

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **TELLURIO** **Z = 52-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{859.234}{859.31}$	Te ₅₂ ¹⁰⁵	$\frac{104.94372}{104.94364}$	52n	2+0	8+0	18+0	12+0	8+0	3+1	0+0	$\frac{4.890M}{\alpha 0.62\mu s}$
$\frac{873.014}{873.10}$	Te ₅₂ ¹⁰⁶	$\frac{105.93759}{105.93750}$	52n	2+0	8+0	18+0	14+0	8+0	0+2	0+0	$\frac{4.290M}{\alpha 70\mu s}$
$\frac{883.885}{883.49}$	Te ₅₂ ¹⁰⁷	$\frac{106.93458}{106.93501}$	52n	2+0	8+0	18+0	16+0	4+1	1+2	0+0	$\frac{4.008M}{\alpha 3.1m}$
$\frac{896.695}{896.75}$	Te ₅₂ ¹⁰⁸	$\frac{107.92950}{107.92944}$	52n	2+0	8+0	18+0	18+0	1+2	1+2	0+0	$\frac{3.416M}{\alpha 2.1s}$
$\frac{907.313}{906.70}$	Te ₅₂ ¹⁰⁹	$\frac{108.92676}{108.92742}$	52n	2+0	8+0	18+0	19+0	0+3	0+2	0+0	$\frac{8.536M}{ce4.60s}$
$\frac{919.865}{919.44}$	Te ₅₂ ¹¹⁰	$\frac{109.92195}{109.92241}$	52n	2+0	8+0	18+0	18+1	0+4	0+1	0+0	$\frac{5.220M}{ce18.6s}$
$\frac{928.290}{928.72}$	Te ₅₂ ¹¹¹	$\frac{110.92157}{110.92111}$	52n	2+0	8+0	18+0	16+2	0+5	1+0	0+0	$\frac{7.249M}{ce19.3s}$
$\frac{940.609}{940.61}$	Te ₅₂ ¹¹²	$\frac{111.91701}{111.91701}$	52n	2+0	8+0	18+0	14+4	1+4	1+0	0+0	$\frac{4.033M}{ce2.0m}$
$\frac{950.027}{949.73}$	Te ₅₂ ¹¹³	$\frac{112.91557}{112.91589}$	52n	2+0	8+0	18+0	14+5	0+3	1+1	0+0	$\frac{6.070M}{ce1.70m}$
$\frac{961.127}{961.34}$	Te ₅₂ ¹¹⁴	$\frac{113.91231}{113.91209}$	52n	2+0	8+0	18+0	13+6	1+3	0+1	0+0	$\frac{2.610M}{ce15.2m}$
$\frac{969.322}{969.58}$	Te ₅₂ ¹¹⁵	$\frac{114.91218}{114.91190}$	52n	2+0	8+0	18+0	12+7	0+3	1+1	0+0	$\frac{4.940M}{ce5.80m}$
$\frac{980.422}{980.86}$	Te ₅₂ ¹¹⁶	$\frac{115.90893}{115.90846}$	52n	2+0	8+0	18+0	11+8	1+3	0+1	0+0	$\frac{1.550M}{ce2.49h}$
$\frac{988.616}{988.76}$	Te ₅₂ ¹¹⁷	$\frac{116.90880}{116.908645}$	52n	2+0	8+0	18+0	10+9	0+3	1+1	0+0	$\frac{3.546M}{ce62.0m}$
$\frac{999.717}{999.45}$	Te ₅₂ ¹¹⁸	$\frac{117.90555}{117.905828}$	52n	2+0	8+0	18+0	9+10	1+3	0+1	0+0	$\frac{313.0K}{ce6.00d}$
$\frac{1006.69}{1007.0}$	Te ₅₂ ¹¹⁹	$\frac{118.90673}{118.906404}$	52n	2+0	8+0	18+0	9+10	0+4	0+1	0+0	$\frac{2.2930M}{ce16.05h}$
$\frac{1017.56}{1017.3}$	Te ₅₂ ¹²⁰	$\frac{119.90372}{119.90402}$	52n	2+0	8+0	18+0	7+12	0+3	1+1	0+0	$\frac{1.729M}{2ce2.2-10^{16}a}$ 0.09%

