

TAVOLA PERIODICA DEI NUCLEI ATOMICI
configurazione dei livelli nucleari degli isodiaferi I = +20

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_\alpha(\text{eV})}{T_{1/2}}$
$\frac{497.956}{-}$	Ti ⁶⁴ ₂₂	$\frac{64.00150}{-}$	22n	2+0	0+4	0+7	0+3	0+3	0+3	0+0	$\frac{-}{\beta^-}$
$\frac{519.898}{520.30}$	V ⁶⁶ ₂₃	$\frac{65.99443}{65.99400}$	23n	2+0	0+4	0+8	0+2	1+3	0+2	0+1	$\frac{-}{\beta^- >360\text{ns}}$
$\frac{546.171}{-}$	Cr ⁶⁸ ₂₄	$\frac{67.98272}{-}$	24n	2+0	0+4	0+8	1+4	1+2	0+1	0+1	$\frac{-19.52\text{M}}{\beta^- >360\text{ns}}$
$\frac{565.200}{-}$	Mn ⁷⁰ ₂₅	$\frac{69.97878}{-}$	25n	2+0	0+4	0+9	0+3	2+1	1+2	0+1	$\frac{-16.30\text{M}}{\beta^- >360\text{ns}}$
$\frac{589.152}{589.09}$	Fe ⁷² ₂₆	$\frac{71.96956}{71.96962}$	26n	2+0	2+3	0+9	1+4	0+2	0+2	1+0	$\frac{-15.80\text{M}}{\beta^- 10\text{ms}}$
$\frac{608.514}{608.40}$	Co ⁷⁴ ₂₇	$\frac{73.96526}{73.96538}$	27n	2+0	4+2	0+9	0+5	0+3	1+0	0+1	$\frac{-15.90\text{M}}{\beta^- 25.0\text{ms}}$
$\frac{632.956}{633.12}$	Ni ⁷⁶ ₂₈	$\frac{75.95551}{75.95533}$	28n	2+0	4+2	0+9	1+7	1+0	0+1	0+1	$\frac{-15.70\text{M}}{\beta^- 238\text{ms}}$
$\frac{651.675}{651.62}$	Cu ⁷⁸ ₂₉	$\frac{77.95190}{77.95196}$	29n	2+0	4+2	0+9	0+8	1+0	1+1	1+0	$\frac{-14.20\text{M}}{\beta^- 335\text{ms}}$
$\frac{673.857}{674.08}$	Zn ⁸⁰ ₃₀	$\frac{79.94458}{79.94434}$	30n	2+0	6+1	0+9	0+9	0+1	1+0	1+0	$\frac{-12.50\text{M}}{\beta^- 540\text{ms}}$
$\frac{690.935}{690.70}$	Ga ⁸² ₃₁	$\frac{81.94274}{81.94299}$	31n	2+0	6+1	0+9	1+9	1+0	0+1	1+0	$\frac{-10.90\text{M}}{\beta^- 599\text{ms}}$
$\frac{711.279}{711.20}$	Ge ⁸⁴ ₃₂	$\frac{83.93739}{83.93747}$	32n	2+0	8+0	0+9	0+10	1+1	0+0	1+0	$\frac{-8.925\text{M}}{\beta^- 0.954\text{s}}$
$\frac{727.183}{727.47}$	As ⁸⁶ ₃₃	$\frac{85.93680}{85.93650}$	33n	2+0	8+0	0+9	1+10	1+0	0+1	1+0	$\frac{-8.456\text{M}}{\beta^- 0.945\text{s}}$
$\frac{747.123}{747.56}$	Se ⁸⁸ ₃₄	$\frac{87.93189}{87.93142}$	34n	2+0	8+0	4+7	0+11	0+1	0+1	0+0	$\frac{-8.161\text{M}}{\beta^- 1.53\text{s}}$
$\frac{764.067}{763.65}$	Br ⁹⁰ ₃₅	$\frac{89.93019}{89.93063}$	35n	2+0	8+0	2+8	1+11	1+0	1+1	0+0	$\frac{-7.463\text{M}}{\beta^- 1.91\text{s}}$
$\frac{783.344}{783.18}$	Kr ⁹² ₃₆	$\frac{91.92598}{91.92616}$	36n	2+0	8+0	6+6	0+12	0+1	0+1	0+0	$\frac{-7.310\text{M}}{\beta^- 1.840\text{s}}$
