

# MINISTARSTVO ZDRAVSTVA

Na temelju članka 12. stavka 2. Zakona o zaštiti od ionizirajućih zračenja («Narodne novine» broj 27/99) ministar zdravstva donosi

## PRAVILNIK

### O GRANICAMA IZLAGANJA IONIZIRAJUĆIM ZRAČENJIMA TE O UVJETIMA IZLAGANJA U POSEBNIM OKOLNOSTIMA I ZA PROVEDBE INTERVENCIJA U IZVANREDNOM DOGAĐAJU

#### Članak 1.

Ovim Pravilnikom utvrđuju se granice izloženosti ionizirajućim zračenjima sukladno članku 11. i 14. Zakona o zaštiti od ionizirajućih zračenja, te uvjeti izlaganja djelatnika koji obavljaju djelatnosti s izvorima ionizirajućih zračenja u posebnim okolnostima i tijekom provedbe intervencija u izvanrednom događaju.

#### Članak 2.

U ovom Pravilniku u uporabi su sljedeći pojmovi:

Radionuklid je vrsta atoma koji zbog svoje trajne nestabilnosti teži spontanom prijelazu u stabilno stanje ili u drugu vrstu nuklida uz oslobađanje energije ili čestica tijekom prijelaza.

Apsorbirana doza ionizirajućeg zračenja  $D$  jest kvocijent energije  $dE$  i mase  $dm$  kojoj je prolazom zračenja ta energija pridjeljena, tj.

$$D = \frac{dE}{dm}$$

Jedinica apsorbirane doze jest džul po kilogramu ( $J\ kg^{-1}$ ), a zove se grej:  $1\ Gy = 1\ J/kg$ .

Ekvivalentna doza u tkivu  $T$  od zračenja vrste  $R$ ,  $H_{T,R}$ , jest umnožak srednje apsorbirane doze u tkivu  $T$ ,  $D_T$ , i težinskog koeficijenta zračenja  $W_R$ , tj.

$$H_T = \sum_R D_{T,R} \cdot W_R$$

ili

$$H_{T,R} = D_T \cdot W_R$$

Težinski koeficijent  $W_R$  za vrstu zračenja  $R$  je prikazan u Tablici 1. koja je sastavni dio ovog Pravilnika.

Jedinica ekvivalentne doze je džul po kilogramu ( $J\ kg^{-1}$ ), a zove se svert (Sv).

Efektivna doza E jest zbroj umnožaka ekvivalentne doze u tkivu T i odgovarajućeg težinskog koeficijenta T tkiva  $W_T$ , tj.:

$$E = \sum_T W_T \cdot H_T$$

Težinski koeficijent tkiva vrste T,  $W_T$  je mjera različite osjetljivosti pojedinog tkiva na zračenje, a vrijednosti su prikazane u Tablici 2. koja je sastavni dio ovog Pravilnika.

Jedinica efektivne doze je sievert (Sv).

Očekivana ekvivalentna doza jest:

$$HT = \int_t^{t_0+\tau} H(t) \cdot dt$$

gdje je  $\tau$  vrijeme proteklo od unosa radionuklida, a  $t_0$  je trenutak unosa radionuklida.  $HT(\tau)$  je jakost ekvivalentne doze u trenutku t u organu ili tkivu T. Ako  $\tau$  nije određen uzima se da je 50 godina za odrasle osobe, a 70 godina za unos radionuklida kod djece.

Očekivana efektivna doza jest:

$$E(\tau) = \sum_T W_T \cdot H_T(\tau)$$

gdje je  $HT(\tau)$  očekivana ekvivalentna doza u organu ili tkivu T pridjeljena kroz vrijeme  $\tau$  proteklo od trenutka unosa radionuklida. Ako  $\tau$  nije određen uzima se 50 godina za odrasle osobe, a 70 godina za unos radionuklida kod djece.

Kolektivna efektivna doza S za pučanstvo jest:

$$S = \sum_i E_i \cdot N_i$$

i

gdje je  $E_i$  srednja efektivna doza u skupini osoba i, a  $N_i$  je broj osoba u toj skupini.

Akcijska razina je iznos doze ili koncentracije aktivnosti kod koje se mora obvezno započeti provedba intervencije.

Aktivnost radioaktivne tvari A je broj spontanijeh prijelaza dN iz jednog stanja energije u druga energetska stanja u jezgrama atoma te tvari u vremenskom razdoblju dt, tj.

$$A = dN / dt.$$

Jedinica aktivnosti je jedan prijelaz u sekundi ( $s^{-1}$ ), a zove se bekerel ( Bq).

