

^{44}Sc $Z = 21$ $N = 23$ adopted link ENSDF link

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

BE = 376.525 (0.002) MeV

Qbeta+ = 3.653 (0.002) MeV

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

44SC 1	0.000	2+			1 4.0420 H 25
44SC 2			0.068 1-		2 154.8 NS 8
44SC 3			0.146 0-		3 51.0 US 3
44SC 4			0.235 2-		4 6.16 NS 8
44SC 5	0.271	6+			5 58.61 H 10
44SC 6	0.350	4+			6 3.067 NS 14
44SC 7			0.425 3-		7 366 PS 10
44SC 8			0.531 3(-)		8 3.8 PS GT
44SC 9			0.631 4-		9 353 PS 21
44SC 10				0.641	10

44SC 11	0.666	1+			11 51 FS +16-14
44SC 12				0.725 (1+,2+,3+	12
44SC 13	0.762	3+			13 231 FS 56
44SC 14				0.829	14
44SC 15	0.968	7+			15 3.5 PS LT
44SC 16	0.986	3+			16 1.39 PS +71-59
44SC 17			1.007 (4-)		17 35 NS LT
44SC 18				1.047	18
44SC 19	1.051	5+			19 170 FS +69-59
44SC 20				1.102 (1-,2)	20

44SC 21	1.143	1+			21
44SC 22	1.186	3+			22 38 FS +14-7
44SC 23			1.197 5-		23 35 NS LT
44SC 24				1.292	24
44SC 25	1.326	3+			25 125 FS 34
44SC 26				1.416 (1,3,5)-	26
44SC 27	1.426	2+			27 42 FS 21
44SC 28	1.428	(4)+			28
44SC 29				1.507 (4,5)+	29
44SC 30	1.531	5+			30

44SC 31			1.567 (3)-		31
44SC 32	1.592	(2+)			32
44SC 33				1.608 (3,4)+	33
44SC 34				1.648 (1,2,3-)	34 122 FS 19
44SC 35				1.652 (1,2,3,4+	35 107 FS 24
44SC 36			1.680 (2-)		36 97 FS 23

44SC 37				1.683	(5)-				37
44SC 38							1.728		38
44SC 39				1.755	6-				39
44SC 40				1.768	2-				40 55 FS 12

44SC 41							1.812	1+,3+	41
44SC 42							1.866	3+,5+	42
44SC 43							1.903		43
44SC 44							1.958	(2,4)+	44
44SC 45							1.986	3-,4-	45
44SC 46							2.032		46
44SC 47		2.069	1+						47
44SC 48							2.106		48
44SC 49							2.115		49
44SC 50							2.177		50

44SC 51				2.211	(6-)				51 162 PS 9
44SC 52							2.212		52
44SC 53							2.241		53
44SC 54							2.294	2+,3+,4+,	54
44SC 55				2.332	(1 TO 6)-				55
44SC 56							2.382		56
44SC 57							2.425	(3,4)+	57
44SC 58							2.474	2+,3+,4+,	58
44SC 59				2.489	4-				59
44SC 60				2.518	(1 TO 6)-				60

44SC 61							2.556		61
44SC 62							2.586	3-,4-	62
44SC 63				2.607	7-				63 180 PS 10
44SC 64							2.617	3-,4-	64
44SC 65							2.631		65
44SC 66		2.672	9+						66 1.7 PS 3
44SC 67							2.691		67
44SC 68							2.704	2+,3+,4+,	68
44SC 69							2.719		69
44SC 70							2.751	3-,4-	70

44SC 71		2.780	2 0+						71
44SC 72				2.789	(7-)				72
44SC 73							2.796		73
44SC 74							2.849		74
44SC 75							2.878		75
44SC 76							2.918	(2,3)+	76
44SC 77				2.989	8-				77
44SC 78							2.990	3-,4-	78
44SC 79							3.011	3-,4-	79
44SC 80							3.035		80

44SC 81							3.052		81

44SC 82						3.078	2+,3+,4+,	82		
44SC 83						3.101	2+,3+,4+,	83		
44SC 84		3.152		1+				84		
44SC 85						3.178		85		
44SC 86						3.216		86		
44SC 87		3.288		(5)+				87		
44SC 88						3.326	(5,6,7)+	88		
44SC 89						3.364	(8-)	89	164 PS	12
44SC 90						3.368	2+,3+,4+,	90		

44SC 91		3.418		(1+)				91		
44SC 92						3.431	2+,3+,4+,	92		
44SC 93		3.458		1+				93		
44SC 94						3.483	2+,3+,4+,	94		
44SC 95						3.560		95		
44SC 96		3.567		11+				96	47.6 PS	31
44SC 97						3.626	2+,3+,4+,	97		
44SC 98		3.641		1+				98		
44SC 99		3.711		1+				99		
44SC 100						3.826		100		

