

^{51}V $Z = 23$ $N = 28$ adopted link ENSDF link

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

BE = 445.846 (0.000) MeV

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

51V	1			0.000	7/2-	1	STABLE
51V	2			0.320	5/2-	2	184 PS 6
51V	3					3	
51V	4			0.929	3/2-	4	8.7 PS 8
51V	5					5	
51V	6					6	
51V	7			1.609	11/2-	7	0.52 PS 5
51V	8			1.813	9/2-	8	0.54 PS 10
51V	9					9	
51V	10			2.411	3/2-	10	13.9 FS 21

51V	11	2.546	1/2+			11	0.7 PS GT
51V	12				2.600	12	
51V	13	2.677	(3/2)+			13	0.58 PS 10
51V	14			2.700	15/2-	14	5.5 PS 4
51V	15					15	
51V	16				2.790	16	
51V	17			3.084	(5/2)-	17	10.4 FS +35-21
51V	18			3.150	(3/2-)	18	
51V	19			3.216	3/2-	19	26 FS +14-10
51V	20			3.264	(5/2)-	20	53 FS +12-7

51V	21				3.280 (5/2)	21	139 FS +21-14
51V	22				3.310	22	
51V	23				3.320 -	23	
51V	24				3.372 1/2-,3/2-	24	
51V	25			3.378	9/2-	25	56 FS 7
51V	26				3.381 (3/2-,5/2	26	73 FS +17-14
51V	27				3.383 (9/2,11/2	27	55 FS 18
51V	28			3.386	13/2-	28	0.87 PS GT
51V	29			3.395	(13/2-)	29	15 FS +9-7
51V	30				3.413	30	

51V	31				3.444	31	7 FS
51V	32			3.454	9/2-	32	5.8 FS 20
51V	33			3.517	9/2-	33	17 FS 3
51V	34				3.556	34	
51V	35				3.563	35	
51V	36				3.568	36	0.08 PS +11-6
51V	37				3.577 (3/2-,5/2	37	0.06 PS +9-4

51V 38						3.614 (9/2,11/2	38	187 FS	35
51V 39				3.623		(3/2-)	39		
51V 40						3.632 -	40	13 FS	3

51V 41						3.663 1/2-,3/2-	41		
51V 42						3.668	42		
51V 43				3.678		(3/2-)	43	34 PS	4
51V 44						3.681	44		
51V 45						3.723	45		
51V 46						3.743	46		
51V 47		3.748		1/2+			47		
51V 48						3.765	48		
51V 49						3.780 (5/2,7/2)	49	26 FS	5
51V 50						3.796 (3/2,5/2,	50	24 FS	6

51V 51						3.804 (9/2,11/2	51		
51V 52						3.810	52		
51V 53						3.840	53		
51V 54				3.874		15/2-	54	0.15 PS	LT
51V 55						3.874	55		
51V 56						3.902 (9/2,11/2	56	37 FS	19
51V 57				3.919		9/2-	57	12 FS	4
51V 58						3.939 +	58		
51V 59						3.943	59	90 FS	14
51V 60						4.003 (7/2-,9/2	60	0.17 FS	+11-6

51V 61						4.025	61	17 FS	LT
51V 62						4.030	62		
51V 63				4.052		(-)	63	66 FS	21
51V 64						4.124 (7/2,9/2,	64	8 FS	3
51V 65				4.180		(1/2)-	65		
51V 66						4.200 3/2+,5/2+	66		
51V 67						4.225 (9/2,11/2	67		
51V 68						4.240 1/2-,3/2-	68		
51V 69				4.266		(1/2)-	69		
51V 70						4.323	70		

51V 71						4.340	71		
51V 72						4.445 5/2-,7/2-	72		
51V 73						4.447 (9/2,11/2	73		
51V 74						4.451	74		
51V 75						4.464	75		
51V 76						4.465 (3/2-,5/2	76)		
51V 77						4.494 (11/2,13/	77		
51V 78		4.505		1/2+			78		
51V 79						4.512 +	79		
51V 80						4.521 5/2-,7/2-	80		

