

^{31}Si $Z = 14$ $N = 17$ [link to full NNDC output](#)

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

BE = 262.207 (0.000) MeV

Qbeta- = 1.492 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
31SI 1	0.000	3/2+			1 157.36 M 26
31SI 2	0.752	1/2+			2 0.53 PS 12
31SI 3	1.695	5/2+			3 0.57 PS 15
31SI 4	2.317	3/2+			4 38 FS 15
31SI 5				2.788 (5/2+)	5 14 FS 14
31SI 6			3.134 7/2-		6 0.37 PS 8
31SI 7			3.533 3/2-		7 6.9 FS LT
31SI 8				3.874 (7/2+,9/2+)	8
31SI 9				4.262 3/2+,5/2+	9
31SI 10				4.382 (3/2)-	10
31SI 11				4.690	11
31SI 12	4.719	1/2+			12
31SI 13				4.933	13
31SI 14				4.966	14
31SI 15				4.992	15
31SI 16				5.281 (1/2)-	16
31SI 17				5.311	17
31SI 18				5.442 5/2-,7/2-	18
31SI 19				5.594	19
31SI 20				5.604	20
31SI 21				5.655	21
31SI 22				5.680	22
31SI 23				5.730	23
31SI 24				5.819 (1/2+)	24
31SI 25				5.873 1/2-,3/2-	25
31SI 26				5.958 (1/2-,3/2,5/2+)	26
31SI 27				5.985 (3/2+,5/2+)	27
31SI 28				6.071 3/2+,5/2+	28
31SI 29				6.106 5/2-,7/2-	29
31SI 30				6.241 3/2+,5/2+	30
31SI 31				6.285	31
31SI 32				6.351	32
31SI 33				6.417 (5/2-,7/2-)	33
31SI 34				6.450	34
31SI 35				6.461 (3/2+,5/2+)	35
31SI 36	6.577	1/2+			36
31SI 37				6.583 5/2-,7/2-	37

31SI	38	6.587	1/2+					38			
S-n	=	6.587	(0.000)	-----							
31SI	39			6.592	1/2-			39	1.90 KEV	7	
31SI	40					6.602		40			

31SI	41					6.661		41			
31SI	42	6.765	1/2+					42	11.0 KEV	3	
31SI	43					6.772	(3/2+)	43			
31SI	44					6.791		44			
31SI	45					6.815	3/2+,5/2+	45			
31SI	46			6.881	3/2-			46	0.52 KEV	4	
31SI	47					6.915	3/2+,5/2+	47			
31SI	48					6.949	(1/2-,3/2+	48)			
31SI	49			6.987	1/2-			49	1.30 KEV	25	
31SI	50					7.008	(1/2-,3/2-)	50			

31SI	51					7.164	(3/2+,5/2+)	51			
31SI	52					7.212	(3/2+,5/2+)	52			
31SI	53					7.270	(3/2+,5/2+)	53			
31SI	54			7.309	3/2-			54			
31SI	55					7.359	(1/2-)	55	0.86 KEV	13	
31SI	56					7.369	(1/2-)	56	0.52 KEV	10	
31SI	57					7.373	(1/2-)	57	0.60 KEV	12	
31SI	58			7.405	3/2-			58	20.8 KEV	8	
31SI	59					7.432	3/2+,5/2+	59			
31SI	60					7.438	(5/2)	60			

31SI	61			7.536	1/2-			61	6 KEV	1	
31SI	62					7.564	(3/2+,5/2,7/2-)	62			
31SI	63					7.648	(3/2+,5/2,7/2-)	63			
31SI	64					7.718		64			
31SI	65	7.732	1/2+					65	7.5 KEV	5	
31SI	66					7.767	3/2+,5/2+	66	5.0 KEV	5	
31SI	67			7.822	1/2-			67	7.9 KEV	13	
31SI	68					7.848	(3/2+,5/2+	68)	4.2 KEV	10	
31SI	69					7.857	(3/2-)	69	5.0 KEV	16	
31SI	70			7.883	1/2-			70	9 KEV	3	

31SI	71			7.901	3/2-			71	34 KEV	3	
31SI	72					7.905	5/2-,7/2-	72			
31SI	73			7.927	1/2-			73	5.8 KEV	20	
31SI	74					7.944	(3/2+,5/2+	74)			
31SI	75					7.955	(3/2-)	75	5.4 KEV	12	
31SI	76					7.991	5/2-,7/2-	76			
31SI	77					8.017	5/2-,7/2-	77			
31SI	78					8.035	5/2-,7/2-	78			
31SI	79					8.071	5/2-,7/2-	79			
31SI	80					8.116	5/2-,7/2-	80			

31SI	81					8.140	5/2-,7/2-	81			

31SI 82				8.165	5/2-,7/2-	82
31SI 83				8.220		83
31SI 84				8.240	(5/2-,7/2-)	84
31SI 85				8.360	5/2-,7/2-	85
31SI 86				8.570	3/2+,5/2+	86
31SI 87				8.620	3/2+,5/2+	87
31SI 88				8.710	(5/2-,7/2-)	88
31SI 89				8.780	(3/2+,5/2+)	89
31SI 90				8.830	(1/2-,3/2-)	90

31SI 91				8.850		91
31SI 92				8.920	(1/2-,3/2-)	92
31SI 93				8.970	(1/2-,3/2-)	93
31SI 94				9.230	(3/2+,5/2+)	94
31SI 95				9.380		95
31SI 96				9.590		96
31SI 97				10.760		97

S-p = 14.373 (0.003)-----
S-n = 6.587 (0.000)-----
S-2p = 26.924 (0.011)-----
S-2n = 17.197 (0.000)-----
S-alpha= 10.787 (0.000)-----

S+p = -8.645 (0.000)
S+n = -9.200 (0.000)
S+2p = -18.215 (0.000)
S+2n = -13.708 (0.001)
S+alpha = -8.322 (0.000)

gap p = 5.728 (0.003)
gap n = -2.613 (0.000)
gap 2p = 8.709 (0.011)
gap 2n = 3.489 (0.001)
gap alpha = 2.465 (0.000)