

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **ATTINIO Z = 89-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1580.06}{1579.6}$	Ac_{89}^{206}	$\frac{206.01396}{206.01450}$	89n	2+0	8+0	18+0	30+1	1+18	1+9	1+0	$\frac{7.940M}{\alpha 22.0ms}$
$\frac{1590.18}{1590.0}$	Ac_{89}^{207}	$\frac{207.01176}{207.01195}$	89n	2+0	8+0	18+0	30+1	0+20	1+8	1+0	$\frac{7.840M}{\alpha 27.0ms}$
$\frac{1598.46}{1598.4}$	Ac_{89}^{208}	$\frac{208.01154}{208.01155}$	89n	2+0	8+0	18+0	30+1	0+20	0+9	1+0	$\frac{7.730M}{\alpha 95.0ms}$
$\frac{1608.57}{1608.4}$	Ac_{89}^{209}	$\frac{209.00935}{209.00949}$	89n	2+0	8+0	18+0	28+2	0+21	1+8	1+0	$\frac{7.730M}{\alpha 100ms}$
$\frac{1616.84}{1616.6}$	Ac_{89}^{210}	$\frac{210.00913}{210.00944}$	89n	2+0	8+0	18+0	26+3	1+21	1+8	1+0	$\frac{7.610M}{\alpha 350ms}$
$\frac{1626.97}{1626.2}$	Ac_{89}^{211}	$\frac{211.00692}{211.00773}$	89n	2+0	8+0	18+0	26+3	1+22	0+8	1+0	$\frac{7.620M}{\alpha 210ms}$
$\frac{1635.24}{1634.2}$	Ac_{89}^{212}	$\frac{212.00671}{212.00781}$	89n	2+0	8+0	18+0	26+3	0+23	0+8	1+0	$\frac{7.520M}{\alpha 0.93s}$
$\frac{1643.51}{1643.4}$	Ac_{89}^{213}	$\frac{213.00650}{213.00661}$	89n	2+0	8+0	18+0	24+4	1+23	0+8	1+0	$\frac{7.500M}{\alpha 0.738s}$
$\frac{1651.78}{1651.2}$	Ac_{89}^{214}	$\frac{214.00628}{214.006902}$	89n	2+0	8+0	18+0	24+4	0+24	0+8	1+0	$\frac{7.352M}{\alpha 8.20s}$
$\frac{1660.05}{1659.7}$	Ac_{89}^{215}	$\frac{215.00607}{215.006454}$	89n	2+0	8+0	18+0	22+5	1+24	0+8	1+0	$\frac{7.746M}{\alpha 170ms}$
$\frac{1666.47}{1665.7}$	Ac_{89}^{216}	$\frac{216.00784}{216.008720}$	89n	2+0	8+0	18+0	20+6	1+24	1+8	1+0	$\frac{9.235M}{\alpha 440\mu s}$
$\frac{1672.90}{1673.1}$	Ac_{89}^{217}	$\frac{217.00960}{217.009347}$	89n	2+0	8+0	18+0	20+6	1+24	0+9	1+0	$\frac{9.832M}{\alpha 69.0ns}$
$\frac{1679.32}{1679.1}$	Ac_{89}^{218}	$\frac{218.01138}{218.01164}$	89n	2+0	8+0	18+0	18+7	1+24	1+9	1+0	$\frac{9.380M}{\alpha 1.08\mu s}$
$\frac{1685.74}{1686.4}$	Ac_{89}^{219}	$\frac{219.01315}{219.01242}$	89n	2+0	8+0	18+0	18+7	1+24	0+10	1+0	$\frac{8.830M}{\alpha 11.8\mu s}$
$\frac{1692.16}{1692.3}$	Ac_{89}^{220}	$\frac{220.01492}{220.014763}$	89n	2+0	8+0	18+0	16+8	1+24	1+10	1+0	$\frac{8.348M}{\alpha 26.4ms}$
$\frac{1700.44}{1699.6}$	Ac_{89}^{221}	$\frac{221.01470}{221.01559}$	89n	2+0	8+0	18+0	16+8	0+25	1+10	1+0	$\frac{7.1374M}{\alpha 5.0s}$
$\frac{1705.75}{1705.6}$	Ac_{89}^{222}	$\frac{222.01766}{222.017844}$	89n	2+0	8+0	18+0	16+8	0+25	1+10	0+1	$\frac{6.8804M}{\alpha 28.0s}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1712.17}{1712.4}$	Ac_{89}^{223}	$\frac{223.01944}{223.019137}$	89n	2+0	8+0	18+0	16+8	0+25	0+11	0+1	$\frac{6.7832\text{M}}{\alpha 2.10\text{m}}$
