Table II. Influences on primary nuclei

EXPLANATION OF TABLE

This table gives for each of the 847 primary nuclei the up to three most important contributing data and their *influences* ($\times 100$) on its mass, as given by the flow-of-information matrix.

Nucleus (primaries only)

Influence $Influence \ (\times 100)$ brought to the determination of the mass of the nucleus, by

the piece of data represented by the equation in following column

Equation In mass-doublet equation: In mass-triplet equation: In nuclear reaction:

 $H = {}^{1}H, N = {}^{14}N, Rb^{x}, Rb^{y}$: different K^{m}, Cs^{m}, Cs^{n} : $D = {}^{2}H, O = {}^{16}O,$ mixtures of isomers upper isomers, $C = {}^{12}C.$ or contaminants. see NUBASE.

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
$0\pi^+$	100.0	π^+				
$0\pi^-$	99.6	$\pi^+(2\beta^+)\pi^-$				
1 n	100.0	1 H(n, γ) 2 H				
¹ H	77.9	H_{12} -C	17.8	CH ₄ -O	2.8	C H ₂ -N
² H	61.3	D_6 -C	24.2	$C_2 D_8^{4} - {}^{40}Ar$	10.0	$C D_4^{-20} Ne$
³ H	72.7	$^{3}\text{H}_{4}$ -C	27.3	$^{3}\text{H}(\beta^{\circ})^{3}\text{He}$		3
³ He	67.7	$^{3}\text{H}(\beta^{-})^{3}\text{He}$	24.0	$^{3}\mathrm{He_{4}}\mathrm{-C}$	8.3	$\mathrm{H}\mathrm{D}{-^{3}\mathrm{He}}$
⁴ He	100.0	⁴ He ₃ -C	0.2	144 g 3xx 6xx 141 g		
⁶ He ⁶ Li	99.8	$^{7}\text{Li}(d, ^{3}\text{He})^{6}\text{He} - ^{19}\text{F}()^{18}\text{O}$	0.2	¹⁴⁴ Sm(³ He, ⁶ He) ¹⁴¹ Sm		
⁷ Li	100.0	⁶ Li ₂ -C				
⁷ Be	100.0 100.0	6 Li(n, γ) 7 Li 7 Li(p,n) 7 Be				
⁸ He	94.4	⁴ He(⁶⁴ Ni, ⁶⁰ Ni) ⁸ He	5.1	197 Au(α , 8 He) 193 Au	0.4	9 He(γ ,n) 8 He
⁸ Li	100.0	$^{7}\text{Li}(n,\gamma)^{8}\text{Li}$	3.1	Au(a, 11c) Au	0.4	ric(y,n) ric
⁸ Be	99.9	$^{8}\text{Be}(\alpha)^{4}\text{He}$	0.1	9 Be(γ ,n) 8 Be		
8B	100.0	⁶ Li(³ He,n) ⁸ B	0.1	Be(7,11) Be		
⁹ He	91.3	${}^{9}\text{He}(\gamma,n){}^{8}\text{He}$	8.7	⁹ Be(¹⁴ C, ¹⁴ O) ⁹ He		
⁹ Li	58.4	¹⁰ Be(d, ³ He) ⁹ Li	41.6	⁷ Li(t,p) ⁹ Li		
⁹ Be	88.0	$^{9}\mathrm{Be}(\gamma,\mathrm{n})^{8}\mathrm{Be}$	11.0	$^{6}\text{Li}(\alpha,p)^{9}\text{Be}$	1.0	9 Be(n, γ) 10 Be
¹⁰ Be	98.9	9 Be(n, γ) 10 Be	1.1	¹⁰ Be(d, ³ He) ⁹ Li		
$^{10}{ m B}$	100.0	10 B(α ,d) 12 C		,		
¹¹ Li	54.7	¹¹ Li-C _{.917}	45.3	$^{11}{\rm B}(\pi^-,\pi^+)^{11}{\rm Li}$		
11 B	100.0	10 B(n, γ) 11 B				
¹¹ C	100.0	$^{11}C(\beta^{+})^{11}B$				
¹² N	100.0	$^{14}N(p,t)^{12}N$				
¹³ C	57.5	C D- ¹³ C H	36.8	C D-13C H	5.7	$^{13}C-C_{1.083}$
¹³ N	100.0	$^{12}C(p,\gamma)^{13}N$				
¹⁴ B	100.0	¹⁴ C(⁷ Li, ⁷ Be) ¹⁴ B				
¹⁴ C	79.9	$^{14}C H_2 - N D$	20.1	$C D_2 - {}^{14}C H_2$		14
¹⁴ N	56.2	CH ₂ -N	31.6	N_2 -CO	11.9	$^{14}N-C_{1.167}$
¹⁴ O	57.9	26 Mg(3 He,t) 26 Al $^{-14}$ N() 14 O	42.1	$^{14}N(p,n)^{14}O$		
¹⁵ N	67.4	C D H ⁻¹⁵ N	17.6	$C H_3 - ^{15}N$	15.0	$^{15}N_2 - ^{28}Si H_2$
¹⁵ O	100.0	$^{15}N(p,n)^{15}O$	2.2	G.Y. 0	0.2	V
¹⁶ O	97.3	$C_4 - O_3$	2.3	C H ₄ -O	0.3	N ₂ -C O
¹⁷ O ¹⁷ F	99.5	$^{16}O(n,\gamma)^{17}O$	0.2	$^{17}{\rm O}({\rm p},\gamma)^{18}{\rm F}$	0.2	$^{17}\text{O}(\text{n},\gamma)^{18}\text{O}$
18O	100.0 45.2	$^{16}{ m O}({ m p},\gamma)^{17}{ m F}$ $^{18}{ m F}(m{eta}^+)^{18}{ m O}$	37.5	$^{17}{ m O}({ m n},\gamma)^{18}{ m O}$	17.1	¹⁸ O(³ He,p) ²⁰ F
¹⁸ F	76.1	$^{17}O(p,\gamma)^{18}F$	23.9	$^{18}\text{F}(\beta^+)^{18}\text{O}$	17.1	О(не,р) Т
¹⁹ F	98.6	C D ₄ -H ¹⁹ F	1.2	¹⁹ F(p,n) ¹⁹ Ne	0.2	$^{19}F(n,\gamma)^{20}F$
¹⁹ Ne	72.8	$^{19}\text{Ne}-^{22}\text{Ne}_{.864}$	27.2	¹⁹ F(p,n) ¹⁹ Ne	0.2	$\Gamma(\Pi,\gamma) = \Gamma$
²⁰ F	99.8	$^{19}F(n,\gamma)^{20}F$	0.2	¹⁸ O(³ He,p) ²⁰ F		
²⁰ Ne	44.0	20 Ne = 40 Ar	34.4	$C D_4 - {}^{20}Ne$	21.6	$^{20}{ m Ne}_2{-}^{40}{ m Ar}$
²² Ne	99.9	²² Ne-C	0.1	¹⁹ Ne ⁻²² Ne _{.864}	21.0	1102
²³ Na	100.0	²³ Na-C _{1.917}		.864		
23 Mg	73.5	24 Mg(p,d) 23 Mg	26.5	23 Na(p,n) 23 Mg		
²⁴ Mg	95.9	24 Mg $-$ C ₂	4.1	24 Mg(n, γ) 25 Mg		
²⁵ Mg	55.9	24 Mg(n, γ) 25 Mg	39.8	25 Mg(n, γ) 26 Mg	4.3	25 Mg(p, γ) 26 Al
²⁶ Mg	75.4	²⁶ Mg-C _{2 167}	21.5	25 Mg(n, γ) 26 Mg	1.5	$^{26}Mg(p,n)^{26}Al$
²⁶ Al	67.2	25 Mg(p, γ) 26 Al	21.7	²⁶ Mg(p,n) ²⁶ A1	6.9	26 Mg(3 He,t) 26 Al $-^{14}$ N() 14 O
²⁷ Na	88.3	$^{27}Na-^{27}A1$	11.7	²⁷ Na-C _{2.25}		
²⁷ Al	83.9	27 Al $(p,\gamma)^{28}$ Si	16.1	26 Mg(p, γ) 27 Al		
²⁸ Na	100.0	²⁸ Na-C _{2 333}				
²⁸ Si	57.1	$C_2 D_2 = {}^{28}Si$	42.9	$^{15}{ m N}_2{-}^{28}{ m Si~H}_2$		
²⁹ Na	100.0	²⁹ Na-C _{2 417}				
31 P	83.5	$^{31}P(p,\alpha)^{28}Si$	16.5	$^{31}P(p,\gamma)^{32}S$		
³² S	90.8	$^{32}S(n,\gamma)^{33}S$	8.7	$^{31}P(p,\gamma)^{32}S$	0.5	$C^{32}S_2 - {}^{74}Ge H_2$
³³ S	87.0	$^{33}S(n,\gamma)^{34}S$	8.8	$^{32}S(n,\gamma)^{33}S$	4.2	$^{33}S(p,\gamma)^{34}C1$
³⁴ S	94.7	$^{34}S(n,\gamma)^{35}S$	5.1	$^{33}S(n,\gamma)^{34}S$	0.2	$^{34}S(^{3}He,t)^{34}Cl$
³⁴ Cl	87.0	33 S(p, γ) 34 Cl	13.0	³⁴ S(³ He,t) ³⁴ Cl		
³⁵ S ³⁵ Cl	95.5	$^{35}S(\beta^{-})^{35}C1$	4.5	$^{34}S(n,\gamma)^{35}S$		100 25
22 C1	62.3	$C_3 - {}^{35}Cl H$	17.1	$C_5 H_{10} - {}^{35}Cl_2$	5.9	199 Hg $-C_2$ 35 Cl $_5$

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
³⁶ S	64.8	36 S(p, γ) 37 Cl	35.2	³⁶ S(p,n) ³⁶ Cl		
³⁶ Cl	96.6	$^{35}Cl(n,\gamma)^{36}Cl$	3.4	³⁶ S(p,n) ³⁶ Cl		
³⁶ Ar	99.4	³⁶ Ar–C ₂	0.6	$^{39}K - ^{36}Ar_{1.082}$		25
³⁷ Cl	70.9	$C_3 H_6 O_2 - {}^{37}Cl_2$ ${}^{38}Ar - {}^{39}K_{.974}$	8.1	$C_5 H_{12} - {}^{35}Cl^{37}Cl$	7.9	$C_2 D_8 - {}^{37}C1 H_3$
³⁸ Ar ³⁸ K	69.2	³⁶ Ar- ³⁹ K ₉₇₄	19.4	$^{38}Ar(p,\gamma)^{39}K$	11.4	$^{37}\text{Cl}(p,\gamma)^{38}\text{Ar}$
³⁸ K ^m	82.5 97.7	³⁸ K ^m (IT) ³⁸ K ³⁸ Ar(p,n) ³⁸ K ^m	17.5 2.3	³⁸ Ar(p,n) ³⁸ K ³⁸ K ^m (IT) ³⁸ K		
³⁹ K	47.1	$^{39}K - ^{36}Ar_{1.083}$	39.6	39 K(n, γ) 40 K	7.4	41 K $-^{39}$ K $_{1.051}$
40 Ar	65.6	$C_3 H_4 - {}^{40}Ar$	24.3	$C_2 D_8 - {}^{40}Ar$	6.7	$^{1.051}_{20}$ Ne ₂ $-^{40}$ Ar
⁴⁰ K	51.3	39 K(n, γ) 40 K	37.7	40 K(n, γ) 41 K	11.0	40 K(n,p) 40 Ar
⁴⁰ Ca	94.2	39 K(p, γ) 40 Ca	5.8	40 Ca $(n,\gamma)^{41}$ Ca	0.1	40 Ca(p, γ) 41 Sc
⁴¹ Ar	91.2	40 Ar(n, γ) 41 Ar	8.8	$^{41}\text{Ar}(\beta^{-})^{41}\text{K}$		
⁴¹ K	48.4	40 K(n, γ) 41 K	41.9	40 Ar(p, γ) 41 K	4.7	$^{41}_{^{1}}K^{-39}_{^{1},051}$ $^{41}_{^{1}}Ca(n,\gamma)^{42}Ca$
⁴¹ Ca	87.2	40 Ca $(n,\gamma)^{41}$ Ca	10.7	41 K(p,n) 41 Ca	2.0	41 Ca(n, γ) 42 Ca
⁴¹ Sc	88.0	40 Ca(p, γ) 41 Sc	12.0	⁴¹ Sc ^r (IT) ⁴¹ Sc		
41 Sc ^r	84.2	$^{41}\text{Sc}^{r}(\text{IT})^{41}\text{Sc}$	15.8	41 Ca(p, γ) 42 Sc r $-^{40}$ Ca() 41 Sc r	2.2	42.0 ()43.0
⁴² Ca ⁴² Sc	92.6	41 Ca(n, γ) 42 Ca	4.1	42 Ca(3 He,t) 42 Sc- 26 Mg() 26 Al 42 Ca(3 He,t) 42 Sc- 26 Mg() 26 Al	2.2	⁴² Ca(n,γ) ⁴³ Ca ⁵⁴ F (³ H γ) ⁵⁴ G (⁴² G γ) ⁴² G
⁴² Sc	71.1	42 Sc ^r (IT) 42 Sc 41 Ca(p, γ) 42 Sc ^r $-^{40}$ Ca() 41 Sc ^r	23.0	⁴² Ca(³ He,t) ⁴² Sc- ²⁰ Mg() ²⁰ Al	5.9	54 Fe(3 He,t) 54 Co $-^{42}$ Ca() 42 Sc
⁴³ Ca	80.5 96.7	42 Ca(n, γ) 43 Ca	19.5 3.3	42 Sc ^r (IT) ⁴² Sc 43 Ca(n, γ) ⁴⁴ Ca		
⁴⁴ Ca	94.7	$Ca(n,\gamma)$ Ca $^{43}Ca(n,\gamma)^{44}Ca$	3.8	44 Ca(p, γ) 45 Sc	1.5	44 Ca(n, γ) 45 Ca
⁴⁵ Ca	97.9	44 Ca(n, γ) 45 Ca	1.9	$^{45}\text{Ca}(\beta^-)^{45}\text{Sc}$	0.2	⁴⁶ Ca(d,t) ⁴⁵ Ca
⁴⁵ Sc	42.6	44 Ca(p, γ) 45 Sc	42.2	45 Sc(p, γ) 46 Ti	15.2	$^{45}\text{Ca}(\beta^-)^{45}\text{Sc}$
⁴⁶ Ca	89.8	46 Ca(n, γ) 47 Ca	10.2	⁴⁶ Ca(d,t) ⁴⁵ Ca	10.2	Su(p) 50
⁴⁶ Ti	57.0	$^{46}\text{Ti}(n,\gamma)^{47}\text{Ti}$	40.7	45 Sc(p, γ) 46 Ti	1.3	⁴⁶ Ti ³⁷ Cl- ⁴⁸ Ti ³⁵ Cl
⁴⁷ Ca	82.8	$^{47}\text{Ca}(\beta^-)^{47}\text{Sc}$	10.1	46 Ca(n, γ) 47 Ca	7.1	⁴⁸ Ca(d,t) ⁴⁷ Ca
⁴⁷ Sc	87.1	$^{47}\text{Sc}(\beta^{-})^{47}\text{Ti}$	12.9	$^{47}\text{Ca}(\beta^{-})^{47}\text{Sc}$		
⁴⁷ Ti	43.6	$^{47}\text{Ti}(n,\gamma)^{48}\text{Ti}$	36.2	⁴⁶ Ti(n,γ) ⁴⁷ Ti	18.5	C ³⁵ Cl- ⁴⁷ Ti
⁴⁸ Ca	45.4	48 Ca(p, γ) 49 Sc	38.2	48 Ca(d,t) 47 Ca	16.3	48 Ca(p,n) 48 Sc
⁴⁸ Sc	58.2	$^{48}\text{Sc}(\beta^{-})^{48}\text{Ti}$	41.8	⁴⁸ Ca(p,n) ⁴⁸ Sc		4040
⁴⁸ Ti	56.3	$^{47}\text{Ti}(n,\gamma)^{48}\text{Ti}$	22.1	¹³ C ³⁵ Cl- ⁴⁸ Ti	20.7	$^{48}\text{Ti}(n,\gamma)^{49}\text{Ti}$
⁴⁹ Sc	61.3	$^{49}\text{Sc}(\beta^{-})^{49}\text{Ti}$	38.7	48 Ca(p, γ) 49 Sc	4.5	49m; 37 cs 51xx 35 cs
⁴⁹ Ti ⁵⁰ Ti	79.3	$^{48}\text{Ti}(n,\gamma)^{49}\text{Ti}$	16.0	$^{49}\text{Ti}(n,\gamma)^{50}\text{Ti}$	4.7	⁴⁹ Ti ³⁷ Cl- ⁵¹ V ³⁵ Cl
⁵⁰ Cr	84.0	$^{49}\text{Ti}(n,\gamma)^{50}\text{Ti}$ $^{50}\text{Cr}(p,\gamma)^{51}\text{Mn}$	16.0	50 Ti(p, γ) 51 V 50 Cr(n, γ) 51 Cr	0.2	⁵⁰ Cr(³ He,t) ⁵⁰ Mn
⁵⁰ Mn	52.0 67.5	50 Cr(3 He,t) 50 Mn- 54 Fe() 54 Co	48.0 32.5	50 Cr(3 He,t) 50 Mn	0.2	CI(He,t) Mil
51 V	49.3	$^{51}V(p,n)^{51}Cr$	32.3	$^{50}\text{Ti}(p,\gamma)^{51}\text{V}$	9.5	⁴⁹ Ti ³⁷ Cl- ⁵¹ V ³⁵ Cl
⁵¹ Cr	50.9	50 Cr(n, γ) 51 Cr	49.1	⁵¹ V(p,n) ⁵¹ Cr	7.5	II CI V CI
⁵¹ Mn	54.5	54 Fe(p, α) 51 Mn	45.5	50 Cr(p, γ) 51 Mn		
⁵² Cr	76.2	52 Cr(n, γ) 53 Cr	20.0	52 Cr(p, γ) 53 Mn	3.8	$^{51}V(p,\gamma)^{52}Cr$
⁵³ Cr	78.4	53 Cr(n, γ) 54 Cr	21.6	52 Cr(n, γ) 53 Cr		47//
⁵³ Mn	66.9	52 Cr(p, γ) 53 Mn	33.1	56 Fe(p, α) 53 Mn		
⁵⁴ Cr	80.1	54 Cr(p, γ) 55 Mn	19.9	⁵³ Cr(n,γ) ⁵⁴ Cr		
⁵⁴ Fe	55.8	54 Fe(n, γ) 55 Fe	22.4	54 Fe(p, γ) 55 Co	11.6	54 Fe(p, α) 51 Mn
⁵⁴ Co	79.5	54 Fe(3 He,t) 54 Co $-^{42}$ Ca() 42 Sc	20.5	50 Cr(3 He,t) 50 Mn- 54 Fe() 54 Co		
⁵⁵ Mn	37.2	55 Fe(ε) 55 Mn	34.0	55 Mn(p, γ) 56 Fe	23.4	55 Mn(n, γ) 56 Mn
⁵⁵ Fe	59.6	55 Fe(ε) 55 Mn	40.4	54 Fe(n, γ) 55 Fe		
⁵⁵ Co	69.0	54 Fe(p, γ) 55 Co	31.0	⁵⁸ Ni(p,α) ⁵⁵ Co		
⁵⁶ Mn ⁵⁶ Fe	75.9	55 Mn(n, γ) 56 Mn	24.1	⁵⁶ Mn- ⁸⁵ Rb _{.659}	10.0	56E-(>57.C-
⁵⁷ Mn	60.7 74.5	55 Mn(p, γ) 56 Fe 57 Mn 85 Rb $_{.671}$	20.1 25.5	56 Fe(n, γ) 57 Fe 55 Mn(t,p) 57 Mn	18.8	56 Fe(p, γ) 57 Co
⁵⁷ Fe	79.8	56 Fe(n, γ) 57 Fe	11.7	57 Fe(n, γ) 58 Fe	6.7	⁵⁷ Fe(p,n) ⁵⁷ Co
⁵⁷ Co	35.6	60 Ni(p, α) ⁵⁷ Co	31.5	58 Fe(p, γ) 59 Co $-^{56}$ Fe() 57 Co	24.3	⁵⁶ Fe(p,γ) ⁵⁷ Co
⁵⁷ Ni	52.0	⁵⁷ Ni- ⁸⁵ Rb _{.671}	28.5	⁵⁹ Ni(p,t) ⁵⁷ Ni	19.4	$^{58}\text{Ni}(^{3}\text{He},\alpha)^{57}\text{Ni}$
⁵⁸ Fe	84.3	57 Fe(n, γ) 58 Fe	15.7	58 Fe(p, γ) 59 Co $-^{56}$ Fe() 57 Co	17.7	1.1(110,00) 111
⁵⁸ Co	61.0	⁵⁹ Co(d.t) ⁵⁸ Co	25.0	60 Ni(d, α) 58 Co	14.0	57 Fe(p, γ) 58 Co
⁵⁸ Ni	87.7	⁵⁸ Ni(n,γ) ⁵⁹ Ni	11.1	58 Ni(p, α) 55 Co	1.2	⁵⁸ Ni(³ He,α) ⁵⁷ Ni
⁵⁹ Co	69.9	⁵⁹ Co(p,n) ⁵⁹ Ni	14.4	62 Ni(p, α) 59 Co	8.9	58 Fe(p, γ) 59 Co $-^{56}$ Fe() 57 Co
⁵⁹ Ni	67.4	⁵⁹ Ni(n,γ) ⁶⁰ Ni	18.8	⁵⁹ Co(p,n) ⁵⁹ Ni	12.1	58 Ni(n, γ) 59 Ni
⁶⁰ Ni	44.1	⁶⁰ Ni(n,γ) ⁶¹ Ni	31.9	59 Ni $(n,\gamma)^{60}$ Ni	16.6	60Ni-85Rb _{.706}
61 Ni	55.4	60 Ni $(n,\gamma)^{61}$ Ni	44.6	61 Ni $(n,\gamma)^{62}$ Ni		50