Kritična skupina ljudi jest skupina osoba koje primaju sličnu ili jednaku dozu koja je reprezentativna za pojedince koji primaju najveću efektivnu ili ekvivalentnu dozu od određenog načina izlaganja i od određenog izvora ionizirajućih zračenja.

Ovlaštene pravne osobe su pravne osobe koje obavljaju stručne poslove zaštite od ionizirajućih zračenja na temelju ovlaštenja ministra zdravstva sukladno članku 31. Zakona o zaštiti od ionizirajućih zračenja.

### Članak 3.

Doze ionizirajućeg zračenja koje primaju osobe u kritičnoj skupini ljudi ne smiju prijeći granice propisane ovim Pravilnikom, a pri tom zaštita od štetnih učinaka ionizirajućih zračenja mora biti optimalizirana tako da su doze zračenja od bilo kojeg određenog izvora ionizirajućih zračenja, odnosno od svih izvora zračenja koji se rabe, smanjene ispod propisanih granica na toliko nisku razinu koliko je razumno moguće postići uvažavajući tehničke, gospodarske i socijalne čimbenike.

### Članak 4.

Djelatnici koji obavljaju djelatnosti s ionizirajućim zračenjima tijekom rada ne smiju u normalnim uvjetima rada primiti doze iznad sljedećih granica:

- efektivna doza do 100 milisiverta tijekom pet uzastopnih godina, odnosno 20 milisiverta prosječno u svakoj godini petogodišnjeg razdoblja ;
- efektivna doza do 50 milisiverta u bilo kojoj pojedinoj godini petogodišnjeg razdoblja;
- ekvivalentna doza za očne leće do 150 milisiverta u jednoj godini i
- ekvivalentna doza za podlaktice, šake, stopala ili kožu do 500 milisiverta u jednoj godini.

### Članak 5.

Područje oko izvora ionizirajućih zračenja u kojem je efektivna doza u jednoj godini viša od 1 milisivert smatra se područjem nadzora u kojem se obvezno provode propisane mjere zaštite od ionizirajućih zračenja za sve djelatnike.

### Članak 6.

U posebnim okolnostima ministar zdravstva može djelatnicima koji rade s izvorima ionizirajućih zračenja odobriti izlaganje ionizirajućim zračenjima i iznad granica iz članka 4. podstavka 1. ovoga Pravilnika pod sljedećim uvjetima:

1. Pravna ili fizička osoba koja ima odobrenje za obavljanje djelatnosti s izvorom ionizirajućih zračenja obvezna je podnijeti zahtjev s obrazloženjem privremene promjene granice efektivne ili ekvivalentne doze za izlaganje određenih djelatnika s mišljenjem ovlaštene pravne osobe i Hrvatskog zavoda za zaštitu od zračenja;
2. Uz zahtjev iz točke 1. stavka 1. ovoga članka obvezno je priložiti pisanu izjavu djelatnika da je potpuno upoznat s opasnostima i okolnostima povišenog izlaganja ionizirajućim

zračenjima tijekom obavljanja djelatnosti. Pisanu izjavu djelatnika supotpisuje i odgovorna osoba za zaštitu od ionizirajućih zračenja koju imenuje pravna ili fizička osoba;

3. Prije početka obavljanja djelatnosti s povišenim izlaganjem ionizirajućem zračenju djelatnik treba obaviti izvanredni zdravstveni pregled sukladno propisu o zdravstvenim pregledima osoba koje obavljaju djelatnosti s izvorima ionizirajućih zračenja, a ocjena i mišljenje o zdravstvenoj sposobnosti prilažu se zahtjevu;

4. Efektivna doza za cijelo tijelo djelatnika ne smije prijeći 50 milisiverta u bilo kojoj godini razdoblja s planiranim privremenim povišenim izlaganjem koje ne smije biti dulje od uzastopnih pet godina i ne smije se produljivati za iste djelatnike.

Ako efektivna doza za cijelo tijelo djelatnika kojem je odobrena viša granica izlaganja dostigne 100 milisiverta od početka produženog razdoblja, potrebno je provesti posebno ispitivanje uvjeta rada s izvorima ionizirajućih zračenja i izvanredni zdravstveni pregled djelatnika koji su primili takve doze.

Osobne doze djelatnika primljene tijekom razdoblja s promijenjenim granicama moraju se kod poslodavca i u Hrvatskom zavodu za zaštitu od zračenja voditi u posebnoj evidenciji za svakog djelatnika.

Djelatnici za koje je dano odobrenje za povišeno izlaganje ionizirajućim zračenjima moraju biti dodatno opskrbljeni dozimetrima za izravno očitavanje primljenih doza koje su obvezni nositi tijekom obavljanja djelatnosti uz službene osobne dozimetre.

