

$^{60}\text{Ni}$        $Z = 28$        $N = 32$       adopted link      ENSDF link

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

BE      =      526.847 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
60NI	1   0.000	0+			1 STABLE
60NI	2   1.333	2+			2 0.735 PS 21
60NI	3   2.159	2+			3 0.59 PS 17
60NI	4   2.285	0+			4 1.5 PS GT
60NI	5   2.506	4+			5 3.3 PS 10
60NI	6   2.626	3+			6 0.6 PS AP
60NI	7   3.120	4+			7 0.24 PS 10
60NI	8   3.124	2+			8 0.23 PS +17-10
60NI	9			3.186 (3+)	9 0.14 PS 4
60NI	10   3.194	1+			10 53 FS 14
60NI	11   3.269	2+			11 71 FS 21
60NI	12   3.318	0+			12 0.24 PS +28-11
60NI	13			3.381	13 0.23 PS +35-11
60NI	14   3.393	2+			14 0.13 PS +6-4
60NI	15   3.588	0+			15 40 PS LT
60NI	16   3.619	3+			16 0.2 PS +5-1
60NI	17   3.671	4+			17 0.06 PS 4
60NI	18   3.703	4+			18
60NI	19   3.731	4+			19 0.21 PS +29-9
60NI	20   3.734	2+			20 0.11 PS 4
60NI	21			3.798 1	21 118 FS 15
60NI	22   3.871	2+			22 3.0 PS GT
60NI	23   3.887	2+			23 0.07 PS +7-4
60NI	24			3.895	24 59 FS 25
60NI	25			3.908 1	25 27 FS 5
60NI	26			3.925 2+,3+	26 0.19 PS +19-8
60NI	27   4.006	2+			27 21 FS 7
60NI	28   4.020	1+			28 12 FS 3
60NI	29			4.035	29 25 FS 14
60NI	30		4.040 3-		30 22 FS 10
60NI	31			4.078 1+,2+	31 12 FS GT
60NI	32   4.112	2+			32
60NI	33   4.166	5+			33 0.8 PS 4
60NI	34			4.186 (4+)	34
60NI	35			4.191	35
60NI	36   4.265	6+			36 0.45 PS +11-21
60NI	37			4.294	37
60NI	38			4.301	38

60NI 39		4.319	2+					39
60NI 40						4.336	2	40
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60NI 41						4.341	(0+)	41 29 FS +31-21
60NI 42		4.356	2+					42 45 FS +26-18
60NI 43						4.400		43
60NI 44		4.407	5+					44
60NI 45						4.451		45
60NI 46		4.493	2+					46 16 FS 14
60NI 47		4.534	2+					47
60NI 48						4.548	1+,2+	48
60NI 49		4.577	2+					49 18 FS LT
60NI 50						4.579	(4+)	50
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60NI 51						4.613		51
60NI 52						4.760	1,2	52
60NI 53						4.768		53 0.05 PS +6-3
60NI 54						4.779		54
60NI 55						4.800		55
60NI 56		4.844	2+					56 6.9 FS 21
60NI 57						4.849	1,2,3	57
60NI 58						4.859		58
60NI 59						4.891		59
60NI 60						4.929		60
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60NI 61						4.953		61
60NI 62		4.958	4+					62 61 FS 21
60NI 63						4.971		63 0.06 PS +5-3
60NI 64						4.986	(6+)	64 1.0 PS +25-7
60NI 65						5.014	(5-)	65
60NI 66						5.048	1,2	66
60NI 67						5.065	(1-)	67 2.98 FS 28
60NI 68						5.091		68
60NI 69						5.106		69 0.03 PS +5-3
60NI 70					5.110	8-		70
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60NI 71		5.121	4+					71
60NI 72						5.127		72
60NI 73						5.133		73
60NI 74		5.149	6+					74
60NI 75						5.174		75
60NI 76						5.192		76
60NI 77						5.205		77 16 FS 16
60NI 78						5.236	5(+)	78
60NI 79		5.244	4+					79 0.05 PS +5-3
60NI 80						5.264		80
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60NI 81						5.289		81
60NI 82						5.307		82
60NI 83						5.318		83

