

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **PALLADIO Z = 46-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{745.603}{745.91}$	Pd ₄₆ ⁹¹	$\frac{90.94944}{90.94911}$	$\frac{46}{45n}$	2+0	8+0	18+0	6+0	6+0	6+0	0+0	$\frac{12.50M}{ce > 1.0\mu s}$
$\frac{762.434}{762.07}$	Pd ₄₆ ⁹²	$\frac{91.94003}{91.94042}$	46n	2+0	8+0	18+0	8+0	6+0	4+0	0+0	$\frac{7.90M}{ce 700ms}$
$\frac{774.331}{774.34}$	Pd ₄₆ ⁹³	$\frac{92.93592}{92.93591}$	46n	2+0	8+0	18+0	9+0	8+0	0+1	0+0	$\frac{9.90M}{ce 1.00s}$
$\frac{788.515}{789.07}$	Pd ₄₆ ⁹⁴	$\frac{93.92936}{93.92877}$	46n	2+0	8+0	18+0	12+0	4+1	0+1	0+0	$\frac{6.805M}{ce 9.60s}$
$\frac{800.194}{800.94}$	Pd ₄₆ ⁹⁵	$\frac{94.92549}{94.92469}$	46n	2+0	8+0	18+0	14+0	1+2	0+1	0+0	$\frac{8.376M}{ce 5.0s}$
$\frac{815.514}{815.09}$	Pd ₄₆ ⁹⁶	$\frac{95.91771}{95.91816}$	46n	2+0	8+0	18+0	12+3	1+0	1+1	0+0	$\frac{3.504M}{ce 122s}$
$\frac{824.687}{824.73}$	Pd ₄₆ ⁹⁷	$\frac{96.91652}{96.91648}$	46n	2+0	8+0	18+0	11+4	1+0	1+1	0+0	$\frac{4.790M}{ce 3.10m}$
$\frac{836.579}{836.30}$	Pd ₄₆ ⁹⁸	$\frac{97.91242}{97.91272}$	46n	2+0	8+0	18+0	10+5	1+1	1+0	0+0	$\frac{1.855M}{ce 17.7m}$
$\frac{845.752}{845.26}$	Pd ₄₆ ⁹⁹	$\frac{98.91124}{98.91177}$	46n	2+0	8+0	18+0	9+6	1+1	1+0	0+0	$\frac{3.392M}{ce 21.4m}$
$\frac{856.071}{856.37}$	Pd ₄₆ ¹⁰⁰	$\frac{99.90883}{99.90851}$	46n	2+0	8+0	18+0	9+7	1+0	0+1	0+0	$\frac{360K}{ce 3.63d}$
$\frac{864.099}{864.64}$	Pd ₄₆ ¹⁰¹	$\frac{100.90887}{100.90829}$	46n	2+0	8+0	18+0	7+8	1+1	1+0	0+0	$\frac{1.980M}{ce 8.47h}$
$\frac{875.776}{875.21}$	Pd ₄₆ ¹⁰²	$\frac{101.90500}{101.90561}$	46n	2+0	8+0	18+0	7+9	0+1	1+0	0+0	$\frac{st}{1.02\%}$
$\frac{882.445}{882.83}$	Pd ₄₆ ¹⁰³	$\frac{102.90651}{102.90609}$	46n	2+0	8+0	18+0	5+10	1+1	1+0	0+0	$\frac{543.0K}{ce 16.991d}$
$\frac{892.763}{892.82}$	Pd ₄₆ ¹⁰⁴	$\frac{103.90410}{103.90404}$	46n	2+0	8+0	18+0	5+11	1+0	0+1	0+0	$\frac{st}{11.14\%}$
$\frac{899.435}{899.91}$	Pd ₄₆ ¹⁰⁵	$\frac{104.90560}{104.90509}$	46n	2+0	8+0	18+0	5+11	0+1	0+1	0+0	$\frac{st}{22.33\%}$
$\frac{909.964}{909.47}$	Pd ₄₆ ¹⁰⁶	$\frac{105.90296}{105.90349}$	46n	2+0	8+0	18+0	2+13	1+1	1+0	0+0	$\frac{st}{27.33\%}$
$\frac{916.418}{916.01}$	Pd ₄₆ ¹⁰⁷	$\frac{106.90470}{106.90513}$	46n	2+0	8+0	18+0	1+14	1+0	1+1	0+0	$\frac{35.0K}{\beta^- 6.5 \cdot 10^6 a}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{925.591}{925.24}$	Pd_{46}^{108}	$\frac{107.90351}{107.90389}$	46n	2+0	8+0	18+0	0+15	1+0	1+1	0+0	$\frac{\text{st}}{26.46\%}$
$\frac{931.122}{931.39}$	Pd_{46}^{109}	$\frac{108.90624}{108.90595}$	46n	2+0	8+0	18+0	1+14	0+2	0+1	0+0	$\frac{1.1161\text{M}}{\beta^-13.7012\text{h}}$
$\frac{940.295}{940.21}$	Pd_{46}^{110}	$\frac{109.90506}{109.90515}$	46n	2+0	8+0	18+0	0+15	0+2	0+1	0+0	$\frac{2.002\text{M}}{\frac{2\beta^-6\cdot 10^{17}\text{a}}{11.72\%}}$