$\frac{1718.97}{1718.1}$	Ac_{89}^{224}	$\frac{224.02080}{224.021723}$	89n	2+0	8+0	18+0	14+9	1+24	0+13	0+0	$\frac{1.410\text{M}}{ce 2.78\text{h}}$
$\frac{1725.39}{1724.8}$	Ac_{89}^{225}	$\frac{225.02257}{225.023230}$	89n	2+0	8+0	18+0	12+10	1+24	1+13	0+0	$\frac{5.9351\text{M}}{\alpha 10.0\text{d}}$
$\frac{1729.97}{1730.2}$	Ac_{89}^{226}	$\frac{226.02632}{226.026098}$	89n	2+0	8+0	18+0	12+10	0+24	1+14	0+0	$\frac{1.113\text{M}}{\beta^- 27.37\text{h}}$
$\frac{1736.39}{1736.7}$	Ac_{89}^{227}	$\frac{227.02809}{227.027752}$	89n	2+0	8+0	18+0	12+10	0+24	0+15	0+0	$\frac{44.8\text{K}}{\beta^- 21.772\text{a}}$
$\frac{1740.96}{1741.7}$	Ac_{89}^{228}	$\frac{228.03185}{228.031021}$	89n	2+0	8+0	18+0	10+11	1+23	0+16	0+0	$\frac{2.134\text{M}}{\beta^- 6.15\text{h}}$
$\frac{1747.38}{1747.9}$	Ac_{89}^{229}	$\frac{229.03363}{229.03302}$	89n	2+0	8+0	18+0	8+12	1+23	1+16	0+0	$\frac{1.160\text{M}}{\beta^- 62.7\text{m}}$
$\frac{1753.81}{1753.0}$	Ac_{89}^{230}	$\frac{230.03539}{230.03629}$	89n	2+0	8+0	18+0	8+12	1+23	0+17	0+0	$\frac{2.900\text{M}}{\beta^- 122\text{s}}$
$\frac{1758.38}{1758.9}$	Ac_{89}^{231}	$\frac{231.03915}{231.03856}$	89n	2+0	8+0	18+0	8+12	0+23	0+18	0+0	$\frac{2.100\text{M}}{\beta^- 7.50\text{m}}$
$\frac{1764.80}{1763.8}$	Ac_{89}^{232}	$\frac{232.04092}{232.04203}$	89n	2+0	8+0	18+0	6+13	0+23	1+18	0+0	$\frac{3.700\text{M}}{\beta^- 119\text{s}}$
$\frac{1770.11}{1769.5}$	Ac_{89}^{233}	$\frac{233.04388}{233.04455}$	89n	2+0	8+0	18+0	4+14	0+23	1+18	1+0	$\frac{2.740\text{M}}{\beta^- 145\text{s}}$
$\frac{1774.68}{1774.0}$	Ac_{89}^{234}	$\frac{234.04764}{234.04842}$	89n	2+0	8+0	18+0	2+15	1+22	1+19	1+0	$\frac{4.430\text{M}}{\beta^- 44.0\text{s}}$
$\frac{1779.26}{1779.4}$	Ac_{89}^{235}	$\frac{235.05139}{235.05123}$	89n	2+0	8+0	18+0	2+15	0+22	1+20	1+0	$\frac{3.400\text{M}}{\beta^- 60.0\text{s}}$
$\frac{1783.83}{1783.7}$	Ac_{89}^{236}	$\frac{236.05515}{236.05530}$	89n	2+0	8+0	18+0	0+16	1+21	1+21	1+0	$\frac{4.810\text{M}}{\beta^- 2\text{m}}$
$\frac{1788.40}{-}$	Ac_{89}^{237}	$\frac{237.05891}{-}$	89n	2+0	8+0	18+0	0+16	0+21	1+22	1+0	$\frac{4.100\text{M}}{\beta^-}$
$\frac{1792.97}{-}$	Ac_{89}^{238}	$\frac{238.06267}{-}$	89n	2+0	8+0	18+0	0+16	1+20	1+23	1+0	$\frac{5.712\text{M}}{\beta^-}$
$\frac{1797.54}{-}$	Ac_{89}^{239}	$\frac{239.06643}{-}$	89n	2+0	8+0	18+0	0+16	0+20	1+24	1+0	$\frac{5.202\text{M}}{\beta^-}$