Odredbe ovoga članka ne primjenjuju se na žene.

#### Članak 7.

Za osobe koje ne rade s izvorima ionizirajućih zračenja ozračenje ne smije biti više od:

- efektivna doza do 1 mSv u jednoj godini;
- u posebnim okolnostima efektivna doza do 5 mSv u jednoj godini s tim da u pet uzastopnih godina prosječna doza ne bude veća od 1 mSv za svaku pojedinu godinu;
- ekvivalentna doza za očne leće do 15 mSv u jednoj godini i
- ekvivalentna doza za kožu do 50 mSv u jednoj godini.

#### Članak 8.

Ukupno ozračenje izraženo kao zbroj efektivne doze od vanjskog ozračenja u određenom razdoblju i očekivane efektivne doze od unutarnjeg izlaganja ionizirajućim zračenjima zbog unosa radionuklida u organizam u istom razdoblju ne smije prijeći granice doza utvrđene ovim Pravilnikom.

Procjena unutarnjeg izlaganja ionizirajućem zračenju od radionuklida "j" u jednoj godini temelji se na godišnjim granicama unošenja (I<sub>j</sub>,G) radionuklida u organizam koje su određene

sukladno očekivanoj efektivnoj dozi za razdoblje od 50 godina za odrasle osobe i za razdoblje od 70 godina za djecu.

#### Članak 9.

Stupanj ozračenja osobe određuje se na jedan od sljedećih načina:

- izračunavanjem ukupne efektivne doze E pomoću formule:

$$E = H_p(d) + \sum_j e(g)_{j,ing} + \sum_j e(g)_{j,inh} I_{j,inh}$$

gdje je:

$H_p(d)$  - osobni dozni ekvivalent vanjskog ozračenja u jednoj godini,

$e(g)_{j,ing}$  - očekivana efektivna doza po jedinici aktivnosti gutanjem unesenog radionuklida vrste "j" u tijelo osobe iz skupine starosne dobi "g",

$e(g)_{j,inh}$  - očekivana efektivna doza po jedinici aktivnosti udisanjem unesenog radionuklida vrste "j" u tijelo osobe iz skupine starosne dobi "g",

$I_{j,ing}$  - aktivnost gutanjem unesenog radionuklida vrste "j" u organizam u jednoj godini,

$I_{j,inh}$  - aktivnost udisanjem unesenog radionuklida vrste "j" u organizam u jednoj godini.

ili na temelju nejednadžbe:

$$\frac{H_p(d)}{GD} + \sum_j \frac{I_{j,ing}}{I_{j,ing,G}} + \sum_j \frac{I_{j,inh}}{I_{j,inh,G}} \leq 1$$

gdje je:

GD - godišnja granica efektivne doze za kritičnu skupinu osoba;

$I_{j,ing,G}$  - godišnja granica unošenja (GGU) radionuklida vrste "j" u organizam gutanjem;

$I_{j,inh,G}$  - godišnja granica unošenja (GGU) radionuklida vrste "j" u organizam udisanjem;

Za radionuklid vrste "j" godišnja granica unošenja ( $I_{j,G}$ ) izračunava se izrazom:

$$I_{j,G} = \frac{GD}{e_j}$$

#### Članak 10.

Očekivane efektivne doze po jedinici aktivnosti za gutanje  $e(g)_{j,ing}$ , odnosno za udisanje  $e(g)_{j,inh}$ , za pojedine radionuklide sadržane su u Tablici 3. koja je sastavni dio ovoga

Pravilnika za djelatnike koji rade s izvorima ionizirajućih zračenja, a za ostale osobe u Tablici 4. i Tablici 5. koje su sastavni dio ovoga Pravilnika.

Očekivane efektivne doze po jedinici aktivnosti za gutanje  $e(g)_{j,ing}$ , odnosno za udisanje  $e(g)_{j,inh}$ , za topljive i reaktivne plinove i pare sadržane su u Tablici 6. koja je sastavni dio ovoga Pravilnika za djelatnike koji rade s izvorima ionizirajućih zračenja i za ostale osobe starije od 18 godina.

U Tablicama iz stavka 1. i 2. ovog članka sadržani su i koeficijenti prijenosa za radionuklide:

$f_1$  koji predstavljaju razmjer prijenosa unesene aktivnosti iz želuca u tjelesne tekućine kod unosa gutanjem, odnosno razmjer prijenosa unesene aktivnosti u probavni sustav iz pluća kod unosa radionuklida udisanjem. Vrijednosti koeficijenata  $f_1$  za gutanje i udisanje radionuklida vezanih u spojevima sadržani su u Tablicama 7a. i 7b.