60NI 84				5.349	7-				84	250 PS	21
60NI 85							5.379		85		
60NI 86				5.396	3-				86		
60NI 87							5.411		87		
60NI 88							5.428		88		
60NI 89		5.447	2+						89		
60NI 90		5.450	6+						90		
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60NI 91							5.476		91		
60NI 92							5.530	(2+)	92	20 FS	14
60NI 93							5.612		93		
60NI 94							5.642		94		
60NI 95							5.650		95		
60NI 96		5.663	7+						96	0.7 PS	+21-3
60NI 97							5.672		97		
60NI 98							5.711		98		
60NI 99							5.741		99		
60NI 100							5.780		100		
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60NI 101							5.785	(7+)	101		
60NI 102		5.799	2+						102		
60NI 103							5.831		103		
60NI 104							5.860		104		
60NI 105							5.878		105		
60NI 106				5.902	6-				106		
60NI 107							5.902		107		
60NI 108							5.919		108		
60NI 109							5.931	1	109	21 FS	6
60NI 110							5.946		110		
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60NI 111							5.968		111		
60NI 112				5.973	5-				112		
60NI 113							5.992		113		
60NI 114							6.028		114		
60NI 115							6.054		115		
60NI 116							6.067		116		
60NI 117							6.077	(8)	117		
60NI 118							6.111		118		
60NI 119		6.112	7+						119		
60NI 120							6.142		120		
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60NI 121				6.181	1-				121	1.80 FS	28
60NI 122							6.192		122		
60NI 123							6.229	(2+)	123	20 FS	4
60NI 124							6.239		124		
60NI 125							6.278	(6-)	125		
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S-alpha=	6.291	( 0.000)									
60NI 126							6.292		126		
60NI 127		6.327	2+						127		
60NI 128							6.362		128		

60NI 129				6.382	1	129	12 FS	3
60NI 130				6.403		130		
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60NI 131				6.431		131		
60NI 132	6.461	8+				132	1.2 PS	+16-5
60NI 133			6.465	1-		133	1.7 FS	5
60NI 134						134		
60NI 135	6.515	1+				135	3.0 FS	5
60NI 136						136		
60NI 137						137		
60NI 138						138		
60NI 139			6.588	1-		139	1.25 FS	28
60NI 140						140		
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60NI 141				6.623		141		
60NI 142				6.647		142		
60NI 143				6.658		143		
60NI 144				6.672	(9)	144		
60NI 145				6.687		145		
60NI 146			6.719	1-		146	6.7 FS	13
60NI 147				6.736	(1)	147	6 FS	3
60NI 148				6.756		148		
60NI 149				6.761	7(+)	149		
60NI 150				6.765		150		
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60NI 151				6.791		151		
60NI 152			6.811	9-		152	0.55 PS	28
60NI 153				6.835		153		
60NI 154				6.835		154		
60NI 155			6.837	8-		155	0.6 PS	+5-2
60NI 156				6.859		156		
60NI 157				6.892		157		
60NI 158	6.912	1+				158	1.46 FS	28
60NI 159				6.950	(10)	159		
60NI 160				6.997		160		
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60NI 161	7.028	8+				161		
60NI 162			7.039	1-		162	1.3 FS	4
60NI 163						163		
60NI 164					(10)	164		
60NI 165						165		
60NI 166						166		
60NI 167						167		
60NI 168	7.250	8+				168		
60NI 169						169		
60NI 170						170		
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60NI 171				7.340		171		
60NI 172				7.361	(8)	172		
60NI 173	7.380	8+				173		

60NI 174						7.414				174
60NI 175		7.433		9+						175
60NI 176						7.466		(7-)		176
60NI 177		7.473		1+						177 2.1 FS 3
60NI 178						7.495				178
60NI 179		7.531		8+						179
60NI 180						7.550		8-		180
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60NI 181						7.552				181
60NI 182						7.560		1-		182 6.5 FS 22
60NI 183										183
60NI 184						7.570				184
60NI 185						7.590				185
60NI 186						7.627				186 0.27 FS 3
60NI 187		7.658		1+		7.647		1-		187 0.97 FS 14
60NI 188										188
60NI 189						7.684				189 0.208 FS 28
60NI 190						7.690		1-		190
60NI 191		7.733		8+						191
60NI 192						7.748		1-		192 0.55 FS 21
60NI 193						7.760		8-		193
60NI 194		7.762		1+						194 1.7 FS 4
60NI 195										195
60NI 196						7.799				196
60NI 197						7.813				197
60NI 198		7.850		1+						198 1.66 FS 28
60NI 199		7.880		1+						199 2.6 FS 6
60NI 200		7.927		1+						200 8.2 FS 36
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60NI 201		7.951		1+						201 0.76 FS 14
60NI 202		7.981		9+						202
60NI 203		8.043		1+						203 7.7 FS 28
60NI 204						8.044		9-		204 0.04 PS +31-4
60NI 205		8.074		8+						205
60NI 206						8.086		1-		206 0.201 FS 35
60NI 207		8.112		1+						207 3.0 FS 7
60NI 208						8.127		1-		208 0.45 FS 6
60NI 209										209 1.04 FS 21
60NI 210						8.189		1		210 0.40 FS 6
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60NI 211						8.272		10-		211
60NI 212										212
60NI 213						8.286		(1+)		213 0.76 FS 28
60NI 214		8.352		1+						214 2.4 FS 6
60NI 215		8.359		1+						215 3.4 FS 11
60NI 216						8.390		9-		216
60NI 217						8.407		1-		217 6.3 FS 37
60NI 218						8.427		9-		218
60NI 219						8.430		3-		219

