

$^{189}\text{Os}$        $Z = 76$        $N = 113$       adopted link      ENSDF link

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

BE = 1505.007 ( 0.001) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-1.976	( 0.001)	-----		
1890S 1			0.000	3/2-	1 STABLE
1890S 2			0.031	9/2-	2 5.81 H 10
1890S 3			0.036	1/2-	3 0.52 NS 3
1890S 4			0.070	5/2-	4 1.62 NS 4
1890S 5			0.095	3/2-	5 0.23 NS 3
1890S 6	0.097	11/2+			6
1890S 7			0.217	7/2-	7 0.41 NS 2
1890S 8			0.219	7/2-	8 0.260 NS 11
1890S 9			0.234	5/2-	9 0.27 NS +7-4
1890S 10			0.276	5/2-	10 0.17 NS 3
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1890S 11				0.288 (13/2+)	11
1890S 12				0.350 (9/2-)	12
1890S 13				0.366 (7/2)-	13
1890S 14				0.428 5/2-,7/2-	14 4.4 PS GT
1890S 15				0.439 1/2-,3/2-	15
1890S 16	0.444	7/2+			16
1890S 17				0.499 1/2-,3/2-	17
1890S 18				0.506 1/2-,3/2-	18
1890S 19			0.532	5/2-	19 0.26 PS GT
1890S 20			0.550	3/2-	20 0.039 PS GT
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1890S 21			0.557	3/2-	21
1890S 22				0.563	22
1890S 23				0.595 (11/2-)	23
1890S 24			0.600	3/2-	24
1890S 25				0.622 (3/2-,5/2-)	25
1890S 26				0.631 (9/2-)	26
1890S 27				0.634	27
1890S 28				0.667	28
1890S 29			0.672	5/2-	29
1890S 30				0.673 5/2	30
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1890S 31			0.680	3/2-	31
1890S 32				0.688 1/2-,3/2-,5/2-	32
1890S 33			0.717	5/2-	33
1890S 34				0.717 5/2-,7/2-	34
1890S 35				0.735 1/2-,3/2-	35
1890S 36				0.786	36
1890S 37				0.792 5/2	37

1890S	38				0.794		38
1890S	39				0.817	5/2-, 7/2-	39
1890S	40				0.850	1/2-, 3/2-	40
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1890S	41				0.877	(13/2+)	41
1890S	42				0.898		42
1890S	43				0.908	1/2-, 3/2-	43
1890S	44	0.940	3/2+				44
1890S	45				0.957		45
1890S	46	0.990	7/2+				46
1890S	47				0.995	1/2-, 3/2-	47
1890S	48				0.996	1/2+, 3/2+	48
1890S	49				1.019	(13/2+)	49
1890S	50				1.028		50
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1890S	51				1.037	(5/2-, 7/2, 9/2-)	51
1890S	52				1.056	(3/2)-	52
1890S	53				1.077		53
1890S	54				1.108		54
1890S	55				1.140	1/2-, 3/2-	55
1890S	56				1.149	1/2+, 3/2+	56
1890S	57			1.160	3/2-		57
1890S	58				1.163		58
1890S	59				1.189	1/2-, 3/2-	59
1890S	60				1.190	1/2-, 3/2-	60
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1890S	61				1.197	1/2+, 3/2+	61
1890S	62				1.207		62
1890S	63				1.220	1/2-, 3/2-	63
1890S	64				1.226	1/2+, 3/2+	64
1890S	65				1.235	1/2-, 3/2-	65
1890S	66				1.243		66
1890S	67				1.255	1/2-, 3/2-	67
1890S	68				1.267	3/2, 1/2(-)	68
1890S	69				1.268	1/2+, 3/2+	69
1890S	70				1.269		70
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1890S	71				1.278		71
1890S	72			1.297	3/2-		72
1890S	73				1.312	1/2-, 3/2-	73
1890S	74	1.333	3/2+				74
1890S	75				1.361	1/2-, 3/2-	75
1890S	76				1.370	1/2-, 3/2-	76
1890S	77			1.377	3/2-		77
1890S	78				1.395	1/2-, 3/2-	78
1890S	79				1.398	1/2-, 3/2-	79
1890S	80			1.408	3/2-		80
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1890S	81				1.411	1/2-, 3/2-	81
1890S	82				1.435	1/2-, 3/2-	82

1890S	83				1.446	1/2-,3/2-	83
1890S	84				1.451	1/2+,3/2+	84
1890S	85				1.472	1/2-,3/2-	85
1890S	86				1.475	1/2-,3/2-	86
1890S	87				1.555	1/2-,3/2-	87
1890S	88				1.634		88
1890S	89				1.700	(5/2-)	89
1890S	90				1.725	5/2-,7/2-	90
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1890S	91				1.816	(1/2:7/2)-	91
1890S	92				1.895	(1/2,3/2)	92
1890S	93				1.941	(1/2,3/2)	93
S-n	=	5.921	( 0.001)	-----			
1890S	94		5.921		1/2+		94
1890S	95		5.923		1/2+		95
1890S	96				5.944	1/2,3/2-	96
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S-p	=	7.259	( 0.001)	-----			
S-n	=	5.921	( 0.001)	-----			
S-2p	=	13.661	( 0.001)	-----			
S-2n	=	13.910	( 0.001)	-----			
S-alpha	=	-1.976	( 0.001)	-----			
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S+p	=	-5.056	( 0.002)				
S+n	=	-7.792	( 0.001)				
S+2p	=	-11.290	( 0.004)				
S+2n	=	-13.551	( 0.001)				
S+alpha	=	2.082	( 0.002)				
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gap p	=	2.203	( 0.002)				
gap n	=	-1.872	( 0.001)				
gap 2p	=	2.371	( 0.004)				
gap 2n	=	0.359	( 0.001)				
gap alpha	=	0.106	( 0.002)				