44SC 101						3.829	9-	101		
44SC 102								102		
44SC 103		3.905		1+		3.851	2+,3+,4+,	102		
44SC 104						3.956		103		
44SC 105						3.967	(1,2,3)+	104		
44SC 106		3.975		(13+)				105		
44SC 107						4.024		106		
44SC 108		4.040		(1)+				107		
44SC 109		4.054		1+				108		
44SC 110						4.087	2+,3+,4+,	109		

44SC 111						4.107	(9-)	110		
44SC 112		4.114		(10+)				111	0.35 PS	LT
44SC 113						4.140	(1,2,3)+	112		
44SC 114						4.185		113		
44SC 115						4.254	(2,3)+	114		
44SC 116		4.261		1+				115		
44SC 117						4.296	2+,3+,4+,	116		
44SC 118		4.323		1+				117		
44SC 119						4.363	2+,3+,4+,	118		
44SC 120						4.391	+	119		

44SC 121						4.422	(9)	120		
44SC 122						4.430		121		
44SC 123						4.461	2+,3+,4+,	122		
44SC 124						4.500		123		
44SC 125						4.533	2+,3+,4+,	124		
44SC 126						4.541	10-	125		
44SC 127		4.558		1+				126		

44SC 128				4.595	128
44SC 129				4.622	129
44SC 130				4.645	130

44SC 131				4.658	131
44SC 132				4.697 (3,4,5)+	132
44SC 133				4.718	133
44SC 134				4.746 (1:6)-	134
44SC 135				4.762	135
44SC 136	4.791	1+			136
44SC 137				4.820 2+,3+,4+,	137
44SC 138	4.857	1+			138
44SC 139			4.950 (10-)		139
44SC 140	5.001	1+			140

44SC 141	5.065	1+			141
44SC 142	5.096	1+			142
44SC 143	5.200	1+			143
44SC 144	5.262	1+			144
44SC 145				5.277	145
44SC 146				5.295	146
44SC 147				5.336	147
44SC 148			5.358 11-		148
44SC 149	5.404	1+			149
44SC 150				5.439	150

44SC 151				5.463	151
44SC 152	5.506	1+			152
44SC 153				5.526 +	153
44SC 154				5.553 (1:6)-	154
44SC 155	5.559	1+			155
44SC 156				5.608	156
44SC 157	5.636	1+			157
44SC 158				5.700	158
44SC 159				5.716	159
44SC 160	5.724	1+			160

44SC 161	5.774	(1+)			161
44SC 162	5.822	1+			162
44SC 163				5.854	163
44SC 164	5.880	1+			164
44SC 165				5.926	165
44SC 166				5.980	166
44SC 167	6.013	1+			167
44SC 168				6.043	168
44SC 169				6.099	169
44SC 170	6.156	1+			170

44SC 171				6.201	171
44SC 172				6.246	172

44SC 173						6.303		173
44SC 174						6.367		174
44SC 175				6.377	12-			175 0.31 PS 10
44SC 176		6.404	1+					176
44SC 177						6.429		177
44SC 178				6.441	(12-)			178 80 FS 24
44SC 179		6.464	1+					179
44SC 180						6.547		180

44SC 181						6.574		181
44SC 182		6.635	1+					182
44SC 183						6.678		183
44SC 184						6.690		184
S-alpha=		6.705	(0.002)	-----				
S-p =		6.696	(0.002)	-----				
44SC 185		6.737	1+					185
44SC 186		6.776	1+					186
44SC 187		6.818	1+					187
44SC 188		6.857	1+					188
44SC 189		6.893	1+					189
44SC 190						6.990		190

44SC 191		7.038	1+					191
44SC 192						7.068		192
44SC 193				7.092	13-			193 195 FS 69
44SC 194		7.104	1+					194
44SC 195		7.150	1+					195
44SC 196						7.171		196
44SC 197		7.198	1+					197
44SC 198						7.265		198
44SC 199						7.291		199
44SC 200						7.321		200

44SC 201		7.351	(1+)					201
44SC 202						7.374		202
44SC 203		7.407	1+					203
44SC 204						7.494		204
44SC 205						7.514		205
44SC 206		7.568	1+					206
44SC 207		7.595	1+					207
44SC 208		7.654	(1+)					208
44SC 209		7.696	1+					209
44SC 210						7.763		210

44SC 211		7.797	1+					211
44SC 212						7.873		212
44SC 213						7.896		213
44SC 214		7.942	1+					214
44SC 215		8.016	1+					215
44SC 216						8.051		216