51V 81				4.535		(3/2)-	81		
51V 82						4.561 (9/2,11/2	82		

51V 83				4.583	(9/2)-			83
51V 84							4.633 5/2-,7/2-	84
51V 85							4.651	85
51V 86							4.660	86
51V 87				4.670	(-)			87
51V 88							4.680	88
51V 89							4.689	89
51V 90							4.755 (5/2-,7/2	90

51V 91							4.768	91
51V 92				4.770	5/2-			92
51V 93							4.775 9/2-,11/2	93
51V 94							4.790 -	94
51V 95							4.810	95
51V 96				4.821	17/2-			96 0.14 PS 4
51V 97							4.838 (9/2,11/2	97
51V 98				4.843	3/2-			98
51V 99							4.849 1/2-,3/2-	99
51V 100				4.861	3/2-			100

51V 101							4.885	101
51V 102							4.894 (11/2,13/102)-	
51V 103		4.907	1/2+					103
51V 104							4.916 (9/2-,11/104-)	
51V 105				4.920	(-)			105
51V 106							4.936	106
51V 107							4.945	107
51V 108							4.950	108
51V 109							4.964 1/2-,3/2-	109
51V 110							4.978	110

51V 111							5.020	111
51V 112							5.030	112
51V 113							5.037 -	113
51V 114							5.065 3/2+,5/2+114	
51V 115							5.070	115
51V 116							5.080 -	116
51V 117		5.104	1/2+					117
51V 118							5.113 (11/2,13/118	
51V 119							5.127 3/2+,5/2+119	
51V 120							5.138	120

51V 121							5.142 -	121
51V 122							5.160 -	122
51V 123							5.183 3/2+,5/2+123	
51V 124							5.188 (11/2,13/124)-	
51V 125							5.209	125
51V 126							5.249	126
51V 127							5.256 (11/2,13/127)-	
51V 128							5.260	128

51V 129				5.292	129	
51V 130		5.308	(9/2)-		130	

51V 131				5.312	(3/2-,5/2)131	
51V 132				5.325	132	
51V 133				5.333	133	
51V 134				5.341	1/2-,3/2-134	
51V 135				5.350	-	135
51V 136				5.355	136	
51V 137				5.394	-	137
51V 138				5.401	138	
51V 139				5.404	139	
51V 140		5.424	(-)		140	

51V 141		5.433	19/2-		141	0.16 PS 5
51V 142				5.440	1/2-,3/2-142	
51V 143				5.461	-	143
51V 144				5.478	144	
51V 145				5.496	3/2+,5/2+145	
51V 146				5.497	1/2-,3/2-146	
51V 147				5.502	-	147
51V 148				5.508	148	
51V 149				5.512	149	
51V 150				5.585	1/2-,3/2-150	

51V 151				5.591	-	151
51V 152				5.600	3/2+,5/2+152	
51V 153				5.617	(9/2,11/2)153	
51V 154				5.629	(11/2-,13)154	
51V 155				5.689	-	155
51V 156				5.720	1/2-,3/2-156	
51V 157				5.734	157	
51V 158				5.787	-	158
51V 159		5.808	(11/2-)		159	
51V 160				5.818	(11/2-,13)160	

51V 161				5.838	161	
51V 162				5.850	(9/2-,11/2)162-	
51V 163				5.899	-	163
51V 164				5.914	(11/2-,13)164	
51V 165				5.943	(9/2-,11/2)165-	
51V 166				5.949	(9/2-,11/2)166-	
51V 167				5.958	167	
51V 168				5.961	168	
51V 169				5.981	(9/2-,11/2)169	
51V 170				6.005	11/2+,13/2)170	