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
⁶² Ni	33.8	⁶¹ Ni(n,γ) ⁶² Ni	31.2	62 Ni $(p,\gamma)^{63}$ Cu	21.2	⁶² Ni(n,γ) ⁶³ Ni
⁶³ Ni	61.2	63 Ni(β^{-}) 63 Cu	20.1	62 Ni $(n,\gamma)^{63}$ Ni	18.7	63Ni(n,γ)64Ni
⁶³ Cu	37.2	$^{63}Ni(\beta^{-})^{63}Cu$	28.6	⁶² Ni(p,γ) ⁶³ Cu	26.2	⁶³ Cu(n,γ) ⁶⁴ Cu
⁶³ Zn	73.1	64 Zn(d,t) 63 Zn	26.9	63 Cu(p,n) 63 Zn		
⁶⁴ Ni	44.7	63 Ni $(n,\gamma)^{64}$ Ni	26.0	⁶⁴ Ni(p,n) ⁶⁴ Cu	21.9	⁶⁴ Ni- ⁸⁵ Rb _{.753}
⁶⁴ Cu	67.7	⁶³ Cu(n,γ) ⁶⁴ Cu	17.9	$^{64}\mathrm{Cu}(\beta^-)^{64}\mathrm{Zn}$	14.3	⁶⁴ Ni(p,n) ⁶⁴ Cu
⁶⁴ Zn	47.7	64 Zn(n, γ) 65 Zn	28.6	$^{64}\mathrm{Cu}(\beta^-)^{64}\mathrm{Zn}$	19.0	64 Zn(p, γ) 65 Ga
⁶⁴ Ga	75.2	64Ga-85Rb 753	24.8	⁶⁴ Zn(n n) ⁶⁴ Ga		
⁶⁵ Ni	92.2	64 Ni $(n,\gamma)^{65}$ Ni	7.8	65 Ni —85 Rh acc		
⁶⁵ Cu	36.9	65 Cu(p,n) 65 Zn	36.8	65 Cu $-^{85}$ Rb $_{765}$	10.9	⁶⁵ Cu(n,γ) ⁶⁶ Cu
⁶⁵ Zn	50.6	64 Zn(n, γ) 65 Zn	42.5	65 Cu(p,n) 65 Zn	6.9	71 Ga(3 He,t) 71 Ge $-^{65}$ Cu() 65 Zn
⁶⁵ Ga	64.4	64 Zn(p, γ) 65 Ga	35.6	65 Ga $-^{85}$ Rb $_{.765}$		
⁶⁶ Cu	88.9	65 Cu(n, γ) 66 Cu	11.1	66 Cu $-^{85}$ Rb $_{776}$		
⁶⁶ Zn	82.8	66 Zn(p, α) 63 Cu	14.7	66 Zn(n, γ) 67 Zn	2.4	67 Zn N $-^{66}$ Zn 15 N
⁶⁷ Zn	70.4	66 Zn(n, γ) 67 Zn	16.0	67 Zn(p,n) 67 Ga	11.6	67 Zn N $-^{66}$ Zn 15 N
⁶⁷ Ga	54.8	⁶⁷ Zn(p,n) ⁶⁷ Ga	45.2	$^{70}\mathrm{Ge}(\mathrm{p},\alpha)^{67}\mathrm{Ga}$		
⁶⁸ Zn	97.9	67 Zn(n, γ) 68 Zn	2.1	⁷⁰ Zn ³⁵ Cl— ⁶⁸ Zn ³⁷ Cl		
⁶⁸ Ge	99.3	⁷⁰ Ge(p,t) ⁶⁸ Ge	0.7	69 Se(ε p) 68 Ge		
⁶⁹ Ga	65.3	⁶⁹ Ga- ⁸⁵ Rb _{.812}	34.7	69 Ga $(n,\gamma)^{70}$ Ga		
⁶⁹ Ge	100.0	⁶⁹ Ga(p,n) ⁶⁹ Ge		60 ~ (0)60 .		
⁶⁹ As	77.8	69 As(β^{+}) 69 Ge	22.2	$^{69}\text{Se}(\beta^+)^{69}\text{As}$		
⁶⁹ Se	70.0	⁶⁹ Se(εp) ⁶⁸ Ge	30.0	$^{69}\text{Se}(\beta^+)^{69}\text{As}$		
⁷⁰ Zn	90.7	70 Zn(p,n) 70 Ga	9.3	⁷⁰ Zn ³⁵ Cl- ⁶⁸ Zn ³⁷ Cl	2.2	707 ()70 6
⁷⁰ Ga	64.9	69 Ga $(n, \gamma)^{70}$ Ga	31.8	⁷⁰ Ga= ⁸⁵ Rb _{.824}	3.3	70 Zn(p,n) 70 Ga
⁷⁰ Ge	64.1	70 Ge $(n, \gamma)^{71}$ Ge	20.3	70 Ge(p, α) 67 Ga	6.0	$C_4 H_6 O^{-70}Ge$
⁷¹ Ga ⁷¹ Ge	52.1	71 Ga $(n,\gamma)^{72}$ Ga 71 Ge $(\varepsilon)^{71}$ Ga	32.5	71 Ge(ε) 71 Ga	13.3 2.9	⁷¹ Ga- ⁸⁵ Rb _{.835} ⁷¹ Ga(³ He,t) ⁷¹ Ge- ⁶⁵ Cu() ⁶⁵ Zn
⁷² Ga	61.4	⁷² Ga− ⁸⁵ Rb _{.847}	35.7 47.0	70 Ge $(n, \gamma)^{71}$ Ge 71 Ga $(n, \gamma)^{72}$ Ga	2.9	Ga("He,t)" Ge="Cu()" Zii
⁷² Ge	53.0 71.7	72 Ge(n, γ) 73 Ge	15.9	70 Ge $H_2 - ^{72}$ Ge	11.2	$C_4 H_8 O - ^{72}Ge$
⁷² Se	99.0	⁷⁴ Se(p,t) ⁷² Se	1.0	$^{72}\text{Br}(\beta^+)^{72}\text{Se}$	11.2	C_4 H_8 $O=$ Ge
⁷² Br	55.0	72 Kr $(\beta^+)^{72}$ Br	38.7	$^{72}\text{Br}(\beta^+)^{72}\text{Se}$	6.3	73 Br $-^{72}$ Br
⁷² Kr	99.6	72 Kr $-^{85}$ Rb _{.847}	0.4	$^{72}\text{Kr}(\beta^+)^{72}\text{Br}$	0.5	ы– ы
⁷³ Ge	62.3	73 Ge(n, γ) 74 Ge	26.6	72 Ge $(n,\gamma)^{73}$ Ge	11.2	$C_4 H_9 O^{-73}Ge$
⁷³ As	79.9	⁷² Ge(³ He,d) ⁷³ As	20.0	⁷⁴ Se(d, ³ He) ⁷³ As	0.1	$^{73}\text{Se}(\beta^+)^{73}\text{As}$
⁷³ Se	99.0	$^{73}\text{Se}(\beta^{+})^{73}\text{As}$	1.0	73 Br(β^{+}) 73 Se	0.1	50(p) 115
⁷³ Br	63.9	73 Br(β^{+}) 73 Se	31.6	⁷³ Br-C _{6,083}	4.5	$^{73}Br - ^{72}Br$
⁷⁴ Ge	35.1	73 Ge(n, γ) 74 Ge	25.9	⁷³ Br-C _{6.083} ⁷⁶ Ge ³⁵ Cl- ⁷⁴ Ge ³⁷ Cl	24.9	$ m C^{32}S_2 - ^{74}Ge\ H_2$
⁷⁴ As	81.9	74 As(β^{+}) 74 Ge	18.1	74 As(β^{-}) 74 Se		2 2
⁷⁴ Se	98.5	74 Se(n, γ) 75 Se	1.2	74 As(β^{-}) 74 Se	0.3	74 Se(d, 3 He) 73 As
⁷⁴ Kr	95.7	⁷⁴ Kr- ⁸⁵ Rb ₉₇₁	4.3	74 Rb(β^{+}) 74 Kr		
⁷⁴ Rb	84.2	74 Rb $-^{85}$ Rb $_{871}$	15.8	74 Rb(β^{+}) 74 Kr		
⁷⁵ As	63.2	75 As(p,n) 75 Se	15.8	75 As(n, γ) 76 As	12.0	78 Se(p, α) 75 As
⁷⁵ Se	90.6	75 Se(n, γ) 76 Se	8.0	⁷⁵ As(p,n) ⁷⁵ Se	1.4	74 Se(n, γ) 75 Se
⁷⁶ Ge	53.0	76 Ge $-^{76}$ Se	43.2	⁷⁶ Ge ³⁵ Cl— ⁷⁴ Ge ³⁷ Cl	2.8	⁷⁶ Ge(³ He,d) ⁷⁷ As
⁷⁶ As	84.1	75 As(n, γ) 76 As	15.9	76 As(β^-) 76 Se		
⁷⁶ Se	46.6	76 Ge $-^{76}$ Se	26.5	76 Se(n, γ) 77 Se	17.3	⁷⁶ Se ³⁵ Cl- ⁷⁴ Ge ³⁷ Cl
⁷⁶ Kr	84.8	76 Kr $-^{85}$ Rb $_{.894}$	15.2	80 Kr(α , 6 He) 78 Kr $-^{78}$ Kr() 76 Kr		
⁷⁷ As	33.2	80 Se(p, α) 77 As	31.4	76 Ge(3 He,d) 77 As	17.7	77 As(β^{-}) 77 Se
⁷⁷ Se	72.3	76 Se(n, γ) 77 Se	26.1	77 Se $(n,\gamma)^{78}$ Se	1.6	77 As $(\beta^{-})^{77}$ Se
⁷⁸ Se	63.9	77 Se(n, γ) 78 Se	15.6	80 Se(p,t) 78 Se	10.4	$C_6 H_6 - {}^{78}Se$
⁷⁸ Kr	95.4	⁷⁸ Kr- ⁸⁵ Rb _{.918}	3.8	80 Kr(α , 6 He) 78 Kr- 78 Kr() 76 Kr	0.7	⁷⁸ Kr(³ He,d) ⁷⁹ Rb
⁷⁹ Rb	64.6	79 Rb- $C_{6.583}$ 80 Ge(β^-) 80 As	35.4	⁷⁸ Kr(³ He,d) ⁷⁹ Rb		
⁸⁰ Ge	77.8	^{δ0} Ge(β ⁻) ^{δ0} As	22.2	⁸² Se(¹⁴ C, ¹⁶ O) ⁸⁰ Ge		
80 As	86.5	⁸⁰ Se(t, ³ He) ⁸⁰ As	13.5	80 Ge(β^-) 80 As	1.00	80 0 0 77 •
⁸⁰ Se	42.7	⁸⁰ Se(p,t) ⁷⁸ Se	27.7	⁸² Se ³⁵ Cl- ⁸⁰ Se ³⁷ Cl	16.0	80 Se(p, α) ⁷⁷ As
⁸⁰ Kr	86.1	⁸⁰ Kr- ⁸⁵ Rb _{.941}	10.3	80 Kr(d,p) 81 Kr	1.7	80 Kr(α , 6 He) 78 Kr $-^{78}$ Kr() 76 Kr
⁸⁰ Rb	87.6	80 Rb- $C_{6.667}$ 81 Br $(n,\gamma)^{82}$ Br	12.4	⁸⁰ Kr(p,n) ⁸⁰ Rb		87p1 /311 087g 81p 091vr
81Br	79.6	⁰¹ Br(n,γ) ⁰² Br	19.3	81 Kr(ε) 81 Br	1.1	87Rb(3He,t)87Sr-81Br()81Kr
81 Kr	74.4	81 Kr $(\varepsilon)^{81}$ Br	21.4	80 Kr(d,p)81 Kr	4.2	87 Rb(3 He,t) 87 Sr $-^{81}$ Br() 81 Kr
⁸¹ Rb ⁸² Se	64.8	81Rb-C _{6.75}	35.2	⁸⁰ Kr(³ He,d) ⁸¹ Rb ⁸² Se ³⁵ Cl- ⁸⁰ Se ³⁷ Cl	16.5	82g - (\\ 80g -
Se	44.0	82 Se $-^{82}$ Kr	33.2	-Se -CISe -CI	16.5	82 Se(p,t) 80 Se

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
82Br	79.6	$^{82}{ m Br}(eta^-)^{82}{ m Kr}$	20.4	81 Br $(n,\gamma)^{82}$ Br		
⁸² Kr	54.0	82Kr-85Rb _{.965}	25.8	82Se-82Kr	16.1	$^{82}{\rm Br}(\beta^{-})^{82}{\rm Kr}$
⁸² Rb	84.0	$^{82}Rh^{m}(IT)^{82}Rh$	10.8	82 Rb-C _{6.833}	5.2	$^{82}\text{Rb}(\beta^{+})^{82}\text{Kr}$
32 Rb m	88.0	$^{82}\text{Rb}^{m} - ^{85}\text{Rb}_{065}$	12.0	$^{82}\text{Rb}^{m}(\text{IT})^{82}\text{Rb}$		4 /
³² Sr	55.9	82 Sr-C _{6.833} 83 Br(β^-) 83 Kr	44.1	84 Sr(p,t) 82 Sr		
³³ Br	50.1	83 Br $(\beta^{-})^{83}$ Kr	49.9	82Se(3He,d)83Br		
⁸³ Kr	74.7	83 Kr(n, γ) 84 Kr	12.7	83 Br(β^{-}) 83 Kr	12.6	$C_6 H_{11}^{-83} Kr$
⁸³ Rb	65.0	83 Rb- $C_{6.917}$	35.0	82 Kr(3 He,d) 83 Rb		0 11
⁸⁴ Se	92.3	83 Rb-C _{6.917} 82 Se(t,p) 84 Se	7.7	$^{84}\mathrm{Se}(\beta^-)^{84}\mathrm{Br}$		
⁸⁴ Br	92.2	84 Br(β^{-}) 84 Kr	7.8	$^{84}\text{Se}(\beta^{-})^{84}\text{Br}$		
⁸⁴ Kr	39.9	84 Rb(β^{+}) 84 Kr	25.1	83 Kr(n, γ) 84 Kr	23.2	$C_6 H_{12} - {}^{84}Kr$
⁸⁴ Rb	40.0	84 Rb(β^{+}) 84 Kr	24.0	84 Rb(β^-) 84 Sr	21.9	85 Rb(p,d) 84 Rb
⁸⁴ Sr	38.9	84 Rb(β^{-}) 84 Sr	28.0	$C_6 H_{12} - {}^{84}Sr$	14.0	84 Sr(d,p) 85 Sr
85 Kr	94.8	85 Kr(β^{-}) 85 Rb	5.2	84 Kr(d,p) 85 Kr		
⁸⁵ Rb	100.0	$C_6 H_{14} - {}^{85}Rb$				
⁸⁵ Sr	89.4	85Rb(3He,t)85Sr	10.6	84 Sr(d,p) 85 Sr		
⁸⁶ Rb	99.1	85 Rb(n, γ) 86 Rb	0.9	86 Rb(β^{-}) 86 Sr		
⁸⁶ Sr	51.1	86 Sr(n, γ) 87 Sr	47.8	$^{86}{ m Rb}(eta^{-})^{86}{ m Sr}$	1.0	86 Sr(p,t) 84 Sr
⁸⁷ Rb	100.0	$C_6 H_{16} - {}^{87}Rb$				
⁸⁷ Sr	48.6	Sr(n, γ)°' Sr	46.1	87 Rb(3 He,t) 87 Sr- 81 Br() 81 Kr	5.3	87 Sr(n, γ) 88 Sr
⁸⁸ Sr	94.6	87 Sr(n, γ) 88 Sr	5.4	88 Sr(n, γ) 89 Sr		
⁸⁹ Rb	56.2	89 Rb(β^{-}) 89 Sr	42.4	$^{89}\text{Rb} - ^{85}\text{Rb}_{1.047}$	1.3	91Rb-93Rb _{.489} 89Rb _{.511}
⁸⁹ Sr	94.6	88 Sr $(n,\gamma)^{89}$ Sr	4.5	$^{89}{\rm Sr}(\beta^-)^{89}{\rm Y}$	1.0	$^{89}\text{Rb}(\beta^{-})^{89}\text{Sr}^{-}$
89 Y	47.6	89 Y $(n,\gamma)^{90}$ Y	37.8	89 Sr(β^-) 89 Y	11.5	$^{89}Y(p,\gamma)^{90}Zr$
⁸⁹ Zr	82.4	89 Zr(β^{+}) 89 Y	17.6	90 Zr(d,t) 89 Zr		
90Rb	60.7	90 Rb $-^{85}$ Rb $_{1.059}$	39.3	90 Rb(β^{-}) 90 Sr		
⁹⁰ Sr	95.1	$^{90}\text{Sr}(\beta^{-})^{90}\text{Y}$	4.9	90 Rb(β^{-}) 90 Sr		00 - 00
90 Y	52.3	$^{89}Y(n,\gamma)^{90}Y$	43.9	90 Y $(\beta^{-})^{90}$ Zr	3.8	$^{90}\text{Sr}(\beta^{-})^{90}\text{Y}$
⁹⁰ Zr	70.2	90 Zr(n, γ) 91 Zr	22.4	90 Y $(\beta^{-})^{90}$ Zr	5.9	89 Y(p, γ) 90 Zr
⁹¹ Rb	74.8	$^{91}\text{Rb} - ^{85}\text{Rb}_{1.071}$	12.9	$^{91}\text{Rb}(\beta^{-})^{91}\text{Sr}^{x}$	12.3	⁹¹ Rb- ⁹³ Rb _{.489} ⁸⁹ Rb _{.511}
⁹¹ Sr	59.6	$^{91}\text{Sr}(\beta^{-})^{91}\text{Y}$	29.1	$^{91}\text{Sr}-^{85}\text{Rb}_{1.071}$	7.6	92 Rb(β^- n) 91 Sr
91 Sr ^x	73.2	$^{91}\text{Rb}(\beta^{-})^{91}\text{Sr}^{x}$	26.8	$^{91}\text{Sr}^{x}(\text{IT})^{91}\text{Sr}$		
91 Y	89.0	$^{91}Y(\beta^{-})^{91}Zr$	11.0	${}^{91}\text{Sr}(\hat{\beta}^{-}){}^{91}\text{Y}$		9177.0->917
⁹¹ Zr	64.2	91 Zr(n, γ) 92 Zr	28.9	90 Zr(n, γ) 91 Zr	6.9	$^{91}Y(\beta^{-})^{91}Zr$
⁹² Rb	53.0	92Rb-85Rb _{1.082}	31.5	$^{92}\text{Rb}(\beta^{-})^{92}\text{Sr}$	15.1	$^{92}\text{Rb}(\beta^{-}n)^{91}\text{Sr}$
⁹² Sr ⁹² Y	88.7	$^{92}\text{Sr}-^{85}\text{Rb}_{1.082}$	7.2	$^{92}\text{Rb}(\beta^{-})^{92}\text{Sr}$	2.9	$^{92}\text{Sr}(\hat{\beta}^{-})^{92}\text{Y}$
⁹² Y ⁹² Zr	57.0	$^{92}Y(\beta^{-})^{92}Zr$	29.7	${}^{92}\text{Sr}(\hat{\beta}^{-}){}^{92}\text{Y}$	13.3	94 Zr(d, α) 92 Y
⁹² Nb	54.7	$^{92}Zr(n,\gamma)^{93}Zr$	35.8	91 Zr(n, γ) 92 Zr	8.3	92 Zr(p,n) 92 Nb
⁹² Mo	65.4	92 Zr(p,n) 92 Nb 92 Mo(n, γ) 93 Mo	34.6	93 Nb $(\gamma,n)^{92}$ Nb	21.7	94Mo 35Cl-92Mo 37Cl
⁹³ Rb	52.2	$^{93}\text{Rb}-^{85}\text{Rb}_{1.094}$	26.1	$C_7 H_8 - {}^{92}Mo$	21.7	$^{93}\text{Rb}(\beta^-\text{n})^{92}\text{Sr}$
⁹³ Sr	66.2	93Sr-85Rb _{1.094}	24.8	93 Rb(β^{-}) 93 Sr 93 Rb(β^{-}) 93 Sr	6.3	$^{93}\text{Sr}(\beta^{-})^{93}\text{Y}$
93 Y	65.4 75.6	93 Y(β^-) 93 Zr	24.3 24.4	93 Sr(β ⁻) 93 Y	10.3	$\sim SI(p^{-})^{\sim} I$
⁹³ Zr	43.4	92 Zr(n, γ) 93 Zr	29.6	94 Zr(d,t) 93 Zr	26.1	$^{93}{ m Zr}(eta^-)^{93}{ m Nb}$
93Nb	42.8	93 Nb(n, γ) 94 Nb	36.6	93 Zr(β^-) 93 Nb	11.2	93 Nb(γ ,n) 92 Nb
93 Mo	52.2	93Nb(p,n)93Mo	47.7	$^{92}\text{Mo}(\text{n},\gamma)^{93}\text{Mo}$	11.2	110(7,11) 110
94Rb	80.5	$^{94}\text{Rb} - ^{85}\text{Rb}_{1.106}$	15.3	$^{94}\text{Rb}(\beta^{-})^{94}\text{Sr}$	4.3	94Rb-95Rb.660 92Rb.341
94Sr	59.5	$^{94}\text{Sr}-^{85}\text{Rb}_{1.106}$	29.8	$^{94}\text{Sr}(\beta^-)^{94}\text{Y}$	10.7	$^{94}\text{Rb}(\beta^-)^{94}\text{Sr}$
⁹⁴ Y	58.4	$^{94}Y(\beta^{-})^{94}Zr$	29.6	$^{94}Sr(\beta^{-})^{94}Y$	12.0	96 Zr(d, α) 94 Y
⁹⁴ Zr	54.0	94 Zr(n, γ) 95 Zr	36.2	$^{94}Zr(d,t)^{93}Zr$	7.1	$C_7 H_{10}^{-94} Zr$
94Nb	57.2	93 Nb(n, γ) 94 Nb	42.8	$^{94}\text{Nb}(\beta^{-})^{94}\text{Mo}$	7.1	C ₇ H ₁₀ Z ₁
⁹⁴ Mo	79.2	94 Mo(n, γ) 95 Mo	11.9	$^{94}\text{Nb}(\beta^{-})^{94}\text{Mo}$	6.6	C- H = 94Mo
95Rb	54.2	95 Rb(β^-) 95 Sr	17.1	95Rb-96Rb _{.742} 92Rb _{.258}	13.1	$C_7 H_{10}^{-94} Mo$ $^{94}Rb - ^{95}Rb_{.660}$ $^{92}Rb_{.341}$
⁹⁵ Sr	64.5	$^{95}Sr-^{85}Rb_{1.118}$	32.3	$^{95}\text{Sr}(\beta^{-})^{95}\text{Y}$	3.2	$^{95}\text{Rb}(\beta^{-})^{95}\text{Sr}$
⁹⁵ Y	59.4	95 Y(β^-) 95 Zr	28.5	$^{95}Sr(\beta^{-})^{95}Y$	12.1	96 Zr(t, α) 95 Y
95Zr	41.0	94 Zr(n, γ) 95 Zr	39.6	$^{95}Zr(\beta^{-})^{95}Nb$	17.3	96 Zr(d,t) 95 Zr
95Nb	88.8	$^{95}\text{Nb}(\beta^{-})^{95}\text{Mo}$	11.2	95 Zr(β^-) 95 Nb	17.5	21 (a,t) 21
95 Mo	69.6	⁹⁵ Mo(n,γ) ⁹⁶ Mo	20.8	94 Mo(n, γ) 95 Mo	9.3	95 Nb(β^{-}) 95 Mo
95Tc	97.3	$^{95}\text{Tc}(\beta^{+})^{95}\text{Mo}$	2.7	95 Ru(β^{+}) 95 Tc	7.5	1.0(p) 1110
95Ru	84.9	96Ru(p,d)95Ru	15.1	95 Ru(β^{+}) 95 Tc		
96Rb	37.2	96 Rb(β^-) 96 Sr	26.7	⁹⁶ Rb- ⁹⁷ Rb _{.742} ⁹³ Rb _{.258}	19.0	95Rb-96Rb _{.742} 92Rb _{.258}
110	51.2	κο(ρ) οι	20.7	742 10.258	17.0	NO NO.742 NO.25

