

TAVOLA PERIODICA DEI NUCLEI ATOMICI

configurazione dei livelli nucleari degli isotopi **ARSENICO Z = 33-a**

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{464.504}{464.86}$	As ⁶⁰ ₂₇	$\frac{59.99351}{59.99313}$	$\frac{33}{27n}$	2+0	8+0	11+0	3+0	4+0	5+0	0+0	$\frac{3.8224M}{p}$
$\frac{484.846}{484.59}$	As ⁶¹ ₂₈	$\frac{60.98034}{60.98062}$	$\frac{33}{28n}$	2+0	8+0	12+0	4+0	4+0	3+0	0+0	$\frac{2.9375M}{p}$
$\frac{499.510}{499.57}$	As ⁶² ₂₉	$\frac{61.97326}{61.97320}$	$\frac{33}{29n}$	2+0	8+0	13+0	3+0	4+0	3+0	0+0	$\frac{1.98735M}{p}$
$\frac{516.104}{516.50}$	As ⁶³ ₃₀	$\frac{62.96411}{62.96369}$	$\frac{33}{30n}$	2+0	8+0	14+0	3+0	3+0	3+0	0+0	$\frac{1.6427M}{p < 43ns}$
$\frac{530.613}{530.27}$	As ⁶⁴ ₃₁	$\frac{63.95720}{63.95757}$	$\frac{33}{31n}$	2+0	8+0	14+0	4+0	4+0	1+0	0+0	$\frac{15.00M}{ce18.0ms}$
$\frac{546.173}{545.80}$	As ⁶⁵ ₃₂	$\frac{64.94916}{64.94956}$	$\frac{33}{32n}$	2+0	8+0	15+0	4+0	2+0	2+0	0+0	$\frac{9.54M}{ce128ms}$
$\frac{558.734}{558.39}$	As ⁶⁶ ₃₃	$\frac{65.94434}{65.94471}$	33n	2+0	8+0	16+0	2+0	3+0	2+0	0+0	$\frac{9.58M}{ce 95.77ms}$
$\frac{571.170}{571.61}$	As ⁶⁷ ₃₃	$\frac{66.93966}{66.93919}$	33n	2+0	8+0	17+0	2+0	3+0	0+1	0+0	$\frac{6.072M}{ce 42.5s}$
$\frac{582.325}{581.93}$	As ⁶⁸ ₃₃	$\frac{67.93635}{67.93677}$	33n	2+0	8+0	17+0	2+1	1+1	1+0	0+0	$\frac{8.084M}{ce 151.6s}$
$\frac{593.637}{594.19}$	As ⁶⁹ ₃₃	$\frac{68.93287}{68.93227}$	33n	2+0	8+0	18+0	2+1	0+1	0+1	0+0	$\frac{4.01M}{ce 15.2m}$
$\frac{603.667}{603.52}$	As ⁷⁰ ₃₃	$\frac{69.93077}{69.93092}$	33n	2+0	8+0	18+0	0+3	1+0	0+1	0+0	$\frac{6.220M}{ce 52.6m}$
$\frac{614.815}{615.14}$	As ⁷¹ ₃₃	$\frac{70.92746}{70.92711}$	33n	2+0	8+0	16+1	0+4	1+0	1+0	0+0	$\frac{2.013M}{ce65.30h}$
$\frac{623.905}{623.55}$	As ⁷² ₃₃	$\frac{71.92637}{71.92675}$	33n	2+0	8+0	16+1	1+4	0+1	0+0	0+0	$\frac{4.356M}{ce26.0h}$
$\frac{633.931}{634.35}$	As ⁷³ ₃₃	$\frac{72.92427}{72.92383}$	33n	2+0	8+0	14+2	1+5	1+0	0+0	0+0	$\frac{345K}{ce80.30d}$
$\frac{641.895}{642.32}$	As ⁷⁴ ₃₃	$\frac{73.92439}{73.92393}$	33n	2+0	8+0	14+2	0+6	1+0	0+0	0+0	$\frac{2.5624M}{ce17.77d}$
$\frac{651.927}{652.56}$	As ⁷⁵ ₃₃	$\frac{74.92228}{74.92160}$	33n	2+0	8+0	14+2	0+7	0+0	0+0	0+0	st
$\frac{659.887}{659.89}$	As ⁷⁶ ₃₃	$\frac{75.92239}{75.92239}$	33n	2+0	8+0	12+3	1+7	0+0	0+0	0+0	$\frac{2.9610M}{\beta^{-}1.0942d}$

