TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **STAGNO Z = 50-a**

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{807.095}{807.14}$	$Sn^{99}_{\frac{50}{49}}$	$\frac{98.94938}{98.94933}$	**50 / 49n**	2+0	8+0	18+0	10+0	4+0	8+0	0+0	$\frac{13.70M}{ce\,5.0ms}$
$\frac{825.171}{824.80}$	Sn^{100}_{50}	$\frac{99.93864}{99.93904}$	50n	2+0	8+0	18+0	13+0	2+0	7+0	0+0	$\frac{7.400M}{ce\,860ms}$
$\frac{836.091}{835.65}$	Sn^{101}_{50}	$\frac{100.93558}{100.93606}$	50n	2+0	8+0	18+0	14+0	1+1	6+0	0+0	$\frac{8.700M}{ce\,1.70s}$
$\frac{849.634}{849.08}$	Sn^{102}_{50}	$\frac{101.92971}{101.93030}$	50n	2+0	8+0	18+0	16+0	3+0	1+2	0+0	$\frac{5.760M}{ce\,3.80s}$
$\frac{859.357}{859.20}$	Sn^{103}_{50}	$\frac{102.92794}{102.92810}$	50n	2+0	8+0	18+0	16+0	2+2	1+1	0+0	$\frac{7.660M}{ce\,7.0s}$
$\frac{871.698}{871.89}$	Sn^{104}_{50}	$\frac{103.92335}{103.92314}$	50n	2+0	8+0	18+0	17+0	0+4	1+0	0+0	$\frac{4.558M}{ce\,20.8s}$
$\frac{881.193}{881.63}$	Sn^{105}_{50}	$\frac{104.92182}{104.92135}$	50n	2+0	8+0	18+0	16+1	0+4	1+0	0+0	$\frac{6.303M}{ce\,32.7s}$
$\frac{893.305}{893.87}$	Sn^{106}_{50}	$\frac{105.91749}{105.91688}$	50n	2+0	8+0	18+0	14+3	1+3	1+0	0+0	$\frac{3.250M}{ce\,115s}$
$\frac{902.800}{903.10}$	Sn^{107}_{50}	$\frac{106.91596}{106.91564}$	50n	2+0	8+0	18+0	13+4	1+3	1+0	0+0	$\frac{5.052M}{ce\,2.90m}$
$\frac{914.914}{914.63}$	Sn^{108}_{50}	$\frac{107.91162}{107.91192}$	50n	2+0	8+0	18+0	13+5	0+3	1+0	0+0	$\frac{2.045M}{ce\,10.30m}$
$\frac{922.987}{923.30}$	Sn^{109}_{50}	$\frac{108.91161}{108.91128}$	50n	2+0	8+0	18+0	12+6	1+2	0+1	0+0	$\frac{3.856M}{ce\,18.0m}$
$\frac{935.101}{934.57}$	Sn^{110}_{50}	$\frac{109.90727}{109.90784}$	50n	2+0	8+0	18+0	12+7	0+2	0+1	0+0	$\frac{628.0K}{ce\,4.11h}$
$\frac{943.398}{942.74}$	Sn^{111}_{50}	$\frac{110.90703}{110.90773}$	50n	2+0	8+0	18+0	10+8	0+3	1+0	0+0	$\frac{2.452M}{ce\,35.3m}$
$\frac{954.090}{953.53}$	Sn^{112}_{50}	$\frac{111.90422}{111.90482}$	50n	2+0	8+0	18+0	10+9	0+2	0+1	0+0	$\frac{\mathbf{st}}{\frac{2ce\,1.3\cdot10^{21}a}{0.97\%}}$
$\frac{960.965}{961.28}$	Sn^{113}_{50}	$\frac{112.90550}{112.90517}$	50n	2+0	8+0	18+0	8+10	1+2	0+1	0+0	$\frac{1.038M}{ce\,115.09d}$
$\frac{971.881}{971.57}$	Sn^{114}_{50}	$\frac{113.90245}{113.90278}$	50n	2+0	8+0	18+0	7+11	0+3	1+0	0+0	$\frac{\mathbf{st}}{0.66\%}$