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
⁹⁶ Sr	71.9	$^{96}{ m Sr}(eta^-)^{96}{ m Y}$	28.1	96 Rb(β^-) 96 Sr		
⁹⁶ Y	82.0	$^{96}Y(\beta^{-})^{96}Zr$	18.0	$^{96}\text{Sr}(\beta^{-})^{96}\text{Y}$		
⁹⁶ Zr	54.8	96 Zr(n, γ) 97 Zr	43.0	96 Zr(d,t) 95 Zr	1.1	96 Zr(d, α) 94 Y
⁹⁶ Mo	62.1	96 Mo(n 197 Mo	30.4	95 Mo(n, γ) 96 Mo	7.5	$C_7 H_{12}^{-96} Mo$
⁹⁶ Ru	79.3	$C_7 H_{12} = {}^{96}Ru$ ${}^{97}Rb(\beta^-){}^{97}Sr$	7.4	⁹⁶ Ru(¹⁶ O, ¹² C) ¹⁰⁰ Pd	7.2	⁹⁶ Ru(¹⁶ O, ¹³ C) ⁹⁹ Pd
⁹⁷ Rb	61.2	$^{97}\text{Rb}(\beta^{-})^{97}\text{Sr}$	14.8	$^{97}\text{Rb} - ^{98}\text{Rb}_{.660} ^{95}\text{Rb}_{.340}$	11.1	⁹⁶ Rb- ⁹⁷ Rb _{.742} ⁹³ Rb _{.258}
⁹⁷ Sr	89.6	$^{97}\text{Sr}(\beta^{-})^{97}\text{Y}$	10.4	$^{97}\text{Rb}(\beta^{-})^{97}\text{Sr}$		
⁹⁷ Y	96.5	97 Y(β^-) 97 Zr	3.5	$^{97}\text{Sr}(\beta^{-})^{97}\text{Y}$		07****0 > 07=
⁹⁷ Zr	55.5	97 Zr(β^{-}) 97 Nb	44.4	96 Zr(n, γ) 97 Zr	0.1	$^{97}Y(\beta^{-})^{97}Zr$
⁹⁷ Nb ⁹⁷ Mo	75.6	$^{97}\text{Nb}(\beta^{-})^{97}\text{Mo}$	24.4	$^{97}Zr(\beta^{-})^{97}Nb$	12.0	G V O 9714
⁹⁷ Tc	44.8	⁹⁷ Mo(n,γ) ⁹⁸ Mo	37.4	96 Mo(n, γ) 97 Mo 97 Mo(p,n) 97 Tc	12.8	$C_5 H_5 O_2 - {}^{97}Mo$
98Rb	52.9	96 Mo(3 He,d) 97 Tc 98 Rb(β^{-}) 98 Sr	47.1	97ph 98ph 95ph		
⁹⁸ Sr	80.4 95.5	$^{98}\text{Sr}(\beta^{-})^{98}\text{Y}$	19.6 4.5	97 Rb $-^{98}$ Rb $_{.660}$ 95 Rb $_{.340}$ 98 Rb(β^-) 98 Sr		
98 Y	96.1	$^{98}Y(\beta^{-})^{98}Zr$	3.9	$^{98}\text{Sr}(\beta^{-})^{98}\text{Y}$		
⁹⁸ Zr	97.5	$^{96}Zr(t,p)^{98}Zr$	2.5	$^{98}\text{Y}(\beta^{-})^{98}\text{Zr}$		
98 Mo	55.2	$^{97}\text{Mo}(n,\gamma)^{98}\text{Mo}$	33.4	$^{98}\text{Mo}(n,\gamma)^{99}\text{Mo}$	8.6	$C_5 H_6 O_2 - {}^{98}Mo$
98Tc	57.4	99Tc(p,d) ⁹⁸ Tc	28.7	97Mo(³ He,d) ⁹⁸ Tc	11.2	$^{98}Mo(p,n)^{98}Tc$
⁹⁸ Ru	86.2	$C_7 H_{14}^{-98} Ru$	7.8	$^{98}\text{Tc}(\beta^-)^{98}\text{Ru}$	5.9	99Ru-98Ru
99Rb	73.8	$^{99}\text{Rb}(\beta^{-})^{99}\text{Sr}$	15.9	⁹⁷ Rb- ⁹⁹ Rb _{.490} ⁹⁵ Rb _{.511}	10.3	⁹⁷ Rb- ⁹⁹ Rb _{.653} ⁹³ Rb _{.348}
⁹⁹ Sr	91.4	$^{99}\text{Sr}(\beta^{-})^{99}\text{Y}$	8.6	$^{99}\text{Rb}(\beta^{-})^{99}\text{Sr}$	10.0	.653 10.348
⁹⁹ Y	99.3	$^{99}Y(\beta^{-})^{99}Zr$	0.7	$^{99}\text{Sr}(B^-)^{99}\text{Y}$		
⁹⁹ Zr	99.5	99 Zr(β^{-}) 99 Nb	0.5	$^{99}Y(\beta^{-})^{99}Zr$		
⁹⁹ Nb	99.8	¹⁰⁰ Mo(d, ³ He) ⁹⁹ Nb	0.2	$^{99}Zr(\beta^{-})^{99}Nb$		
⁹⁹ Mo	66.4	$^{98}\text{Mo(n,}\gamma)^{99}\text{Mo}$	33.6	$^{99}\text{Mo}(\beta^{-})^{99}\text{Tc}$		
⁹⁹ Tc	58.4	$^{99}\text{Mo}(\beta^{-})^{99}\text{Tc}$	40.0	$^{99}\text{Tc}(\beta^{-})^{99}\text{Ru}$	1.7	99Tc(p,d)98Tc
⁹⁹ Ru	45.4	$^{99}\text{Tc}(\beta^{-})^{99}\text{Ru}$	45.3	⁹⁹ Ru(n,γ) ¹⁰⁰ Ru	8.3	$C_7 H_{15}^{-99} Ru$
99Rh	94.2	99 Rh(β^{+}) 99 Ru	5.8	$^{99}\text{Pd}(\beta^{+})^{99}\text{Rh}$		
⁹⁹ Pd	50.7	$^{99}\text{Pd}(\beta^{+})^{99}\text{Rh}$	49.3	⁹⁶ Ru(¹⁶ O, ¹³ C) ⁹⁹ Pd		
100 Mo	57.6	¹⁰⁰ Mo ³⁵ Cl ⁻⁹⁸ Mo ³⁷ Cl	35.8	$C_7 H_{16} - {}^{100}Mo$	6.5	100 Mo(3 He,p) 102 Tc
¹⁰⁰ Ru	54.6	99 Ru(n, γ) 100 Ru	39.7	100 Ru $(n,\gamma)^{101}$ Ru	5.4	$C_7 H_{16}^{-100} Ru$
l00Rh	82.0	100 Rh $(\beta^{+})^{100}$ Ru	18.0	100 Rh $-C_{8,333}$		
¹⁰⁰ Pd	82.8	¹⁰² Pd(p,t) ¹⁰⁰ Pd	17.0	⁹⁶ Ru(¹⁶ O, ¹² C) ¹⁰⁰ Pd	0.2	100 Ag(β^+) 100 Pd
100 Ag	86.7	100 Ag(β^+) 100 Pd	13.3	$^{100}\text{Cd}(\beta^+)^{100}\text{Ag}$		
100 Cd	77.2	$^{100}\text{Cd}(\beta^+)^{100}\text{Ag}$	22.8	100Cd-C _{8.333}		o ** 101=
¹⁰¹ Ru ¹⁰² Tc	59.9	100 Ru(n, γ) 101 Ru	24.6	101 Ru $(n,\gamma)^{102}$ Ru	15.5	$C_8 H_5^{-101} Ru$
102 IC 102 Ru	80.0	104 Ru(d, α) 102 Tc	20.0	¹⁰⁰ Mo(³ He,p) ¹⁰² Tc	7.2	C II 102 D
¹⁰² Ru ¹⁰² Rh	75.4	101 Ru(n, γ) 102 Ru	16.9	102 Ru(n, γ) 103 Ru 102 Rh(β ⁻) 102 Pd	7.3	$C_8 H_6^{-102} Ru$
¹⁰² Pd	50.2 92.3	102 Rh $(\beta^+)^{102}$ Ru 102 Pd $(n,\gamma)^{103}$ Pd	49.8 6.8	$^{102}\text{Rh}(\beta^{-})^{102}\text{Pd}$	1.0	¹⁰² Pd(p,t) ¹⁰⁰ Pd
¹⁰³ Ru	92.3 83.0	102 Ru(n, γ) 103 Ru	10.4	¹⁰⁴ Ru(d,t) ¹⁰³ Ru- ¹⁴⁸ Gd() ¹⁴⁷ Gd	6.6	103 Ru(β^-) 103 Rh
103Rh	79.9	103 Ru(β^-) 103 Rh	13.3	$C_8 H_7 - {}^{103}Rh$	6.8	$^{103}\text{Pd}(\varepsilon)^{103}\text{Rh}$
¹⁰³ Pd	92.3	$^{103}\text{Pd}(\varepsilon)^{103}\text{Rh}$	7.0	$^{102}_{102}$ Pd $(n,\gamma)^{103}$ Pd	0.3	103 Ag(β^+) 103 Pd
103 Ag	62.3	$^{103}\text{Cd}(\beta^+)^{103}\text{Ag}$	37.7	103 Ag(β^+) 103 Pd	0.7	ng(p) ru
¹⁰³ Cd	72.5	¹⁰⁶ Cd(³ He, ⁶ He) ¹⁰³ Cd	27.5	$^{103}\text{Cd}(\beta^+)^{103}\text{Ag}$		
104Ru	64.6	104 Ru(d,t) 103 Ru $^{-148}$ Gd() 147 Gd	18.0	104 Ru $(n,\gamma)^{105}$ Ru	15.7	$C_8 H_8 - ^{104}Ru$
¹⁰⁴ Cd	99.8	$^{106}Cd(p,t)^{104}Cd$	0.2	$^{104} \text{In}(\beta^+)^{104} \text{Cd}$		
¹⁰⁴ In	82.4	104 In(β^{+}) 104 Cd	17.6	$^{105}In^{-104}In$		
¹⁰⁵ Ru	81.9	¹⁰⁴ Ru(n,γ) ¹⁰⁵ Ru	18.1	105 Ru(β^{-}) 105 Rh		
105Rh	57.9	105 Ru(β^-) 105 Rh	42.1	105 Rh(β^{-}) 105 Pd		
105 D A	51.0	$^{105}Pd(n,\gamma)^{106}Pd$	47.3	105 Rh(β^{-}) 105 Pd	1.3	105 Ag $(\varepsilon)^{105}$ Pd
¹⁰⁵ Ag	47.5	107 Ag(p,t) 105 Ag	34.6	105 Ag $(\varepsilon)^{105}$ Pd	17.9	$^{105}\text{Cd}(\beta^+)^{105}\text{Ag}$
105 Cd	79.6	$^{105}\text{Cd}(\beta^+)^{105}\text{Ag}$	20.1	$^{106}\text{Cd}(^{3}\text{He},\alpha)^{105}\text{Cd}$	0.3	105 In(β^{+}) 105 Cd
¹⁰⁵ In	99.4	$^{105}\text{In}(\beta^+)^{105}\text{Cd}$	0.6	105 In $^{-104}$ In		
¹⁰⁶ Pd	48.8	105 Pd $(n,\gamma)^{106}$ Pd	32.7	106 Pd(n, γ) 107 Pd	16.5	$C_8 H_{10}^{-106} Pd$ $^{107} Ag(p,d)^{106} Ag$
106 A o	79.4	106 Ag(ε) 106 Pd	12.2	105 Pd(3 He,d) 106 Ag	8.4	107 Ag(p,d) 106 Ag
¹⁰⁶ Cd	89.0	$C_8 H_{10}^{-106} Cd$	4.4	$^{106}\text{Cd}(^{3}\text{He},\alpha)^{105}\text{Cd}$	3.5	$^{106}\text{In}(\beta^+)^{106}\text{Cd}$
¹⁰⁶ In	82.4	$^{106}In(\beta^{+})^{106}Cd$	17.1	106 In $-$ C _{8.833} 107 Sn $-^{106}$ Sn	0.5	$^{106}{ m Sn}(m{\beta}^+)^{106}{ m In}$
¹⁰⁶ Sn	90.3	106 Sn(β^+) 106 In	9.7	107 Sn $^{-106}$ Sn		
¹⁰⁷ Rh ¹⁰⁷ Pd	91.2	¹⁰⁸ Pd(d, ³ He) ¹⁰⁷ Rh	8.8	$^{107}_{107}\text{Rh}(\beta^-)^{107}_{107}\text{Pd}$		107 - 107
IU/To 1	66.8	$^{106}\text{Pd}(n,\gamma)^{107}\text{Pd}$	32.2	$^{107}\text{Pd}(\beta^{-})^{107}\text{Ag}$	0.9	$^{107}\text{Rh}(\beta^{-})^{107}\text{Pd}$

