

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **MERCURIO Z = 80-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1314.26}{1314.1}$	Hg ₈₀ ¹⁷¹	$\frac{171.00359}{171.00376}$	80n	2+0	8+0	18+0	31+0	6+0	4+9	0+2	$\frac{7.668M}{\alpha 59\mu s}$
$\frac{1326.64}{1326.8}$	Hg ₈₀ ¹⁷²	$\frac{171.99897}{171.99883}$	80n	2+0	8+0	18+0	32+0	6+0	1+11	1+1	$\frac{7.524M}{\alpha 231\mu s}$
$\frac{1336.45}{1336.3}$	Hg ₈₀ ¹⁷³	$\frac{172.99710}{172.99724}$	80n	2+0	8+0	18+0	32+0	6+1	0+11	1+1	$\frac{7.375M}{\alpha 600\mu s}$
$\frac{1348.41}{1348.5}$	Hg ₈₀ ¹⁷⁴	$\frac{173.99293}{173.992864}$	80n	2+0	8+0	18+0	32+0	4+3	1+11	1+0	$\frac{7.233M}{\alpha 2.10ms}$
$\frac{1358.22}{1357.9}$	Hg ₈₀ ¹⁷⁵	$\frac{174.99106}{174.99142}$	80n	2+0	8+0	18+0	32+0	4+4	0+11	1+0	$\frac{7.072M}{\alpha 10.6ms}$
$\frac{1369.81}{1369.7}$	Hg ₈₀ ¹⁷⁶	$\frac{175.98728}{175.987355}$	80n	2+0	8+0	18+0	32+0	3+6	0+10	1+0	$\frac{6.899M}{\alpha 20.3ms}$
$\frac{1378.55}{1378.8}$	Hg ₈₀ ¹⁷⁷	$\frac{176.98656}{176.98628}$	80n	2+0	8+0	18+0	32+0	3+7	0+9	0+1	$\frac{6.740M}{\alpha 118ms}$
$\frac{1390.14}{1390.4}$	Hg ₈₀ ¹⁷⁸	$\frac{177.98278}{177.982483}$	80n	2+0	8+0	18+0	32+0	2+9	0+8	0+1	$\frac{6.577M}{\alpha 266.5ms}$
$\frac{1399.24}{1399.1}$	Hg ₈₀ ¹⁷⁹	$\frac{178.98168}{178.981834}$	80n	2+0	8+0	18+0	30+1	1+10	1+8	1+0	$\frac{6.340M}{\alpha 1.05s}$
$\frac{1410.83}{1410.5}$	Hg ₈₀ ¹⁸⁰	$\frac{179.97791}{179.978266}$	80n	2+0	8+0	18+0	30+1	0+12	1+7	1+0	$\frac{5.345M}{ce 2.58s}$
$\frac{1418.88}{1419.0}$	Hg ₈₀ ¹⁸¹	$\frac{180.97795}{180.977819}$	80n	2+0	8+0	18+0	28+2	1+12	1+7	1+0	$\frac{7.210M}{ce 3.60s}$
$\frac{1430.45}{1430.0}$	Hg ₈₀ ¹⁸²	$\frac{181.97417}{181.97469}$	80n	2+0	8+0	18+0	28+2	0+14	1+6	1+0	$\frac{4.724M}{ce 10.83s}$
$\frac{1438.48}{1438.3}$	Hg ₈₀ ¹⁸³	$\frac{182.97422}{182.974450}$	80n	2+0	8+0	18+0	26+3	1+14	1+6	1+0	$\frac{6.381M}{ce 9.40s}$
$\frac{1448.29}{1448.9}$	Hg ₈₀ ¹⁸⁴	$\frac{183.97235}{183.971713}$	80n	2+0	8+0	18+0	26+3	1+15	0+6	1+0	$\frac{3.969M}{ce 30.87s}$
$\frac{1457.03}{1456.8}$	Hg ₈₀ ¹⁸⁵	$\frac{184.97163}{184.971899}$	80n	2+0	8+0	18+0	26+3	1+16	0+5	0+1	$\frac{5.690M}{ce 49.1s}$
$\frac{1466.84}{1467.2}$	Hg ₈₀ ¹⁸⁶	$\frac{185.96977}{185.969362}$	80n	2+0	8+0	18+0	24+4	1+17	1+4	0+1	$\frac{3.175M}{ce 1.38m}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1475.88}{1474.9}$	Hg ₈₀ ¹⁸⁷	$\frac{186.969814}{186.969814}$	80n	2+0	8+0	18+0	24+4	0+18	1+4	0+1	$\frac{4.890\text{M}}{ce\ 2.40\text{m}}$
$\frac{1484.69}{1485.0}$	Hg ₈₀ ¹⁸⁸	$\frac{187.96793}{187.967577}$	80n	2+0	8+0	18+0	24+4	0+19	0+4	0+1	$\frac{2.098\text{M}}{ce\ 3.25\text{m}}$
$\frac{1492.01}{1492.5}$	Hg ₈₀ ¹⁸⁹	$\frac{188.96874}{188.96819}$	80n	2+0	8+0	18+0	22+5	0+19	0+5	1+0	$\frac{3.950\text{M}}{ce\ 7.60\text{m}}$
$\frac{1501.82}{1502.3}$	Hg ₈₀ ¹⁹⁰	$\frac{189.96687}{189.966322}$	80n	2+0	8+0	18+0	20+6	0+20	1+4	1+0	$\frac{1.512\text{M}}{ce\ 20.0\text{m}}$
$\frac{1509.15}{1509.6}$	Hg ₈₀ ¹⁹¹	$\frac{190.96767}{190.967157}$	80n	2+0	8+0	18+0	20+6	0+20	1+5	0+0	$\frac{3.220\text{M}}{ce\ 49.0\text{m}}$
$\frac{1518.97}{1519.1}$	Hg ₈₀ ¹⁹²	$\frac{191.96579}{191.965634}$	80n	2+0	8+0	18+0	20+6	0+21	0+5	0+0	$\frac{764.0\text{K}}{ce\ 4.85\text{h}}$
$\frac{1527.00}{1526.2}$	Hg ₈₀ ¹⁹³	$\frac{192.96584}{192.966665}$	80n	2+0	8+0	18+0	18+7	1+21	0+5	0+0	$\frac{2.343\text{M}}{ce\ 3.80\text{h}}$
$\frac{1535.03}{1535.4}$	Hg ₈₀ ¹⁹⁴	$\frac{193.96588}{193.965439}$	80n	2+0	8+0	18+0	18+7	0+22	0+5	0+0	$\frac{68.0\text{K}}{ce\ 444\text{a}}$
$\frac{1543.07}{1542.3}$	Hg ₈₀ ¹⁹⁵	$\frac{194.96591}{194.966720}$	80n	2+0	8+0	18+0	16+8	1+22	0+5	0+0	$\frac{1.569\text{M}}{ce\ 10.53\text{h}}$
$\frac{1551.10}{1551.2}$	Hg ₈₀ ¹⁹⁶	$\frac{195.96596}{195.965833}$	80n	2+0	8+0	18+0	16+8	0+23	0+5	0+0	$\frac{820.0\text{K}}{2ce\ 2.5 \cdot 10^{18}\text{a}}$ 0.15%
$\frac{1559.13}{1558.0}$	Hg ₈₀ ¹⁹⁷	$\frac{196.96600}{196.967213}$	80n	2+0	8+0	18+0	14+9	1+23	0+5	0+0	$\frac{600.0\text{K}}{ce\ 64.14\text{h}}$
$\frac{1567.17}{1566.5}$	Hg ₈₀ ¹⁹⁸	$\frac{197.96604}{197.966769}$	80n	2+0	8+0	18+0	14+9	0+24	0+5	0+0	st 9.97%
$\frac{1573.42}{1573.2}$	Hg ₈₀ ¹⁹⁹	$\frac{198.96799}{198.968280}$	80n	2+0	8+0	18+0	12+10	0+24	1+5	0+0	st 16.87%
$\frac{1581.45}{1581.2}$	Hg ₈₀ ²⁰⁰	$\frac{199.96804}{199.968326}$	80n	2+0	8+0	18+0	10+11	1+24	1+5	0+0	st 23.10%
$\frac{1587.71}{1587.4}$	Hg ₈₀ ²⁰¹	$\frac{200.96998}{200.970302}$	80n	2+0	8+0	18+0	10+11	1+24	0+6	0+0	st 13.18%
$\frac{1595.75}{1595.2}$	Hg ₈₀ ²⁰²	$\frac{201.97001}{201.970643}$	80n	2+0	8+0	18+0	10+11	0+25	0+6	0+0	st 29.86%

