

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **INDIO** **Z = 49-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{791.254}{791.59}$	In ₄₈ ⁹⁷	$\frac{96.94990}{96.94954}$	$\frac{49}{48n}$	2+0	8+0	18+0	8+0	7+0	6+0	0+0	$\frac{2.32269M}{p\ 5ms}$
$\frac{806.711}{806.55}$	In ₄₉ ⁹⁸	$\frac{97.94197}{97.94214}$	49n	2+0	8+0	18+0	10+0	6+0	5+0	0+0	$\frac{13.73M}{ce432.0ms}$
$\frac{822.498}{822.00}$	In ₄₉ ⁹⁹	$\frac{98.93369}{98.93422}$	49n	2+0	8+0	18+0	14+0	2+0	4+1	0+0	$\frac{8.560M}{ce3.0s}$
$\frac{833.326}{832.97}$	In ₄₉ ¹⁰⁰	$\frac{99.93073}{99.93111}$	49n	2+0	8+0	18+0	15+0	3+0	1+2	0+0	$\frac{9.850M}{ce5.9s}$
$\frac{845.559}{845.48}$	In ₄₉ ¹⁰¹	$\frac{100.92626}{100.92634}$	49n	2+0	8+0	18+0	16+0	1+2	1+1	0+0	$\frac{7.200M}{ce15.1s}$
$\frac{855.200}{855.65}$	In ₄₉ ¹⁰²	$\frac{101.92457}{101.92409}$	49n	2+0	8+0	18+0	16+0	0+4	1+0	0+0	$\frac{8.965M}{ce23.3s}$
$\frac{867.205}{867.61}$	In ₄₉ ¹⁰³	$\frac{102.92035}{102.91991}$	49n	2+0	8+0	18+0	14+2	1+3	1+0	0+0	$\frac{6.023M}{ce65.0s}$
$\frac{876.621}{877.19}$	In ₄₉ ¹⁰⁴	$\frac{103.91891}{103.91830}$	49n	2+0	8+0	18+0	13+3	1+3	1+0	0+0	$\frac{7.786M}{ce1.80m}$
$\frac{888.629}{888.63}$	In ₄₉ ¹⁰⁵	$\frac{104.91468}{104.91467}$	49n	2+0	8+0	18+0	13+4	0+3	1+0	0+0	$\frac{4.693M}{ce5.07m}$
$\frac{898.045}{897.83}$	In ₄₉ ¹⁰⁶	$\frac{105.91324}{105.91347}$	49n	2+0	8+0	18+0	12+5	0+3	1+0	0+0	$\frac{6.526M}{ce6.20m}$
$\frac{908.647}{908.86}$	In ₄₉ ¹⁰⁷	$\frac{106.91052}{106.91030}$	49n	2+0	8+0	18+0	12+6	0+2	0+1	0+0	$\frac{3.426M}{ce32.4m}$
$\frac{918.063}{917.48}$	In ₄₉ ¹⁰⁸	$\frac{107.90908}{107.90970}$	49n	2+0	8+0	18+0	11+7	0+2	0+1	0+0	$\frac{5.136M}{ce58.0m}$
$\frac{927.479}{927.93}$	In ₄₉ ¹⁰⁹	$\frac{108.90763}{108.90715}$	49n	2+0	8+0	18+0	10+8	0+2	0+1	0+0	$\frac{2.016M}{ce4.167h}$
$\frac{935.710}{935.99}$	In ₄₉ ¹¹⁰	$\frac{109.90746}{109.90717}$	49n	2+0	8+0	18+0	8+9	0+3	1+0	0+0	$\frac{3.878M}{ce44.90h}$
$\frac{946.312}{945.98}$	In ₄₉ ¹¹¹	$\frac{110.90474}{110.90510}$	49n	2+0	8+0	18+0	8+10	0+2	0+1	0+0	$\frac{861.0K}{ce2.8047d}$
$\frac{953.136}{953.65}$	In ₄₉ ¹¹²	$\frac{111.90608}{111.90553}$	49n	2+0	8+0	18+0	6+11	1+2	0+1	0+0	$\frac{2.585M}{ce14.97m}$
$\frac{962.553}{963.09}$	In ₄₉ ¹¹³	$\frac{112.90464}{112.90406}$	49n	2+0	8+0	18+0	5+12	1+2	0+1	0+0	$\frac{st}{4.29\%}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p \cdot T_{1/2}}$
$\frac{970.784}{970.37}$	In_{49}^{114}	$\frac{113.90447}{113.90491}$	49n	2+0	8+0	18+0	3+13	1+3	1+0	0+0	$\frac{1.9886\text{M}}{\beta^- 71.9\text{s}}$
$\frac{978.796}{979.40}$	In_{49}^{115}	$\frac{114.90453}{114.90388}$	49n	2+0	8+0	18+0	4+13	0+3	0+1	0+0	$\frac{497.489\text{K}}{\beta^- 4.41 \cdot 10^{14}\text{a}}$ 95.71%
$\frac{985.621}{986.19}$	In_{49}^{116}	$\frac{115.90587}{115.90526}$	49n	2+0	8+0	18+0	2+14	1+3	0+1	0+0	$\frac{3.27621\text{M}}{\beta^- 14.10\text{s}}$
$\frac{995.037}{994.95}$	In_{49}^{117}	$\frac{116.90442}{116.90451}$	49n	2+0	8+0	18+0	1+15	1+3	0+1	0+0	$\frac{1.455\text{M}}{\beta^- 43.2\text{m}}$
$\frac{1001.86}{1001.3}$	In_{49}^{118}	$\frac{117.90577}{117.90635}$	49n	2+0	8+0	18+0	1+15	0+4	0+1	0+0	$\frac{4.425\text{M}}{\beta^- 5.0\text{s}}$