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹⁰⁷ Ag	49.7	$^{107}\text{Pd}(\beta^-)^{107}\text{Ag}$	35.0	C ₈ H ₁₁ - ¹⁰⁷ Ag	7.8	¹⁰⁹ Ag(p,t) ¹⁰⁷ Ag
107 Cd	96.3	$^{107}\text{Cd}(\beta^+)^{107}\text{Ag}$	3.7	107 In(β^{+}) 107 Cd		
¹⁰⁷ In	83.4	$^{107}\text{In}(\beta^+)^{107}\text{Cd}$	16.6	¹⁰⁷ In-C _{8.917}		
¹⁰⁷ Sn ¹⁰⁸ Pd	59.6	$^{108}\text{Sn} - ^{107}\text{Sn}$	40.4	$^{107}\text{Sn} - ^{106}\text{Sn}$	2.0	110 p.1/ (>108 p.1
108Cd	91.3 67.9	$C_8 H_{12} - {}^{108}Cd$	6.1 27.1	$C_8 H_{12}^{-108} Pd$ $^{108}Cd(^3He,d)^{109}In-^{110}Cd()^{111}In$	2.0 5.0	110 Pd(p,t) 108 Pd 108 In(β^+) 108 Cd
¹⁰⁸ In	82.2	$^{108}_{10}$ In(β^+) 108 Cd	11.4	108 In-C ₉	6.4	$^{108}\text{Sn}(\beta^+)^{108}\text{In}$
¹⁰⁸ Sn	54.3	$^{108}\text{Sn}(\beta^+)^{108}\text{In}$	44.4	$^{108}Sn-C_{9}$	1.4	$^{108}\text{Sn} - ^{107}\text{Sn}$
109 Pd	91.3	$^{109}\text{Pd}(\beta^{-})^{109}\text{Ag}$	8.7	$^{108}\text{Pd}(n,\gamma)^{109}\text{Pd}$	1.1	Sii Sii
¹⁰⁹ Αg	70.5	109 Ag(n, γ) 110 Ag	10.7	$C_8 H_{13}^{-109} Ag$	9.5	$^{109}\mathrm{Cd}(\varepsilon)^{109}\mathrm{Ag}$
¹⁰⁹ Cd	84.7	$^{109}\text{Cd}(\varepsilon)^{109}\text{Ag}$	15.3	$^{109}\text{In}(\beta^+)^{109}\text{Cd}$., ,
¹⁰⁹ In	53.0	$^{109} In(\beta^{+})^{109} Cd$	47.0	$^{108}\text{Cd}(^{3}\text{He,d})^{109}\text{In} - ^{110}\text{Cd}()^{111}\text{In}$		
¹¹⁰ Ru	55.1	110Ru-Co + 67	44.9	110 Ru(β^-) 110 Rh		
¹¹⁰ Rh	41.6	$^{110}\text{Rh}-\text{C}_{0.167}$	33.3	110 Ru(β^{-}) 110 Rh	25.1	110 Rh(β^-) 110 Pd
¹¹⁰ Pd	49.3	¹¹⁰ Pd(p,t) ¹⁰⁸ Pd	26.9	$C_8 H_{14} - {}^{110}Pd$	13.5	¹¹² Cd(¹⁴ C, ¹⁶ O) ¹¹⁰ Pd
¹¹⁰ Ag	70.6	110 Ag(β^{-}) 110 Cd	29.4	¹⁰⁹ Ag(n, γ) ¹¹⁰ Ag		
¹¹⁰ Cd	68.2	$^{110}\text{Cd}(n,\gamma)^{111}\text{Cd}$	23.5	110 Ag(β^-) 110 Cd	8.4	¹⁰⁸ Cd(³ He,d) ¹⁰⁹ In- ¹¹⁰ Cd() ¹¹¹ In
¹¹¹ Cd	59.7	111 Cd(n, γ) 112 Cd	31.7	¹¹⁰ Cd(n,γ) ¹¹¹ Cd	8.6	$C_8 H_{15}^{-111} Cd$
111 In	77.4	¹¹³ In(p,t) ¹¹¹ In- ¹¹² Cd() ¹¹⁰ Cd	13.2	¹⁰⁸ Cd(³ He,d) ¹⁰⁹ In- ¹¹⁰ Cd() ¹¹¹ In	9.3	$^{113}In(p,t)^{111}In-^{115}In()^{113}In$
¹¹² Pd ¹¹² Ag	60.4	110Pd(t,p) ¹¹² Pd	39.6	$^{112}\text{Pd}(\beta^-)^{112}\text{Ag}$		
112 Ag 112 Cd	69.7	112 Ag(β^-) 112 Cd 112 Cd(d,p) 113 Cd	30.3	112 Pd(β^-) 112 Ag 111 Cd(n,γ) 112 Cd	0.6	С. И. 112С4
112In	40.2 57.8	¹¹² Cd(p,n) ¹¹² In	40.0 42.2	$\operatorname{Cd}(\Pi,\gamma)$ Cd $\operatorname{I12}\operatorname{In}(\beta^{-})^{112}\operatorname{Sn}$	8.6	$C_8 H_{16}^{-112}Cd$
¹¹² Sn	37.8 79.9	$Cd(p,n) = In$ $Sn(n,\gamma)^{113}Sn$	20.1	$\ln(\beta^{-})$ Sn 112 In(β^{-}) 112 Sn		
113Rh	59.9	$^{113}\text{Rh}(\beta^-)^{113}\text{Pd}$	40.1	113 Rh-C _{9.417}		
¹¹³ Pd	84.9	$^{113}\text{Pd}(\beta^-)^{113}\text{Ag}$	15.1	$^{113}\text{Rh}(\beta^{-})^{113}\text{Pd}$		
¹¹³ Ag	97.2	$^{113}\text{Ag}(\beta^{-})^{113}\text{Cd}$	2.8	$^{113}\text{Pd}(\beta^{-})^{113}\text{Ag}$		
¹¹³ Cd	58.1	¹¹² Cd(d,p) ¹¹³ Cd	29.4	$^{113}\text{Cd}(n,\gamma)^{114}\text{Cd}$	8.7	$C_9 H_5 - ^{113}Cd$
¹¹³ In	81.6	113 In(n, γ) 114 In	6.9	$^{113}\text{Cd}(\beta^{-})^{113}\text{In}$	5.6	$^{113}\text{Sn}(\beta^{+})^{113}\text{In}$
¹¹³ Sn	45.0	113 Sn(β^+) 113 In	38.5	114 Sn(d,t) 113 Sn	16.5	112 Sn $(n,\gamma)^{113}$ Sn
¹¹⁴ Pd	65.4	¹¹⁶ Cd(¹⁴ C, ¹⁶ O) ¹¹⁴ Pd	34.6	$^{114}\text{Pd}(\beta^{-})^{114}\text{Ag}$		
¹¹⁴ Ag	50.3	$^{114}\text{Pd}(\beta^{-})^{114}\text{Ag}$	49.7	$^{114}\text{Ag}(\beta^{-})^{114}\text{Cd}$		
¹¹⁴ Cd	70.6	$^{113}\text{Cd}(n,\gamma)^{114}\text{Cd}$	10.6	¹¹⁴ Cd(d,p) ¹¹⁵ Cd	8.2	$C_8 H_{18} - {}^{114}Cd$
¹¹⁴ In	72.4	$^{114}\text{In}(\beta^{-})^{114}\text{Sn}$	18.0	113 In(n, γ) 114 In	9.6	$^{115}_{11}In(\gamma,n)^{114}In$
¹¹⁴ Sn	70.4	114 Sn(n, γ) 115 Sn	25.5	$^{114}\text{In}(\beta^{-})^{114}\text{Sn}$	4.1	¹¹⁴ Sn(d,t) ¹¹³ Sn
¹¹⁵ Cd	87.3	¹¹⁴ Cd(d,p) ¹¹⁵ Cd	7.4	$^{115}\text{Cd}(\beta^-)^{115}\text{In}$	5.3	116Cd(γ,n) ¹¹⁵ Cd
¹¹⁵ In ¹¹⁵ Sn	48.2	$^{115}In(\gamma,n)^{114}In$	41.3	$^{115}\text{Cd}(\beta^-)^{115}\text{In}$	10.6	113 In(p,t) 111 In $^{-115}$ In() 113 In
116Cd	78.0	115 Sn(n, γ) 116 Sn 116 Cd 35 Cl $^{-114}$ Cd 37 Cl	23.4	114 Sn(n, γ) 115 Sn C ₉ H ₈ $^{-116}$ Cd	20.0	11604()11504
116Sn	43.5	116 Sn(n, γ) 117 Sn	21.8 22.0	$C_9 H_8 = 3.0 Cd$ $S_1 = 3.0 Cd$ $S_1 = 3.0 Cd$ $S_2 = 3.0 Cd$	20.9 1.4	116 Cd(γ ,n) 115 Cd 116 Sn(p,n) 116 Sb
¹¹⁶ Sb	76.6 73.3	116 Sn(p,n) 116 Sb	26.7	115 Sn(3 He,d) 116 Sb $-^{120}$ Sn() 121 Sb	1.4	Sh(p,n) Sb
¹¹⁷ In	94.5	$^{117}\text{In}(\beta^-)^{117}\text{Sn}$	5.5	120 Sn(t, α) 119 In $^{-118}$ Sn() 117 In		
¹¹⁷ Sn	61.6	$^{117}\mathrm{Sn}(\mathrm{n},\gamma)^{118}\mathrm{Sn}$	22.9	$^{116}\text{Sn}(n,\gamma)^{117}\text{Sn}$	15.4	C 35Cl ₃ -117Sn
117Sb	80.0	¹¹⁶ Sn(³ He d) ¹¹⁷ Sb	20.0	¹¹⁷ Sn(p,n) ¹¹⁷ Sb		3
¹¹⁷ Cs	100.0	¹¹⁷ Cs- ¹³³ Cs _{.880}		(-,)		
117 Cex	100.0	$^{117}\text{Cs}^{x}(\text{IT})^{117}\text{Cs}$				
¹¹⁸ In	100.0	119 Sn(t, α) 118 In $^{-118}$ Sn() 117 In				
118Sn	63.8	118 Sn(n, γ) 119 Sn	36.1	117 Sn(n, γ) 118 Sn	0.1	¹¹⁸ Sn(³ He,d) ¹¹⁹ Sb
¹¹⁸ Cs	100.0	$^{118}\text{Cs}^{x}(\text{IT})^{118}\text{Cs}$				
¹¹⁸ Cs ^x	100.0	$^{118}\text{Cs}^x - ^{133}\text{Cs}_{.887}$		120		
¹¹⁹ In	86.7	120 Sn(t, α) 119 In $^{-118}$ Sn() 117 In	13.3	120 Sn(d, 3 He) 119 In		121 25 110 27
¹¹⁹ Sn	54.9	¹²⁰ Sn(d,t) ¹¹⁹ Sn	35.3	118 Sn $(n,\gamma)^{119}$ Sn	9.8	¹²¹ Sb ³⁵ Cl- ¹¹⁹ Sn ³⁷ Cl
¹¹⁹ Sb	59.0	¹¹⁸ Sn(³ He,d) ¹¹⁹ Sb	41.0	119 Sb(ε) 119 Sn 120 Sn(d,t) 119 Sn	<i>5</i> C	13 c 35 ct 37 ct 120 c
¹²⁰ Sn ¹²⁰ Te	69.6	120 Sn $(n,\gamma)^{121}$ Sn 122 Te $(p,t)^{120}$ Te	23.2	$C_9 H_{12} - {}^{120}Te$	5.0	¹³ C ³⁵ Cl ₂ ³⁷ Cl- ¹²⁰ Sn ¹²⁰ Te(³ He,d) ¹²¹ I
¹²⁰ Te ¹²¹ Sn	64.3	122 Te(p,t) 120 Te 121 Sn(β^-) 121 Sb	21.4 29.9	$C_9 H_{12} - ^{120} \text{Te}$ $^{120} \text{Sn}(n, \gamma)^{121} \text{Sn}$	14.3	¹²⁰ Te(³ He,d) ¹²¹ I ¹²² Sn(d,t) ¹²¹ Sn
121 Sb	43.0 62.2	$^{121}\text{Sb}(n,\gamma)^{122}\text{Sb}$	29.9	$^{121}\text{Sn}(\beta^-)^{121}\text{Sb}$	27.1 6.5	$C_9 H_{13} - {}^{121}Sb$
121 Te	74.3	$^{121}\text{Te}(\beta^+)^{121}\text{Sb}$	25.7	$^{121}\text{I}(\beta^+)^{121}\text{Te}$	0.5	$c_9 n_{13} - 30$
	83.1	¹²⁰ Te(³ He,d) ¹²¹ I	13.7	121 I – C	3.1	121 I(β^+) 121 Te
121		10(110,0/ 1	10.1	10 002	J.1	-(P / 10
¹²¹ I ¹²² Sn	49.2	122 Sn $(n,\gamma)^{123}$ Sn	39.9	$^{121}I-C_{10.083}$ $^{122}Sn(d,t)^{121}Sn$	10.9	¹²⁴ Sn ³⁵ Cl- ¹²² Sn ³⁷ Cl

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹²² Te	91.8	$^{122}{\rm Te}({\rm n},\gamma)^{123}{\rm Te}$	7.1	$^{122}_{}$ Sb $(\beta^-)^{122}$ Te	0.6	¹²² Te(³ He,d) ¹²³ I
122 Ce	58.1	$^{122}\text{Cs} - ^{133}\text{Cs}_{.017}$	41.9	122 Cs-C $_{10,167}$ 124 Sn(d,t) 123 Sn		, . ,
¹²³ Sn	45.2	122 Sn(n, ν) 123 Sn	43.5	124 Sn(d,t) 123 Sn	11.3	123 Sn(β^-) 123 Sb
123Sb	78.7	123 Sb $(n, \gamma)^{124}$ Sb	12.5	123 Sb $(\gamma,n)^{122}$ Sb	5.3	$^{123}\text{Sn}(\beta^{-})^{123}\text{Sb}$
¹²³ Te	92.0	$^{123}\text{Te}(n,\gamma)^{124}\text{Te}$	8.0	$^{122}\text{Te}(n,\gamma)^{123}\text{Te}$		- V - /
123 I	96.2	¹²² Te(³ He d) ¹²³ I	3.8	123 Xe(β^+) 123 I		
¹²³ Xe	62.0	123Xe-133Cs and	38.0	123 Xe(β^+) 123 I		
¹²⁴ Sn	70.5	$^{124}\text{Sn} - ^{13}\text{C} ^{37}\text{Cl}_3$	24.2	$^{124}\text{Sn} - ^{124}\text{Te}$	4.2	124Sn(d,t)123Sn
¹²⁴ Sb	78.7	$^{124}\text{Sb}(\beta^-)^{124}\text{Te}^{3}$	21.3	123 Sb $(n,\gamma)^{124}$ Sb		(.,,
124Te	29.7	$^{124}Sn-^{124}Te$	25.1	¹²⁴ Te- ¹³ C ³⁷ Cl ₂	17.0	$^{124}\text{Te}(n,\gamma)^{125}\text{Te}$
¹²⁴ Xe	57.3	¹²⁴ Xe- ⁵⁴ Fe ³⁵ Cl ₂	24.6	¹²⁴ Xe ⁻¹³ C ³⁷ Cl ₃	16.9	124 Xe $-^{124}$ Te
¹²⁵ Te	83.0	¹²⁴ Te(n, γ) ¹²⁵ Te	17.0	$^{125}\text{Te}(n,\gamma)^{126}\text{Te}$		
¹²⁵ Xe	98.8	¹²⁴ Xe(n γ) ¹²⁵ Xe	1.2	$^{125}\text{Cs}(\beta^+)^{125}\text{Xe}$		
125Cs	70.5	¹²⁵ Cs- ¹³³ Cs _{.940}	29.5	$^{125}\text{Cs}(\beta^+)^{125}\text{Xe}$		
¹²⁶ Te	83.0	$^{125}\text{Te}(n,\gamma)^{126}\text{Te}$	9.6	¹²⁸ Te ³⁵ Cl- ¹²⁶ Te ³⁷ Cl	3.0	128Te 35Cl-126Te 37Cl
126 _I	50.0	$^{127}I(\gamma,n)^{126}I$	50.0	$^{126}\text{I}(\beta^+)^{126}\text{Te}$		
¹²⁷ Te	98.0	$^{126}\text{Te}(n,\gamma)^{127}\text{Te}$	2.0	$^{127}\text{Te}(\beta^{-})^{127}\text{I}$		
127 I	32.9	$^{127}I(\gamma,n)^{126}I$	22.3	$^{127}\text{Te}(\beta^{-})^{127}\text{I}$	19.9	$C_{10} H_7 - ^{127}I$
127 Xe	91.5	127 Xe(ε) 127 I	8.5	$^{127}\text{Cs}(\beta^+)^{127}\text{Xe}$		-10/
127 Cs	81.6	¹²⁷ Cs- ¹³³ Cs _{.955}	18.4	$^{127}\text{Cs}(\beta^+)^{127}\text{Xe}$		
¹²⁸ Te	56.9	$^{128}\text{Te} - ^{128}\text{Xe}$	15.8	¹³⁰ Te ³⁵ Cl ⁻¹²⁸ Te ³⁷ Cl	14.6	¹²⁸ Te ³⁵ Cl- ¹²⁶ Te ³⁷ Cl
128 I	87.9	$^{127}I(n,\gamma)^{128}I$	12.1	$^{128}I(\beta^-)^{128}Xe$	1	10 01 10 0
¹²⁸ Xe	76.7	$C_{10} H_8 - {}^{128}Xe$	20.5	$^{128}\text{Te} - ^{128}\text{Xe}$	1.7	$^{128}I(\beta^-)^{128}Xe$
¹²⁸ Cs	79.4	$^{128}\text{Cs}(\beta^+)^{128}\text{Xe}$	20.6	¹²⁸ Cs- ¹³³ Cs _{.962}	1.,	1(β) 110
¹²⁸ Ba	82.5	¹²⁸ Ba- ¹³³ Cs _{.962}	17.5	¹³⁰ Ba(p,t) ¹²⁸ Ba		
¹²⁹ Te	91.8	$^{128}\text{Te}(n,\gamma)^{129}\text{Te}$	8.2	$^{129}\text{Te}(\beta^{-})^{129}\text{I}$		
¹²⁹ I	51.5	$^{129}\text{Te}(\beta^-)^{129}\text{I}$	38.8	$^{129}I(\beta^{-})^{129}Xe$	9.7	$^{129}I(n,\gamma)^{130}I$
¹²⁹ Xe	59.5	129 Xe $-C_2$ 35 Cl ₃	39.2	129 Xe(n, γ) 130 Xe	0.9	$^{129}I(\beta^-)^{129}Xe$
¹²⁹ Cs	82.9	$^{129}\text{Cs}(\beta^+)^{129}\text{Xe}$	12.5	¹²⁹ Cs- ¹³³ Cs _{.970}	4.6	129 Ba(β^+) 129 Cs
¹²⁹ Ba	51.5	130 Ba(d,t) 129 Ba	48.5	$^{129}\text{Ba}(\beta^+)^{129}\text{Cs}$	4.0	Ba(p) Cs
¹³⁰ Sn	94.9	130 Sn-C	5.1	$^{130}\text{Sn}(\beta^{-})^{130}\text{Sb}$		
130 Sh	85.6	130 Sn $-C_{10.833}$ 130 Sn $(\beta^-)^{130}$ Sb	14.4	$^{130}\text{Sb}(\beta^{-})^{130}\text{Te}$		
¹³⁰ Te	79.7	¹³⁰ Te ³⁵ Cl- ¹²⁸ Te ³⁷ Cl	20.0	$^{130}\text{Te} - ^{130}\text{Xe}$	0.2	$^{130}\text{Te}(n,\gamma)^{131}\text{Te}$
130 I	90.2	$^{129}I(n,\gamma)^{130}I$	9.7	$^{130}I(\beta^{-})^{130}Xe$	0.2	10(11,7)
130 Xe	56.8	129 Xe(n, γ) 130 Xe	21.2	$^{13}CC_8NH_7-^{130}Xe$	19.3	¹³⁰ Xe-C ¹³ C ³⁵ Cl ₃
130 Cc	47.7	130Cs=133Cs	34.8	$^{130}\text{Cs}(\beta^+)^{130}\text{Xe}$	17.4	¹²⁹ Xe(³ He,d) ¹³⁰ Cs
130Ba	77.6	130 Ba $-^{85}$ Rb $_{1.529}$	10.8	130 Ba $(n,\gamma)^{131}$ Ba	8.9	$^{132}\text{Ba}-^{130}\text{Ba}$
¹³¹ Sn	55.3	$^{131}\text{Sn}(\beta^-)^{131}\text{Sb}$	44.7	¹³¹ Sn-C _{10,917}	0.7	Da Da
¹³¹ Sb	62.5	$^{131}\text{Sb}(\beta^{-})^{131}\text{Te}$	37.5	$^{131}\text{Sn}(\beta^{-})^{131}\text{Sb}$		
¹³¹ Te	99.8	$^{130}\text{Te}(n,\gamma)^{131}\text{Te}$	0.2	$^{131}\text{Sb}(\beta^{-})^{131}\text{Te}$		
¹³¹ Xe	73.2	131 Xe- C_2 35 Cl ₂ 37 Cl	25.9	131 Xe(n, γ) 132 Xe	0.9	131 Cs $(\varepsilon)^{131}$ Xe
131 Ce	60.2	$^{131}\text{Cs}(\varepsilon)^{131}\text{Xe}$	25.0	$^{131}\text{Ba}(\beta^+)^{131}\text{Cs}$	14.8	¹³¹ Cs- ¹³³ Cs _{.985}
¹³¹ Ba	89.1	130 Ba(n, γ) 131 Ba	6.2	$^{131}\text{Ba}(\beta^+)^{131}\text{Cs}$	4.6	¹³¹ Ba- ¹³³ Cs _{.985}
¹³² Sn	66.2	$^{132}Sn-C_{11}$	33.8	$^{132}\text{Sn}(\beta^{-})^{132}\text{Sb}$	4.0	Da C3.985
¹³² Sb	54.2	$^{132}\text{Sn}(\beta^{-})^{132}\text{Sb}$	45.8	$^{132}\text{Sb}(\beta^{-})^{132}\text{Te}$		
¹³² Te	93.9	$^{132}\text{Te}(\beta^{-})^{132}\text{I}$	6.1	$^{132}\text{Sb}(\beta^{-})^{132}\text{Te}$		
132 I	95.8	$^{132}I(\beta^{-})^{132}Xe$	4.2	$^{132}\text{Te}(\beta^-)^{132}\text{I}$		
¹³² Xe	73.0	131 Xe(n, γ) 132 Xe	24.5	¹³² Xe-C ¹³ C ³⁵ Cl ₂ ³⁷ Cl	2.4	132 Cs $(\beta^+)^{132}$ Xe
132Cs	90.2	133 Cs $(\gamma,n)^{132}$ Cs	9.8	$^{132}\text{Cs}(\beta^+)^{132}\text{Xe}$	2.4	Cs(p') Ac
¹³² Ba	98.8	132 Ba(n, γ) 133 Ba	1.2	$^{132}\text{Ba} = ^{130}\text{Ba}$		
132 Ce	54.2	$^{132}\text{Ce}-\text{C}_{11}$	45.8	132 Ce O $^{-142}$ Sm $_{1.042}$		
¹³³ Cs	82.8	$^{133}\text{Cs}-\text{C}_{3}\text{O}_{6}$	17.2	133 Cs-C ₁₀ H ₁₂		
¹³³ Ba	99.0	133 Ba(ε) 133 Cs	1.0	132 Ba $(n,\gamma)^{133}$ Ba		
134Cs	100.0	133 Cs $(n,\gamma)^{134}$ Cs	1.0	Du(11,1) Du		
¹³⁴ Ba	99.2	$^{134}\text{Cs}(\beta^-)^{134}\text{Ba}$	0.8	134 Ba $(n,\gamma)^{135}$ Ba		
135 T	94.0	$^{135}I(\beta^-)^{135}Xe$	5.6	136 Xe(d, 3 He) 135 I	0.4	$^{136}\text{Te}(\beta^- \text{n})^{135}\text{I}$
¹³⁵ Xe	97.8	135 Xe(β^-) 135 Cs	2.2	$^{135}I(\beta^-)^{135}Xe$	0.4	10(p 11) 1
135 Cs	99.9	134 Cs(n, γ) 135 Cs		135 Xe(β^-) 135 Cs		
¹³⁵ Ba	99.9 99.2	134 Ba $(n,\gamma)^{135}$ Ba	0.1 0.8	135 Ba(n, γ) 136 Ba		
¹³⁶ Te	99.2 80.1	$^{136}\text{Te}(\beta^-\text{n})^{135}\text{I}$	19.9	$^{136}\text{Te}(\beta^-)^{136}\text{I}$		

