

^{50}V $Z = 23$ $N = 27$ [link to full NNDC output](#)

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

BE = 434.796 (0.000) MeV
 Qbeta- = 1.038 (0.001) MeV
 Qbeta+ = 2.208 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
50V	1	0.000	6+		1 1.4E+17 Y +4-3
50V	2	0.226	5+		2 3.7 PS LT
50V	3	0.320	4+		3 56 PS 12
50V	4	0.356	3+		4 3 NS LT
50V	5	0.389	2+		5
50V	6	0.836	5+		6 54 FS 22
50V	7			0.910 5+,6+,7+	7 43 FS 8
50V	8	0.910	4+		8 68 FS 9
50V	9			1.301 2+,3+	9 48 FS 8
50V	10			1.332 (1)+	10 17 FS 6
50V	11			1.402 2+,3+	11 0.8 PS GT
50V	12			1.495 (1)+	12 44 FS 7
50V	13			1.518 2+,3+	13 164 FS 26
50V	14			1.562 2+,3+	14 0.7 PS +4-2
50V	15			1.677 (3)+	15 0.32 PS GT
50V	16			1.700 3+,4+,5+	16 0.35 PS 10
50V	17			1.703	17
50V	18			1.719	18
50V	19			1.725 (8)+	19 0.14 PS 6
50V	20			1.725	20
50V	21			1.752 3+,4,5+	21 1.3 PS GT
50V	22			1.762	22 5 FS LT
50V	23			1.762	23
50V	24			1.811 1+,2+,3+	24 2.9 PS GT
50V	25			1.881 4(+),5(+),6(+)	25 15 FS 8
50V	26			1.936 (0:5)+	26
50V	27	1.954	1+		27
50V	28			2.038 3+,4+,5+	28
50V	29			2.111 3+,4+,5+	29
50V	30			2.132 3+,4+,5+	30
50V	31			2.162 3-,4-	31
50V	32			2.313 3+,4+,5+	32
50V	33			2.344 3+,4+,5+	33
50V	34			2.398 (2:5)+	34
50V	35			2.424 3-,4-	35
50V	36			2.425 (1)+	36

50V	37				2.455	3+,4+,5+	37		
50V	38				2.478	(9+)	38	0.24 PS	+28-14
50V	39				2.484	(0:7)+	39		
50V	40				2.494	(0 TO 7)+	40		

50V	41				2.511	3-,4-	41		
50V	42				2.532	(1)+	42		
50V	43				2.534	3-,4-	43		
50V	44				2.597	3-,4-	44		
50V	45				2.652	(2:5)+	45		
50V	46				2.736	(3,4,5)+	46		
50V	47				2.762	(5,6,7)+	47		
50V	48				2.791	1+,2+,3+	48		
50V	49				2.812	(1)+	49		
50V	50				2.828		50		

50V	51				2.842	(5+,6+,7+)	51		
50V	52				2.877	3-,4-	52		
50V	53				2.929	(0:7)+	53		
50V	54				2.957	(1:6)-	54		
50V	55				2.966	(2:5)+	55		
50V	56				2.991	(1+)	56		
50V	57				3.013	(0:7)+	57		
50V	58				3.097	(2:5)+	58		
50V	59				3.111	(1:6)-	59		
50V	60				3.141	(3+)	60		

50V	61				3.169	(1:4)	61		
50V	62				3.209	3-,4-	62		
50V	63				3.230	(0)+	63		
50V	64				3.271	3+,4+,5+	64		
50V	65				3.296	3+,4+,5+	65		
50V	66				3.312		66		
50V	67				3.402		67		
50V	68				3.431	(2:5)+	68		
50V	69				3.462	(0)+	69		
50V	70				3.537	(2:5)+	70		

