

^{72}As $Z = 33$ $N = 39$ adopted link ENSDF link

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

BE = 623.547 (0.004) MeV

Qbeta+ = 4.356 (0.004) MeV

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

72AS 1			0.000 2-		1 26.0 H 1
72AS 2	0.046	1+			2 10.7 NS 3
72AS 3	0.214	3+			3 85 NS 5
72AS 4	0.288	(2)+			4 2 NS 1
72AS 5			0.310 4-		5 27 NS 5
72AS 6	0.318	4+			6 27 NS 1
72AS 7			0.363 5-		7
72AS 8	0.380	0+			8
72AS 9				0.390 1+,2+	9
72AS 10			0.414 3-		10

72AS 11				0.439 1+,2+	11
72AS 12	0.440	3+			12
72AS 13	0.483	2+			13
72AS 14	0.501	2+			14
72AS 15	0.514	(0)+			15
72AS 16			0.525 3-		16
72AS 17			0.559 4-		17
72AS 18			0.563 7-		18 87.9 NS 17
72AS 19				0.565 1-,2-	19
72AS 20				0.566 1+,2+	20

72AS 21				0.586 1+,2+	21
72AS 22			0.594 4-		22
72AS 23				0.625 1+,2+	23
72AS 24	0.645	2+			24
72AS 25	0.650	3+			25
72AS 26			0.663 6-		26
72AS 27	0.674	2+			27
72AS 28			0.708 (5)-		28
72AS 29	0.715	3+			29
72AS 30			0.730 3-		30

72AS 31			0.733 (0 TO 4)-		31
72AS 32				0.743 4 TO 7	32
72AS 33				0.745 4-,5-,6-	33
72AS 34				0.747 2+,3+	34
72AS 35				0.794 (3,4)	35
72AS 36				0.800 1,2	36

72AS 37		0.802	(4)+						37
72AS 38							0.806	1,3	38
72AS 39							0.813	4 T0 6	39
72AS 40							0.817	1,2	40

72AS 41		0.828	6+						41
72AS 42					0.834	6-			42
72AS 43							0.838	(1,2)	43
72AS 44							0.840	4-,5-	44
72AS 45							0.841	(2,3)	45
72AS 46							0.844	1,2	46
72AS 47					0.867	4-			47
72AS 48		0.981	8+						48 402 PS 14
72AS 49		1.034	(5)+						49
72AS 50		1.179	(7)+						50

72AS 51							1.191	4+,5+	51
72AS 52					1.346	(7)-			52
72AS 53		1.402	9+						53
72AS 54					1.666	(8)-			54
72AS 55		1.875	10+						55 0.9 PS 3
72AS 56					2.134	(9)-			56
72AS 57		2.308	11+						57 0.27 PS 16
72AS 58					2.326	(10-)			58
72AS 59					2.517	(10)-			59
72AS 60					2.925	(11-)			60

72AS 61					3.044	(11-)			61
72AS 62		3.151	12+						62 0.22 PS 7
72AS 63					3.446	(12)-			63
72AS 64		3.505	13+						64 0.17 PS 5
S-alpha=		3.569	(0.004)		-----				
72AS 65		4.778	(15)+						65 0.22 PS 7
S-p =		5.612	(0.004)		-----				
72AS 66		6.088	(17+)						66 0.29 PS 10

S-p =		5.612	(0.004)		-----				
S-n =		8.408	(0.006)		-----				
S-2p =		13.898	(0.004)		-----				
S-2n =		20.039	(0.004)		-----				
S-alpha=		3.569	(0.004)		-----				
S+p =		-7.287	(0.008)		-----				
S+n =		-10.794	(0.006)		-----				
S+2p =		-11.636	(0.007)		-----				
S+2n =		-18.773	(0.004)		-----				
S+alpha =		-4.484	(0.010)		-----				
gap p =		-1.674	(0.009)		-----				

gap n = -2.386 (0.008)
gap 2p = 2.261 (0.008)
gap 2n = 1.266 (0.006)
gap alpha = -0.916 (0.011)