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹³⁶ Xe	60.1	$C_{10} H_{16} - {}^{136}Xe$	34.4	¹³⁶ Xe(³ He,d) ¹³⁷ Cs	5.2	¹³⁶ Xe(d, ³ He) ¹³⁵ I
¹³⁶ Ba ¹³⁶ Ce	99.2	135 Ba(n, γ) 136 Ba	0.8	136 Ba(n, γ) 137 Ba	7.0	138.0 136.0
136Pr	62.5 77.0	136 Ce(n, γ) 137 Ce 136 Pr $^{-133}$ Cs _{1.023}	29.8 23.0	136 Pr(β^+) 136 Ce 136 Pr(β^+) 136 Ce	7.8	¹³⁸ Ce ⁻¹³⁶ Ce
¹³⁷ Cs	99.9	$^{137}\text{Cs}(\beta^-)^{137}\text{Ba}$	0.1	¹³⁶ Xe(³ He,d) ¹³⁷ Cs		
¹³⁷ Ba	99.1	136 Ba $(n,\gamma)^{137}$ Ba	0.8	137 Ba $(n,\gamma)^{138}$ Ba	0.1	$^{137}\text{Cs}(\beta^-)^{137}\text{Ba}$
¹³⁷ Ce	62.5	$137 Pr(\beta +)137 Ce$	37.5	136 Ce(n, γ) 137 Ce	***	(4)
¹³⁷ Pr	71.2	$^{137}Pr-^{133}Cs_{1,020}$	24.3	$^{137}\text{Pr}(\beta^+)^{137}\text{Ce}$	4.5	137 Nd(β^+) 137 Pr
¹³⁷ Nd	77.5	137 Nd $^{-133}$ Cs $_{1.030}$ 137 Pm $^{m}(\beta^{+})^{137}$ Nd	16.9	137 Nd $-C_{11.417}$ 137 Sm $(\beta^+)^{137}$ Pm m	4.3	137 Nd(β^+) 137 Pr
$^{137}\mathrm{Pm}^{m}$	69.9	137 Pm $^{m}(\beta^{+})^{137}$ Nd	30.1	$^{137}\text{Sm}(\beta^{+})^{137}\text{Pm}^{m}$		
¹³⁷ Sm	77.5	137 Sm $-C_{11,417}$	22.5	$^{13}/\text{Sm}(B^+)^{13}/\text{Pm}^m$		
138Cs	50.7	$^{138}\text{Cs}(B^-)^{138}\text{Ba}$	49.3	$^{138}\text{Cs} - ^{133}\text{Cs}_{1.038}$		120 120-
138Ba	99.2	137 Ba $(n, \gamma)^{138}$ Ba	0.7	138 Ba $(n,\gamma)^{139}$ Ba	0.1	$^{138}\text{Cs}(\beta^-)^{138}\text{Ba}$
¹³⁸ Ce	67.6	¹³⁸ Ce(t,p) ¹⁴⁰ Ce	28.0	¹⁴⁰ Ce- ¹³⁸ Ce	4.4	¹³⁸ Ce ⁻¹³⁶ Ce
¹³⁹ Ba	99.2	138 Ba $(n, \gamma)^{139}$ Ba	0.8	139 Ba(β^-) 139 La	0.0	130 0 ()130 v
¹³⁹ La ¹³⁹ Ce	58.7	139 Ba $(\beta^{-})^{139}$ La 139 Ce $(\varepsilon)^{139}$ La	41.1	$^{139}\text{La}(n,\gamma)^{140}\text{La}$	0.2	$^{139}\mathrm{Ce}(\varepsilon)^{139}\mathrm{La}$
139 Pr	98.4 98.2	$^{139}\text{Pr}(\beta^+)^{139}\text{Ce}$	1.6	139 Pr(β^+) 139 Ce 139 Nd(β^+) 139 Pr		
139 Nd	61.6	$^{139}\text{Pm}(\beta^+)^{139}\text{Nd}$	1.8 26.1	$^{139}\text{Nd}(\beta^+)^{139}\text{Pr}$	12.3	139 Nd $-C_{11.583}$
139 Pm	93.1	139 Pm $-^{133}$ Cs _{1.045}	6.9	$^{139}\text{Pm}(\beta^+)^{139}\text{Nd}$	12.3	$Nu - C_{11.583}$
140 Cc	79.1	$^{140}\text{Cs} - ^{133}\text{Cs}_{1.053}$	20.9	$^{140}\text{Cs}(\beta^-)^{140}\text{Ba}$		
¹⁴⁰ Ba	37.3	$^{140}\text{Ba}(\beta^-)^{140}\text{La}$	37.2	140 Ba $^{-133}$ Cs _{1.053}	19.3	$^{140}\text{Cs}(\beta^-)^{140}\text{Ba}$
140 Ta	58.8	$^{139}\text{La}(n,\gamma)^{140}\text{La}$	39.0	$^{140}\text{La}(\beta^-)^{140}\text{Ce}$	2.2	$^{140}\text{Ba}(\beta^-)^{140}\text{La}$
140Ce	46.2	140 Ce(n ν) 141 Ce	44.7	$^{140}\text{La}(\beta^{-})^{140}\text{Ce}$	5.9	¹⁴⁰ Ce(t,p) ¹⁴² Ce
141 Ce	49.9	141 Cs_133 Cs	36.5	$^{141}\text{Cs}(\beta^-)^{141}\text{Ba}$	11.4	$^{141}\text{Cs}(\beta^-\text{n})^{140}\text{Ba}$
¹⁴¹ Ba	63.3	¹⁴¹ Ba- ¹³³ Cs _{1.060}	20.3	141 Ba(β^-) 141 La	16.4	$^{141}\text{Cs}(\beta^-)^{141}\text{Ba}$
¹⁴¹ La	94.6	$^{141}\text{La}(\beta^-)^{141}\text{Ce}$	5.4	141 Ba(β^-) 141 La		
141 Co	53.7	¹⁴⁰ Ce(n,γ) ¹⁴¹ Ce	44.8	$^{141}\text{Ce}(\beta^-)^{141}\text{Pr}$	1.5	$^{141}\text{La}(\beta^-)^{141}\text{Ce}$
¹⁴¹ Pr	52.9	141 Pr(n, γ) 142 Pr	47.1	$141 C_{o}(R-)141 D_{r}$		
¹⁴¹ Sm	48.8	144 Sm(3He 6He)141 Sm	43.8	¹⁴¹ Sm- ¹³³ Cs	7.5	$^{141}\text{Eu}(\beta^+)^{141}\text{Sm}$
¹⁴¹ Eu	81.9	¹⁴¹ Fu= ¹³³ Cs	18.1	$^{141}\text{Eu}(B^+)^{141}\text{Sm}$		
¹⁴² Cs	50.6	¹⁴² Cs- ¹³³ Cs _{1,069}	42.1	$^{142}C_{5}(\beta^{-})^{142}B_{2}$	7.0	¹⁴² Cs- ¹⁴³ Cs _{.497} ¹⁴¹ Cs _{.504}
¹⁴² Ba	54.1	$^{142}\text{Ba}(\beta^{-})^{142}\text{La}$	36.8	$^{142}\text{Ba} - ^{133}\text{Cs}_{1.068}$	9.1	$^{142}\text{Cs}(\beta^-)^{142}\text{Ba}$
¹⁴² La	70.4	142 La(β^-) 142 Ce	29.6	$^{142}\text{Ba}(\beta^-)^{142}\text{La}$		142 140
¹⁴² Ce	67.4	$^{142}\text{Ce}(n,\gamma)^{143}\text{Ce}$	17.5	¹⁴⁰ Ce(t,p) ¹⁴² Ce	8.9	¹⁴² Ce ⁻¹⁴⁰ Ce
¹⁴² Pr	52.9	142 Pr(β^{-}) 142 Nd	47.1	141 Pr $(n,\gamma)^{142}$ Pr		175 - 27 - 142 - 35 -
¹⁴² Nd ¹⁴² Sm	62.3	142 Nd(n, γ) 143 Nd	28.7	$^{142}\text{Pr}(\beta^{-})^{142}\text{Nd}$ $^{158}\text{Yb} = ^{142}\text{Sm}_{1.113}$ $^{143}\text{Cs} = ^{144}\text{Cs}_{.662}^{-141}\text{Cs}_{.338}$	6.3	¹⁷⁵ Lu ³⁷ Cl- ¹⁴² Nd ³⁵ Cl ₂
¹⁴³ Cs	18.9	$^{142}\text{Sm} - ^{133}\text{Cs}_{1.068}$	13.9	143 G - 144 G - 141 G -	12.4	¹⁴⁴ Sm(p,t) ¹⁴² Sm
¹⁴³ Ba	68.9 79.0	143 Cs(β^-) 143 Ba 143 Ba $^{-133}$ Cs _{1.075}	18.0 13.8	143 Ba(β^-) 143 La	9.0 7.2	$^{142}\text{Cs} - ^{143}\text{Cs}_{.497}$ $^{141}\text{Cs}_{.504}$ $^{143}\text{Cs}(\beta^-)^{143}\text{Ba}$
143La	79.8	$^{143}\text{La}(\beta^-)^{143}\text{Ce}$	20.2	$^{143}\text{Ba}(\beta^-)^{143}\text{La}$	1.2	Cs(p) ba
¹⁴³ Ce	66.8	$^{143}\text{Ce}(\beta^-)^{143}\text{Pr}$	32.6	$^{142}\text{Ce}(n,\gamma)^{143}\text{Ce}$	0.6	$^{143}\text{La}(\beta^-)^{143}\text{Ce}$
¹⁴³ Pr	83.7	$^{143}\text{Pr}(\beta^{-})^{143}\text{Nd}$	16.3	$^{143}\text{Ce}(\beta^-)^{143}\text{Pr}$	0.0	Eu(p) CC
¹⁴³ Nd	37.6	142 Nd(n, γ) 143 Nd	34.2	143 Nd(n, γ) 144 Nd	20.0	176Lu 37Cl-143Nd 35Cl ₂
¹⁴³ Pm	59.6	143 Nd(3 He.d) 144 Pm $-^{142}$ Nd() 143 Pm	22.7	¹⁴² Nd(³ He,d) ¹⁴³ Pm	17.6	$^{147}\text{Eu}(\alpha)^{143}\text{Pm}$
¹⁴³ Sm	100.0	144 Sm(p.d) 143 Sm $-^{148}$ Gd() 147 Gd		, , ,		` ´
¹⁴⁴ Cs	56.5	$^{144}C_8(\beta^-)^{144}B_9$	32.7	¹⁴⁴ Cs- ¹⁴⁵ Cs _{.662} ¹⁴² Cs _{.338}	8.5	143Cs-144Cs _{.662} 141Cs _{.338}
¹⁴⁴ Ba	91.3	¹⁴⁴ Ba- ¹³³ Cs _{1.082}	6.8	$^{144}\text{Cs}(\beta^-)^{144}\text{Ba}$	1.9	$^{144}\text{Ba}(\beta^-)^{144}\text{La}^{.002}$
¹⁴⁴ La	53.1	$^{144}La(\beta^{-})^{144}Ce$	46.9	144 Ba(β^{-}) 144 La		
¹⁴⁴ Ce	99.9	$^{144}\text{Ce}(\beta^{-})^{144}\text{Pr}$	0.1	$^{144}\text{La}(\beta^{-})^{144}\text{Ce}$		
¹⁴⁴ Pr	99.9	$^{144}\Pr(\beta^{-})^{144}\text{Nd}$	0.1	$^{144}\text{Ce}(\beta^-)^{144}\text{Pr}$		
¹⁴⁴ Nd	65.8	143 Nd(n, γ) 144 Nd	27.5	144 Nd(n, γ) 145 Nd	5.6	144Sm-144Nd
¹⁴⁴ Pm	50.1	¹⁴⁴ Nd(³ He,d) ¹⁴⁵ Pm- ¹⁴³ Nd() ¹⁴⁴ Pm	29.5	¹⁴³ Nd(³ He,d) ¹⁴⁴ Pm- ¹⁴² Nd() ¹⁴³ Pm	19.6	¹⁴³ Nd(³ He,d) ¹⁴⁴ Pm
144Sm	43.1	¹⁴⁴ Sm- ¹⁴⁴ Nd	27.9	144 Sm $(n, \gamma)^{145}$ Sm	10.9	$^{148}\text{Gd}(\alpha)^{144}\text{Sm}$
¹⁴⁴ Eu	46.8	144Eu-133Cs _{1.083}	38.2	$^{144}\text{Eu}(\beta^+)^{144}\text{Sm}$	15.0	¹⁴⁴ Eu-C ₁₂
¹⁴⁵ Cs	94.1	$^{145}\text{Cs} - ^{133}\text{Cs}_{1.090}$	2.8	¹⁴⁵ Cs ⁻¹⁴⁷ Cs _{.493} ¹⁴³ Cs _{.507}	1.5	$^{144}\text{Cs} - ^{145}\text{Cs}_{.662}$ $^{142}\text{Cs}_{.338}$
¹⁴⁵ Pr	50.0	145 Pr(β^-) 145 Nd	50.0	146Nd(d, 3He) 145Pr	0.7	145 p. (->145 p. +
¹⁴⁵ Nd	71.3	144 Nd(n,γ) ¹⁴⁵ Nd 144 N 163 H 18145 P 143 N 16144 P	27.9	145 Nd(n, γ) 146 Nd	0.7	¹⁴⁵ Pm(ε) ¹⁴⁵ Nd
¹⁴⁵ Pm ¹⁴⁵ Sm	37.0	¹⁴⁴ Nd(³ He,d) ¹⁴⁵ Pm- ¹⁴³ Nd() ¹⁴⁴ Pm	26.4	145 Sm $(\varepsilon)^{145}$ Pm 145 Sm $(\varepsilon)^{145}$ Pm	18.3	¹⁴⁴ Nd(³ He,d) ¹⁴⁵ Pm
¹⁴⁵ Sm ¹⁴⁵ Eu	71.5	144 Sm $(n,\gamma)^{145}$ Sm 144 Sm $(^3$ Ho d) 145 Fy	13.4	$^{149}\text{Sm}(\varepsilon)^{145}\text{Pm}$ $^{149}\text{Tb}(\alpha)^{145}\text{Eu}$	8.3	146 Sm(3 He, α) 145 Sm
EU	88.8	¹⁴⁴ Sm(³ He,d) ¹⁴⁵ Eu	11.2	10(a) Eu		

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹⁴⁶ Cs	41.5	$^{146}\text{Cs}(\beta^-)^{146}\text{Ba}$	37.8	¹⁴⁵ Cs- ¹⁴⁶ Cs 662 ¹⁴³ Cs 338	20.7	¹⁴⁵ Cs- ¹⁴⁶ Cs _{.497} ¹⁴⁴ Cs _{.503}
¹⁴⁶ Ba	51.5	$^{146}\text{Cs}(\beta^-)^{146}\text{Ba}$	48.5	146 Ba(β^-) 146 La		
¹⁴⁶ La	58.1	$^{146}\text{La}(\beta^{-})^{146}\text{Ce}$	41.9	146 Ba $(\beta^-)^{146}$ La		
¹⁴⁶ Ce	69.8	$^{146}\text{Ce}(\beta^-)^{146}\text{Pr}$	30.2	$^{146}\text{La}(\beta^{-})^{146}\text{Ce}$		
¹⁴⁶ Pr ¹⁴⁶ Nd	76.1	$^{146}\text{Pr}(\beta^{-})^{146}\text{Nd}$	23.9	$^{146}\text{Ce}(\beta^-)^{146}\text{Pr}$	2 -	149.0
146Sm	71.9	145 Nd(n, γ) 146 Nd 146 Sm(α) 142 Nd	22.8	146 Nd(n, γ) 147 Nd 146 Sm(3 He, α) 145 Sm	2.6	¹⁴⁹ Sm(n,α) ¹⁴⁶ Nd
¹⁴⁶ Eu	46.8 45.3	$^{146}\text{Eu}(\beta^+)^{146}\text{Sm}$	28.5 23.4	¹⁴⁴ Sm(³ He,p) ¹⁴⁶ Eu	12.4 19.9	148 Sm(p,t) 146 Sm 146 Eu $^{-133}$ Cs $_{1.098}$
146Gd	91.2	¹⁴⁸ Gd(p,t) ¹⁴⁶ Gd	8.6	150 Dy(α) 146 Gd	0.2	$^{146}\text{Tb}(\beta^+)^{146}\text{Gd}$
¹⁴⁶ Tb	81.0	$^{146}\text{Tb}(\beta^+)^{146}\text{Gd}$	19.0	146 Dy(β^+) 146 Tb	0.2	16(p') Ga
¹⁴⁶ Dv	94.1	146Dv-C	5.9	146 Dv(β^{+}) 146 Tb		
147 Cs	79.2	$^{147}\text{Cs} - ^{133}\text{Cs}_{1.105}$	20.8	¹⁴⁵ Cs- ¹⁴⁷ Cs ₄₀₂ ¹⁴³ Cs ₅₀₇		
¹⁴⁷ Nd	77.1	146 Nd(n, γ) 147 Nd	22.6	$^{147}\text{Nd}(\beta^-)^{147}\text{Pm}$	0.3	¹⁴⁸ Nd(d,t) ¹⁴⁷ Nd
¹⁴⁷ Pm	57.7	$^{147}\text{Nd}(\beta^-)^{147}\text{Pm}$	42.3	$^{147}\text{Pm}(\beta^-)^{147}\text{Sm}$		
¹⁴⁷ Sm	55.8	147 Pm(β^{-}) 147 Sm	33.0	147 Sm $(n,\gamma)^{148}$ Sm	9.0	¹⁴⁹ Sm ³⁵ Cl- ¹⁴⁷ Sm ³⁷ Cl
¹⁴⁷ Eu	54.8	$^{147}\text{Eu}(\hat{\beta}^+)^{147}\text{Sm}$	17.9	$^{147}\text{Gd}(\beta^+)^{147}\text{Eu}$	15.7	147 Eu(α) 143 Pm
¹⁴⁷ Gd	83.6	¹⁴⁸ Gd(p,d) ¹⁴⁷ Gd- ¹⁴⁸ Sm() ¹⁴⁷ Sm	12.9	$^{147}\text{Gd}(\beta^+)^{147}\text{Eu}$	3.5	104 Ru(d,t) 103 Ru $-^{148}$ Gd() 147 Gd
¹⁴⁸ Cs ¹⁴⁸ Nd	100.0	¹⁴⁵ Cs ⁻¹⁴⁸ Cs ₋₃₉₂ ¹⁴³ Cs ₋₆₀₈	166	14857 17 1 1014757 1	11.0	14831 1 35 01 14431 1 37 01
148 Sm	60.3	¹⁴⁸ Nd ³⁵ Cl ⁻¹⁴⁶ Nd ³⁷ Cl ¹⁴⁷ Sm(n,γ) ¹⁴⁸ Sm	16.6	¹⁴⁸ Nd(d,t) ¹⁴⁷ Nd ¹⁵⁰ Sm ³⁵ Cl- ¹⁴⁸ Sm ³⁷ Cl	11.3	148 Nd 35 Cl ₂ $-^{144}$ Nd 37 Cl ₂ 148 Sm(n, γ) 149 Sm
148Eu	64.1 53.4	148Eu-133Cs _{1.113}	17.1 35.9	¹⁴⁸ Eu- ¹⁴² Sm _{1.042}	9.8 10.7	¹⁴⁸ Eu(α) ¹⁴⁴ Pm
¹⁴⁸ Gd	89.2	$^{148}\text{Gd}(\alpha)^{144}\text{Sm}$	8.1	¹⁴⁸ Gd(p,d) ¹⁴⁷ Gd- ¹⁴⁸ Sm() ¹⁴⁷ Sm	2.0	¹⁴⁸ Gd(p,t) ¹⁴⁶ Gd
¹⁴⁸ Tb	88.0	148 Dy(β^+) 148 Tb	12.0	$^{148}\text{Tb}(\beta^+)^{148}\text{Gd}$	2.0	Gu(p,t) Gu
¹⁴⁸ Dv	93.4	¹⁴⁸ Dy-C _{12,333}	6.6	148 Dy(β^+) 148 Tb		
¹⁴⁹ Nd	98.7	148 Nd $(n,\gamma)^{149}$ Nd	1.3	$^{149}\text{Nd}(\beta^-)^{149}\text{Pm}$		
¹⁴⁹ Pm	47.2	$^{149}\text{Pm}(\beta^-)^{149}\text{Sm}$	42.2	¹⁴⁸ Nd(³ He,d) ¹⁴⁹ Pm	10.6	$^{149}\text{Nd}(\beta^-)^{149}\text{Pm}$
¹⁴⁹ Sm	64.3	149 Sm(n, γ) 150 Sm	13.8	148 Sm $(n,\gamma)^{149}$ Sm	13.6	¹⁴⁹ Sm ³⁵ Cl- ¹⁴⁷ Sm ³⁷ Cl
¹⁴⁹ Eu	53.3	¹⁵¹ Eu(p,t) ¹⁴⁹ Eu	28.4	$^{149}\mathrm{Gd}(\varepsilon)^{149}\mathrm{Eu}$	13.4	$^{149}\mathrm{Eu}(arepsilon)^{149}\mathrm{Sm}$
¹⁴⁹ Gd	50.6	$^{149}\text{Gd}(\alpha)^{145}\text{Sm}$	22.0	153 Dy $(\alpha)^{149}$ Gd	19.2	$^{149}\mathrm{Gd}(\varepsilon)^{149}\mathrm{Eu}$
¹⁴⁹ Tb	83.6	$^{149}\text{Tb}(\alpha)^{145}\text{Eu}$	10.9	$^{149}\text{Tb}(\beta^+)^{149}\text{Gd}$	5.5	149 Dy(β^+) 149 Tb
¹⁴⁹ Dy	40.1	149 Dy(β^+) 149 Tb	28.7	¹⁴⁹ Dy- ¹⁴² Sm _{1.049}	21.4	153 Er(α) 149 Dy
¹⁵⁰ Nd ¹⁵⁰ Sm	58.2	¹⁵⁰ Nd- ¹⁵⁰ Sm	28.4	150 Nd 35 Cl ₂ – 146 Nd 37 Cl ₂	9.6	¹⁵⁰ Nd- ¹⁴⁸ Nd ¹⁵⁰ Sm ³⁵ Cl- ¹⁴⁸ Sm ³⁷ Cl
150 Sm 150 Eu	40.9	150 Sm $(n,\gamma)^{151}$ Sm 150 Eu $(\beta^-)^{150}$ Gd	30.5	149 Sm $(n, \gamma)^{150}$ Sm 151 Eu $(p, d)^{150}$ Eu	21.5	Sm SCI=1 Sm S/CI
150Gd	53.9 39.3	150 Gd(α) 146 Sm	46.1 37.2	150 Eu(β^-) 150 Gd	11.8	$^{150}{ m Tb}(m{eta}^+)^{150}{ m Gd}$
150Tb	80.5	150 Tb(α) 146 Eu	19.5	$^{150}\text{Tb}(\beta^+)^{150}\text{Gd}$	11.0	16(<i>p</i>) Gd
150 Dy	90.4	150 Dv(α) 146 Gd	7.2	$^{154}\text{Er}(\alpha)^{150}\text{Dy}$	2.4	$^{150}\mathrm{Ho}(\varepsilon)^{150}\mathrm{Dy}$
¹⁵⁰ Ho	53.3	$^{150}\text{Ho} - ^{133}\text{Cs}_{1.128}$	26.7	150 Ho(ε) 150 Dy	20.0	150 Er(β^+) 150 Ho
¹⁵⁰ Er	62.1	150 Er(β^+) 150 Ho	37.9	¹⁵⁰ Er-C _{12.5}		
¹⁵¹ Pm	77.1	¹⁵⁰ Nd(³ He,d) ¹⁵¹ Pm	22.9	150 Er- $C_{12.5}$ 151 Pm(β^{-}) 151 Sm		
¹⁵¹ Sm	58.6	150 Sm $(n,\gamma)^{151}$ Sm	25.5	$^{151}\text{Sm}(\beta^{-})^{151}\text{Eu}$	15.6	151 Sm $(n,\gamma)^{152}$ Sm
¹⁵¹ Eu	55.3	151 Sm(β^{-}) 151 Eu	40.1	151 Eu $(n,\gamma)^{152}$ Eu	1.8	¹⁵¹ Eu(p,t) ¹⁴⁹ Eu
¹⁵¹ Gd	84.4	$^{151}\mathrm{Gd}(\varepsilon)^{151}\mathrm{Eu}$	15.6	$^{151}\text{Tb}(\beta^+)^{151}\text{Gd}$		
¹⁵¹ Tb	50.8	151 Tb(β^+) 151 Gd	49.2	$^{151}\text{Tb}(\alpha)^{147}\text{Eu}$		
152 Nd	66.3	150 Nd(t,p) 152 Nd	33.7	152 Nd(β^-) 152 Pm		
¹⁵² Pm ¹⁵² Sm	51.3	152 Nd(β^{-}) 152 Pm 151 Sm(n, γ) 152 Sm	48.7	152 Pm(β^-) 152 Sm 154 Sm 35 Cl 152 Sm 37 Cl	20.1	152Ev(R+)152C
152 Sm 152 Eu	44.5 59.4	$Sm(n,\gamma)^{152}Sm$ $^{151}Eu(n,\gamma)^{152}Eu$	20.6 25.8	154 Sm 35 Cl $^{-152}$ Sm 37 Cl 152 Eu(n, γ) 153 Eu	20.1 14.8	152 Eu(β^+) 152 Sm 152 Eu(β^+) 152 Sm
153 Pm	52.1	$^{153}\text{Pm}(\beta^-)^{153}\text{Sm}$	47.9	¹⁵⁴ Sm(d, ³ He) ¹⁵³ Pm	14.0	$\operatorname{Eu}(p^+)$ Sin
153Sm	100.0	152 Sm $(n,\gamma)^{153}$ Sm	77.7	5m(a, 110) 1 m		
¹⁵³ Eu	74.0	¹⁵² Eu(n,γ) ¹⁵³ Eu	26.0	153 Eu $(n,\gamma)^{154}$ Eu		
¹⁵³ Gd	97.4	153 Gd(n, γ) 154 Gd	2.6	$^{153}\text{Tb}(\beta^+)^{153}\text{Gd}$		
¹⁵³ Tb	58.1	$^{153}\text{Tb}(\beta^+)^{153}\text{Gd}$	41.9	153 Dy(β^+) 153 Tb		
¹⁵³ Dy	51.8	153 Dv(β^+) 153 Tb	48.2	153 Dv(α) 149 Gd		
¹⁵³ Er	78.2	153 Er(α) 149 Dy	11.8	157 Yb(α) 153 Er	10.0	$C_{12} H_{10} = ^{154} Sm$
154Sm	65.5	¹⁵⁴ Sm ³⁵ Cl- ¹⁵² Sm ³⁷ Cl	26.8	¹⁵⁴ Sm- ¹⁵⁴ Gd	7.5	$C_{12} H_{10} - {}^{154}Sm$
¹⁵⁴ Eu	72.9	153 Eu(n, γ) 154 Eu	19.9	154 Eu(β^-) 154 Gd	6.8	Eu(n,γ)Eu
¹⁵⁴ Gd	49.7	154 Gd $(n,\gamma)^{155}$ Gd	27.3	154 Eu(β^-) 154 Gd	20.4	154 Sm $-^{154}$ Gd
154Dy	81.4	154 Dy(α) 150 Gd	18.6	¹⁵⁴ Dy ⁻¹³³ Cs _{1.158}		
¹⁵⁴ Er ¹⁵⁵ Eu	90.5	154 Er(α) 150 Dy	9.5	158 Yb(α) 154 Er	0.2	¹⁵⁸ Gd(t,α) ¹⁵⁷ Eu− ¹⁵⁶ Gd() ¹⁵⁵ Eu
Eu	91.6	154 Eu $(n,\gamma)^{155}$ Eu	8.1	155 Eu(β^{-}) 155 Gd	0.3	$$ Gd(t, α). Eu $-$ 15 Gd()15 Eu

