

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **OSMIO** **Z = 76-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1262.68}{1262.6}$	Os ₇₆ ¹⁶²	$\frac{161.98434}{161.98443}$	76n	2+0	8+0	18+0	31+0	1+1	6+8	0+1	$\frac{6.767M}{\alpha 2.10ms}$
$\frac{1272.17}{1272.3}$	Os ₇₆ ¹⁶³	$\frac{162.98282}{162.98269}$	76n	2+0	8+0	18+0	32+0	2+0	3+10	0+1	$\frac{6.680M}{\alpha 5.50ms}$
$\frac{1284.51}{1284.7}$	Os ₇₆ ¹⁶⁴	$\frac{163.97823}{163.97804}$	76n	2+0	8+0	18+0	32+0	1+2	2+10	1+0	$\frac{7.060M}{ce 21.0ms}$
$\frac{1294.16}{1294.0}$	Os ₇₆ ¹⁶⁵	$\frac{164.97654}{164.97676}$	76n	2+0	8+0	18+0	32+0	1+3	1+10	1+0	$\frac{6.340M}{\alpha 71.0ms}$
$\frac{1305.56}{1305.8}$	Os ₇₆ ¹⁶⁶	$\frac{165.97297}{165.972691}$	76n	2+0	8+0	18+0	32+0	0+5	1+9	1+0	$\frac{6.139M}{\alpha 199ms}$
$\frac{1315.22}{1315.0}$	Os ₇₆ ¹⁶⁷	$\frac{166.97126}{166.97155}$	76n	2+0	8+0	18+0	32+0	0+6	0+9	1+0	$\frac{5.980M}{\alpha 0.81s}$
$\frac{1326.61}{1326.5}$	Os ₇₆ ¹⁶⁸	$\frac{167.96770}{167.967804}$	76n	2+0	8+0	18+0	30+1	1+7	0+8	1+0	$\frac{5.800M}{ce 2.10s}$
$\frac{1335.22}{1335.3}$	Os ₇₆ ¹⁶⁹	$\frac{168.967089}{168.967019}$	76n	2+0	8+0	18+0	30+1	1+8	0+7	0+1	$\frac{7.690M}{ce 3.43s}$
$\frac{1346.61}{1346.6}$	Os ₇₆ ¹⁷⁰	$\frac{169.963577}{169.963577}$	76n	2+0	8+0	18+0	30+1	0+10	0+6	0+1	$\frac{5.00M}{ce 7.37s}$
$\frac{1354.53}{1355.0}$	Os ₇₆ ¹⁷¹	$\frac{170.96372}{170.963185}$	76n	2+0	8+0	18+0	28+2	1+10	0+6	0+1	$\frac{6.960M}{ce 8.30s}$
$\frac{1365.92}{1366.0}$	Os ₇₆ ¹⁷²	$\frac{171.96016}{171.960023}$	76n	2+0	8+0	18+0	28+2	0+12	0+5	0+1	$\frac{4.280M}{ce 19.2s}$
$\frac{1373.84}{1374.3}$	Os ₇₆ ¹⁷³	$\frac{172.96032}{172.959808}$	76n	2+0	8+0	18+0	26+3	1+12	0+5	0+1	$\frac{6.120M}{ce 22.4s}$
$\frac{1384.54}{1384.9}$	Os ₇₆ ¹⁷⁴	$\frac{173.95750}{173.957062}$	76n	2+0	8+0	18+0	24+4	1+13	0+5	1+0	$\frac{3.680M}{ce 44.0s}$
$\frac{1393.14}{1393.1}$	Os ₇₆ ¹⁷⁵	$\frac{174.95693}{174.956946}$	76n	2+0	8+0	18+0	24+4	1+14	0+4	0+1	$\frac{5.180M}{ce 1.40m}$
$\frac{1402.80}{1403.2}$	Os ₇₆ ¹⁷⁶	$\frac{175.95523}{175.95481}$	76n	2+0	8+0	18+0	22+5	1+15	1+3	0+1	$\frac{2.960M}{ce 3.60m}$
$\frac{1410.70}{1411.1}$	Os ₇₆ ¹⁷⁷	$\frac{176.95541}{176.954965}$	76n	2+0	8+0	18+0	20+6	0+16	1+3	0+1	$\frac{4.320M}{ce 3.0m}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p \cdot T_{1/2}}$
$\frac{1420.36}{1420.8}$	Os ₇₆ ¹⁷⁸	$\frac{177.95371}{177.953251}$	76n	2+0	8+0	18+0	20+6	0+17	0+3	0+1	$\frac{2.110M}{ce 5.0m}$
$\frac{1428.27}{1428.3}$	Os ₇₆ ¹⁷⁹	$\frac{178.95388}{178.953816}$	76n	2+0	8+0	18+0	18+7	1+17	0+3	0+1	$\frac{3.560M}{ce 6.50m}$
$\frac{1437.24}{1437.7}$	Os ₇₆ ¹⁸⁰	$\frac{179.95291}{179.952379}$	76n	2+0	8+0	18+0	18+7	0+18	1+3	1+0	$\frac{1.480M}{ce 21.5m}$
$\frac{1445.16}{1445.0}$	Os ₇₆ ¹⁸¹	$\frac{180.95308}{180.95324}$	76n	2+0	8+0	18+0	16+8	1+18	1+3	1+0	$\frac{2.970M}{ce 105m}$
$\frac{1453.07}{1454.1}$	Os ₇₆ ¹⁸²	$\frac{181.95325}{181.952110}$	76n	2+0	8+0	18+0	16+8	0+19	1+3	1+0	$\frac{840.0K}{ce 21.84h}$
$\frac{1462.04}{1461.3}$	Os ₇₆ ¹⁸³	$\frac{182.95228}{182.95313}$	76n	2+0	8+0	18+0	16+8	1+19	0+4	0+0	$\frac{2.150K}{ce 13.0h}$
$\frac{1469.96}{1469.9}$	Os ₇₆ ¹⁸⁴	$\frac{183.952459}{183.952489}$	76n	2+0	8+0	18+0	16+8	0+20	0+4	0+0	$\frac{2.955M}{\alpha 5.6 \cdot 10^{13} a}$ 0.02%
$\frac{1476.13}{1476.5}$	Os ₇₆ ¹⁸⁵	$\frac{184.95449}{184.954042}$	76n	2+0	8+0	18+0	14+9	0+20	1+4	0+0	$\frac{1.0128M}{ce 93.6d}$
$\frac{1484.04}{1484.8}$	Os ₇₆ ¹⁸⁶	$\frac{185.95466}{185.953838}$	76n	2+0	8+0	18+0	12+10	1+20	1+4	0+0	$\frac{2.8204M}{\alpha 2.0 \cdot 10^{15} a}$ 1.59%
$\frac{1490.22}{1491.1}$	Os ₇₆ ¹⁸⁷	$\frac{186.95669}{186.955750}$	76n	2+0	8+0	18+0	12+10	1+20	0+5	0+0	st 1.96%
$\frac{1498.13}{1499.1}$	Os ₇₆ ¹⁸⁸	$\frac{187.95686}{187.955838}$	76n	2+0	8+0	18+0	12+10	0+21	0+5	0+0	st 13.24%
$\frac{1504.31}{1505.0}$	Os ₇₆ ¹⁸⁹	$\frac{188.95889}{188.958147}$	76n	2+0	8+0	18+0	10+11	0+21	1+5	0+0	st 16.15%
$\frac{1512.22}{1512.8}$	Os ₇₆ ¹⁹⁰	$\frac{189.95907}{189.958447}$	76n	2+0	8+0	18+0	8+12	1+21	1+5	0+0	st 26.26%
$\frac{1518.40}{1518.6}$	Os ₇₆ ¹⁹¹	$\frac{190.96110}{190.960930}$	76n	2+0	8+0	18+0	8+12	1+21	0+6	0+0	$\frac{314.0K}{\beta^- 15.4d}$
$\frac{1526.31}{1526.1}$	Os ₇₆ ¹⁹²	$\frac{191.96127}{191.961481}$	76n	2+0	8+0	18+0	8+12	0+22	0+6	0+0	$\frac{408.0K}{2\beta^- 9.8 \cdot 10^{12} a}$ 40.78%
$\frac{1532.48}{1531.7}$	Os ₇₆ ¹⁹³	$\frac{192.96331}{192.964152}$	76n	2+0	8+0	18+0	6+13	0+22	1+6	0+0	$\frac{1.1423M}{\beta^- 30.11h}$

