 (5-)	6
164W	7			1.824 (4-)	7
164W	8 2.115	8+			8
164W	9			2.181 (7-)	9
164W	10			2.239 (6-)	10

164W	11			2.573 (8-)	11
164W	12			2.632 (9-)	12
164W	13			2.718 (10-)	13
164W	14 2.830	10+			14
164W	15			2.906 (11-)	15
164W	16			2.907 (10+)	16

S-p	= 2.990	(0.039)	-----		
164W	17			3.120 (11-)	17
164W	18			3.133 (12-)	18
164W	19			3.326 (13-)	19
164W	20 3.438	12+			20

S-2p	= 3.645	(0.013)	-----		
164W	21			3.674 (14-)	21
164W	22 3.830	14+			22
164W	23			3.877 (15-)	23
164W	24			4.293 (16-)	24
164W	25 4.338	16+			25
164W	26			4.525 (17-)	26
164W	27 4.903	18+			27
164W	28			4.966 (18-)	28
164W	29			5.232 (19-)	29
164W	30 5.524	20+			30

164W	31			5.691 (20-)	31
164W	32			5.986 (21-)	32
164W	33 6.190	22+			33
164W	34			6.466 (22-)	34

164W	35						6.779	(23-)		35
164W	36		6.901	24+						36
164W	37						7.283	(24-)		37
164W	38						7.601	(25-)		38
164W	39		7.665	26+						39
164W	40						8.122	(26-)		40

164W	41		8.464	28+						41
164W	42						8.468	(27-)		42
164W	43						9.304	(30+)		43

S-p = 2.990 (0.039)-----
 S-n = 11.399 (0.054)-----
 S-2p = 3.645 (0.013)-----
 S-2n = 20.379 (0.020)-----
 S-alpha= -5.278 (0.014)-----

S+p = 0.287 (0.026)
 S+n = -8.697 (0.027)
 S+2p = -1.774 (0.020)
 S+2n = -19.795 (0.014)
 S+alpha = 5.816 (0.014)

gap p = 3.277 (0.047)
 gap n = 2.702 (0.060)
 gap 2p = 1.871 (0.024)
 gap 2n = 0.584 (0.024)
 gap alpha = 0.537 (0.019)