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹⁵⁵ Gd	49.7	$^{154}\mathrm{Gd}(\mathrm{n},\gamma)^{155}\mathrm{Gd}$	38.5	$^{155}\mathrm{Gd}(\mathrm{n},\gamma)^{156}\mathrm{Gd}$	9.0	155 Eu $(\beta^{-})^{155}$ Gd
¹⁵⁶ Sm	86.4	156 Sm(β^-) 156 Eu	13.6	154 Sm(t,p) 156 Sm		
¹⁵⁶ Eu	67.8	156 Eu(β^-) 156 Gd	28.1	¹⁵⁴ Eu(t,p) ¹⁵⁶ Eu	4.1	156 Sm(β^-) 156 Eu
¹⁵⁶ Gd	61.4	155 Gd(n, γ) 156 Gd	40.1	156 Gd(n, γ) 157 Gd	1.2	¹⁶⁰ Gd ³⁵ Cl ₂ - ¹⁵⁶ Gd ³⁷ Cl ₂
¹⁵⁶ Tb	100.0	155 Gd(α ,t) 156 Tb $^{-158}$ Gd() 159 Tb	21.0	1565 (1.)1575		158 0 156 0
¹⁵⁶ Dy ¹⁵⁷ Eu	54.0 88.7	158 Dy 35 Cl $^{-156}$ Dy 37 Cl 158 Gd(t, α) 157 Eu $^{-156}$ Gd() 155 Eu	31.9 11.3	156 Dy(d,p) 157 Dy 157 Eu(β^-) 157 Gd	14.2	158 Dy(p,t) 156 Dy
157 Gd	58.6	156 Gd(n, γ) 157 Gd	29.6	$^{157}\mathrm{Gd}(\mathrm{n},\gamma)^{158}\mathrm{Gd}$	7.6	¹⁵⁹ Tb ³⁵ Cl- ¹⁵⁷ Gd ³⁷ Cl
157Th	94.0	$^{157}\text{Tb}(\varepsilon)^{157}\text{Gd}$	6.0	$^{156}\text{Gd}(\alpha,t)^{157}\text{Tb} - ^{158}\text{Gd}()^{159}\text{Tb}$	7.0	16 CI= Gu CI
157 Dv	65.9	¹⁵⁸ Dy(d,t) ¹⁵⁷ Dy	34.1	156 Dy(d,p) 157 Dy		
¹⁵⁷ Yb	83.6	157 Yb(α) 153 Er	13.2	157 Yb-C _{13.083} 160 Gd(\alpha,t) ¹⁶¹ Tb-158 Gd() ¹⁵⁹ Tb 159 Tb(4,t) ¹⁵⁸ Tb, 164 Dy() ¹⁶³ Dy	3.3	161 Hf(α) 157 Yb
¹⁵⁸ Gd	69.9	157 Gd(n, γ) 158 Gd	7.5	160 Gd(α ,t) $^{13.083}$ Tb $-^{158}$ Gd() 159 Tb	7.3	160Gd 35Cl-158Gd 37Cl
¹⁵⁸ Tb	36.6	157 Gd(α ,t) 158 Tb $-^{158}$ Gd() 159 Tb	36.3	$ID(\mathbf{u},t) ID = DY(t) DY$	16.3	158 Gd(d,t) 157 Gd $-^{159}$ Tb() 158 Tb
¹⁵⁸ Dy	66.0	160 Dv(n t) 158 Dv	18.2	¹⁶⁰ Dv ³⁵ Cl- ¹⁵⁸ Dv ³⁷ Cl	15.8	$^{158}\text{Tb}(\beta^-)^{158}\text{Dy}$
¹⁵⁸ Er	81.4	158Er-C	18.6	158 Tm(β^+) 158 Er		
¹⁵⁸ Tm	81.4	$^{156}\text{Tm} - \text{C}_{12,167}$	18.6	158 Tm(β^+) 158 Er		
158Yb	69.7	136 Yb(α) 134 Er	30.3	$^{158}\text{Yb} - ^{142}\text{Sm}_{1.113}$		
¹⁵⁹ Eu	100.0	160 Gd(t, α) 159 Eu $^{-158}$ Gd() 157 Eu		150 - 150		
¹⁵⁹ Gd	92.6	158 Gd(n,γ)159 Gd	7.4	$^{159}\text{Gd}(\beta^-)^{159}\text{Tb}$		161 - 25 - 150 - 27 -
¹⁵⁹ Tb	19.5	¹⁵⁹ Tb ³⁵ Cl- ¹⁵⁷ Gd ³⁷ Cl	17.2	$^{159}\text{Gd}(\beta^-)^{159}\text{Tb}$	15.1	¹⁶¹ Dy ³⁵ Cl- ¹⁵⁹ Tb ³⁷ Cl
¹⁵⁹ Dy ¹⁶⁰ Gd	68.3	159 Dy $(\varepsilon)^{159}$ Tb 160 Gd 35 Cl $^{-158}$ Gd 37 Cl	31.7	¹⁶¹ Dy(p,t) ¹⁵⁹ Dy	242	¹⁶⁰ Gd- ¹⁶⁰ Dy
¹⁶⁰ Tb	26.7		26.1	160 Gd(α ,t) 161 Tb $^{-158}$ Gd() 159 Tb 160 Tb(n , γ) 161 Tb	24.3	loo Gd=100 Dy
¹⁶⁰ Dy	94.3 77.0	159 Tb $(n,\gamma)^{160}$ Tb 160 Dy $(n,\gamma)^{161}$ Dy	5.7 21.3	$^{160}\text{Gd} - ^{160}\text{Dy}$	1.4	¹⁶⁰ Dy(p,t) ¹⁵⁸ Dy
¹⁶¹ Tb	77.0	$^{160}\text{Tb}(n,\gamma)^{161}\text{Tb}$	23.0	$^{160}\text{Gd}(\alpha,t)^{161}\text{Tb}-^{158}\text{Gd}()^{159}\text{Tb}$	1.4	Dy(p,t) Dy
¹⁶¹ Dy	52.4	161 Dy(n, γ) 162 Dy	22.9	160 Dy(n, γ) 161 Dy	13.6	¹⁶¹ Dy ³⁵ Cl- ¹⁵⁹ Tb ³⁷ Cl
¹⁶¹ Ho	100.0	160 Dv(3 He d) 161 Ho $-^{164}$ Dv() 165 Ho	22.)	$Dy(n, \gamma)$ Dy	13.0	by er iv er
¹⁶¹ Hf	65.0	¹⁶¹ Hf-C _{13,417}	19.5	$^{161}{\rm Hf}(\alpha)^{157}{\rm Yb}$	15.5	$^{165}{ m W}(lpha)^{161}{ m Hf}$
162 Dv	93.3	102 Dy(n, γ) 103 Dy	47.6	161 Dy $(n,\gamma)^{162}$ Dy		(01)
¹⁶² Ho	100.0	161 Dy(3 He,d) 162 Ho $-^{164}$ Dy() 165 Ho		3 (),,,		
¹⁶² Er	47.3	¹⁶⁴ Er ³⁵ Cl- ¹⁶² Er ³⁷ Cl	31.9	162Er 35Cl-160Gd 37Cl	16.2	162Er 35Cl ₂ -158Gd 37Cl ₂
163 Dv	51.5	163 Dy(n, γ) 164 Dy	41.8	163 Ho $(\varepsilon)^{163}$ Dy	6.6	162 Dy $(n,\gamma)^{163}$ Dy
¹⁶³ Ho	58.3	163 Ho $(\varepsilon)^{163}$ Dy	41.0	162 Dy(3 He,d) 163 Ho $-^{164}$ Dy() 165 Ho	0.8	163 Er(β^+) 163 Ho
¹⁶³ Er	59.4	163 Er(β^+) 163 Ho	20.6	¹⁶⁴ Er(d,t) ¹⁶³ Er	20.0	¹⁶² Er(d,p) ¹⁶³ Er
¹⁶⁴ Dy	48.0	163 Dy(n, γ) 164 Dy	41.0	162 Dy(3 He,d) 163 Ho $^{-164}$ Dy() 165 Ho	10.6	158 Gd(α ,t) 159 Tb $-^{164}$ Dy() 165 Ho
¹⁶⁴ Ho	67.1	¹⁶³ Dy(³ He,d) ¹⁶⁴ Ho- ¹⁶⁴ Dy() ¹⁶⁵ Ho	32.9	¹⁶⁵ Ho(γ,n) ¹⁶⁴ Ho		164 25 162 27
¹⁶⁴ Er	38.1	164 Er(n, γ) 165 Er	31.8	¹⁶⁶ Er ³⁵ Cl- ¹⁶⁴ Er ³⁷ Cl	19.1	¹⁶⁴ Er ³⁵ Cl- ¹⁶² Er ³⁷ Cl
¹⁶⁵ Ho ¹⁶⁵ Er	39.0	¹⁶⁵ Ho(n,γ) ¹⁶⁶ Ho	36.1	¹⁶² Dy(³ He,d) ¹⁶³ Ho- ¹⁶⁴ Dy() ¹⁶⁵ Ho	13.9	¹⁶⁹ Tm ³⁵ Cl ₂ – ¹⁶⁵ Ho ³⁷ Cl ₂
¹⁶⁵ Er ¹⁶⁵ Tm	56.1 49.7	164 Er $(n,\gamma)^{165}$ Er 164 Er $(\alpha,t)^{165}$ Tm $^{-168}$ Er $()^{169}$ Tm	23.6 48.2	167 Er(p,t) 165 Er 165 Tm(β^+) 165 Er	10.2	165 Tm(β^+) 165 Er 165 Tm $-^{142}$ Sm $_{1.162}$
¹⁶⁵ W	79.9	$^{165}W-C_{13.75}$	20.1	$^{165}W(\alpha)^{161}Hf$	2.1	1III= 3III _{1.162}
166 Ho	61.0	$W = C_{13.75}$ 165 Ho(n, γ) 166 Ho	39.0	$^{166}\text{Ho}(\beta^-)^{166}\text{Er}$		
166 Fr	62.5	166 Er $(n,\gamma)^{167}$ Er	33.6	$^{166}\text{Ho}(\beta^-)^{166}\text{Er}$	2.6	¹⁶⁶ Er ³⁵ Cl- ¹⁶⁴ Er ³⁷ Cl
¹⁶⁷ Er	39.7	167 Er $(n,\gamma)^{168}$ Er	36.6	166 Er $(n,\gamma)^{167}$ Er	10.1	¹⁶⁹ Tm ³⁵ Cl- ¹⁶⁷ Er ³⁷ Cl
¹⁶⁷ Tm	99.1	166 Er(α ,t) 167 Tm $-^{168}$ Er() 169 Tm	0.9	167 Yb(β^+) 167 Tm		
167 Vh	90.1	167 Yb(β^+) 167 Tm	9.9	168 Yb(d.t) 167 Yb		
¹⁶⁸ Er	60.0	¹⁶⁷ Er(n, γ) ¹⁶⁸ Er	11.1	170 Er(α ,t) 171 Tm $-^{168}$ Er() 169 Tm	7.7	164 Er(α ,t) 165 Tm $-^{168}$ Er() 169 Tm
168Tm	100.0	167 Er(α ,t) 168 Tm $-^{168}$ Er() 169 Tm				
¹⁶⁸ Yb	54.2	168 Yb $(n,\gamma)^{169}$ Yb	37.4	170 Yb(p,t) 168 Yb	8.5	168 Yb(d,t) 167 Yb
¹⁶⁹ Er	92.4	168 Er $(n,\gamma)^{169}$ Er		169 Er($\hat{\beta}^-$) 169 Tm		160- 25 165 27
¹⁶⁹ Tm	46.9	169 Tm $(n,\gamma)^{170}$ Tm	11.6	170 Er(α ,t) 171 Tm $-^{168}$ Er() 169 Tm	10.2	$^{169}\mathrm{Tm}\ ^{35}\mathrm{Cl}_{2} - ^{165}\mathrm{Ho}\ ^{37}\mathrm{Cl}_{2}$
¹⁶⁹ Yb ¹⁶⁹ W	54.2	¹⁷¹ Yb(p,t) ¹⁶⁹ Yb	45.8	168 Yb(n, γ) 169 Yb		
¹⁶⁹ W ¹⁶⁹ Re	69.5	$^{173}\text{Os}(\alpha)^{169}\text{W}$	30.5	¹⁶⁹ W-C _{14.083}		
¹⁰⁹ Re ¹⁷⁰ Er	72.0	$^{173}\text{Ir}^{m}(\alpha)^{169}\text{Re}$	28.0	¹⁶⁹ Re-C _{14.083} 170Er(n 2)171Er	10.0	¹⁷⁰ Er ³⁵ Cl- ¹⁶⁸ Er ³⁷ Cl
¹⁷⁰ Er ¹⁷⁰ Tm	59.2 52.3	$^{170}{\rm Er}(\alpha,t)^{171}{\rm Tm} - ^{168}{\rm Er}()^{169}{\rm Tm}$ $^{169}{\rm Tm}(n,\gamma)^{170}{\rm Tm}$	29.3	170 Er(n, γ) 171 Er	10.0	Er CIEr CI
170 Yb	52.5 76.5	170 Yb $(n,\gamma)^{171}$ Yb	47.7 30.6	170 Tm(β^-) 170 Yb 170 Tm(β^-) 170 Yb	0.5	¹⁷⁰ Yb(p,t) ¹⁶⁸ Yb
¹⁷¹ Er	68.8	170 Er $(n,\gamma)^{171}$ Er	31.2	$^{171}\text{Er}(\beta^-)^{171}\text{Tm}$	0.5	10(p,t) 10
	93.2	$^{171}\text{Tm}(\beta^{-})^{171}\text{Yb}$	7.3	$^{171}\text{Er}(\beta^-)^{171}\text{Tm}$		
171 Tm			1.0	(P / 1111		
¹⁷¹ Tm ¹⁷¹ Yb	73.1	171 Yb(n, γ) 172 Yb 170 Yb(α ,t) 171 Lu $^{-174}$ Yb() 175 Lu	11.0	$^{170}{ m Yb}({ m n},\gamma)^{171}{ m Yb}$ $^{171}{ m Lu}(eta^+)^{171}{ m Yb}$	9.9	171 Lu(β^+) 171 Yb