1042

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1538.66}{1538.8}$	Os ₇₆ ¹⁹⁴	$\frac{193.96534}{193.965182}$	76n	2+0	8+0	18+0	6+13	0+22	0+7	0+0	$\frac{96.6K}{\beta^- 6.0a}$
$\frac{1543.78}{1544.1}$	Os ₇₆ ¹⁹⁵	$\frac{194.96851}{194.96813}$	76n	2+0	8+0	18+0	4+14	0+22	0+7	1+0	$\frac{2.00M}{\beta^- 9m}$
$\frac{1549.96}{1550.8}$	Os ₇₆ ¹⁹⁶	$\frac{195.97054}{195.96964}$	76n	2+0	8+0	18+0	2+15	0+22	1+7	1+0	$\frac{1.160M}{\beta^- 34.9m}$
$\frac{1556.13}{-}$	Os ₇₆ ¹⁹⁷	$\frac{196.97258}{-}$	76n	2+0	8+0	18+0	2+15	0+22	0+8	1+0	$\frac{2.960M}{\beta^- 2.80m}$
$\frac{1562.30}{-}$	Os ₇₆ ¹⁹⁸	$\frac{197.97462}{-}$	76n	2+0	8+0	18+0	0+16	0+22	1+8	1+0	$\frac{2.00M}{\beta^-}$
$\frac{1565.69}{-}$	Os ₇₆ ¹⁹⁹	$\frac{198.97965}{-}$	76n	2+0	8+0	18+0	0+16	1+21	0+9	0+1	$\frac{3.900M}{\beta^- 5.0s}$
$\frac{1571.86}{-}$	Os ₇₆ ²⁰⁰	$\frac{199.98169}{-}$	76n	2+0	8+0	16+1	0+16	1+21	1+9	0+1	$\frac{2.800M}{\beta^- 6.0s}$

$E_c(\text{MeV})$ = valore calcolato dell'energia di legame

$E_s(\text{MeV})$ = valore sperimentale dell'energia di legame

m_c = valore calcolato della massa atomica

m_s = valore sperimentale della massa atomica

n = numero di neutroni centrali attivi

1-7 = numero quantico associato al livello

$p + d$ = (numero di protoni) + (numero di deutoni) in orbita

$p - T_{1/2}$ = particella emessa – periodo di dimezzamento

$E_p(\text{eV})$ = energia della particella emessa