50V	71				3.542	(1:6)-	71		
50V	72				3.555	(0,1)+	72		
50V	73				3.606	(0:7)	73		
50V	74				3.658	(2+,3+)	74		
50V	75				3.700	(2:5)+	75		
50V	76				3.722	0+,1+	76		
50V	77				3.729	(10+)	77	28 FS	+56-28
50V	78				3.749	(1+,3-,4-)	78		
50V	79				3.769	(1)+	79		
50V	80		3.796	3+			80		

50V	81				3.811	3+,4+,5+	81		

50V	82				3.846	1+,2+,3+	82
50V	83				3.878	(2:5)+	83
50V	84				3.914	(2:5)+	84
50V	85				3.940	(1:4)	85
50V	86				3.963	(2:5)+	86
50V	87				4.073	(2:5)+	87
50V	88				4.116	(0:7)+	88
50V	89				4.146	2+,3+	89
50V	90				4.195		90

50V	91				4.213		91
50V	92				4.234		92
50V	93				4.262	2+,3+	93
50V	94				4.292	(11+)	94 0.24 PS 7
50V	95				4.294		95
50V	96				4.334	(1:6)-	96
50V	97				4.361	(2:5)+	97
50V	98				4.396	(2:5)+	98
50V	99				4.430	(2:5)+	99
50V	100				4.431	(1)+	100

50V	101				4.480	(1:6)-	101
50V	102				4.501	(1:6)-	102
50V	103				4.541		103
50V	104				4.570	3-,4-	104
50V	105				4.599	(2:5)+	105
50V	106				4.653	(2:5)+	106
50V	107				4.704	(1:6)-	107
50V	108				4.722	(1+)	108
50V	109				4.774	(1:6)	109
50V	110				4.815 3	(0)+	110

50V	111				4.833	(2:5)+	111
50V	112				4.864		112
50V	113				4.904	1+,2+,3+	113
50V	114				4.936	1+,2+,3+	114
50V	115				5.026		115
50V	116				5.060	(2:5)+	116
50V	117				5.107	(2:5)+	117
50V	118				5.172	(1+)	118
50V	119				5.264		119
50V	120				5.288		120

50V	121				5.320		121
50V	122				5.352		122
50V	123				5.405		123
50V	124				5.440	(2:5)+	124
50V	125				5.491	(1+)	125
50V	126				5.543	1+,2+,3+	126
50V	127				5.664		127

50V 128				5.752	(1+)	128
50V 129				5.782	1+,2+,3+	129
50V 130				5.829		130

50V 131				5.871		131
50V 132				5.896		132
50V 133				5.948	2+,3+	133
50V 134				6.080		134
50V 135				6.124		135
50V 136				6.179	(1+,2+,3+)	136
50V 137				6.222		137
50V 138				6.267	(1+,2+,3+)	138
50V 139				6.341		139
50V 140				6.390	(0:7)+	140

50V 141				6.464		141
50V 142				6.558		142
50V 143				6.601		143
50V 144				6.652		144
50V 145				6.685		145
50V 146				6.744		146
50V 147				6.804		147
50V 148				6.833		148
50V 149				6.883		149
50V 150				6.929		150

50V 151				6.969		151
50V 152				6.989		152
50V 153				7.092		153
50V 154				7.106		154
50V 155				7.173		155
50V 156				7.206		156
50V 157				7.321		157
50V 158				7.386		158
50V 159				7.442		159
50V 160				7.520	(0:7)+	160

S-p	=	7.949	(0.000)	-----		
50V 161				8.050	(0:7)+	161
50V 162				8.590	(0)+	162
50V 163				8.771		163
50V 164				8.814		164
50V 165				8.817		165
50V 166				8.842		166
50V 167				8.845		167
50V 168				8.850		168
50V 169				8.857		169
50V 170				8.867		170

50V 171				8.872		171

50V 172			8.878	172
50V 173			8.881	173
50V 174			8.886	174
50V 175			8.892	175
50V 176			8.896	176
50V 177			8.897	177
50V 178			8.899	178
50V 179			8.902	179
50V 180			8.906	180

