TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi POLONIO Z = 84-a

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{1451.98}{1452.2}$	Po_{84}^{188}	$\frac{187.99969}{187.999422}$	84n	2+0	8+0	18+0	32+0	4+10	0+9	0+1	$\frac{6.660M}{ce\,275\mu s}$
$\frac{1461.21}{1461.2}$	Po_{84}^{189}	$\frac{188.998481}{188.998481}$	84n	2+0	8+0	18+0	32+0	1+12	1+9	1+0	$\frac{7.697M}{\alpha\,3.50ms}$
$\frac{1472.98}{1472.4}$	Po_{84}^{190}	$\frac{189.99448}{189.995101}$	84n	2+0	8+0	18+0	32+0	0+14	1+8	1+0	$\frac{7.693M}{\alpha\,2.46ms}$
$\frac{1481.12}{1481.0}$	Po_{84}^{191}	$\frac{190.99440}{190.994574}$	84n	2+0	8+0	18+0	30+1	1+14	1+8	1+0	$\frac{7.510M}{\alpha\,22.0ms}$
$\frac{1492.83}{1492.0}$	Po_{84}^{192}	$\frac{191.99050}{191.991335}$	84n	2+0	8+0	18+0	30+1	0+16	1+7	1+0	$\frac{7.320M}{\alpha\,32.2ms}$
$\frac{1501.02}{1500.4}$	Po_{84}^{193}	$\frac{192.99037}{192.99103}$	84n	2+0	8+0	18+0	28+2	1+16	1+7	1+0	$\frac{7.094M}{\alpha\,245ms}$
$\frac{1510.98}{1511.1}$	Po_{84}^{194}	$\frac{193.98834}{193.988186}$	84n	2+0	8+0	18+0	28+2	1+17	0+7	1+0	$\frac{6.987M}{\alpha\,392ms}$
$\frac{1519.12}{1519.3}$	Po_{84}^{195}	$\frac{194.98827}{194.98811}$	84n	2+0	8+0	18+0	28+2	0+18	0+7	1+0	$\frac{6.750M}{\alpha\ 4.64s}$
$\frac{1529.07}{1529.7}$	Po_{84}^{196}	$\frac{195.98625}{195.985535}$	84n	2+0	8+0	18+0	26+3	0+19	1+6	1+0	$\frac{6.658M}{\alpha\ 5.80s}$
$\frac{1537.22}{1537.7}$	Po_{84}^{197}	$\frac{196.98617}{196.98566}$	84n	2+0	8+0	18+0	24+4	1+19	1+6	1+0	$\frac{6.330M}{ce\ 84.0s}$
$\frac{1547.17}{1547.9}$	Po_{84}^{198}	$\frac{197.98415}{197.983389}$	84n	2+0	8+0	18+0	24+4	1+20	0+6	1+0	$\frac{6.3098M}{\alpha\ 1.77m}$
$\frac{1555.32}{1555.7}$	Po_{84}^{199}	$\frac{198.98406}{198.983666}$	84n	2+0	8+0	18+0	24+4	0+21	0+6	1+0	$\frac{5.580M}{ce\,5.47m}$
$\frac{1565.27}{1565.5}$	Po_{84}^{200}	$\frac{199.98205}{199.981799}$	84n	2+0	8+0	18+0	22+5	0+22	1+5	1+0	$\frac{3.420M}{ce\,11.51m}$
$\frac{1573.41}{1573.1}$	Po_{84}^{201}	$\frac{200.98197}{200.982260}$	84n	2+0	8+0	18+0	20+6	1+22	1+5	1+0	$\frac{4.891M}{ce\,15.60m}$
$\frac{1582.27}{1582.6}$	Po_{84}^{202}	$\frac{201.98113}{201.980758}$	84n	2+0	8+0	18+0	20+6	1+23	1+4	0+1	$\frac{2.817M}{ce\ 44.6m}$
$\frac{1590.42}{1590.1}$	Po_{84}^{203}	$\frac{202.98104}{202.981420}$	84n	2+0	8+0	18+0	20+6	0+24	1+4	0+1	$\frac{4.214M}{ce\ 36.7m}$