$\frac{798.018}{798.31}$	Rb ⁹⁴ ₃₇	$\frac{93.92672}{93.92640}$	37n	2+0	8+0	6+6	0+12	0+1	1+1	0+0	$\frac{-6.987\text{M}}{\beta^- 2.702\text{s}}$
$\frac{818.482}{818.05}$	Sr ⁹⁶ ₃₈	$\frac{95.92124}{95.92170}$	38n	2+0	8+0	6+6	1+12	0+2	1+0	0+0	$\frac{-6.589\text{M}}{\beta^- 1.07\text{s}}$

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$\frac{832.564}{832.95}$	Y_{39}^{98}	$\frac{97.92261}{97.92220}$	39n	2+0	8+0	8+5	0+13	0+1	1+0	0+1	$\frac{-6.167M}{\beta^- 0.548s}$
$\frac{852.547}{852.44}$	Zr_{40}^{100}	$\frac{99.91765}{99.91776}$	40n	2+0	8+0	6+6	1+13	1+1	1+0	1+0	$\frac{-5.876M}{\beta^- 7.10s}$
$\frac{867.694}{867.54}$	Nb_{41}^{102}	$\frac{101.91788}{101.91804}$	41n	2+0	8+0	8+5	1+13	1+1	1+1	0+0	$\frac{-6.435M}{\beta^- 4.30s}$
$\frac{885.846}{886.89}$	Mo_{42}^{104}	$\frac{103.91488}{103.91376}$	42n	2+0	8+0	10+4	1+13	0+3	1+0	0+0	$\frac{-6.400M}{\beta^- 60.0s}$
$\frac{901.162}{901.69}$	Tc_{43}^{106}	$\frac{105.91493}{105.91436}$	43n	2+0	8+0	12+3	0+14	0+2	1+1	0+0	$\frac{-5.885M}{\beta^- 35.6s}$
$\frac{921.484}{920.96}$	Ru_{44}^{108}	$\frac{107.90960}{107.91017}$	44n	2+0	8+0	12+3	1+15	0+0	1+2	0+0	$\frac{-5.724M}{\beta^- 4.55m}$
$\frac{935.787}{935.41}$	Rh_{45}^{110}	$\frac{109.91074}{109.91114}$	45n	2+0	8+0	14+2	1+14	0+3	0+1	0+0	$\frac{-5.495M}{\beta^- 28.5s}$
$\frac{953.840}{954.34}$	Pd_{46}^{112}	$\frac{111.90785}{111.90731}$	46n	2+0	8+0	16+1	0+15	0+3	0+1	0+0	$\frac{-5.090M}{\beta^- 21.03h}$
$\frac{968.917}{968.31}$	Ag_{47}^{114}	$\frac{113.90815}{113.90880}$	47n	2+0	8+0	16+1	0+15	1+3	0+1	0+0	$\frac{-4.512M}{\beta^- 4.60s}$
$\frac{988.082}{987.44}$	Cd_{48}^{116}	$\frac{115.90407}{115.90476}$	48n	2+0	8+0	16+1	1+15	0+4	1+0	0+0	$\frac{-4.818M}{2\beta^- 3.3 \cdot 10^{19}a}$
$\frac{1001.86}{1001.3}$	In_{49}^{118}	$\frac{117.90577}{117.90635}$	49n	2+0	8+0	18+0	1+15	0+4	0+1	0+0	$\frac{-4.722M}{\beta^- 5.0s}$
$\frac{1020.99}{1020.5}$	Sn_{50}^{120}	$\frac{119.90172}{119.90219}$	50n	2+0	8+0	18+0	0+16	1+4	1+0	0+0	$\frac{-4.807M}{st}$
$\frac{1033.403}{1033.1}$	Sb_{51}^{122}	$\frac{121.90488}{121.905174}$	51n	2+0	8+0	18+0	1+15	1+5	1+0	0+0	$\frac{-3.532M}{\beta^- 2.7238d}$
$\frac{1051.03}{1050.7}$	Te_{52}^{124}	$\frac{123.90245}{123.902818}$	52n	2+0	8+0	18+0	2+15	1+5	1+0	0+0	$\frac{-1.853M}{st}$
$\frac{1063.24}{1063.4}$	I_{53}^{126}	$\frac{125.90583}{125.905624}$	53n	2+0	8+0	18+0	3+14	1+6	1+0	0+0	$\frac{-2.002M}{ce 12.93d}$