50V 181			8.909	181
50V 182			8.911	182
50V 183			8.914	183
50V 184			8.917	184
50V 185			8.920	185
50V 186			8.924	186
50V 187			8.925	187
50V 188			8.928	188
50V 189			8.936	189
50V 190			8.940	190

50V 191			8.944	191
50V 192			8.952	192
50V 193			8.960	193
50V 194			8.962	194
50V 195			8.967	195
50V 196			8.969	196
50V 197			8.970	197
50V 198			8.975	198
50V 199			8.979	199
50V 200			8.990	200

50V 201			8.993	201
50V 202			8.995	202
50V 203			8.999	203
50V 204			9.007	204
50V 205			9.014	205
50V 206			9.017	206
50V 207			9.019	207
50V 208			9.020	208
50V 209			9.024	209
50V 210			9.027	210

50V 211			9.029	211
50V 212			9.032	212
50V 213			9.034	213
50V 214			9.037	214
50V 215			9.040	215
50V 216			9.042	216
50V 217			9.045	217

50V 218				9.048	218
50V 219				9.053	219
50V 220				9.056	220

50V 221				9.059	221
50V 222				9.064	222
50V 223				9.067	223
50V 224				9.072	224
50V 225				9.075	225
50V 226				9.079	226
50V 227				9.084	227
50V 228				9.087	228
50V 229				9.090	229
50V 230				9.091	230

50V 231				9.095	231
50V 232				9.100	232
50V 233				9.103	233
50V 234				9.107	234
50V 235				9.110	235
50V 236				9.112	236
50V 237				9.115	237
50V 238				9.115	238
50V 239				9.118	239
50V 240				9.121	240

50V 241				9.128	241
50V 242				9.130	242
50V 243				9.134	243
50V 244				9.136	244
50V 245				9.143	245
50V 246				9.148	246
50V 247				9.151	247
50V 248				9.153	248
50V 249				9.157	249
50V 250				9.160	250

50V 251				9.164	251
50V 252				9.165	252
50V 253				9.166	253
50V 254				9.168	254
50V 255				9.170	255
50V 256				9.176	256
50V 257				9.178	257
50V 258				9.181	258
50V 259				9.182	259
50V 260				9.185	260

50V 261				9.191	261
50V 262				9.194	262

50V 263				9.199		263
50V 264				9.201		264
50V 265				9.206		265
50V 266				9.209		266
50V 267				9.258		267
50V 268				9.270	3-,4-	268
50V 269				9.307		269

S-n	=	9.333	(0.001)			
50V 270				9.454		270

50V 271				9.502		271
50V 272				9.531		272
50V 273				9.551		273
50V 274				9.649		274
50V 275				9.746		275
50V 276				9.844		276

S-alpha=		9.888	(0.001)			
50V 277				10.039		277
50V 278				10.136		278
50V 279				10.240	(1:6)(-)	279
50V 280				10.283		280

50V 281				10.390		281
50V 282				10.478		282
50V 283				10.575		283
50V 284				10.640	(1:6)(-)	284
50V 285				10.672		285
50V 286				10.770		286
50V 287				10.833		287
50V 288				10.900	3-,4-	288
50V 289				10.931		289
50V 290				11.225		290

50V 291				11.270	(1:6)(-)	291
50V 292				11.440	(1:6)(-)	292
50V 293				12.570		293

S-p	=	7.949	(0.000)			
S-n	=	9.333	(0.001)			
S-2p	=	19.298	(0.005)			
S-2n	=	20.889	(0.001)			
S-alpha=		9.888	(0.001)			

S+p	=	-9.516	(0.001)			
S+n	=	-11.051	(0.001)			
S+2p	=	-16.061	(0.002)			
S+2n	=	-18.362	(0.001)			
S+alpha	=	-8.759	(0.001)			

gap p = -1.567 (0.001)
gap n = -1.718 (0.001)
gap 2p = 3.237 (0.005)
gap 2n = 2.527 (0.001)
gap alpha = 1.129 (0.001)