51V 171				6.039	(9/2-,11/2)171	
51V 172		6.046	(1/2-)		172	
51V 173				6.056	173	

51V 174				6.059	(9/2,11/2174-			
51V 175				6.073	-	175		
51V 176				6.101	(9/2-,11/176-)			
51V 177				6.114	(11/2-,13177			
51V 178				6.137		178		
51V 179				6.172	(1/2-,3/2179			
51V 180				6.181		180		

51V 181				6.200		181		
51V 182				6.221		182		
51V 183				6.228		183		
51V 184				6.241		184		
51V 185		6.248	(21/2-)			185	0.15 PS	10
51V 186				6.260	(11/2,13/186			
51V 187				6.264	(9/2-,11/187-)			
51V 188		6.267	(11/2-)			188		
51V 189				6.297	(9/2,11/2189-			
51V 190				6.319		190		

51V 191				6.344		191		
51V 192				6.362		192		
51V 193				6.380	(9/2,11/2193-			
51V 194				6.403		194		
51V 195				6.438	(11/2-,13195			
51V 196				6.455	-	196		
51V 197				6.464	(9/2-,11/197-)			
51V 198				6.485	(9/2,11/2198-			
51V 199				6.496	(11/2-,13199			
51V 200				6.529		200		

51V 201				6.567		201		
51V 202				6.570	(11/2,13/202			
51V 203		6.579	(9/2-)			203		
51V 204				6.605		204		
51V 205				6.636		205		
51V 206				6.650		206		
51V 207				6.675	(11/2-,13207			
51V 208				6.694	(1/2-,3/2208			
51V 209				6.747		209		
51V 210				6.831	(11/2-,13210			

51V 211				6.888		211		
51V 212				6.931	(11/2-,13212			
51V 213				6.977	(9/2-,11/213-)			
51V 214				7.047		214		
51V 215				7.152		215		
51V 216				7.272		216		
51V 217		7.335	(23/2-)			217	0.28 PS	+7-11
51V 218				7.348		218		
51V 219				7.393		219		

51V 220				7.442		220

51V 221				7.540		221
51V 222				7.590		222
51V 223				7.633		223
51V 224				7.682		224
51V 225				7.710		225
51V 226				7.940		226
S-p	=	8.060	(0.000)	-----		
51V 227				8.061		227
51V 228				8.171		228
51V 229		8.211	(25/2-)			229
51V 230				8.305		230

51V 231				8.501		231
51V 232		9.400	3/2-			232 7 EV 2
51V 233		9.405	3/2-			233 47 EV 6
51V 234		9.411	3/2-			234 9 EV 2
S-alpha=	10.291	(0.002)	-----			
51V 235		10.545	1/2-			235 4.1 KEV
51V 236		10.856	7/2-			236
51V 237		10.988	5/2-			237
S-n	=	11.051	(0.000)	-----		
51V 238		11.588	5/2-			238 3.9 KEV 10
51V 239		11.604	3/2-			239 4.1 KEV 10
51V 240					11.800	240

51V 241		12.300	1/2-			241
51V 242		12.359	5/2-			242
51V 243		12.555	3/2-			243
51V 244		13.217	9/2+			244

S-p	=	8.060	(0.000)	-----		
S-n	=	11.051	(0.000)	-----		
S-2p	=	20.219	(0.002)	-----		
S-2n	=	20.384	(0.001)	-----		
S-alpha=	10.291	(0.002)	-----			

S+p	=	-10.505	(0.000)	-----		
S+n	=	-7.311	(0.000)	-----		
S+2p	=	-17.065	(0.000)	-----		
S+2n	=	-15.791	(0.003)	-----		
S+alpha	=	-7.934	(0.000)	-----		

gap p	=	-2.445	(0.000)	-----		
gap n	=	3.740	(0.000)	-----		
gap 2p	=	3.153	(0.002)	-----		
gap 2n	=	4.592	(0.003)	-----		
gap alpha	=	2.357	(0.002)	-----		