$\frac{1080.76}{1080.7}$	Xe_{54}^{128}	$\frac{127.90351}{127.903531}$	54n	2+0	8+0	18+0	4+14	1+6	1+0	0+0	$\frac{-1.7585M}{st}$
$\frac{1092.77}{1093.1}$	Cs_{55}^{130}	$\frac{129.90711}{129.906709}$	55n	2+0	8+0	18+0	5+13	1+7	1+0	0+0	$\frac{-1.412M}{ce 29.21m}$

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$\frac{1110.19}{1110.0}$	Ba ₅₆ ¹³²	$\frac{131.90490}{131.905061}$	56n	2+0	8+0	18+0	6+13	1+7	1+0	0+0	$\frac{-999.6\text{K}}{2ce\ 3\cdot 10^{21}\text{a}}$
$\frac{1121.99}{1122.2}$	La ₅₇ ¹³⁴	$\frac{133.90872}{133.908514}$	57n	2+0	8+0	18+0	7+12	1+8	1+0	0+0	$\frac{-744\text{K}}{ce\ 6.45\text{m}}$
$\frac{1139.32}{1138.8}$	Ce ₅₈ ¹³⁶	$\frac{135.90661}{135.907172}$	58n	2+0	8+0	18+0	8+12	1+8	1+0	0+0	$\frac{-464\text{K}}{2ce\ 7\cdot 10^{13}\text{a}}$
$\frac{1150.67}{1150.8}$	Pr ₅₉ ¹³⁸	$\frac{137.91091}{137.910755}$	59n	2+0	8+0	18+0	10+11	0+8	1+1	0+0	$\frac{-334\text{K}}{ce\ 1.45\text{m}}$
$\frac{1166.57}{1167.3}$	Nd ₆₀ ¹⁴⁰	$\frac{139.91033}{139.90955}$	60n	2+0	8+0	18+0	12+10	0+9	0+1	0+0	$\frac{-210\text{K}}{ce\ 3.37\text{d}}$
$\frac{1179.53}{1179.6}$	Pm ₆₁ ¹⁴²	$\frac{141.91291}{141.912874}$	61n	2+0	8+0	18+0	11+10	1+10	1+0	0+0	$\frac{-450\text{K}}{ce\ 40.5\text{s}}$
$\frac{1195.05}{1195.7}$	Sm ₆₂ ¹⁴⁴	$\frac{143.91274}{143.911999}$	62n	2+0	8+0	18+0	14+9	0+10	0+1	0+0	$\frac{-140\text{K}}{st}$
$\frac{1206.23}{1206.2}$	Eu ₆₃ ¹⁴⁶	$\frac{145.91722}{145.917205}$	63n	2+0	8+0	18+0	15+8	0+11	0+1	0+0	$\frac{1.610\text{M}}{ce\ 4.61\text{d}}$
$\frac{1220.00}{1220.8}$	Gd ₆₄ ¹⁴⁸	$\frac{147.91893}{147.918115}$	64n	2+0	8+0	18+0	16+8	0+10	0+2	0+0	$\frac{3.27121\text{M}}{ce\ 70.9\text{a}}$
$\frac{1230.69}{1231.0}$	Tb ₆₅ ¹⁵⁰	$\frac{149.92395}{149.92366}$	65n	2+0	8+0	18+0	16+8	1+9	0+3	0+0	$\frac{3.587\text{M}}{ce\ 3.48\text{h}}$
$\frac{1244.53}{1245.3}$	Dy ₆₆ ¹⁵²	$\frac{151.92558}{151.924718}$	66n	2+0	8+0	18+0	18+7	0+10	0+3	0+0	$\frac{3.726\text{M}}{ce\ 2.38\text{h}}$
$\frac{1255.00}{1255.2}$	Ho ₆₇ ¹⁵⁴	$\frac{153.93083}{153.930602}$	67n	2+0	8+0	18+0	18+7	1+9	0+4	0+0	$\frac{4.041\text{M}}{ce\ 11.76\text{m}}$
$\frac{1270.31}{1270.1}$	Er ₆₈ ¹⁵⁶	$\frac{155.93088}{155.931065}$	68n	2+0	8+0	18+0	18+7	1+10	1+3	0+0	$\frac{3.481\text{M}}{ce\ 19.5\text{m}}$
$\frac{1279.56}{1280.0}$	Tm ₆₉ ¹⁵⁸	$\frac{157.93744}{157.93698}$	69n	2+0	8+0	18+0	20+6	0+10	0+4	1+0	$\frac{3.510\text{M}}{ce\ 3.98\text{m}}$