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{978.756}{979.12}$	Sn_{50}^{115}	$\frac{114.90373}{114.90334}$	50n	2+0	8+0	18+0	5+12	1+3	1+0	0+0	$\frac{\textbf{st}}{0.34\%}$
$\frac{988.251}{988.68}$	Sn_{50}^{116}	$\frac{115.90221}{115.90174}$	50n	2+0	8+0	18+0	4+13	1+3	1+0	0+0	$\frac{\textbf{st}}{14.54\%}$
$\frac{995.128}{995.63}$	Sn_{50}^{117}	$\frac{116.90349}{116.90295}$	50n	2+0	8+0	18+0	4+13	0+4	1+0	0+0	$\frac{\textbf{st}}{7.68\%}$
$\frac{1004.62}{1005.0}$	Sn_{50}^{118}	$\frac{117.90196}{117.90160}$	50n	2+0	8+0	18+0	3+14	0+4	1+0	0+0	$\frac{\textbf{st}}{24.22\%}$
$\frac{1011.50}{1011.4}$	Sn_{50}^{119}	$\frac{118.90324}{118.90331}$	50n	2+0	8+0	18+0	1+15	1+4	1+0	0+0	$\frac{\textbf{st}}{8.59\%}$
$\frac{1020.99}{1020.5}$	Sn_{50}^{120}	$\frac{119.90172}{119.90219}$	50n	2+0	8+0	18+0	0+16	1+4	1+0	0+0	$\frac{\textbf{st}}{32.58\%}$
$\frac{1026.45}{1026.7}$	Sn_{50}^{121}	$\frac{120.90452}{120.90424}$	50n	2+0	8+0	18+0	0+16	1+4	0+1	0+0	$\frac{403.0K}{\beta^{-}27.03h}$
$\frac{1034.74}{1035.5}$	Sn_{50}^{122}	$\frac{121.90429}{121.90344}$	50n	2+0	8+0	16+1	0+16	1+5	1+0	0+0	$\frac{\textbf{st}}{4.63\%}$
$\frac{1041.62}{1041.5}$	Sn_{50}^{123}	$\frac{122.90517}{122.90572}$	50n	2+0	8+0	16+1	0+16	0+6	1+0	0+0	$\frac{1.409M}{\beta^{-}129.2d}$
$\frac{1049.92}{1050.0}$	Sn_{50}^{124}	$\frac{123.90532}{123.90527}$	50n	2+0	8+0	16+1	0+16	0+7	0+0	0+0	$\frac{2.2896M}{\frac{2\beta^{-}1.2\cdot10^{21}a}{5.79\%}}$
$\frac{1055.36}{1055.7}$	Sn_{50}^{125}	$\frac{124.90814}{124.90778}$	50n	2+0	8+0	14+2	0+16	0+7	1+0	0+0	$\frac{2.359M}{\beta^{-}9.64d}$
$\frac{1063.66}{1063.9}$	Sn_{50}^{126}	$\frac{125.90790}{125.90765}$	50n	2+0	8+0	14+2	0+16	0+8	0+0	0+0	$\frac{380.0K}{\beta^{-}2.3\cdot10^{5}a}$
$\frac{1069.11}{1069.4}$	Sn_{50}^{127}	$\frac{126.91071}{126.91036}$	50n	2+0	8+0	12+3	0+16	0+8	1+0	0+0	$\frac{3.231M}{\beta^{-}2.10h}$
$\frac{1077.41}{1077.3}$	Sn_{50}^{128}	$\frac{127.91047}{127.91054}$	50n	2+0	8+0	12+3	0+16	0+9	0+0	0+0	$\frac{1.274M}{\beta^{-}59.07m}$
$\frac{1082.86}{1082.7}$	Sn_{50}^{129}	$\frac{128.91328}{128.91348}$	50n	2+0	8+0	10+4	0+16	0+9	1+0	0+0	$\frac{4.040M}{\beta^{-}2.23m}$
$\frac{1089.73}{1090.3}$	Sn_{50}^{130}	$\frac{129.91457}{129.913967}$	50n	2+0	8+0	8+5	0+16	1+9	1+0	0+0	$\frac{2.153M}{\beta^{-}2.72m}$

$\frac{E_c(MeV)}{E_s(MeV)}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(eV)}{p\text{-}T_{1/2}}$
$\frac{1095.18}{1095.5}$	Sn_{50}^{131}	$\frac{130.91739}{130.91700}$	50n	2+0	8+0	8+5	0+16	1+9	0+1	0+0	$\frac{4.704M}{\beta^- 56.0s}$
$\frac{1102.06}{1102.9}$	Sn_{50}^{132}	$\frac{131.91866}{131.91782}$	50n	2+0	8+0	8+5	0+16	0+10	0+1	0+0	$\frac{3.120M}{\beta^- 39.7s}$
$\frac{1105.21}{1105.3}$	Sn_{50}^{133}	$\frac{132.92395}{132.92383}$	50n	2+0	8+0	4+7	0+16	1+9	1+1	1+0	$\frac{8.100M}{\beta^- 1.46s}$
$\frac{1109.24}{1109.2}$	Sn_{50}^{134}	$\frac{133.92828}{133.92829}$	50n	2+0	8+0	4+7	0+16	0+9	1+2	1+0	$\frac{7.840M}{\beta^- 1.050s}$
$\frac{1111.22}{1111.3}$	Sn_{50}^{135}	$\frac{134.93483}{134.93473}$	50n	2+0	8+0	2+8	1+15	1+9	1+2	0+1	$\frac{9.200M}{\beta^- 530ms}$
$\frac{1115.25}{1115.1}$	Sn_{50}^{136}	$\frac{135.93916}{135.93934}$	50n	2+0	8+0	2+8	1+15	0+9	1+3	0+1	$\frac{8.200M}{\beta^- 250ms}$
$\frac{1116.67}{1117.0}$	Sn_{50}^{137}	$\frac{136.94630}{136.94599}$	50n	2+0	8+0	2+8	0+15	0+9	1+4	0+1	$\frac{10.10M}{\beta^- 190ms}$
$\frac{1119.28}{-}$	Sn_{50}^{138}	$\frac{137.95217}{-}$	50n	2+0	8+0	2+8	0+15	0+8	0+6	0+1	$\frac{6.820M}{n\beta^- >408ns}$
$\frac{1123.30}{-}$	Sn_{50}^{139}	$\frac{138.95652}{-}$	50n	2+0	8+0	0+9	0+15	1+7	0+7	0+1	$\frac{9.00M}{\beta^-}$
$\frac{1125.89}{-}$	Sn_{50}^{140}	$\frac{139.96240}{-}$	50n	2+0	6+1	0+9	0+15	1+6	1+8	0+1	$\frac{6.410M}{n\beta^-}$

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

$\mathbf{E_s}(\text{MeV})$ = 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

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

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

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

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