

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **IRIDIO Z = 77-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1270.13}{1270.7}$	Ir_{77}^{164}	$\frac{163.99284}{163.99220}$	77n	2+0	8+0	18+0	30+0	4+0	5+9	0+1	$\frac{13.20M}{ce\ 94\mu s}$
$\frac{1282.78}{1283.2}$	Ir_{77}^{165}	$\frac{164.98792}{164.98752}$	77n	2+0	8+0	18+0	32+0	2+0	4+10	0+1	$\frac{6.830M}{\alpha\ 1\mu s}$
$\frac{1292.48}{1292.8}$	Ir_{77}^{166}	$\frac{165.98617}{165.98582}$	77n	2+0	8+0	18+0	32+0	4+0	1+11	0+1	$\frac{6.722M}{\alpha\ 10.5ms}$
$\frac{1304.98}{1304.7}$	Ir_{77}^{167}	$\frac{166.98142}{166.981665}$	77n	2+0	8+0	18+0	32+0	3+2	0+11	1+0	$\frac{6.505.M}{\alpha\ 35.2ms}$
$\frac{1314.67}{1314.5}$	Ir_{77}^{168}	$\frac{167.97968}{167.97988}$	77n	2+0	8+0	18+0	32+0	1+4	1+10	1+0	$\frac{6.381.M}{\alpha\ 222ms}$
$\frac{1326.12}{1325.9}$	Ir_{77}^{169}	$\frac{168.97605}{168.976295}$	77n	2+0	8+0	18+0	32+0	0+6	1+9	1+0	$\frac{6.141M}{\alpha\ 353ms}$
$\frac{1335.81}{1335.2}$	Ir_{77}^{170}	$\frac{169.97431}{169.97497}$	77n	2+0	8+0	18+0	32+0	0+7	0+9	1+0	$\frac{10.56M}{ce\ 0.87s}$
$\frac{1346.20}{1346.4}$	Ir_{77}^{171}	$\frac{170.97183}{170.97163}$	77n	2+0	8+0	18+0	30+1	1+8	1+7	0+1	$\frac{5.980M}{\alpha\ 3.20s}$
$\frac{1355.20}{1355.5}$	Ir_{77}^{172}	$\frac{171.97083}{171.97046}$	77n	2+0	8+0	18+0	30+1	0+9	0+8	1+0	$\frac{9.870M}{ce\ 4.40s}$
$\frac{1366.64}{1366.4}$	Ir_{77}^{173}	$\frac{172.96721}{172.967502}$	77n	2+0	8+0	18+0	28+2	1+10	0+7	1+0	$\frac{7.168M}{ce\ 9.0s}$
$\frac{1374.59}{1375.0}$	Ir_{77}^{174}	$\frac{173.96734}{173.966861}$	77n	2+0	8+0	18+0	28+2	0+11	0+7	1+0	$\frac{9.130M}{ce\ 7.90s}$
$\frac{1386.03}{1385.7}$	Ir_{77}^{175}	$\frac{174.96373}{174.964113}$	77n	2+0	8+0	18+0	26+3	1+12	0+6	1+0	$\frac{6.725M}{ce\ 9.0s}$
$\frac{1393.98}{1394.2}$	Ir_{77}^{176}	$\frac{175.96386}{175.963649}$	77n	2+0	8+0	18+0	26+3	0+13	0+6	1+0	$\frac{8.240M}{ce\ 8.70s}$
$\frac{1404.37}{1404.4}$	Ir_{77}^{177}	$\frac{176.96137}{176.961302}$	77n	2+0	8+0	18+0	24+4	1+14	1+4	0+1	$\frac{5.900M}{ce\ 30.0s}$
$\frac{1412.32}{1412.7}$	Ir_{77}^{178}	$\frac{177.96150}{177.961082}$	77n	2+0	8+0	18+0	24+4	0+15	1+4	0+1	$\frac{7.300M}{ce\ 12.0s}$
$\frac{1423.06}{1422.6}$	Ir_{77}^{179}	$\frac{178.95863}{178.959122}$	77n	2+0	8+0	18+0	22+5	0+16	1+4	1+0	$\frac{4.943M}{ce\ 79.0s}$
$\frac{1429.96}{1430.6}$	Ir_{77}^{180}	$\frac{179.95989}{179.959229}$	77n	2+0	8+0	18+0	22+5	1+16	0+4	0+1	$\frac{6.380M}{ce\ 1.50m}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p \cdot T_{1/2}}$
$\frac{1439.65}{1440.1}$	Ir_{77}^{181}	$\frac{180.95815}{180.957625}$	77n	2+0	8+0	18+0	20+6	1+17	1+3	0+1	$\frac{4.080M}{ce 4.90m}$
$\frac{1447.60}{1447.8}$	Ir_{77}^{182}	$\frac{181.95828}{181.958076}$	77n	2+0	8+0	18+0	20+6	0+18	1+3	0+1	$\frac{5.560M}{ce 15.0m}$
