

$^{191}\text{Ir}$        $Z = 77$        $N = 114$       adopted link    ENSDF link

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

BE      =    1518.090 ( 0.001) MeV

	Energy	T	J+	J-	J-other	T1/2
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S-alpha=	-2.083	( 0.002)	-			
191IR	1	0.000	3/2+			1 STABLE
191IR	2	0.082	1/2+			2 4.08 NS 7
191IR	3	0.129	5/2+			3 89.9 PS 9
191IR	4			0.171      11/2-		4 4.899 S 23
191IR	5	0.179	3/2+			5 43 PS 4
191IR	6				0.300	6
191IR	7				0.343	(7/2)+ 7 20.4 PS 8
191IR	8				0.351	(5/2)+ 8 18.8 PS 25
191IR	9			0.391      7/2-		9 240 PS 20
191IR	10				0.503	(9/2)+ 10 13.4 PS 19
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191IR	11				0.504	(7/2+) 11
191IR	12	0.539	3/2+			12 9.8 PS 8
191IR	13				0.557	(13/2-) 13
191IR	14				0.588	3/2+,5/2+ 14 0.3 PS AP
191IR	15				0.591	(15/2-) 15
191IR	16				0.614	16
191IR	17				0.624	(1/2+) 17 5 PS GT
191IR	18				0.654	(9/2-) 18
191IR	19				0.659	(3/2-) 19 0.12 NS LT
191IR	20	0.686	7/2+			20 2.7 PS 3
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191IR	21				0.748	(5/2)+ 21
191IR	22	0.763	3/2+			22
191IR	23				0.800	(5/2)- 23
191IR	24				0.812	(9/2+) 24
191IR	25				0.817	25
191IR	26				0.825	(7/2+,9/2+) 26
191IR	27				0.832	(11/2+) 27 3.15 PS 19
191IR	28				0.878	(9/2-,11/2+) 28
191IR	29				0.919	(11/2-) 29
191IR	30				0.928	(7/2+) 30
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191IR	31				0.935	(1/2+,3/2,5/2+) 31
191IR	32				0.945	(5/2+,7/2+,9/2+) 32
191IR	33				0.963	(15/2-) 33
191IR	34				0.977	(7/2-) 34
191IR	35				0.991	(11/2+) 35
191IR	36				1.004	(13/2+) 36
191IR	37	1.034	1/2+			37

191IR	38					1.037	(17/2-)	38
191IR	39					1.053		39
191IR	40		1.070	3/2+				40
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191IR	41					1.127	(19/2-)	41
191IR	42					1.130		42
191IR	43					1.135	(7/2-, 9/2, 11/2)	43-)
191IR	44					1.138		44
191IR	45					1.207	(7/2+, 9/2+, 11/2+)	45)
191IR	46					1.207	(9/2-)	46
191IR	47					1.211	(9/2, 11/)	472)
191IR	48					1.244		48
191IR	49					1.253	(13/2-)	49
191IR	50					1.297		50
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191IR	51					1.359		51
191IR	52					1.393		52
191IR	53					1.398	(13/2+)	53
191IR	54					1.401	(5/2+, 7/2-)	54
191IR	55					1.418	(15/2+)	55
191IR	56					1.422	(17/2-)	56
191IR	57					1.433		57
191IR	58					1.449	1/2-, 3/2	58-
191IR	59		1.461	3/2+				59
191IR	60					1.507		60
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191IR	61					1.520	5/2-, 7/2	61-
191IR	62		1.596	3/2+				62
191IR	63					1.600	(17/2+)	63
191IR	64					1.613		64
191IR	65					1.642		65
191IR	66					1.646	(21/2	66-)
191IR	67					1.652		67
191IR	68					1.660		68
191IR	69					1.681	(23/2	69-)
191IR	70					1.711		70
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191IR	71					2.047		71

S-p = 5.290 ( 0.001)-----  
S-n = 8.026 ( 0.002)-----  
S-2p = 13.308 ( 0.008)-----  
S-2n = 14.402 ( 0.013)-----  
S-alpha= -2.083 ( 0.002)-----

S+p = -6.869 ( 0.003)  
S+n = -6.198 ( 0.002)  
S+2p = -11.274 ( 0.009)  
S+2n = -13.970 ( 0.002)

S+alpha = 1.717 ( 0.002)

gap p = -1.579 ( 0.003)  
gap n = 1.828 ( 0.003)  
gap 2p = 2.034 ( 0.012)  
gap 2n = 0.432 ( 0.013)  
gap alpha = -0.366 ( 0.002)