

$^{41}\text{Ar}$        $Z = 18$        $N = 23$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

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
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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
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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
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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
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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
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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
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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
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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
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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
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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
41AR 128			8.301	128

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 ( 0.001)

gap p = 3.555 ( 0.032)  
 gap n = -3.328 ( 0.006)  
 gap 2p = 4.563 ( 0.050)  
 gap 2n = 0.883 ( 0.007)  
 gap alpha = -1.574 ( 0.001)