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p \cdot T_{1/2}}$
$\frac{1024.53}{1024.5}$	Te ₅₂ ¹²¹	$\frac{120.90490}{120.904936}$	52n	2+0	8+0	18+0	5+13	1+3	1+1	0+0	$\frac{1.050M}{ce19.17d}$
$\frac{1034.18}{1034.3}$	Te ₅₂ ¹²²	$\frac{121.90321}{121.903044}$	52n	2+0	8+0	18+0	4+14	1+3	1+1	0+0	$\frac{st}{2.55\%}$
$\frac{1041.15}{1041.3}$	Te ₅₂ ¹²³	$\frac{122.90439}{122.90427}$	52n	2+0	8+0	18+0	4+14	0+4	1+1	0+0	$\frac{52.7K}{ce9.2 \cdot 10^{16}a}$ 0.89%
$\frac{1051.03}{1050.7}$	Te ₅₂ ¹²⁴	$\frac{123.90245}{123.902818}$	52n	2+0	8+0	18+0	2+15	1+5	1+0	0+0	$\frac{st}{4.74\%}$
$\frac{1058.01}{1057.3}$	Te ₅₂ ¹²⁵	$\frac{124.90362}{124.904431}$	52n	2+0	8+0	18+0	2+15	0+6	1+0	0+0	$\frac{st}{7.07\%}$
$\frac{1066.43}{1066.4}$	Te ₅₂ ¹²⁶	$\frac{125.90325}{125.903312}$	52n	2+0	8+0	18+0	2+15	0+7	0+0	0+0	$\frac{st}{18.84\%}$
$\frac{1071.96}{1072.7}$	Te ₅₂ ¹²⁷	$\frac{126.90597}{126.905226}$	52n	2+0	8+0	18+0	0+16	0+7	1+0	0+0	$\frac{702.0K}{\beta^- 9.35h}$
$\frac{1080.38}{1081.4}$	Te ₅₂ ¹²⁸	$\frac{127.90560}{127.904463}$	52n	2+0	8+0	18+0	0+16	0+8	0+0	0+0	$\frac{866.5M}{2\beta^- 2.41 \cdot 10^{24}a}$ 31.74%
$\frac{1087.35}{1087.5}$	Te ₅₂ ¹²⁹	$\frac{128.90678}{128.906598}$	52n	2+0	8+0	16+1	0+16	1+8	0+0	0+0	$\frac{1.502M}{\beta^- 69.6m}$
$\frac{1094.32}{1095.9}$	Te ₅₂ ¹³⁰	$\frac{129.90796}{129.906224}$	52n	2+0	8+0	16+1	0+16	0+9	0+0	0+0	$\frac{2.52751M}{2\beta^- 3 \cdot 10^{24}a}$ 34.08%
$\frac{1101.29}{1101.9}$	Te ₅₂ ¹³¹	$\frac{130.90915}{130.908524}$	52n	2+0	8+0	14+2	0+16	1+9	0+0	0+0	$\frac{2.2318M}{\beta^- 25.0m}$
$\frac{1108.27}{1109.9}$	Te ₅₂ ¹³²	$\frac{131.91032}{131.908553}$	52n	2+0	8+0	14+2	0+16	0+10	0+0	0+0	$\frac{518.0K}{\beta^- 3.204d}$
$\frac{1115.23}{1115.7}$	Te ₅₂ ¹³³	$\frac{132.91151}{132.910955}$	52n	2+0	8+0	12+3	0+16	1+10	0+0	0+0	$\frac{2.942M}{\beta^- 12.5m}$
$\frac{1122.21}{1123.4}$	Te ₅₂ ¹³⁴	$\frac{133.91268}{133.911369}$	52n	2+0	8+0	12+3	0+16	0+11	0+0	0+0	$\frac{1.513M}{\beta^- 41.8m}$
$\frac{1126.27}{1126.8}$	Te ₅₂ ¹³⁵	$\frac{134.91699}{134.91645}$	52n	2+0	8+0	10+4	0+16	1+10	0+1	0+0	$\frac{5.888M}{\beta^- 19.0s}$
$\frac{1130.91}{1131.4}$	Te ₅₂ ¹³⁶	$\frac{135.92067}{135.92010}$	52n	2+0	8+0	8+5	0+16	1+10	0+1	1+0	$\frac{5.093M}{\beta^- 17.63s}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p \cdot T_{1/2}}$
$\frac{1134.98}{1134.7}$	Te ₅₂ ¹³⁷	$\frac{136.92497}{136.92532}$	52n	2+0	8+0	8+5	0+16	0+10	0+2	1+0	$\frac{7.220M}{\beta^- 2.49s}$
$\frac{1139.03}{1139.1}$	Te ₅₂ ¹³⁸	$\frac{137.92929}{137.92922}$	52n	2+0	8+0	6+6	0+16	1+9	0+3	1+0	$\frac{6.150M}{\beta^- 1.40s}$
$\frac{1142.24}{1142.0}$	Te ₅₂ ¹³⁹	$\frac{138.93450}{138.93473}$	52n	2+0	8+0	6+6	0+16	0+9	1+3	0+1	$\frac{8.100M}{\beta^- 500ms}$
$\frac{1146.29}{1146.3}$	Te ₅₂ ¹⁴⁰	$\frac{139.93885}{139.93885}$	52n	2+0	8+0	4+7	0+16	1+8	1+4	0+1	$\frac{3.900M}{n\beta^- 300ms}$
$\frac{1148.91}{1148.9}$	Te ₅₂ ¹⁴¹	$\frac{140.94465}{140.94465}$	52n	2+0	8+0	4+7	0+16	1+7	0+6	0+1	$\frac{4.600M}{n\beta^- >150ns}$
$\frac{1152.99}{1152.9}$	Te ₅₂ ¹⁴²	$\frac{141.94895}{141.94908}$	52n	2+0	8+0	4+7	0+16	0+7	0+7	0+1	$\frac{8.100M}{\beta^- 50ms}$
$\frac{1155.58}{-}$	Te ₅₂ ¹⁴³	$\frac{142.95484}{-}$	52n	2+0	8+0	2+8	0+16	0+6	1+8	0+1	$\frac{4.820M}{\beta^- >408ns}$
$\frac{1159.64}{-}$	Te ₅₂ ¹⁴⁴	$\frac{143.95917}{-}$	52n	2+0	8+0	0+9	0+16	1+5	1+9	0+1	$\frac{7.760M}{\beta^-}$
$\frac{1162.26}{-}$	Te ₅₂ ¹⁴⁵	$\frac{144.96499}{-}$	52n	2+0	8+0	0+9	0+16	1+4	0+11	0+1	$\frac{5.140M}{n\beta^-}$
$\frac{1166.33}{-}$	Te ₅₂ ¹⁴⁶	$\frac{145.96929}{-}$	52n	2+0	8+0	0+9	0+16	0+4	0+12	0+1	$\frac{54.80M}{n\beta^-}$

$E_c(\text{MeV})$ = 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

$p \cdot T_{1/2}$ = particella emessa – periodo di dimezzamento

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