$\frac{1294.71}{1294.8}$	Yb ₇₀ ¹⁶⁰	$\frac{159.93767}{159.937552}$	70n	2+0	8+0	18+0	20+6	0+11	1+3	1+0	$\frac{3.620\text{M}}{ce\ 4.80\text{m}}$
$\frac{1305.42}{1304.8}$	Lu ₇₁ ¹⁶²	$\frac{161.94266}{161.94328}$	71n	2+0	8+0	18+0	22+5	0+11	1+3	0+1	$\frac{3.440\text{M}}{ce\ 1.37\text{m}}$
$\frac{1318.73}{1319.2}$	Hf ₇₂ ¹⁶⁴	$\frac{163.94486}{163.944367}$	72n	2+0	8+0	18+0	22+5	1+11	1+3	0+1	$\frac{3.910\text{M}}{ce\ 111\text{s}}$

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$\frac{1328.53}{1328.8}$	Ta ¹⁶⁶ ₇₃	$\frac{165.95083}{165.95051}$	73n	2+0	8+0	18+0	24+4	0+11	1+4	0+1	$\frac{4.310\text{M}}{\text{ce } 34.4\text{S}}$
$\frac{1343.38}{1343.0}$	W ¹⁶⁸ ₇₄	$\frac{167.95138}{167.951808}$	74n	2+0	8+0	18+0	26+3	0+12	0+4	0+1	$\frac{4.506\text{M}}{\text{ce } 50.9\text{S}}$
$\frac{1352.28}{1352.4}$	Re ¹⁷⁰ ₇₅	$\frac{169.95831}{169.958220}$	75n	2+0	8+0	18+0	26+3	0+11	0+6	1+0	$\frac{4.760\text{M}}{\text{ce } 9.20\text{S}}$
$\frac{1365.92}{1366.0}$	Os ¹⁷² ₇₆	$\frac{171.96016}{171.960023}$	76n	2+0	8+0	18+0	28+2	0+12	0+5	0+1	$\frac{5.227\text{M}}{\text{ce } 19.2\text{S}}$
$\frac{1374.59}{1375.0}$	Ir ¹⁷⁴ ₇₇	$\frac{173.96734}{173.966861}$	77n	2+0	8+0	18+0	28+2	0+11	0+7	1+0	$\frac{5.624\text{M}}{\text{ce } 7.90\text{S}}$
$\frac{1388.05}{1388.5}$	Pt ¹⁷⁶ ₇₈	$\frac{175.96938}{175.968945}$	78n	2+0	8+0	18+0	30+1	0+12	0+6	0+1	$\frac{5.8852\text{M}}{\text{ce } 6.33\text{S}}$
$\frac{1397.19}{1397.2}$	Au ¹⁷⁸ ₇₉	$\frac{177.97603}{177.97603}$	79n	2+0	8+0	18+0	30+1	1+11	0+7	0+1	$\frac{6.120\text{M}}{\text{ce } 2.60\text{S}}$
$\frac{1410.83}{1410.5}$	Hg ¹⁸⁰ ₈₀	$\frac{179.97791}{179.978266}$	80n	2+0	8+0	18+0	30+1	0+12	1+7	1+0	$\frac{6.2588\text{M}}{\text{ce } 2.58\text{S}}$
$\frac{1419.38}{1419.0}$	Tl ¹⁸² ₈₁	$\frac{181.98522}{181.98567}$	81n	2+0	8+0	18+0	32+0	0+12	0+7	1+1	$\frac{6.550\text{M}}{\text{ce } 3.10\text{S}}$
$\frac{1432.13}{1432.0}$	Pb ¹⁸⁴ ₈₂	$\frac{183.98802}{183.988142}$	82n	2+0	8+0	18+0	32+0	0+12	1+8	1+0	$\frac{6.774\text{M}}{\alpha 490\text{ms}}$
$\frac{1439.02}{1439.5}$	Bi ¹⁸⁶ ₈₃	$\frac{185.99711}{185.99660}$	83n	2+0	8+0	18+0	32+0	2+10	0+10	1+0	$\frac{7.757\text{M}}{\alpha 15.0\text{ms}}$
$\frac{1451.98}{1452.2}$	Po ¹⁸⁸ ₈₄	$\frac{187.99969}{187.999422}$	84n	2+0	8+0	18+0	32+0	4+10	0+9	0+1	$\frac{8.084\text{M}}{\text{ce } 0.275\text{ms}}$