

^{77}Br $Z = 35$ $N = 42$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 667.344 (0.003) MeV

Qbeta+ = 1.365 (0.003) MeV

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

77BR 1			0.000	3/2-	1 57.04 H 12
77BR 2	0.106	9/2+			2 4.28 M 10
77BR 3	0.130	5/2+			3 9.3 NS 3
77BR 4			0.162	5/2-	4 498 PS 35
77BR 5			0.167	(3/2)-	5
77BR 6			0.227	3/2-	6
77BR 7	0.276	(3/2)+			7 90 PS 20
77BR 8				0.337 1/2-,3/2-	8
77BR 9	0.418	7/2(+)			9
77BR 10			0.425	5/2-	10

77BR 11			0.471	3/2-	11
77BR 12			0.576	7/2-	12 9.8 PS 15
77BR 13	0.640	(13/2)+			13 9.8 PS 6
77BR 14			0.649	(5/2)-	14
77BR 15			0.716	5/2(-)	15
77BR 16	0.771	(1/2+)			16
77BR 17			0.781	(7/2-)	17
77BR 18	0.782	(9/2)+			18 3.0 PS 6
77BR 19			0.791	(9/2)-	19 4.3 PS 6
77BR 20				0.831 1/2-,3/2-	20

77BR 21	0.865	(3/2+)			21
77BR 22				0.887 1/2-,3/2-	22
77BR 23	0.948	(11/2+)			23
77BR 24	0.967	(7/2+)			24
77BR 25	0.970	(5/2)+			25
77BR 26	1.024	(5/2)+			26
77BR 27	1.094	(11/2+)			27
77BR 28				1.098 (5/2+,7/2	28
77BR 29				1.123 (5/2-,7/2	29
77BR 30				1.128 (1/2,3/2)	30

77BR 31				1.139	31
77BR 32				1.240 7/2+,9/2+	32
77BR 33			1.274	(11/2)-	33 2.8 PS 7
77BR 34				1.276 5/2-,7/2-	34
77BR 35			1.287	(9/2-)	35
77BR 36	1.305	(13/2)+			36 2.8 PS 7

77BR 37						1.363 (5/2-,7/2	37		
77BR 38						1.393 1/2-,3/2-	38		
77BR 39		1.462	(1/2+)				39		
77BR 40		1.483	(17/2)+				40	0.42 PS	14

77BR 41						1.484 (7/2+,9/2	41		
77BR 42				1.539	(13/2-)		42		
77BR 43						1.554	43		
77BR 44				1.576	(5/2-)		44		
77BR 45						1.603	45		
77BR 46		1.645	(13/2+)				46		
77BR 47						1.651 (3/2+,5/2	47		
77BR 48						1.716	48		
77BR 49						1.746 7/2+,9/2+	49		
77BR 50		1.747	(15/2+)				50		

77BR 51						1.774 3/2+,5/2+	51		
77BR 52						1.789	52		
77BR 53		1.827	(15/2+)				53		
77BR 54		1.855	(1/2+)				54		
77BR 55						1.879 (5/2-,7/2	55		
77BR 56						1.908 7/2+,9/2+	56		
77BR 57						1.999 1/2-,3/2-	57		
77BR 58						2.019 3/2+,5/2+	58		
77BR 59				2.022	(15/2-)		59		
77BR 60		2.047	(17/2)+				60	0.2 PS	LT

77BR 61				2.129	(3/2)-		61		
77BR 62						2.150 1/2-,3/2-	62		
77BR 63						2.172 (3/2+,5/2	63		
77BR 64						2.194 (3/2,5/2,	64		
77BR 65						2.224 1/2-,3/2-	65		
77BR 66						2.248 (3/2+,5/2	66		
77BR 67						2.275 (1/2-,3/2	67		
77BR 68						2.297 (3/2+,5/2	68		
77BR 69				2.340	(17/2-)		69	0.2 PS	LT
77BR 70						2.344 (3/2,5/2,	70		

77BR 71		2.551	(21/2)+				71	0.16 PS	4
77BR 72		2.648	(19/2+)				72		
77BR 73				2.793	(19/2-)		73		
77BR 74		2.927	(19/2+)				74		
77BR 75				2.932	(17/2-)		75		
77BR 76		3.037	(21/2+)				76		
77BR 77				3.201	(21/2-)		77		
77BR 78				3.220	(19/2-)		78		
77BR 79				3.610	(21/2-)		79		
77BR 80				3.643	(23/2-)		80		

77BR 81		3.728	(23/2+)				81		

77BR 82				3.730	(23/2-)		82
77BR 83		3.775	(25/2+)				83 0.118 PS 35
77BR 84				4.150	(23/2-)		84
77BR 85		4.216	(25/2+)				85
77BR 86				4.247	(25/2-)		86 0.21 PS 6
S-alpha=		4.707	(0.005)	-----			
77BR 87				4.903	(27/2-)		87
77BR 88		4.981	(27/2+)				88
77BR 89		5.149	(29/2+)				89 0.042 PS 21
S-p	=	5.272	(0.003)	-----			
77BR 90				5.517	(29/2-)		90 0.111 PS 35

77BR 91		5.528	(29/2+)				91
77BR 92				6.297	(31/2-)		92
77BR 93		6.411	(31/2+)				93
77BR 94		6.692	(33/2+)				94 0.069 PS LT
77BR 95				6.979	(33/2-)		95 0.14 PS LT
77BR 96				7.876	(35/2-)		96
77BR 97		8.029	(35/2+)				97
77BR 98				8.401	(1/2-)		98
77BR 99		8.421	(37/2+)				99
77BR 100				8.580	(37/2-)		100

77BR 101						8.608 (3/2-,5/2101	
77BR 102				8.922	(3/2-)		102
77BR 103		9.092	(5/2+)				103
77BR 104		9.364	1/2+				104
77BR 105				9.430	(3/2-)		105
77BR 106		9.488	1/2+				106
77BR 107				9.609	(39/2-)		107
77BR 108		9.632	(5/2+)				108
77BR 109				10.280	(41/2-)		109
77BR 110		10.316	(41/2+)				110
S-n	=	11.017	(0.010)	-----			

77BR 111				11.344	(43/2-)		111

S-p	=	5.272	(0.003)	-----			
S-n	=	11.017	(0.010)	-----			
S-2p	=	14.779	(0.003)	-----			
S-2n	=	20.271	(0.005)	-----			
S-alpha=		4.707	(0.005)	-----			

S+p	=	-8.232	(0.003)	-----			
S+n	=	-8.289	(0.005)	-----			
S+2p	=	-12.146	(0.003)	-----			
S+2n	=	-18.976	(0.003)	-----			
S+alpha	=	-4.647	(0.006)	-----			

gap p = -2.961 (0.004)
gap n = 2.728 (0.011)
gap 2p = 2.633 (0.005)
gap 2n = 1.295 (0.006)
gap alpha = 0.060 (0.007)