44SC 217			8.096	14-		217	177 FS	56
44SC 218					8.164	218		
44SC 219					8.193	219		
44SC 220	8.230	1+				220		

44SC 221					8.296	221		
44SC 222					8.356	222		
44SC 223					8.385	223		
44SC 224	8.428	1+				224		
44SC 225					8.458	225		
44SC 226	8.510	1+				226		
44SC 227	8.594	(1+)				227		
44SC 228	8.657	(1+)				228		
44SC 229	8.715	1+				229		
44SC 230	8.754	1+				230		

44SC 231	8.812	(1+)				231		
44SC 232					8.848	232		
44SC 233					8.862	233		
44SC 234	8.906	1+				234		
44SC 235					8.945	235		
44SC 236	8.960	(1+)				236		
44SC 237	9.010	1+				237		
44SC 238	9.035	1+				238		
44SC 239	9.101	(1+)				239		
44SC 240	9.134	1+				240		

44SC 241			9.141	15-		241	118 FS	21
44SC 242	9.166	1+				242		
44SC 243					9.199	243		
44SC 244	9.239	1+				244		
44SC 245	9.307	(1+)				245		
44SC 246					9.343	246		
44SC 247					9.363	247		
44SC 248	9.381	(1+)				248		
44SC 249					9.411	249		
44SC 250					9.439	250		

44SC 251					9.463	251		
44SC 252					9.487	252		
44SC 253	9.516	1+				253		
44SC 254					9.561	254		
44SC 255	9.600	1+				255		
44SC 256					9.631	256		
44SC 257					9.653	257		
44SC 258	9.683	1+				258		
S-n =	9.699	(0.003)						
44SC 259					9.735	259		
44SC 260	9.765	1+				260		

44SC 261		9.798		1+				261
44SC 262						9.836		262
44SC 263						9.860		263
44SC 264						9.892		264
44SC 265						9.920		265
44SC 266						9.956		266
44SC 267						9.984		267
44SC 268		10.007		1+				268
44SC 269						10.075		269
44SC 270						10.094		270

44SC 271						10.112		271
44SC 272						10.140		272
44SC 273		10.188		1+				273
44SC 274						10.235		274
44SC 275						10.263		275
44SC 276		10.294		1+				276
44SC 277		10.364		1+				277
44SC 278		10.397		1+				278
44SC 279						10.455		279
44SC 280		10.487		(1+)				280

44SC 281						10.514		281
44SC 282						10.573		282
44SC 283						10.653		283
44SC 284						10.682		284
44SC 285						10.712		285
44SC 286						10.749		286
44SC 287						10.781		287
44SC 288						10.803		288
44SC 289		10.865		(1+)				289
44SC 290		10.897		(1+)				290

44SC 291		10.954		(1+)				291
44SC 292						10.993		292
44SC 293						11.023		293
44SC 294						11.052		294
44SC 295						11.174		295
44SC 296						11.251		296
44SC 297						11.273		297
44SC 298						11.319		298
44SC 299						11.383		299
44SC 300						11.415		300

44SC 301						11.455		301
44SC 302						11.489		302
44SC 303		11.575		(2) (1+)				303
44SC 304						11.611		304
44SC 305						11.656		305
44SC 306						11.683		306

44SC 307		11.750	2	(1+)				307
44SC 308						11.783		308
44SC 309						11.815		309
44SC 310						11.836		310

44SC 311						11.865		311
44SC 312						11.931		312
44SC 313						11.956		313
44SC 314						11.979		314
44SC 315		12.100		(1+)				315
44SC 316		12.560	(2)	(1+)				316
44SC 317		12.630	2	(1+)				317
44SC 318		12.820	1	(1+)				318
44SC 319		13.100	(2)	(1+)				319
44SC 320		13.380	2	(1+)				320

44SC 321		13.530	2	(1+)				321
44SC 322		13.680	2	(1+)				322

S-p = 6.696 (0.002) -----
 S-n = 9.699 (0.003) -----
 S-2p = 17.372 (0.002) -----
 S-2n = 21.838 (0.002) -----
 S-alpha = 6.705 (0.002) -----

S+p = -8.483 (0.002)
 S+n = -11.328 (0.002)
 S+2p = -13.838 (0.002)
 S+2n = -20.088 (0.002)
 S+alpha = -9.087 (0.002)

gap p = -1.787 (0.003)
 gap n = -1.628 (0.003)
 gap 2p = 3.534 (0.002)
 gap 2n = 1.749 (0.003)
 gap alpha = -2.381 (0.003)