$\frac{E_c(\text{MeV})}{E_s(\text{MeV})}$	Sa	$\frac{m_c}{m_s}$	n	1	2	3	4	5	6	7	$\frac{E_p(\text{eV})}{p-T_{1/2}}$
$\frac{667.851}{669.59}$	As_{33}^{77}	$\frac{76.92252}{76.92065}$	33n	2+0	8+0	12+3	0+8	0+0	0+0	0+0	$\frac{683.0K}{\beta^- 38.83h}$
$\frac{675.810}{676.56}$	As_{33}^{78}	$\frac{77.92264}{77.92183}$	33n	2+0	8+0	10+4	1+8	0+0	0+0	0+0	$\frac{4.208M}{\beta^- 90.7m}$
$\frac{683.774}{685.45}$	As_{33}^{79}	$\frac{78.92275}{78.92095}$	33n	2+0	8+0	10+4	0+9	0+0	0+0	0+0	$\frac{2.281M}{\beta^- 9.01m}$
$\frac{691.734}{692.05}$	As_{33}^{80}	$\frac{79.92287}{79.92253}$	33n	2+0	8+0	8+5	1+9	0+0	0+0	0+0	$\frac{5.588M}{\beta^- 15.2s}$
$\frac{699.698}{700.49}$	As_{33}^{81}	$\frac{80.92299}{80.92213}$	33n	2+0	8+0	8+5	0+10	0+0	0+0	0+0	$\frac{3.856M}{\beta^- 33.3s}$
$\frac{705.589}{706.36}$	As_{33}^{82}	$\frac{81.92533}{81.92450}$	33n	2+0	8+0	6+6	0+10	1+0	0+0	0+0	$\frac{7.491M}{\beta^- 19.1s}$
$\frac{713.549}{713.98}$	As_{33}^{83}	$\frac{82.92545}{82.92498}$	33n	2+0	8+0	4+7	1+10	1+0	0+0	0+0	$\frac{5.671M}{\beta^- 13.4s}$
$\frac{718.317}{718.25}$	As_{33}^{84}	$\frac{83.92899}{83.92906}$	33n	2+0	8+0	2+8	1+10	1+0	1+0	0+0	$\frac{10.094M}{\beta^- 4.2s}$
$\frac{723.092}{723.57}$	As_{33}^{85}	$\frac{84.93253}{84.93202}$	33n	2+0	8+0	2+8	1+10	1+0	0+1	0+0	$\frac{9.224M}{\beta^- 2.021s}$
$\frac{727.183}{727.47}$	As_{33}^{86}	$\frac{85.93680}{85.93650}$	33n	2+0	8+0	0+9	1+10	1+0	0+1	1+0	$\frac{11.541M}{\beta^- 945ms}$
$\frac{732.404}{732.37}$	As_{33}^{87}	$\frac{86.93986}{86.93990}$	33n	2+0	8+0	0+9	1+10	0+1	1+0	0+1	$\frac{10.808M}{\beta^- 560ms}$
$\frac{735.768}{735.75}$	As_{33}^{88}	$\frac{87.94492}{87.94494}$	33n	2+0	6+1	0+9	0+10	1+1	1+1	1+0	$\frac{13.00M}{\beta^- >300ns}$
$\frac{739.420}{739.67}$	As_{33}^{89}	$\frac{88.94966}{88.94939}$	33n	2+0	6+1	0+9	0+10	0+1	1+2	1+0	$\frac{12.10M}{\beta^- >300ns}$
$\frac{742.110}{742.05}$	As_{33}^{90}	$\frac{89.95544}{89.95550}$	33n	2+0	4+2	0+9	1+9	1+1	0+3	1+0	$\frac{14.60M}{\beta^- >300ns}$
$\frac{745.263}{745.53}$	As_{33}^{91}	$\frac{90.96072}{90.96043}$	33n	2+0	4+2	0+9	0+9	1+2	1+2	0+1	$\frac{13.40M}{\beta^- >150ns}$
$\frac{747.972}{747.67}$	As_{33}^{92}	$\frac{91.96647}{91.96680}$	33n	2+0	4+2	0+9	1+8	0+3	0+3	0+1	$\frac{15.70M}{\beta^- >300ns}$

n = numero di neutroni centrali attivi

$p + d$ = (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