$\frac{1010.09}{1009.9}$	In_{49}^{119}	$\frac{118.90559}{118.90584}$	49n	2+0	8+0	16+1	1+15	0+5	1+0	0+0	$\frac{2.366\text{M}}{\beta^- 2.40\text{m}}$
$\frac{1015.51}{1016.0}$	In_{49}^{120}	$\frac{119.90844}{119.90796}$	49n	2+0	8+0	16+1	1+15	0+5	0+1	0+0	$\frac{5.370\text{M}}{\beta^- 3.08\text{s}}$
$\frac{1023.74}{1024.1}$	In_{49}^{121}	$\frac{120.90827}{120.90785}$	49n	2+0	8+0	14+2	1+15	0+6	1+0	0+0	$\frac{3.360\text{M}}{\beta^- 23.1\text{s}}$
$\frac{1029.16}{1029.9}$	In_{49}^{122}	$\frac{121.91112}{121.91028}$	49n	2+0	8+0	14+2	1+15	0+6	0+1	0+0	$\frac{6.370\text{M}}{\beta^- 1.50\text{s}}$
$\frac{1037.715}{1037.9}$	In_{49}^{123}	$\frac{122.91059}{122.91044}$	49n	2+0	8+0	12+3	0+16	0+6	1+0	1+0	$\frac{4.390\text{M}}{\beta^- 6.17\text{s}}$
$\frac{1043.14}{1043.4}$	In_{49}^{124}	$\frac{123.91344}{123.91318}$	49n	2+0	8+0	12+3	0+16	0+6	0+1	1+0	$\frac{7.370\text{M}}{\beta^- 3.12\text{s}}$
$\frac{1051.36}{1051.1}$	In_{49}^{125}	$\frac{124.91328}{124.91360}$	49n	2+0	8+0	10+4	0+16	0+7	1+0	1+0	$\frac{5.420\text{M}}{\beta^- 2.36\text{s}}$
$\frac{1056.78}{1056.5}$	In_{49}^{126}	$\frac{125.91613}{125.91646}$	49n	2+0	8+0	10+4	0+16	0+7	0+1	1+0	$\frac{8.210\text{M}}{\beta^- 1.53\text{s}}$
$\frac{1063.60}{1063.7}$	In_{49}^{127}	$\frac{126.91747}{126.91735}$	49n	2+0	8+0	8+5	0+16	1+7	0+1	1+0	$\frac{6.578\text{M}}{\beta^- 1.09\text{s}}$
$\frac{1069.01}{1069.2}$	In_{49}^{128}	$\frac{127.92032}{127.92017}$	49n	2+0	8+0	6+6	0+16	1+7	1+1	1+0	$\frac{8.980\text{M}}{\beta^- 0.84\text{s}}$
$\frac{1075.84}{1075.8}$	In_{49}^{129}	$\frac{128.92170}{128.92170}$	49n	2+0	8+0	6+6	0+16	0+8	1+1	1+0	$\frac{7.780\text{M}}{\beta^- 610\text{ms}}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{1081.26}{1080.8}$	In_{49}^{130}	$\frac{129.92450}{129.92497}$	49n	2+0	8+0	6+6	0+16	0+8	0+2	1+0	$\frac{10.25M}{\beta^- 290\text{ms}}$
$\frac{1086.67}{1087.1}$	In_{49}^{131}	$\frac{130.92736}{130.92685}$	49n	2+0	8+0	4+7	0+16	0+8	1+2	1+0	$\frac{9.222M}{\beta^- 280\text{ms}}$
$\frac{1089.28}{1089.5}$	In_{49}^{132}	$\frac{131.93322}{131.93299}$	49n	2+0	8+0	4+7	0+16	0+7	0+4	1+0	$\frac{14.14M}{\beta^- 207\text{ms}}$
$\frac{1093.27}{1093.1}$	In_{49}^{133}	$\frac{132.93760}{132.93781}$	49n	2+0	8+0	2+8	0+16	1+6	0+5	1+0	$\frac{13.10M}{\beta^- 165\text{ms}}$
$\frac{1095.03}{1095.2}$	In_{49}^{134}	$\frac{133.94438}{133.94415}$	49n	2+0	8+0	2+8	0+16	1+5	0+6	0+1	$\frac{14.30M}{\beta^- 140\text{ms}}$
$\frac{1098.46}{1098.5}$	In_{49}^{135}	$\frac{134.94933}{134.94933}$	49n	2+0	8+0	0+9	0+16	1+4	0+8	1+0	$\frac{13.00M}{\beta^- 92.0\text{ms}}$
$\frac{1102.95}{-}$	In_{49}^{136}	$\frac{135.95321}{-}$	49n	2+0	8+0	0+9	0+15	0+7	0+7	1+0	$\frac{12.15M}{\beta^-}$
$\frac{1105.53}{-}$	In_{49}^{137}	$\frac{136.95910}{-}$	49n	2+0	6+1	0+9	0+15	0+6	1+8	1+0	$\frac{11.47M}{\beta^-}$

$E_c(\text{MeV})$ = 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

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

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