

^{41}Ar $Z = 18$ $N = 23$ [link to full NNDC output](#)

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

BE = 349.909 (0.000) MeV

Qbeta- = 2.492 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
41AR 1			0.000	7/2-	1 109.61 M 4
41AR 2			0.167	5/2-	2 315 PS 15
41AR 3			0.516	3/2-	3 0.26 NS 8
41AR 4	1.034	3/2+			4 5 PS +28-3
41AR 5			1.354	3/2-	5 0.40 PS 6
41AR 6				1.505 (9/2-)	6
41AR 7				1.630 (11/2-)	7
41AR 8				1.636 (3/2-)	8
41AR 9	1.868	1/2+			9 46 PS LE
41AR 10				1.988	10
41AR 11				2.321	11
41AR 12			2.398	1/2-	12 0.12 PS 3
41AR 13				2.568	13
41AR 14				2.701 1/2-,3/2-	14
41AR 15			2.733	3/2-	15 31 FS LT
41AR 16				2.891 (9/2)+	16
41AR 17			2.948	3/2-	17 62 FS LT
41AR 18			3.010	3/2-	18 111 FS LT
41AR 19				3.122	19
41AR 20				3.293 1/2-,3/2-	20
41AR 21			3.326	1/2-	21 17 FS LT
41AR 22				3.388 (1/2)-	22
41AR 23			3.433	1/2-	23
41AR 24				3.485	24
41AR 25				3.565	25
41AR 26			3.590	3/2-	26
41AR 27				3.698	27
41AR 28				3.734	28
41AR 29				3.775	29
41AR 30				3.799 (1/2)-	30
41AR 31				3.847	31
41AR 32				3.900	32
41AR 33			3.968	1/2-	33 21 FS 12
41AR 34				4.108	34
41AR 35			4.123	3/2-	35
41AR 36			4.154	3/2-	36
41AR 37				4.251	37

41AR 38				4.270	3/2-			38	
41AR 39							4.295	1/2-, 3/2-	39
41AR 40							4.370		40

41AR 41							4.395		41
41AR 42				4.404	3/2-				42
41AR 43		4.447	1/2+						43
41AR 44							4.473	(1/2-, 3/2+)	44
41AR 45							4.513	(1/2)-	45
41AR 46		4.573	5/2+						46
41AR 47		4.613	1/2+						47
41AR 48							4.644		48
41AR 49		4.670	5/2+						49
41AR 50							4.683	(5/2-)	50

41AR 51							4.722		51
41AR 52							4.754		52
41AR 53							4.816		53
41AR 54							4.831	(5/2-, 9/2+)	54
41AR 55							4.900		55
41AR 56				4.935	1/2-				56
41AR 57							4.970	(5/2-, 9/2+)	57
41AR 58							5.016	1/2-, 3/2-	58
41AR 59				5.066	5/2-				59
41AR 60							5.115		60

41AR 61							5.134		61
41AR 62							5.153	(9/2)+	62
41AR 63							5.219		63
41AR 64							5.244		64
41AR 65							5.280		65
41AR 66							5.296		66
41AR 67							5.321	(5/2)-	67
41AR 68							5.406	3/2-, 7/2-	68
41AR 69				5.438	5/2-				69
41AR 70				5.486	7/2-				70

41AR 71							5.529		71
41AR 72							5.573		72
41AR 73							5.618	(5/2)-	73
41AR 74							5.675		74
41AR 75							5.711	(5/2-)	75
41AR 76							5.753	(7/2-, 9/2+)	76
41AR 77				5.789	5/2-				77
41AR 78							5.821	5/2-, 7/2-	78
41AR 79							5.870		79
41AR 80							5.920	(7/2)-	80

41AR 81							5.947		81
41AR 82							5.986	(5/2)-	82

41AR	83			6.036	5/2-			83
41AR	84						6.088	84
S-n = 6.099 (0.000)-----								
41AR	85			6.132	5/2-			85
41AR	86			6.197	5/2-			86
41AR	87			6.280	5/2-			87
41AR	88			6.310	5/2-			88
41AR	89						6.345 (5/2)-	89
41AR	90						6.375	90

41AR	91						6.419	91
41AR	92						6.453	92
41AR	93			6.475	5/2-			93
41AR	94			6.512	5/2-			94
41AR	95						6.564 (5/2-,7/2-)	95
41AR	96						6.614 (9/2+)	96
41AR	97						6.672	97
41AR	98						6.726	98
41AR	99						6.762	99
41AR	100						6.797	100

41AR	101						6.846	101
41AR	102						6.903	102
41AR	103						6.959	103
41AR	104						7.009	104
41AR	105						7.049	105
41AR	106						7.106	106
41AR	107						7.170	107
41AR	108						7.220	108
41AR	109						7.282	109
41AR	110						7.311	110

41AR	111						7.351	111
41AR	112						7.426	112
41AR	113						7.480	113
41AR	114						7.524	114
41AR	115						7.595	115
41AR	116						7.682	116
41AR	117						7.725	117
41AR	118						7.761	118
41AR	119						7.818	119
41AR	120						7.872	120

41AR	121						7.945	121
41AR	122						7.998	122
41AR	123						8.030	123
41AR	124						8.103	124
41AR	125						8.153	125
41AR	126						8.234	126
41AR	127						8.277	127

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S-p    = 12.799 ( 0.032)-----  
S-n    =  6.099 ( 0.000)-----  
S-2p   = 24.483 ( 0.050)-----  
S-2n   = 15.968 ( 0.005)-----  
S-alpha=  8.596 ( 0.000)-----  
  
S+p    = -9.243 ( 0.000)  
S+n    = -9.427 ( 0.006)  
S+2p   = -19.919 ( 0.000)  
S+2n   = -15.085 ( 0.005)  
S+alpha = -10.170 ( 0.000)  
  
gap p   =  3.555 ( 0.032)  
gap n   = -3.328 ( 0.006)  
gap 2p  =  4.564 ( 0.050)  
gap 2n  =  0.883 ( 0.007)  
gap alpha = -1.574 ( 0.001)
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