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹⁷¹ Os	90.0	¹⁷¹ Os-C _{14.25} ¹⁷⁰ Er(t,p) ¹⁷² Er	10.0	175 Pt(α) 171 Os		
¹⁷² Er	87.4	¹⁷⁰ Er(t,p) ¹⁷² Er	12.6	$^{172}\text{Er}(\hat{\beta}^{-})^{172}\text{Tm}$		
¹⁷² Tm	69.9	$^{1/2}\text{Er}(\beta^{-})^{1/2}\text{Tm}$	30.1	$^{172}\text{Tm}(\beta^{-})^{172}\text{Yb}$		
¹⁷² Yb	70.0	$^{172}{\rm Yb}({\rm n},\gamma)^{173}{\rm Yb}$	26.5	171 Yb(n, γ) 172 Yb	3.3	¹⁷² Yb ³⁵ Cl ₂ - ¹⁶⁸ Er ³⁷ Cl ₂
¹⁷² Lu	100.0	171 Yb(α ,t) 172 Lu $^{-174}$ Yb() 175 Lu				
¹⁷³ Yb	57.0	173 Yb $(n,\gamma)^{174}$ Yb	28.1	172 Yb(n, γ) 173 Yb	11.9	¹⁷⁵ Lu ³⁵ Cl- ¹⁷³ Yb ³⁷ Cl
¹⁷³ Lu	100.0	172 Yb(α ,t) 173 Lu $^{-174}$ Yb() 175 Lu		172		172 160
¹⁷³ Os	43.9	177 Pt(α) 173 Os	28.7	173 Os- $C_{14.417}$ 173 Ir $^{m}(\alpha)^{169}$ Re	27.4	$^{173}\mathrm{Os}(\alpha)^{169}\mathrm{W}$
¹⁷³ Ir ^m	72.1	177 Au ^m (α) ¹⁷³ Ir ^m	27.9	$^{1/3} \text{Ir}^m(\alpha)^{169} \text{Re}$		170*** 171* 174*** 0175*
¹⁷⁴ Yb	47.1	174 Yb(n, γ) 175 Yb 173 Yb(α ,t) 174 Lu $^{-174}$ Yb() 175 Lu	42.9	173 Yb $(n,\gamma)^{174}$ Yb	10.0	170 Yb(α ,t) 171 Lu $^{-174}$ Yb() 175 Lu
¹⁷⁴ Lu ¹⁷⁴ Hf	100.0	¹⁷⁶ Hf ³⁵ Cl- ¹⁷⁴ Hf ³⁷ Cl	12.2	$^{174}{ m Hf}({ m n},\gamma)^{175}{ m Hf}$	12.0	¹⁷⁶ Hf(p,t) ¹⁷⁴ Hf
¹⁷⁵ Yb	74.8	174 Yb $(n,\gamma)^{175}$ Yb	13.2	175 Yb(β^-) 175 Lu	12.0	HI(p,t)···HI
¹⁷⁵ Lu	52.8 77.1	175 Lu(n, γ) 176 Lu	47.2 12.8	175 Yb(β^{-}) 175 Lu	4.4	¹⁷⁵ Lu ³⁷ Cl- ¹⁴² Nd ³⁵ Cl ₂
175 LLF	86.3	174 Hf(n, γ) 175 Hf	13.7	¹⁷⁷ Hf(p,t) ¹⁷⁵ Hf	4.4	Lu CI Nu CI ₂
¹⁷⁵ Ir	50.0	$^{175}\text{Ir}^p(\text{IT})^{175}\text{Ir}$	50.0	175 Ir- $C_{14.583}$		
175 Ir p	75.6	179 Au(α) 175 Ir p	24.4	$^{175}\text{Ir}^p(\text{IT})^{175}\text{Ir}$		
¹⁷⁵ Pt	89.8	$^{175}\text{Pt}(\alpha)^{171}\text{Os}$	10.2	179 Hg(α) 175 Pt		
¹⁷⁶ Yb	91.2	176 Yb(α ,t) 177 Lu $^{-174}$ Yb() 175 Lu	8.8	¹⁷⁶ Yb ³⁵ Cl- ¹⁷⁴ Yb ³⁷ Cl		
¹⁷⁶ Lu	41.8	176 Lu $(n,\gamma)^{177}$ Lu	22.5	175 Lu $(n,\gamma)^{176}$ Lu	21.8	$^{176}\text{Lu}(\beta^-)^{176}\text{Hf}$
176 Hf	58.3	176 Hf(n ν) 177 Hf	36.1	176 Lu(β^{-}) 176 Hf	4.3	¹⁷⁸ Hf ³⁵ Cl- ¹⁷⁶ Hf ³⁷ Cl
¹⁷⁶ Ir	65.4	¹⁷⁶ Ir-C _{14.667}	34.6	180 Au(α) 176 Ir		
¹⁷⁷ Lu	56.9	$^{1/6}$ Lu(n, γ) $^{1/7}$ Lu	42.9	177 Lu(β^-) 177 Hf	0.2	176 Yb(α ,t) 177 Lu $^{-174}$ Yb() 175 Lu
¹⁷⁷ Hf	66.9	177 Hf(n, γ) 178 Hf	22.2	$^{177}\text{Lu}(\beta^-)^{177}\text{Hf}$	10.7	176 Hf(n, γ) 177 Hf
¹⁷⁷ Pt	55.3	177 Pt(α) 173 Os	28.8	177 Pt $-$ C _{14.75}	16.0	181 Hg(α) 177 Pt
¹⁷⁷ Au	95.6	$^{181}\text{Tl}(\alpha)^{177}\text{Au}$	4.4	177 Au m (IT) 177 Au		
$^{1//}$ Au ^m	72.6	177 Au m (IT) 177 Au	27.4	177 Au ^{m} (α) 173 Ir m		
¹⁷⁸ Lu	89.4	179 Hf(t, α) 178 Lu $^{-178}$ Hf() 177 Lu	10.6	178 Lu m (IT) 178 Lu		
¹⁷⁸ Lu ^m	65.8	178 Lu m (IT) 178 Lu	34.2	176 Lu(t,p) 178 Lu ^m		179 25 177 27
¹⁷⁸ Hf	66.5	178 Hf(n, γ) 179 Hf	32.7	177 Hf(n, γ) 178 Hf	0.9	¹⁷⁸ Hf ³⁵ Cl- ¹⁷⁶ Hf ³⁷ Cl
¹⁷⁹ Lu	100.0	180 Hf(t, α) 179 Lu $^{-178}$ Hf() 177 Lu		2 22 170222		170**** 180***
¹⁷⁹ Hf ¹⁷⁹ Ta	33.5	178 Hf(n, γ) 179 Hf	26.1	$C_{14}H_{11}-{}^{179}Hf$	16.3	$^{179}{ m Hf}({ m n},\gamma)^{180}{ m Hf}$
179 Au	87.8	179 Ta $(\varepsilon)^{179}$ Hf 183 Tl $^{m}(\alpha)^{179}$ Au	12.2	¹⁸¹ Ta(p,t) ¹⁷⁹ Ta	22.7	179 Au(α) 175 Irp
¹⁷⁹ Hg	44.5 74.3	¹⁷⁹ Hg ⁻²⁰⁸ Pb _{.861}	32.8 25.7	179 Au $-$ C $_{14.917}$ 179 Hg $(\alpha)^{175}$ Pt	22.7	$\operatorname{Au}(\alpha)^{-1}\operatorname{Irp}$
¹⁸⁰ Hf	83.6	179 Hf(n, γ) 180 Hf	16.4	180 Hf(n, γ) 181 Hf		
¹⁸⁰ Ta	96.7	$^{181}\text{Ta}(\gamma, n)^{180}\text{Ta}$	3.3	$^{180}\text{Ta}(\beta^{-})^{180}\text{W}$		
180 W	73.9	180 W(t,p) 182 W	12.6	$^{180}\text{Ta}(\beta^{-})^{180}\text{W}$	7.6	$^{183}\mathrm{W}~\mathrm{O}_{2}\mathrm{-}^{180}\mathrm{W}~^{35}\mathrm{Cl}$
180 Au	56.5	180 Au- $^{C}_{15}$	40.8	180 Au(α) 176 Ir	2.7	$^{184}\text{Tl}(\alpha)^{180}\text{Au}$
¹⁸⁰ Hg	85.0	¹⁸⁰ Hg- ²⁰⁸ Pb _{.865}	15.0	$^{184}\text{Pb}(\alpha)^{180}\text{Hg}$	2.,	11(6)
¹⁸¹ Hf	83.5	180 Hf(n, γ) 181 Hf	16.5	181 Hf(β^-) 181 Ta		
¹⁸¹ Ta	40.1	181 Ta $(n, \gamma)^{182}$ Ta	34.0	¹⁸³ W ³⁵ Cl- ¹⁸¹ Ta ³⁷ Cl	8.7	$^{181}{\rm Hf}({m \beta}^-)^{181}{\rm Ta}$
181 W	69.2	$^{181}W(\varepsilon)^{181}Ta$	21.8	¹⁸² W(d t) ¹⁸¹ W	9.0	180 W(d,p) 181 W
¹⁸¹ Hg	83.0	181 Hg(α) 177 Pt	17.0	¹⁸¹ Hg- ²⁰⁸ Pb _{.870}		
¹⁸¹ Tl	91.6	¹⁸¹ Tl- ¹³³ Cs _{1,261}	6.1	$^{185}\text{Bi}^{m}(\alpha)^{181}\text{Tl}$	2.3	$^{181}\text{Tl}(\alpha)^{177}\text{Au}$
¹⁸² Ta	59.8	$^{181}\text{Ta}(n,\gamma)^{182}\text{Ta}$	40.2	$^{182}\text{Ta}(\beta^{-})^{182}\text{W}$		
¹⁸² W	97.9	$^{182}W(n,\gamma)^{183}W$	1.9	$^{182}\text{Ta}(\beta^{-})^{182}\text{W}$	0.1	180 W(t,p) 182 W
¹⁸² Os	60.6	¹⁸² Os-C _{15.167}	39.4	186 Pt(α) 182 Os		
¹⁸² Ir	56.3	182 Os- $C_{15.167}$ 182 Ir- $C_{15.167}$ 183 W O- C_{2} 35 Cl ₅	43.7	186 Au(α) 182 Ir		102 104
¹⁸³ W	52.2	¹⁸³ W O-C ₂ ³⁵ Cl ₅	38.6	¹⁹⁹ Hg- ¹⁸³ W O	4.7	183 W $(n,\gamma)^{184}$ W
¹⁸³ Ir	80.8	105 lr=('	19.2	187 Au(α) 183 Ir		197×× m = 192×
¹⁸³ Pt ¹⁸³ Hg	54.7	183 Pt – C _{15.25} 183 Pt – C _{15.25} 183 Hg – ²⁰⁸ Pb _{.880}	30.7	187 Hg(α) 183 Pt	14.6	$^{187}\mathrm{Hg}^m(\alpha)^{183}\mathrm{Pt}$
¹⁸³ Hg ¹⁸³ Tl	59.5	183 TI 133 Co	40.5	¹⁸⁷ Pb(α) ¹⁸³ Hg ¹⁸⁷ P;(α) ¹⁸³ TI		
¹⁸³ Tl ^m	90.5	$^{183}\text{Tl} - ^{133}\text{Cs}_{1.376}$ $^{187}\text{Bi}(\alpha)^{183}\text{Tl}^m$	9.5	187 Bi $(\alpha)^{183}$ Tl 183 Tl $^{m}(\alpha)^{179}$ Au		
184W	65.7	183 W(n, γ) 184 W	34.3	$^{184}W(n,\gamma)^{185}W$	0.8	¹⁸⁶ W ³⁵ Cl- ¹⁸⁴ W ³⁷ Cl
¹⁸⁴ Re	93.9 100.0	185 Re(d,t) 184 Re $^{-187}$ Re() 186 Re	5.0	w (π,γ) w	0.8	w CI= W CI
¹⁸⁴ Os	99.5	184 Os $(n,\gamma)^{185}$ Os	0.5	188 Pt(α) 184 Os		
¹⁸⁴ Pt	99.3 57.9	188 Hg(α) 184 Pt	42.1	184 Pt $-C_{15.333}$		
		11 <u>2(</u> () 1 t	44.1	1 t-C15 222		
¹⁸⁴ Hg	38.9	¹⁸⁴ Hg-C _{15,333}	32.1	184 Hg $-^{208}$ Pb $_{.885}$	29.0	184 Hg $-^{204}$ Pb $_{.902}$

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
¹⁸⁴ Pb	84.1	$^{184}\text{Pb}(\alpha)^{180}\text{Hg}$	15.9	¹⁸⁵ Bi ^m (p) ¹⁸⁴ Pb		
¹⁸⁵ W	92.8	$^{184}W(n,\gamma)^{185}W$	7.2	$^{185}W(\beta^{-})^{185}Re$		
¹⁸⁵ Re	67.9	$^{185}W(\beta^{-})^{185}Re$	14.7	¹⁸⁵ Re(n,γ) ¹⁸⁶ Re	14.6	¹⁸⁵ Re ³⁵ Cl- ¹⁸³ W ³⁷ Cl
¹⁸⁵ Os	99.6	$^{185}\mathrm{Os}(\varepsilon)^{185}\mathrm{Re}$	0.4	$^{184}Os(n,\gamma)^{185}Os$		
185 Bi m	67.4	$^{185}\text{Bi}^{m}(p)^{184}\text{Pb}$	32.6	$^{185}\text{Bi}^{m}(\alpha)^{181}\text{Tl}$		
¹⁸⁶ W	67.7	$^{186}W(n,\gamma)^{187}W$	22.7	¹⁸⁶ W ³⁵ Cl- ¹⁸⁴ W ³⁷ Cl	9.6	$^{186}W(p,t)^{184}W$
¹⁸⁶ Re	84.6	185 Re $(n,\gamma)^{186}$ Re	15.4	$^{186}\text{Re}(\beta^-)^{186}\text{Os}$		
186 Oc	64.4	$^{186}\text{Re}(\beta^{-})^{186}\text{Os}$	35.4	186 Os $(n, \gamma)^{187}$ Os	0.2	190 Pt(α) 186 Os
186Pt	60.6	¹⁸⁶ Pt-C _{15.5}	39.4	186 Pt(α) 182 Os		
¹⁸⁶ Au	56.3	¹⁸⁶ Au-C _{15,5}	43.7	186 Au(α) 182 Ir		
187W	67.8	186 Au-C _{15.5} 187 W(β ⁻) 187 Re	32.2	186 W(n, γ) 187 W		197 25 04 195 27 04
¹⁸⁷ Re	76.1	167 Re(b) 167 Os	14.4	$^{187}W(\beta^{-})^{187}Re$	9.8	¹⁸⁷ Re ³⁵ Cl- ¹⁸⁵ Re ³⁷ Cl
¹⁸⁷ Os	56.1	186 Os $(n, \gamma)^{187}$ Os	23.4	$^{187}\text{Re}(\beta^-)^{187}\text{Os}$	19.7	$^{187}\mathrm{Os}(\mathrm{n},\gamma)^{188}\mathrm{Os}$
⁸⁷ Au	80.8	¹⁸⁷ Au-C _{15.583}	19.2	187 Au(α) 183 Ir		197
¹⁸⁷ Hg	55.7	¹⁸⁷ Hg- ²⁰⁸ Pb _{.899}	18.4	187 Hg(α) 183 Pt	17.2	187 Hg $-$ C $_{15.583}$
¹⁸⁷ Hg ^m	51.1	$^{187}\text{Hg}^m(\text{IT})^{187}\text{Hg}$	48.9	187 Hg ^m (α) 183 Pt		
187Tl	62.0	$^{191}\text{Bi}(\alpha)^{187}\text{Tl}$	38.0	¹⁸⁷ Tl ^m (IT) ¹⁸⁷ Tl		197 197
$^{187}\text{Tl}^{m}$	75.3	$^{191}\text{Bi}(\alpha)^{187}\text{Tl}^m$	15.0	$^{187}\text{Tl}^m$ - $^{123}\text{L}^{15.583}$	9.7	$^{187}\text{Tl}^m(\text{IT})^{187}\text{Tl}$
¹⁸⁷ Pb	43.7	187 Pb(α) 183 Hg	40.4	$^{187}\text{Pb} - ^{133}\text{Cs}_{1.406}$	15.9	191 Po $(\alpha)^{187}$ Pb
¹⁸⁷ Pb ^m	66.8	$^{187}\text{Pb}^m - ^{133}\text{Cs}_{1.406}$	33.2	$^{191}\text{Po}(\alpha)^{187}\text{Pb}^{m}$		
187Bi	69.3	$^{187}\text{Bi}(\alpha)^{183}\text{Tl}$	30.7	$^{187}\text{Bi}(\alpha)^{183}\text{Tl}^m$		199 199 -
188 Os	80.1	187 Os $(n, \gamma)^{188}$ Os	19.6	188 Os $(n,\gamma)^{189}$ Os	0.3	188 Ir(β^+) 188 Os
188 Ir	64.2	188 Ir(β^{+}) 188 Os	35.8	188 Pt $(\varepsilon)^{188}$ Ir		100 100
¹⁸⁸ Pt	64.4	188 Pt(α) 184 Os	19.7	190 Pt(p,t) 188 Pt	15.9	188 Pt(ε) 188 Ir
188 Hg	71.9	¹⁸⁸ Hg- ²⁰⁸ Pb _{.904}	17.0	¹⁸⁸ Hg-C _{15.667}	11.1	188 Hg(α) 184 Pt
189Os	78.3	188 Os $(n,\gamma)^{189}$ Os	21.7	189 Os(n, γ) 190 Os		
189 Ir	71.0	¹⁹¹ Ir(p,t) ¹⁸⁹ Ir	29.0	189 Pt(β^+) 189 Ir		
189 Pt	80.4	¹⁹⁰ Pt(p,d) ¹⁸⁹ Pt	19.6	189 Pt(β^+) 189 Ir		
189 Hg	60.8	¹⁸⁹ Hg-C _{15.75} ¹⁸⁹ Hg ^m - ²⁰⁸ Pb _{.909} ¹⁸⁹ C ₁₅	39.2	¹⁸⁹ Hg ^m (IT) ¹⁸⁹ Hg		
¹⁸⁹ Hg ^m	92.6	$^{189}\text{Hg}^m - ^{208}\text{Pb}_{.909}$	7.4	$^{189}\text{Hg}^m(\text{IT})^{189}\text{Hg}$		102 100 -
190 Os	78.0	US(n, γ) US	21.0	190 Os $(n,\gamma)^{191}$ Os	0.6	192 Os(p,t) 190 Os
190 Pt	57.8	¹⁹² Pt(p,t) ¹⁹⁰ Pt	23.3	¹⁹⁰ Pt(p,t) ¹⁸⁸ Pt	14.9	190 Pt(α) 186 Os
190 Hg	72.6	¹⁹⁰ Hg ⁻²⁰⁸ Pb _{.913}	27.4	$^{194}\text{Pb}(\alpha)^{190}\text{Hg}$		
191 Os	78.9	190 Os $(n,\gamma)^{191}$ Os	21.1	$^{191}\text{Os}(\beta^{-})^{191}\text{Ir}$		102 102 101 100 -
191 Ir	63.3	$^{191}\text{Os}(\beta^-)^{191}\text{Ir}$	35.6	191 Ir(n, γ) 192 Ir	1.1	193 Ir(t, α) 192 Os $^{-191}$ Ir() 190 O
191 Pt	69.0	192 Pt(p,d) 191 Pt $^{-194}$ Pt() 193 Pt	30.6	¹⁹² Pt(p,d) ¹⁹¹ Pt	0.3	191 Au(β^+) 191 Pt
¹⁹¹ Au	54.4	191 Au(β^+) 191 Pt	25.2	$^{191}\text{Hg}(\beta^+)^{191}\text{Au}$	20.4	191 Au- $C_{15.917}$ 191 Hg(β^+) 191 Au
¹⁹¹ Hg	69.8	¹⁹¹ Hg ⁻²⁰⁸ Pb _{.918}	22.6	¹⁹¹ Hg-C _{15.917}	7.6	191 Hg(β^{+}) 191 Au
¹⁹¹ Bi	86.0	¹⁹¹ Bi- ¹³³ Cs _{1,436}	12.4	$^{191}\text{Bi}(\alpha)^{187}\text{Tl}^{m}$	1.6	$^{191}\mathrm{Bi}(\alpha)^{187}\mathrm{Tl}$
¹⁹¹ Po	61.7	$^{191}\text{Po}(\alpha)^{187}\text{Pb}^{m}$	38.3	$^{191}\text{Po}(\alpha)^{187}\text{Pb}$		102 102 -
¹⁹² Os	45.4	192 Os(p,t) 190 Os	27.6	193 Ir(t, α) 192 Os $^{-191}$ Ir() 190 Os	18.0	192 Os $(n,\gamma)^{193}$ Os
192 Ir	64.3	191 Ir(n, γ) 192 Ir	34.8	192 Ir(n, γ) 193 Ir	1.0	$^{192}\text{Ir}(\beta^-)^{192}\text{Pt}$
¹⁹² Pt	58.6	$^{192}\text{Ir}(\beta^-)^{192}\text{Pt}$	37.4	192 Pt $(n,\gamma)^{193}$ Pt	5.5	¹⁹² Pt(p,d) ¹⁹¹ Pt- ¹⁹⁴ Pt() ¹⁹³ P
193 Os	81.9	192 Os $(n, \gamma)^{193}$ Os	18.1	$^{193}\text{Os}(\beta^{-})^{193}\text{Ir}$		102 0 10 102*
193 Ir	64.5	192 Ir(n, γ) 193 Ir	33.4	193 Pt $(\varepsilon)^{193}$ Ir	3.1	$^{193}\text{Os}(\beta^-)^{193}\text{Ir}$
¹⁹³ Pt	65.3	193 Pt $(\varepsilon)^{193}$ Ir	28.0	¹⁹⁴ Pt(p,d) ¹⁹³ Pt	5.7	¹⁹² Pt(p,d) ¹⁹¹ Pt- ¹⁹⁴ Pt() ¹⁹³ P
¹⁹³ Au	86.5	197 Au(α , 8 He) 193 Au	13.5	193 Hg(β^+) 193 Au		103
¹⁹³ Hg	58.0	193 Hg(β^+) 193 Au	32.3	¹⁹³ Hg ⁻²⁰⁸ Pb _{.928}	9.7	¹⁹³ Hg-C _{16,083}
¹⁹⁴ Pt	93.6	194 Pt $(n,\gamma)^{195}$ Pt	5.3	¹⁹⁴ Pt(p,d) ¹⁹³ Pt	1.1	192 Pt(p,d) 191 Pt $^{-194}$ Pt() 193 P
¹⁹⁴ Au	83.3	194 Au(β^+) 194 Pt	16.7	194 Hg(ε) 194 Au		104
¹⁹⁴ Hg	49.9	¹⁹⁴ Hg ⁻ ²⁰⁸ Pb _{.933}	29.9	194 Hg(ε) 194 Au	20.1	¹⁹⁴ Hg-C _{16.167}
194 Pb	60.3	$^{198}\text{Po}(\alpha)^{194}\text{Pb}$	39.7	$^{194}\text{Pb}(\alpha)^{190}\text{Hg}$		
195 Pt	93.7	195 Pt(n, γ) 196 Pt	6.3	194 Pt $(n,\gamma)^{195}$ Pt		
¹⁹⁵ Au	99.9	195 Au(ε) 195 Pt	0.1	195 Hg(β^+) 195 Au		
¹⁹⁵ Hg	78.6	¹⁹⁵ Hg- ²⁰⁸ Pb _{.938}	21.4	$^{195}\text{Hg}(\beta^+)^{195}\text{Au}$		100
196Pt	93.0	196 Pt $(n,\gamma)^{197}$ Pt	6.2	195 Pt $(n,\gamma)^{196}$ Pt	0.8	196 Au(β^+) 196 Pt
¹⁹⁶ An	51.7	197 Au(γ ,n) 196 Au	31.0	196 Au(β^-) 196 Hg	17.3	196 Au(β^{+}) 196 Pt
⁹⁶ Hg	57.2	¹⁹⁸ Hg ³⁵ Cl- ¹⁹⁶ Hg ³⁷ Cl	29.9	196 Au(β^-) 196 Hg	12.9	196 Hg(n, γ) 197 Hg
¹⁹⁷ Pt	93.7	$^{197}\text{Pt}(\beta^{-})^{197}\text{Au}$	6.3	196 Pt(n, γ) 197 Pt		
¹⁹⁷ Au	96.6	¹⁹⁷ Au(n,γ) ¹⁹⁸ Au	2.8	197 Pt(β^-) 197 Au	0.5	¹⁹⁷ Au(γ,n) ¹⁹⁶ Au
¹⁹⁷ Hg	84.1	196 Hg(n, γ) 197 Hg	15.9	¹⁹⁹ Hg(p,t) ¹⁹⁷ Hg		