$\frac{1456.59}{1457.0}$	Ir_{77}^{183}	$\frac{182.95730}{182.956846}$	77n	2+0	8+0	18+0	18+7	1+18	0+4	1+0	$\frac{3.470M}{ce 57.0m}$
$\frac{1464.54}{1464.5}$	Ir_{77}^{184}	$\frac{183.95742}{183.95748}$	77n	2+0	8+0	18+0	18+7	0+19	0+4	1+0	$\frac{4.650M}{ce 3.09h}$
$\frac{1472.48}{1473.3}$	Ir_{77}^{185}	$\frac{184.95757}{184.95670}$	77n	2+0	8+0	18+0	16+8	1+19	0+4	1+0	$\frac{2.470M}{ce 14.4h}$
$\frac{1480.43}{1480.2}$	Ir_{77}^{186}	$\frac{185.95770}{185.957945}$	77n	2+0	8+0	18+0	16+8	0+20	0+4	1+0	$\frac{3.829M}{ce 16.64h}$
$\frac{1489.43}{1488.8}$	Ir_{77}^{187}	$\frac{186.95670}{186.957363}$	77n	2+0	8+0	18+0	14+9	1+20	1+4	0+0	$\frac{1.688M}{ce 10.5h}$
$\frac{1495.63}{1495.5}$	Ir_{77}^{188}	$\frac{187.95871}{187.958853}$	77n	2+0	8+0	18+0	14+9	1+20	0+5	0+0	$\frac{2.788M}{ce 41.5h}$
$\frac{1503.57}{1503.7}$	Ir_{77}^{189}	$\frac{188.95885}{188.958719}$	77n	2+0	8+0	18+0	14+9	0+21	0+5	0+0	$\frac{532.0K}{ce 13.2d}$
$\frac{1509.77}{1510.1}$	Ir_{77}^{190}	$\frac{189.96086}{189.960546}$	77n	2+0	8+0	18+0	12+10	0+21	1+5	0+0	$\frac{1.9538M}{ce 11.78d}$
$\frac{1517.71}{1518.1}$	Ir_{77}^{191}	$\frac{190.96100}{190.960594}$	77n	2+0	8+0	18+0	10+11	1+21	1+5	0+0	$\frac{st}{37.3\%}$
$\frac{1523.91}{1524.3}$	Ir_{77}^{192}	$\frac{191.96301}{191.962605}$	77n	2+0	8+0	18+0	10+11	1+21	0+6	0+0	$\frac{1.4545M}{\beta^- 73.829d}$
$\frac{1531.86}{1532.1}$	Ir_{77}^{193}	$\frac{192.96314}{192.962926}$	77n	2+0	8+0	18+0	10+11	0+22	0+6	0+0	$\frac{st}{62.7\%}$
$\frac{1538.05}{1538.1}$	Ir_{77}^{194}	$\frac{193.96516}{193.965078}$	77n	2+0	8+0	18+0	8+12	0+22	1+6	0+0	$\frac{2.2288M}{\beta^- 19.28h}$
$\frac{1545.99}{1545.4}$	Ir_{77}^{195}	$\frac{194.96530}{194.965980}$	77n	2+0	8+0	18+0	6+13	1+22	1+6	0+0	$\frac{1.102M}{\beta^- 2.5h}$
$\frac{1552.19}{1551.2}$	Ir_{77}^{196}	$\frac{195.96731}{195.96840}$	77n	2+0	8+0	18+0	6+13	1+22	0+7	0+0	$\frac{3.210M}{\beta^- 52.0s}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p - T_{1/2}}$
$\frac{1563.52}{1563.7}$	Ir_{77}^{198}	$\frac{197.97247}{197.97228}$	77n	2+0	8+0	18+0	2+15	1+22	1+7	1+0	$\frac{4.090\text{M}}{\beta^- 8.0\text{s}}$
$\frac{1569.72}{1570.4}$	Ir_{77}^{199}	$\frac{198.97448}{198.97380}$	77n	2+0	8+0	18+0	2+15	1+22	0+8	1+0	$\frac{2.990\text{M}}{\beta^- 6.0\text{s}}$
$\frac{1576.61}{-}$	Ir_{77}^{200}	$\frac{199.97575}{-}$	77n	2+0	8+0	18+0	2+15	0+23	1+7	0+1	$\frac{4.990\text{M}}{\beta^- >300\text{ns}}$
$\frac{1582.81}{-}$	Ir_{77}^{201}	$\frac{200.97776}{-}$	77n	2+0	8+0	18+0	2+15	0+23	0+8	0+1	$\frac{3.800\text{M}}{\beta^- >300\text{ns}}$
$\frac{1588.30}{-}$	Ir_{77}^{202}	$\frac{201.98053}{-}$	77n	2+0	8+0	16+1	0+16	1+22	1+9	1+0	$\frac{5.600\text{M}}{\beta^- 11.0\text{s}}$
$\frac{1594.50}{-}$	Ir_{77}^{203}	$\frac{202.98254}{-}$	77n	2+0	8+0	16+1	0+16	1+22	0+10	1+0	$\frac{3.610\text{M}}{\beta^- >300\text{ns}}$

$E_c(\text{MeV})$ = 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