

^{31}S $Z = 16$ $N = 15$ adopted link ENSDF link

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

BE = 256.736 (0.000) MeV

Qbeta+ = 5.398 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
31S	1	0.000	1/2+		1 2.5534 S 18
31S	2	1.249	3/2+		2 0.50 PS 12
31S	3	2.234	5/2+		3 222 FS 55
31S	4	3.077	1/2+		4
31S	5	3.284	5/2+		5
31S	6	3.350	7/2+		6
31S	7	3.435	3/2+		7
31S	8	4.086	5/2+		8
31S	9			4.208 (3/2)+	9
31S	10		4.450 7/2-		10 0.55 PS 17
31S	11	4.520	3/2+		11
31S	12			4.528 (3/2+)	12
31S	13	4.583	7/2+		13
31S	14			4.602	14
31S	15			4.710 5/2+,3/2+	15
31S	16			4.718 (5/2)+	16
31S	17			4.866 (1/2)+	17
31S	18			4.971 (3/2)-	18
31S	19	5.023	5/2+		19
31S	20	5.156	1/2+		20
31S	21	5.300	9/2+		21
31S	22			5.400 (5/2+)	22
31S	23			5.436 (3/2+)	23
31S	24	5.518	5/2+		24
31S	25			5.675 7/2(+)	25
31S	26			5.776 (5/2)+	26
31S	27			5.826	27
31S	28			5.890 (3/2)+	28
31S	29			5.892 3/2(+)	29
31S	30			5.977 (9/2+)	30
31S	31			5.979 3/2+,5/2+	31
31S	32			6.129 (5/2+)	32
S-p	=	6.131 (0.000)			
31S	33			6.138 (7/2+)	33
31S	34			6.158 (5/2,7/2)	34
31S	35	6.255 1/2	1/2+		35
31S	36	6.279 3/2	3/2+		36

31S	37					6.327	(3/2)	37
31S	38					6.357	(5/2-)	38
31S	39				6.376	9/2-		39 170 FS 31
31S	40		6.390	3/2+				40

31S	41					6.392	(5/2+)	41
31S	42					6.393	11/2(+)	42
31S	43					6.402	(7/2-)	43
31S	44					6.542	3/2(-)	44
31S	45					6.582	(5/2-, 7/2-)	45
31S	46					6.635	9/2(-)	46
31S	47					6.720	5/2	47
31S	48		6.749	3/2+				48
31S	49					6.796		49
31S	50					6.833	11/2(-)	50 125 FS 24

31S	51					6.836		51
31S	52					6.869	11/2	52
31S	53					6.936	1/2+, 3/2+, 5/2+	53
31S	54					6.959	(1/2+)	54
31S	55		6.972	1/2+				55
31S	56					7.010		56
31S	57					7.036	(1/2+)	57
31S	58					7.037	3/2+, 5/2+	58
31S	59					7.050	(1/2+, 3/2+, 5/2+)	59)
31S	60					7.150	5/2+, 3/2+, 1/2+	60

31S	61					7.157	3/2+, 5/2+	61
31S	62					7.196		62
31S	63					7.302	11/2(+)	63
31S	64					7.355	1/2+, 3/2+, 5/2+	64
31S	65					7.469		65
31S	66					7.501		66
31S	67					7.517		67
31S	68					7.584		68
31S	69					7.641	(11/2-)	69
31S	70					7.641		70

31S	71					7.699	1/2+, 3/2+, 5/2+	71
31S	72					7.725	(1/2, 3/2, 5/2+)	72
31S	73					7.744		73
31S	74					7.774	(1/2+, 3/2+, 5/2+)	74
31S	75					7.824		75
31S	76					7.859		76
31S	77					7.895	1/2+, 3/2+, 5/2	77+
31S	78		7.907	1/2+				78
31S	79					7.932		79
31S	80					7.945		80

31S	81					7.973		81

31S 82				8.015		82
31S 83				8.022	1/2+,3/2+,5/2+	83
31S 84				8.030		84
31S 85				8.045	1/2+&3/2+,5/2+	85
31S 86				8.060		86
31S 87				8.071		87
31S 88				8.122	1/2+,3/2+,5/2+	88
31S 89				8.130		89
31S 90				8.178		90

31S 91				8.210		91
31S 92				8.229		92
31S 93				8.268	1/2+,3/2+,5/2+	93
31S 94				8.330		94
31S 95				8.386		95
31S 96				8.424	1/2+,3/2+,5/2+	96
31S 97				8.461	(13/2-)	97
31S 98	8.498	1/2+				98
31S 99				8.563		99
31S 100				8.702	1/2+,3/2+,5/2+	100

31S 101				8.746		101
31S 102				8.788	3/2+,5/2+	102
31S 103				8.815		103
31S 104				8.860	(1/2+,3/2+,5/2+)	104
31S 105				8.904		105
31S 106				8.973		106
31S 107				9.001		107
31S 108				9.031	1/2+,3/2+,5/2+	108
31S 109				9.077		109
S-alpha=	9.083	(0.000)	-----			
31S 110				9.154	(13/2+)	110

31S 111				9.207		111
31S 112				9.226		112
31S 113				9.293		113
31S 114				9.332		114
31S 115				9.423	3/2+,5/2+	115
31S 116				9.499		116
31S 117				9.561		117
31S 118				9.606		118
31S 119				9.641		119
31S 120				9.777		120

31S 121				9.833		121

S-p	=	6.131	(0.000)	-----		
S-n	=	13.055	(0.000)	-----		
S-2p	=	11.725	(0.000)	-----		

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S-2n = 32.091 ( 0.013)-----  
S-alpha= 9.083 ( 0.000)-----  
  
S+p = -1.581 ( 0.001)  
S+n = -15.044 ( 0.000)  
S+2p = -4.920 ( 0.000)  
S+2n = -23.686 ( 0.000)  
S+alpha = -6.430 ( 0.001)  
  
gap p = 4.550 ( 0.001)  
gap n = -1.990 ( 0.000)  
gap 2p = 6.806 ( 0.001)  
gap 2n = 8.405 ( 0.013)  
gap alpha = 2.653 ( 0.001)
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