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation	
¹⁹⁸ Au	70.0	198 Au(β^-) 198 Hg	26.7	¹⁹⁸ Au(n,γ) ¹⁹⁹ Au	3.3	197 Au $(n,\gamma)^{198}$ Au	
198 Ho	70.9	198 Hg – C	20.2	198 Hg(n, γ) 199 Hg	4.0	198 Au(β^{-}) 198 Hg	
¹⁹⁸ Po	60.6	¹⁹⁸ Po- ²⁰⁸ Pb ₀₅₂	39.4	$^{198}\text{Po}(\alpha)^{194}\text{Pb}$			
¹⁹⁹ Au	71.8	198 Au(n, γ) 199 Au	28.2	199 Au(β^-) 199 Hg		100** 200**	
¹⁹⁹ Hg ²⁰⁰ Hg	42.7	¹⁹⁹ Hg-C ₂ ³⁵ Cl ₅	28.0	198 Hg(n, γ) 199 Hg	15.0	199 Hg(n, γ) 200 Hg	
²⁰¹ Au	82.3 100.0	199 Hg(n, 9) 200 Hg 202 Hg(d, 3 He) 201 Au $^{-206}$ Pb() 205 Tl	7.2	²⁰⁴ Hg ³⁵ Cl ₂ - ²⁰⁰ Hg ³⁷ Cl ₂	6.8	²⁰⁰ Hg ³⁵ Cl- ¹⁹⁸ Hg ³⁷ Cl	
²⁰¹ Hg	52.4	201 Hg(n, γ) 202 Hg	34.1	$^{201}{ m Hg}$ $^{35}{ m Cl}-^{199}{ m Hg}$ $^{37}{ m Cl}$	12.9	$^{201}{ m Hg}~^{35}{ m Cl}-^{199}{ m Hg}~^{37}{ m Cl}$	
²⁰² Ho	43.0	$^{11g(n,\gamma)}_{201}$ Hg(n, 202 Hg	24.7	²⁰² Hg ³⁵ Cl- ²⁰⁰ Hg ³⁷ Cl	20.7	²⁰⁴ Hg ³⁵ Cl- ²⁰² Hg ³⁷ Cl	
²⁰² Tl	54.1	$^{203}\text{Tl}(p.d)^{202}\text{Tl}$	45.9	202 Ph(c)202 T1	20.7	ng er ng er	
²⁰² Ph	65.7	204 Pb(p,t) 202 Pb	26.0	²⁰² Pb-C _{16.833}	8.2	202 Pb(ε) 202 T1	
²⁰³ Au	100.0	204 Hg(d, 3 He) 203 Au $-^{206}$ Pb() 205 Tl					
203 Ho	83.6	$^{203}{ m Hg}(eta^-)^{203}{ m Tl}$	11.3	204 Hg(d,t) 203 Hg	5.1	202 Hg(d,p) 203 Hg $-^{204}$ Hg() 205 Hg	
203 T1	75.8	$^{203}\text{Tl}(n,\gamma)^{204}\text{Tl}$	11.1	²⁰³ Tl ³⁵ Cl- ²⁰¹ Hg ³⁷ Cl	8.2	203 Hg(β^{-}) 203 Tl	
²⁰³ Pb	51.4	²⁰⁴ Pb(p,d) ²⁰³ Pb	37.0	207 Po(α) 203 Pb	10.3	203 Pb $(\varepsilon)^{203}$ Tl	
²⁰³ Bi ²⁰³ At	81.6	207 At(α) 203 Bi 203 At- 208 Pb. $_{976}$	18.4	203 Bi(β^{+}) 203 Pb 207 Fr(α) 203 At			
²⁰⁴ Hg	99.9	204 Hg-C ₁₇	0.1	204 Hg 35 Cl ₂ $-^{200}$ Hg 37 Cl ₂	5.2	²⁰⁴ Hg ³⁵ Cl- ²⁰² Hg ³⁷ Cl	
²⁰⁴ Tl	87.1 77.6	$^{204}\text{Tl}(\beta^-)^{204}\text{Pb}$	5.9 18.5	$^{203}\text{Tl}(n,\gamma)^{204}\text{Tl}$	5.3 3.9	²⁰⁵ Tl(d,t) ²⁰⁴ Tl	
²⁰⁴ Pb	78.9	$^{204}\text{Pb}(n,\gamma)^{205}\text{Pb}$	19.3	$^{204}\text{Tl}(\beta^-)^{204}\text{Pb}$	1.3	²⁰⁶ Pb ³⁵ Cl- ²⁰⁴ Pb ³⁷ Cl	
²⁰⁴ At	94.0	204At-C ₁₇	6.0	208 Fr(α) 204 At	1.3	10 C1 10 C1	
²⁰⁵ Hσ	52.7	204 Hg(d,p) 205 Hg	47.3	202 Hg(d,p) 203 Hg $-^{204}$ Hg() 205 Hg			
²⁰⁵ Tl	56.7	$^{205}\text{Tl}(d.t)^{204}\text{Tl}$	13.5	²⁰⁵ Tl ³⁵ Cl- ²⁰³ Tl ³⁷ Cl	11.7	²⁰⁵ Tl(³ He,d) ²⁰⁶ Pb	
205 Ph	80.9	205 Pb(n, γ) 206 Pb	19.1	204 Pb $(n,\gamma)^{205}$ Pb		,.,	
²⁰⁵ Bi	100.0	$^{205}\text{Bi}(\beta^+)^{205}\text{Pb}$					
²⁰⁶ Tl	84.1	$^{205}\text{Tl}(n,\gamma)^{206}\text{Tl}$	15.9	$^{210}\mathrm{Bi}(\alpha)^{206}\mathrm{Tl}$			
²⁰⁶ Pb	70.0	²⁰⁶ Pb ³⁵ Cl ₂ — ²⁰² Hg ³⁷ Cl ₂	18.5	205 Pb $(n,\gamma)^{206}$ Pb	8.1	206 Pb $(n,\gamma)^{207}$ Pb	
²⁰⁷ Tl	45.4	$^{207}\text{Tl}(\beta^-)^{207}\text{Pb}$	41.7	211 Bi $(\alpha)^{207}$ Tl	12.9	$^{205}\text{Tl}(t,p)^{207}\text{Tl}$	
²⁰⁷ Pb	88.9	$^{206}\text{Pb}(n,\gamma)^{207}\text{Pb}$	10.1	207 Pb $(n,\gamma)^{208}$ Pb	0.6	$^{207}\text{Tl}(\hat{\beta}^{-})^{207}\text{Pb}$	
²⁰⁷ Bi ²⁰⁷ Po	97.4	209 Bi(p,t) 207 Bi 207 Po(α) 203 Pb	2.6	207 Po $(\beta^+)^{207}$ Bi 207 Po $(\beta^+)^{207}$ Bi			
²⁰⁷ At	59.3	211 Fr(α) 207 At	40.7 18.1	207 At(α) 203 Bi			
²⁰⁷ Fr	81.9 97.4	207 Fr(α) 203 At	2.6	$^{208}\text{Fr} - ^{209}\text{Fr}_{.498} + ^{207}\text{Fr}_{.502}$			
²⁰⁸ Pb	89.1	$^{207}\text{Pb}(n,\gamma)^{208}\text{Pb}$	7.5	11 11 498 11 502 212 Po(α) 208 Pb	1.7	²⁰⁸ Pb ³⁵ Cl- ²⁰⁶ Pb ³⁷ Cl	
²⁰⁸ Fr	69.6	208 Fr(α) 204 At	9.3	²⁰⁸ Fr- ²⁰⁹ Fr _{.498} ²⁰⁷ Fr _{.502}	6.7	²¹⁰ Fr ⁻²²⁰ Fr _{.159} ²⁰⁸ Fr _{.841}	
²⁰⁹ Pb	87.0	$^{209}\text{Pb}(\beta^-)^{209}\text{Bi}$	11.1	²⁰⁸ Pb(d,p) ²⁰⁹ Pb	1.9	$^{213}\text{Po}(\alpha)^{209}\text{Pb}$	
²⁰⁹ Bi	85.8	²⁰⁹ Bi(n,γ) ²¹⁰ Bi	9.6	209 Bi(α) 205 Tl	4.2	$^{209}\text{Pb}(\beta^{-})^{209}\text{Bi}$	
209 A +	100.0	209 At(α) 205 Bi					
²⁰⁹ Fr	99.0	²⁰⁹ Fr- ²²⁶ Ra ₀₂₅	0.9	²⁰⁹ Fr- ²¹³ Fr _{.196} ²⁰⁸ Fr _{.804}	0.2	$^{208}\mathrm{Fr}-^{209}\mathrm{Fr}_{.498}$ $^{207}\mathrm{Fr}_{.502}$	
²¹⁰ Ph	97.8	$^{210}\text{Pb}(\beta^{-})^{210}\text{Bi}$	2.2	$^{214}\text{Po}(\alpha)^{210}\text{Pb}$			
²¹⁰ Bi	50.3	210 Bi $(\beta^{-})^{210}$ Po	33.7	210 Bi $(\alpha)^{206}$ Tl	14.1	$^{209}{ m Bi}({ m n},\gamma)^{210}{ m Bi}$	
²¹⁰ Po	98.5	210 Po $(\alpha)^{206}$ Pb	1.5	$^{210}\text{Bi}(\beta^{-})^{210}\text{Po}$			
²¹⁰ Fr	98.0	²¹⁰ Fr- ²²⁶ Ra _{.929}	2.0	²¹⁰ Fr ⁻²²⁰ Fr _{.159} ²⁰⁸ Fr _{.841}			
²¹¹ Pb ²¹¹ Bi	94.4	215 Po(α) 211 Pb 211 Bi(α) 207 Tl	5.6	$^{211}\text{Pb}(\beta^{-})^{211}\text{Bi}$			
²¹¹ Fr	58.2	211 Fr $-^{226}$ Ra _{.934}	41.8	211 Pb(β^-) 211 Bi 211 Fr(α) 207 At	1.4	211 E. 220 E. 208 E.	
²¹² Pb	81.4 54.2	216 Po(α) 212 Pb	17.2 45.8	$^{212}\text{Pb}(\beta^{-})^{212}\text{Bi}$	1.4	211 Fr $-^{220}$ Fr $_{.240}$ 208 Fr $_{.761}$	
²¹² Bi	72.6	$^{212}\text{Bi}(\beta^-)^{212}\text{Po}$	27.4	$^{212}\text{Pb}(\beta^{-})^{212}\text{Bi}$			
²¹² Po	92.5	$^{212}Po(\alpha)^{208}Ph$	7.5	$^{212}\text{Bi}(\beta^-)^{212}\text{Po}$			
²¹² Fr	97.2	²¹² Fr- ²²⁶ Ra _{.938}	2.8	²¹² Fr- ²²⁰ Fr ₂₂₁ ²⁰⁸ Fr ₂₇₀			
213Bi	77.7	217 At(α) 213 Bi	22.3	$^{213}\text{Bi}(\beta^-)^{213}\text{Po}$			
²¹³ Po	93.2	213 Po(α) 209 Pb	6.8	$^{213}\text{Bi}(\beta^{-})^{213}\text{Po}$			
²¹³ Fr	100.0	213 Fr(α) 209 At					
²¹⁴ Pb	99.1	$^{218}Po(\alpha)^{214}Pb$	0.9	214 Pb(β^{-}) 214 Bi			
²¹⁴ Bi	69.0	$^{214}\text{Bi}(\beta^{-})^{214}\text{Po}$	31.0	$^{214}\text{Pb}(\beta^{-})^{214}\text{Bi}$			
²¹⁴ Po	97.8	$^{214}Po(\alpha)^{210}Pb$	2.0	218 Rn(α) 214 Po	0.3	$^{214}\text{Bi}(\beta^{-})^{214}\text{Po}$	
²¹⁵ Po	94.9	219 Rn(α) 215 Po	5.1	215 Po(α) 211 Pb			
²¹⁶ Po	55.6	220 Rn(α) 216 Po	44.4	216 Po(α) 212 Pb			
²¹⁶ At	100.0	216 At(α) 212 Bi 221 Fr(α) 217 At	21.2	217 At(α) 213 Bi			
217 .		551 Let (01)51/ A t	212	21/ A t(A()212 D1			
²¹⁷ At ²¹⁸ Po	78.8 99.1	222 Rn(α) 218 Po	21.2	$^{218}\text{Po}(\alpha)^{214}\text{Pb}$			

Nucleus	Infl.	Equation	Infl.	Equation	Infl.	Equation
²¹⁸ Rn	94.0	218 Rn(α) 214 Po	6.0	222 Ra(α) 218 Rn		
219 Rn	95.0	223 Ra(α) 219 Rn	5.0	219 Rn(α) 215 Po		
220 p n	55.7	224 Ra(α) 220 Rn	44.3	220 Rn(α) 216 Po		
²²⁰ Fr	100.0	220 Fr(α) 216 At				
²²¹ Fr	80.2	$^{225}Ac(\alpha)^{221}Fr$	19.8	221 Fr(α) 217 At		
²²² Rn	99.2	226 Ra(α) 222 Rn	0.8	222 Rn(α) 218 Po		
²²² Fr	82.2	²²² Fr- ²²⁶ Ra _{.982}	17.8	226 Ac(α) 222 Fr		
²²² Ra	64.9	222 Ra(α) 218 Rn	35.1	226 Th $(\alpha)^{222}$ Ra		
²²³ Ra	95.0	227 Th $(\alpha)^{223}$ Ra	5.0	223 Ra(α) 219 Rn		
²²⁴ Ra	55.8	228 Th(α) 224 Ra	44.2	224 Ra(α) 220 Rn		
²²⁵ Ra ²²⁵ Ac	94.9	229 Th $(\alpha)^{225}$ Ra 229 Pa $(\alpha)^{225}$ Ac	5.1	225 Ra(β^{-}) 225 Ac	17.0	225p (0-)225 A
²²⁶ Ra	63.7	230 Th(α) 226 Ra	18.3	225 Ac(α) 221 Fr 226 Ra(α) 222 Rn	17.9	225 Ra(β^-) 225 Ac 211 Fr $-^{226}$ Ra _{.934}
²²⁶ Ac	98.9	230 Pa(α) ²²⁶ Ac	0.8	226 Ac(β^-) 226 Th	0.1 0.3	226 Ac(α) 222 Fr
²²⁶ Th	86.1 58.9	226 Th $(\alpha)^{222}$ Ra	13.7 41.1	$^{226}\text{Ac}(\beta^{-})^{226}\text{Th}$	0.3	$Ac(\alpha)$ Fi
²²⁷ Ac	95.6	231 Pa(α) ²²⁷ Ac	41.1	$^{227}\text{Ac}(\beta^-)^{227}\text{Th}$		
²²⁷ Th	95.0	227 Ac(β^-) 227 Th	5.0	$^{227}\text{Th}(\alpha)^{223}\text{Ra}$		
228Th	56.1	230 Th(p t) 228 Th $^{-232}$ Th() 230 Th	43.9	$^{228}\text{Th}(\alpha)^{224}\text{Ra}$		
229 P a	91.5	229 Ra $^{-133}$ Cs _{1.722}	8.5	229 Ra(β^{-}) 229 Ac		
²²⁹ Ac	55.8	229 Ra(β^{-}) 229 Ac	44.2	$^{229}\text{Ac}(\beta^{-})^{229}\text{Th}$		
229 Th	68.2	$^{233}U(\alpha)^{229}Th$	27.3	230 Th(d.t) 229 Th	4.3	229 Th $(\alpha)^{225}$ Ra
229 Pa	92.9	²³¹ Pa(n t) ²²⁹ Pa	7.1	229 Pa(α) 225 Ac		
230 Th	59.9	230 Th(p,t) 228 Th $^{-232}$ Th() 230 Th	21.2	$^{234}U(\alpha)^{230}Th$	14.4	230 Th $(n,\gamma)^{231}$ Th
²³⁰ Pa	86.7	230 Pa(ε) 230 Th	13.3	230 Pa(α) 226 Ac		
²³¹ Th	83.7	230 Th $(n,\gamma)^{231}$ Th	12.0	$^{235}\mathrm{U}(\alpha)^{231}\mathrm{Th}$	4.3	$^{231}\text{Th}(\beta^{-})^{231}\text{Pa}$
²³¹ Pa	50.5	$^{231}\text{Th}(\beta^{-})^{231}\text{Pa}$	41.7	235 Np(α) 231 Pa	3.9	²³¹ Pa(p,t) ²²⁹ Pa
²³² Th	69.5	$^{236}U(\alpha)^{232}Th$	22.6	$C_{24} H_{16} - {}^{232}Th {}^{37}Cl {}^{35}Cl$	18.3	$C_{18} H_{16}^{-232} Th$
²³³ Th	92.9	232 Th $(n, \gamma)^{233}$ Th	7.1	233 Th $(\beta^{-})^{233}$ Pa		
²³³ Pa	74.9	237 Np(α) 233 Pa	14.8	233 Th(β^-) 233 Pa	10.2	233 Pa(β^-) 233 U
²³³ U ²³⁴ U	48.0	233 Pa(β^-) 233 U	25.4	233 U(α) ²²⁹ Th	15.3	237 Pu(α) 233 U
²³⁵ U	49.7	234 U(n, γ) 235 U	36.2	234 U(α) 230 Th 239 Pu(α) 235 U	13.7	238 Pu(α) 234 U
²³⁵ Np	31.7	234 U(n, γ) 235 U 235 Np(ϵ) 235 U	24.1	235 Pu(α) 235 U 235 Np(α) 231 Pa	22.3	$^{235}\mathrm{U}(\mathrm{n},\gamma)^{236}\mathrm{U}$
²³⁶ U	86.2 58.7	240 Pu(α) 236 U	13.8 31.5	235 U(n, γ) 236 U	8.9	$^{236}{ m U}(lpha)^{232}{ m Th}$
²³⁷ U	82.5	$^{236}U(n,\gamma)^{237}U$	17.5	241 Pu(α) ²³⁷ U	8.9	$O(\alpha)$ In
²³⁷ Np	97.8	$^{241}\text{Am}(\alpha)^{237}\text{Np}$	2.2	237 Np(α) 233 Pa		
23/ p n	94.0	241 Cm(α) 237 Pu	6.0	237 Pu(α) 233 II		
238 T T	54.3	242 Pu(α) 238 U	34.1	$C_{24} H_{20} = {}^{238}U^{35}Cl_2$	11.6	$C_{18} H_{22}^{-238} U$
238 D 11	76.0	238 Pu(α) 234 U	24.0	²³⁶ Pu(n,γ) ²³⁹ Pu	11.0	018 1122
²³⁹ Np	98.0	$^{239}\text{Np}(\beta^{-})^{239}\text{Pu}$	2.0	243 Am(α) 239 Np		
239 D 11	44.3	239 Pu(α) 235 U	41.3	239 Pu(n, γ) 240 Pu	14.0	238 Pu $(n,\gamma)^{239}$ Pu
²⁴⁰ Pu	37.5	²⁴⁰ Pu(n, γ) ²⁴¹ Pu	31.3	240 Pu(α) 236 U	31.2	²³⁹ Pu(n, γ) ²⁴⁰ Pu
²⁴¹ Pu	62.4	²⁴⁰ Pu(n γ) ²⁴¹ Pu	34.9	²⁴¹ Pu(n v) ²⁴² Pu	2.2	241 Pu(β^-) 241 Am
²⁴¹ Am	97.6	241 Pu(β^-) 241 Am	2.0	241 Am(α) 237 Np	0.4	$^{241}\mathrm{Cm}(\varepsilon)^{241}\mathrm{Am}$
241 Cm	95.0	$^{241}\text{Cm}(\varepsilon)^{241}\text{Am}$	5.0	$^{241}\text{Cm}(\alpha)^{237}\text{Pu}$		
²⁴² Pu	61.0	²⁴¹ Pu(n,γ) ²⁴² Pu	38.4	242 Pu(α) 238 U	0.5	242 Pu(n, γ) 243 Pu
243 p n	74.9	242 Pu(n, γ) 243 Pu	13.5	243 Pu(β^-) 243 Am	7.9	247 Cm(α) 243 Pu
²⁴³ Am	96.3	243 Am(α) 239 Np	3.7	243 Pu(β^-) 243 Am		244 245
²⁴⁴ Pu	65.2	²⁴⁴ Pu(d,t) ²⁴³ Pu	32.4	248 Cm(α) 244 Pu	2.4	244 Pu(t,p) 246 Pu
²⁴⁶ Pu	54.2	²⁴⁴ Pu(t,p) ²⁴⁶ Pu	45.8	246 Pu(β^{-}) 246 Am ^m		
²⁴⁶ Am ^m	56.6	246 Am ^m (β^{-}) 246 Cm	43.4	246 Pu(β^-) 246 Am ^m		248 246
²⁴⁶ Cm	98.7	246 Cm(α) 242 Pu	0.9	²⁴⁶ Cm(d,p) ²⁴⁷ Cm	0.3	²⁴⁸ Cm(p,t) ²⁴⁶ Cm
²⁴⁷ Cm	63.4	247 Cm(α) 243 Pu	24.1	²⁴⁶ Cm(d,p) ²⁴⁷ Cm	12.5	²⁴⁸ Cm(d,t) ²⁴⁷ Cm
²⁴⁸ Cm	67.5	$^{248}\mathrm{Cm}(\alpha)^{244}\mathrm{Pu}$	22.7	248 Cm(d,t) 247 Cm	9.8	²⁴⁸ Cm(p,t) ²⁴⁶ Cm