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1602.00}{1601.2}$	Hg ₈₀ ²⁰³	$\frac{202.97197}{202.972872}$	80n	2+0	8+0	18+0	8+12	0+25	1+6	0+0	$\frac{492.2K}{\beta^- 46.594d}$
$\frac{1608.26}{1608.7}$	Hg ₈₀ ²⁰⁴	$\frac{203.97391}{203.973494}$	80n	2+0	8+0	18+0	8+12	0+25	0+7	0+0	$\frac{st}{6.87\%}$
$\frac{1614.52}{1614.3}$	Hg ₈₀ ²⁰⁵	$\frac{204.97586}{204.976073}$	80n	2+0	8+0	18+0	6+13	0+25	1+7	0+0	$\frac{1.534M}{\beta^- 5.14m}$
$\frac{1620.78}{1621.0}$	Hg ₈₀ ²⁰⁶	$\frac{205.97780}{205.977514}$	80n	2+0	8+0	18+0	6+13	0+25	0+8	0+0	$\frac{1.308M}{\beta^- 8.32m}$
$\frac{1624.89}{1624.4}$	Hg ₈₀ ²⁰⁷	$\frac{206.98206}{206.98259}$	80n	2+0	8+0	18+0	4+14	0+25	1+7	0+1	$\frac{4.820M}{\beta^- 2.90m}$
$\frac{1629.37}{1629.3}$	Hg ₈₀ ²⁰⁸	$\frac{207.98591}{207.98594}$	80n	2+0	8+0	18+0	2+15	1+24	1+8	0+1	$\frac{3.490M}{\beta^- 41.0m}$
$\frac{1632.78}{1632.7}$	Hg ₈₀ ²⁰⁹	$\frac{208.99092}{208.99104}$	80n	2+0	8+0	18+0	2+15	0+24	0+9	1+1	$\frac{5.100M}{\beta^- 35.0s}$
$\frac{1637.26}{1637.5}$	Hg ₈₀ ²¹⁰	$\frac{209.99477}{209.99451}$	80n	2+0	8+0	18+0	0+16	1+23	0+10	1+1	$\frac{3.880M}{\beta^- 10m}$
$\frac{1641.74}{-}$	Hg ₈₀ ²¹¹	$\frac{210.99863}{-}$	80n	2+0	8+0	18+0	0+16	0+23	0+11	1+1	$\frac{5.500M}{\beta^- >300ns}$
$\frac{1644.44}{-}$	Hg ₈₀ ²¹²	$\frac{212.00439}{-}$	80n	2+0	8+0	16+1	0+16	0+22	1+12	1+1	$\frac{4.300M}{\beta^- >300ns}$

$E_c(\text{MeV})$ = 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