

$^{198}\text{Pb}$        $Z = 82$        $N = 116$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

BE = 1560.036 ( 0.009) MeV

Qbeta+ = 1.461 ( 0.012) MeV

	Energy T	J+	J-	J-other	T1/2
-----					
S-alpha=	-3.692	( 0.009)	-----		
-----					
198PB 1	0.000	0+			1 2.4 H 1
198PB 2	1.064	2+			2
198PB 3	1.392	(0+)			3
198PB 4	1.626	4+			4
198PB 5	1.735	(0+)			5
198PB 6			1.824	(5)-	6 50.4 NS 5
198PB 7	1.981	(4+)			7
198PB 8				1.996 (5)	8
198PB 9				2.099 (4,5,6)	9
198PB 10			2.141	(7)-	10 4.19 US 10
-----					
198PB 11				2.191 (6)	11
198PB 12			2.231	(9)-	12 137 NS 10
198PB 13			2.258	(6-)	13
198PB 14				2.342	14
198PB 15				2.345	15
198PB 16			2.369	(6-)	16
198PB 17	2.569	(6+)			17
198PB 18				2.603	18
198PB 19				2.612	19
198PB 20				2.695	20
-----					
198PB 21				2.704	21
198PB 22	2.772	(10)+			22
198PB 23	2.822	(12)+			23 212 NS 4
198PB 24				3.033	24
198PB 25				3.185	25
198PB 26				3.269	26
198PB 27			3.489	11-	27
198PB 28				3.565	28
198PB 29				3.574 (12)	29
198PB 30	3.751	14+			30
-----					
198PB 31			3.810	12-	31
198PB 32				3.966	32
198PB 33				4.030	33
198PB 34				4.032 (14)	34
198PB 35			4.043	13-	35

198PB 36		4.191	(16+)					36
198PB 37							4.236	37
198PB 38					4.380	15-		38
198PB 39		4.512	16+					39
198PB 40					4.573	14-		40 2.8 PS GT
-----								
198PB 41							4.701 (17)	41
198PB 42		4.702	(16+)					42 5.5 PS GT
198PB 43					4.774	(17-)		43
198PB 44		4.776	(14+)					44
198PB 45							4.818	45
198PB 46					4.837	15-		46 2.8 PS GT
198PB 47							4.843	47
198PB 48		4.879	(15+)					48
198PB 49		4.883	(14+)					49
198PB 50		4.896	(19+)					50 6.4 NS
-----								
198PB 51		4.977	(15+)					51
S-p =		5.002 ( 0.016)			-----			
198PB 52		5.004	(16+)					52
198PB 53							5.016	53
198PB 54							5.019	54
198PB 55					5.066	17-		55
198PB 56		5.072	18+					56
198PB 57		5.093	(16+)					57
198PB 58		5.203	(17+)					58
198PB 59		5.209	18+					59
198PB 60		5.250	(17+)					60
-----								
198PB 61							5.304 (16)	61
198PB 62					5.379	(16-)		62
198PB 63					5.452	19-		63
198PB 64		5.468	(18+)					64
198PB 65		5.478	(18+)					65 3.2 PS 10
198PB 66					5.493	17-		66
198PB 67							5.524 (17)	67
198PB 68					5.544	19-		68
198PB 69					5.648	18-		69 0.44 PS 7
198PB 70		5.779	(19+)					70
-----								
198PB 71		5.814	(19+)					71
198PB 72							5.822 (18)	72
198PB 73							5.843 (21)	73
198PB 74					5.863	19-		74 0.49 PS +7-14
198PB 75		5.871	20+					75
198PB 76							6.041	76
198PB 77					6.047	21-		77
198PB 78							6.120 (19)	78
198PB 79					6.126	21-		79
198PB 80					6.142	20-		80 0.24 PS +10-7