$\frac{945.598}{945.93}$	Pd_{46}^{111}	$\frac{110.90803}{110.90767}$	46n	2+0	8+0	16+1	0+15	0+2	1+1	0+0	$\frac{2.215\text{M}}{\beta^-23.4\text{m}}$
$\frac{953.840}{954.34}$	Pd_{46}^{112}	$\frac{111.90785}{111.90731}$	46n	2+0	8+0	16+1	0+15	0+3	0+1	0+0	$\frac{260\text{K}}{\beta^-21.03\text{h}}$
$\frac{960.294}{959.77}$	Pd_{46}^{113}	$\frac{112.90958}{112.91015}$	46n	2+0	8+0	14+2	0+15	1+3	0+1	0+0	$\frac{3.439\text{M}}{\beta^-93.0\text{s}}$
$\frac{966.965}{967.64}$	Pd_{46}^{114}	$\frac{113.91109}{113.91036}$	46n	2+0	8+0	14+2	0+15	0+4	0+1	0+0	$\frac{1.440\text{M}}{\beta^-2.42\text{m}}$
$\frac{972.916}{972.62}$	Pd_{46}^{115}	$\frac{114.91336}{114.91368}$	46n	2+0	8+0	12+3	0+16	0+2	1+1	0+1	$\frac{4.557\text{M}}{\beta^-25.0\text{s}}$
$\frac{980.399}{980.24}$	Pd_{46}^{116}	$\frac{115.91399}{115.91416}$	46n	2+0	8+0	10+4	0+16	1+2	0+2	1+0	$\frac{2.711\text{M}}{\beta^-11.8\text{s}}$
$\frac{984.893}{984.89}$	Pd_{46}^{117}	$\frac{116.91784}{116.91784}$	46n	2+0	8+0	10+4	0+16	1+2	0+2	0+1	$\frac{5.758\text{M}}{\beta^-4.30\text{s}}$
$\frac{991.554}{991.90}$	Pd_{46}^{118}	$\frac{117.91935}{117.91898}$	46n	2+0	8+0	10+4	0+16	0+3	0+2	0+1	$\frac{4.163\text{M}}{\beta^-1.90\text{s}}$
$\frac{996.048}{996.12}$	Pd_{46}^{119}	$\frac{118.92319}{118.92311}$	46n	2+0	8+0	8+5	0+16	0+3	0+2	1+1	$\frac{7.238\text{M}}{\beta^-0.92\text{s}}$
$\frac{1002.71}{1002.7}$	Pd_{46}^{120}	$\frac{119.92469}{119.92469}$	46n	2+0	8+0	6+6	0+16	1+3	0+2	1+1	$\frac{5.342\text{M}}{\beta^-500\text{ms}}$
$\frac{1006.87}{1006.9}$	Pd_{46}^{121}	$\frac{120.92890}{120.92887}$	46n	2+0	8+0	4+7	1+15	1+4	0+2	1+1	$\frac{8.10\text{M}}{\beta^-285\text{ms}}$
$\frac{1013.54}{1013.4}$	Pd_{46}^{122}	$\frac{121.93041}{121.93055}$	46n	2+0	8+0	4+7	1+15	0+5	0+2	1+1	$\frac{6.400\text{M}}{\beta^-175\text{ms}}$
$\frac{1017.71}{1017.4}$	Pd_{46}^{123}	$\frac{122.93459}{122.93493}$	46n	2+0	8+0	4+7	0+15	0+6	0+2	1+1	$\frac{8.900\text{M}}{\beta^-174\text{ms}}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p - T_{1/2}}$
$\frac{1023.85}{1023.7}$	Pd_{46}^{124}	$\frac{123.93667}{123.93688}$	46n	2+0	8+0	4+7	0+15	0+6	0+3	0+1	$\frac{7.400M}{\beta^- 38ms}$
$\frac{1027.79}{-}$	Pd_{46}^{125}	$\frac{124.94110}{-}$	46n	2+0	8+0	2+8	0+15	1+5	0+4	0+1	$\frac{2.710M}{n\beta^- >230ns}$
$\frac{1033.09}{-}$	Pd_{46}^{126}	$\frac{125.94408}{-}$	46n	2+0	8+0	0+9	0+15	1+5	1+4	0+1	$\frac{3.810M}{n\beta^- >230ns}$
$\frac{1039.77}{-}$	Pd_{46}^{127}	$\frac{126.94557}{-}$	46n	2+0	8+0	0+9	0+15	0+6	1+4	0+1	$\frac{7.430M}{\beta^-}$
$\frac{1045.08}{-}$	Pd_{46}^{128}	$\frac{127.94853}{-}$	46n	2+0	8+0	0+9	0+15	0+6	0+5	0+1	$\frac{2.120M}{2\beta^- >394ns}$

$E_c(\text{MeV})$ = 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