60NI 220			8.433	8-			220		
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60NI 221					8.451	1	221	2.3 FS	6
60NI 222			8.464	1-			222	2.7 FS	7
60NI 223			8.486	9-			223		
60NI 224					8.505		224		
60NI 225			8.515	1-			225	0.69 FS	14
60NI 226			8.521	10-			226	0.5 PS	+6-2
60NI 227					8.566		227		
60NI 228					8.639		228		
60NI 229			8.655	1-			229	1.32 FS	28
60NI 230	8.657	1+					230	0.7 FS	6
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60NI 231					8.666		231		
60NI 232	8.688	1+					232	2.6 FS	7
60NI 233	8.689	10+					233		
60NI 234			8.747	1-			234	0.90 FS	21
60NI 235	8.768	1+					235	8 FS	8
60NI 236	8.779	1+					236	1.25 FS	35
60NI 237			8.782	1-			237	1.25 FS	35
60NI 238	8.794	1+					238	1.11 FS	35
60NI 239	8.847	1+					239	1.5 FS	4
60NI 240	8.872	1+					240	1.6 FS	4
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60NI 241	8.891	1+					241	0.83 FS	21
60NI 242			8.924	1-			242	0.36 FS	6
60NI 243			8.959	8-			243	79 KEV	
60NI 244			9.010	1-			244	2.1 FS	7
60NI 245					9.045		245		
60NI 246			9.053	1-			246	2.9 FS	12
60NI 247					9.060		247		
60NI 248	9.069	1+					248	1.04 FS	28
60NI 249					9.077		249		
60NI 250			9.092	1-			250	0.132 FS	28
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60NI 251			9.123	10-			251		
60NI 252			9.132	1-			252	0.90 FS	21
60NI 253			9.132	11-			253	0.18 PS	+10-8
60NI 254			9.149	1-			254	0.69 FS	35
60NI 255			9.208	8-			255	127 KEV	
60NI 256			9.256	1-			256	1.5 FS	7
60NI 257			9.264	11-			257		
60NI 258			9.267	1-			258	1.4 FS	7
60NI 259					9.275	1	259	2.6 FS	19
60NI 260	9.301	1+					260	0.55 FS	21
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60NI 261			9.308	1-			261	0.49 FS	21
60NI 262					9.347		262		
60NI 263			9.353	1-			263	1.9 FS	8
60NI 264			9.396	1-			264	0.83 FS	35

60NI 265				9.411	1-				265	1.2 FS	5
60NI 266		9.426	10+						266		
60NI 267		9.453	1+						267	1.0 FS	4
60NI 268					9.464	1-			268	0.21 FS	21
60NI 269		9.468	1+						269	1.9 FS	12
60NI 270					9.505	1-			270	10 FS	4
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S-p	=	9.532 ( 0.001)-----									
60NI 271					9.599	1-			271	0.62 FS	28
60NI 272					9.623	10-			272		
60NI 273					9.640	1-			273	3.0 FS	26
60NI 274					9.659	1-			274	0.049 FS	14
60NI 275		9.666	10+						275		
60NI 276					9.701	1-			276	0.8 FS	5
60NI 277								9.715	(10+)	277	
60NI 278					9.718	11-			278		
60NI 279					9.721	1-			279	1.2 FS	8
60NI 280					9.752	1-			280	4.2 FS	35
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60NI 281					9.760	11-			281		
60NI 282					9.775	1-			282	1.9 FS	14
60NI 283					9.807	1-			283	1.6 FS	10
60NI 284		9.831	1+						284	1.3 FS	6
60NI 285					9.832	1-			285	1.3 FS	6
60NI 286					9.871	1-			286	0.8 FS	6
60NI 287		9.888	10+						287		
60NI 288					9.894	1-			288	0.49 FS	28
60NI 289								9.954	289		
60NI 290					9.960	11-			290		
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60NI 291								9.989	(12-)	291	0.21 PS +21-7
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S-p	=	9.532 ( 0.001)-----									
S-n	=	11.388 ( 0.001)-----									
S-2p	=	16.896 ( 0.000)-----									
S-2n	=	20.387 ( 0.000)-----									
S-alpha	=	6.291 ( 0.000)-----									
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S+p	=	-4.800 ( 0.001)									
S+n	=	-7.820 ( 0.001)									
S+2p	=	-11.273 ( 0.001)									
S+2n	=	-18.416 ( 0.001)									
S+alpha	=	-3.956 ( 0.001)									
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gap p	=	4.733 ( 0.001)									
gap n	=	3.568 ( 0.001)									
gap 2p	=	5.623 ( 0.001)									
gap 2n	=	1.971 ( 0.001)									
gap alpha	=	2.335 ( 0.001)									