198PB 81				6.152	(17-)					81
198PB 82		6.167	(20+)							82
198PB 83		6.242	(20+)							83 2.4 PS 10
198PB 84					6.393	(18-)				84
198PB 85							6.425 (20)			85
198PB 86					6.484	21-				86 0.14 PS +14-7
198PB 87		6.501	22+							87
198PB 88					6.515	(19-)				88
198PB 89					6.519	(20-)				89
198PB 90		6.555	(21+)							90
198PB 91					6.660	23-				91
198PB 92		6.661	(21+)							92
198PB 93					6.674	(20-)				93
198PB 94		6.691	(21+)							94
198PB 95							6.719			95
198PB 96							6.730			96
198PB 97					6.735	(21-)				97
198PB 98		6.867	(22+)							98
198PB 99					6.873	22-				99 0.17 PS 3
198PB 100					6.873	23-				100
198PB 101					6.878	(21-)				101
198PB 102		6.942	(22+)							102
198PB 103		6.997	(22+)							103
198PB 104					7.017	(22-)				104
198PB 105		7.074	(23+)							105 1.46 PS 28
198PB 106		7.079	(22+)							106
198PB 107					7.143	(22-)				107
198PB 108					7.295	23-				108 0.12 PS +12-3
198PB 109		7.312	(24+)							109 0.59 PS 21
198PB 110		7.334	(23+)							110
198PB 111					7.361	(23-)				111
198PB 112		7.456	(23+)							112
198PB 113					7.480	(23-)				113
198PB 114		7.555	(24+)							114
198PB 115		7.591	(25+)							115 0.80 PS 40
198PB 116					7.739	24-				116 0.14 PS +6-4
198PB 117					7.748	25-				117
198PB 118					7.758	25-				118
198PB 119					7.780	(24-)				119
198PB 120		7.795	(25+)							120
198PB 121					7.835	(24-)				121
198PB 122		7.917	(26+)							122 0.40 PS 10
198PB 123		8.076	(26+)							123
198PB 124					8.211	25-				124 0.14 PS 4
198PB 125					8.243	(25-)				125

198PB 126				8.256	(25-)			126	
198PB 127							8.268	127	
198PB 128		8.291	(27+)					128 0.097 PS +21-28	
198PB 129		8.409	(27+)					129	
198PB 130					8.686	26-		130 0.19 PS 5	
-----									
198PB 131					8.695	(26-)		131	
198PB 132		8.713	(28+)					132 0.105 PS +21-28	
198PB 133					8.740	(26-)		133	
198PB 134		8.800	(28+)					134	
S-2p	=	8.819	(0.009)	-----					
198PB 135					9.112	27-		135	
198PB 136					9.146	(27-)		136	
198PB 137					9.155	(27-)		137	
198PB 138		9.176	(29+)					138 0.097 PS +21-28	
198PB 139		9.255	(29+)					139	
S-n	=	9.393	(0.010)	-----					
198PB 140					9.512	28-		140	
-----									
198PB 141		9.682	(30+)					141 0.14 PS 4	
198PB 142		9.770	(30+)					142	
198PB 143					9.931	29-		143	
198PB 144		10.231	(31+)					144	
198PB 145		10.329	(31+)					145	
198PB 146					10.380	30-		146	
198PB 147		10.821	(32+)					147	
198PB 148					10.869	31-		148	
198PB 149		10.921	(32+)					149	
198PB 150					11.399	32-		150	
-----									
198PB 151		11.439	(33+)					151	
198PB 152					11.971	33-		152	
198PB 153		12.060	(34+)					153	
198PB 154					12.580	34-		154	
198PB 155		12.700	(35+)					155	
-----									
S-p	=	5.002	(0.016)	-----					
S-n	=	9.393	(0.010)	-----					
S-2p	=	8.819	(0.009)	-----					
S-2n	=	16.862	(0.012)	-----					
S-alpha	=	-3.692	(0.009)	-----					
S+p	=	-2.019	(0.014)						
S+n	=	-7.236	(0.011)						
S+2p	=	-5.452	(0.012)						
S+2n	=	-16.326	(0.013)						
S+alpha	=	5.701	(0.012)						
gap p	=	2.983	(0.021)						

gap n = 2.158 ( 0.015)  
gap 2p = 3.367 ( 0.015)  
gap 2n = 0.536 ( 0.018)  
gap alpha = 2.010 ( 0.015)