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{1599.65}{1599.2}$	Po_{84}^{204}	$\frac{203.97980}{203.980318}$	84n	2+0	8+0	18+0	18+7	1+24	0+5	1+0	$\frac{2.300M}{ce\ 3.519h}$
$\frac{1607.08}{1606.4}$	Po_{84}^{205}	$\frac{204.98049}{204.981203}$	84n	2+0	8+0	18+0	18+7	1+24	0+6	0+0	$\frac{3.556M}{ce\ 1.74h}$
$\frac{1615.22}{1615.2}$	Po_{84}^{206}	$\frac{205.980481}{205.980481}$	84n	2+0	8+0	18+0	18+7	0+25	0+6	0+0	$\frac{1.843M}{ce\ 8.80d}$
$\frac{1621.55}{1622.2}$	Po_{84}^{207}	$\frac{206.98228}{206.981593}$	84n	2+0	8+0	18+0	16+8	0+25	1+6	0+0	$\frac{2.909M}{ce\ 5.80h}$
$\frac{1627.89}{1630.6}$	Po_{84}^{208}	$\frac{207.98414}{207.981246}$	84n	2+0	8+0	18+0	16+8	0+25	0+7	0+0	$\frac{5.2153M}{\alpha\ 2.878a}$
$\frac{1634.22}{1637.6}$	Po_{84}^{209}	$\frac{208.98601}{208.982430}$	84n	2+0	8+0	18+0	14+9	0+25	1+7	0+0	$\frac{4.9792M}{\alpha\ 102.0a}$
$\frac{1640.56}{1645.2}$	Po_{84}^{210}	$\frac{209.98787}{209.982874}$	84n	2+0	8+0	18+0	14+9	0+25	0+8	0+0	$\frac{5.40745M}{\alpha\ 138.376d}$
$\frac{1646.89}{1649.8}$	Po_{84}^{211}	$\frac{210.98974}{210.986653}$	84n	2+0	8+0	18+0	12+10	0+25	1+8	0+0	$\frac{7.5945M}{\alpha\ 0.516s}$
$\frac{1653.22}{1655.8}$	Po_{84}^{212}	$\frac{211.99161}{211.988868}$	84n	2+0	8+0	18+0	12+10	0+25	0+9	0+0	$\frac{8.95411M}{\alpha\ 0.299\mu s}$
$\frac{1659.55}{1660.1}$	Po_{84}^{213}	$\frac{212.99348}{212.992857}$	84n	2+0	8+0	18+0	10+11	0+25	1+9	0+0	$\frac{8.536M}{\alpha\ 3.72\mu s}$
$\frac{1664.79}{1664.8}$	Po_{84}^{214}	$\frac{213.99652}{213.995201}$	84n	2+0	8+0	18+0	8+12	0+25	1+9	1+0	$\frac{7.83346M}{\alpha\ 164.3\mu s}$
$\frac{1670.04}{1670.2}$	Po_{84}^{215}	$\frac{214.99955}{214.999420}$	84n	2+0	8+0	18+0	8+12	0+25	1+9	0+1	$\frac{7.5263M}{\alpha\ 1.781ms}$
$\frac{1676.37}{1675.9}$	Po_{84}^{216}	$\frac{216.001414}{216.001915}$	84n	2+0	8+0	18+0	8+12	0+25	0+10	0+1	$\frac{6.906M}{\alpha\ 145ms}$
$\frac{1680.18}{1679.9}$	Po_{84}^{217}	$\frac{217.00599}{217.006335}$	84n	2+0	8+0	18+0	6+13	0+24	0+12	1+0	$\frac{6.6621M}{\alpha\ 1.53s}$
$\frac{1685.42}{1685.5}$	Po_{84}^{218}	$\frac{218.009028}{218.008973}$	84n	2+0	8+0	18+0	6+13	0+24	0+12	0+1	$\frac{6.11668M}{\alpha\ 3.098m}$
$\frac{1689.22}{1689.1}$	Po_{84}^{219}	$\frac{219.01361}{219.01374}$	84n	2+0	8+0	18+0	4+14	0+23	0+14	1+0	$\frac{2.190M}{\beta^-\ 2m}$

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{1694.47}{1694.5}$	Po_{84}^{220}	$\frac{220.01664}{220.01660}$	84n	2+0	8+0	18+0	4+14	0+23	0+14	0+1	$\frac{910.0K}{\beta^- 40s}$
$\frac{1697.18}{-}$	Po_{84}^{221}	$\frac{221.02240}{-}$	84n	2+0	8+0	18+0	2+15	0+22	1+15	0+1	$\frac{2.970M}{\beta^- 112s}$
$\frac{1703.51}{-}$	Po_{84}^{222}	$\frac{222.02427}{-}$	84n	2+0	8+0	18+0	2+15	0+22	0+16	0+1	$\frac{1.800M}{\beta^- 550s}$
$\frac{1706.23}{-}$	Po_{84}^{223}	$\frac{223.03001}{-}$	84n	2+0	8+0	18+0	0+16	0+21	1+17	0+1	$\frac{3.500M}{\beta^- >300ns}$
$\frac{1712.56}{-}$	Po_{84}^{224}	$\frac{224.03188}{-}$	84n	2+0	8+0	18+0	0+16	0+21	0+18	0+1	$\frac{2.00M}{\beta^- >300ns}$

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

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

$\mathbf{m_c}$ = valore calcolato della massa atomica

$\mathbf{m_s}$ = valore sperimentale della massa atomica

n = numero di neutroni centrali attivi

1-7 = numero quantico associato al livello

$\mathbf{p} + \mathbf{d}$ = (numero di protoni) + (numero di deutoni) in orbita

p -$\mathbf{T}_{1/2}$ = particella emessa – periodo di dimezzamento

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

1067