#### Članak 11.

Prekoračenje granice efektivne doze iz članka 4. ovoga Pravilnika tijekom intervencija poradi planiranog i žurnog uklanjanja ili ublažavanja posljedica izvanrednog događaja dopušteno je samo radi spašavanja života ljudi, sprečavanja nesreća s velikim materijalnim i društvenim posljedicama ili prekomjernog ozračenja velikog broja ljudi.

Intervencije prvenstveno provode članovi unaprijed određenih stručnih timova koji su obučeni i pripremljeni za provedbu intervencija, te su pripremljeni i izvješćeni o mogućim opasnostima. Samo u slučaju kad je poduzimanje određenih interventnih mjera neodgodivo i žurno, ovisno o okolnostima, intervencijske mjere mogu poduzeti i osobe koje se zateknu na mjestu izvanrednog događaja.

Članovi intervencijskog tima ili druge osobe koje sudjeluju u intervenciji ne smiju biti ozračeni s više od dvostruke godišnje efektivne doze iz članka 4. ovoga pravilnika uz iznimku spašavanja života ljudi kad je dopuštena viša efektivna doza, ali ne viša od deseterostruke godišnje granice iz članka 4. ovoga Pravilnika.

Ako postoji sumnja o unosu radionuklida u organizam iznad godišnjih granica unošenja obvezno je za svakog izloženog pojedinca procijeniti aktivnosti u tijelo unesenih radionuklida.

#### Članak 12.

Akcijske razine za početak intervencije radi akutnog ozračenja organa ili tkiva prikazane su u Tablici 8. koja je sastavni dio ovoga Pravilnika.

Akcijske razine za početak intervencije radi kroničnog ozračivanja organa ili tkiva prikazane su u Tablici 9. koja je sastavni dio ovoga Pravilnika.

Akcijske razine izražene koncentracijom aktivnosti određenih radionuklida za hranu i vodu za piće prikazane su u Tablici 10. koja je sastavni dio ovoga Pravilnika

#### Članak 13.

Intervencijska razina za zadržavanje ljudi u kućama ili zatvorenim prostorima poslije izvanrednog događaja je efektivna doza u iznosu od 10 mSv za razdoblje do dva dana.

Vlada Republike Hrvatske ili tijelo koje odredi Vlada Republike Hrvatske za provedbu intervencija u slučaju izvanrednog događaja može odrediti i nižu intervencijsku razinu u kraćem razdoblju u kojem će se odrediti zadržavanje ljudi u kućama ili zatvorenim prostorima u svrhu lakše provedbe planiranih potrebnih mjera.

#### Članak 14.

Intervencijska razina za privremenu evakuaciju pučanstva poslije izvanrednog događaja je efektivna doza u iznosu od 50 mSv u razdoblju do jednog tjedna.

Vlada Republike Hrvatske ili tijelo određeno od Vlade Republike Hrvatske za provedbu intervencija u slučaju izvanrednog događaja može odrediti evakuaciju i kod nižeg iznosa efektivne doze, ako se odnosi na manji broj ljudi i može se obaviti u kratkom razdoblju.

Iznimno Vlada Republike Hrvatske ili tijelo određeno od Vlade za provedbu intervencija u slučaju izvanrednog događaja može odrediti evakuaciju i kod višeg iznosa efektivne doze, ako se obavlja u složenim uvjetima, kad je uključen veliki broj ljudi ili je otežan njihov prijevoz.

#### Članak 15.

Intervencijska razina za provedbu zaštite od posljedica izvanrednog događaja uzimanjem pripravka stabilnog joda (jodna profilaksa) je očekivana apsorbirana doza za štitnu žlijezdu u iznosu od 100 mGy koju mogu uzrokovati radionuklidi joda.

#### Članak 16.

Intervencijska razina za početak privremenog preseljavanja ljudi poslije izvanrednog događaja je efektivna doza u iznosu od 30 mSv u razdoblju od jednog mjeseca.

Intervencijska razina za završetak privremenog preseljenja je efektivna doza od 10 mSv u razdoblju od jednog mjeseca. Ako se procijenjena efektivna doza tijekom jednog mjeseca ne smanji ispod te razine odredit će se trajno preseljavanje.

Trajno preseljavanje odredit će se ako se procijeni da je očekivana životna efektivna doza iznad 1 Sv.

#### Članak 17.

Vrijednosti doza koje se uspoređuju s intervencijskim razinama su ukupne efektivne doze bez obzira na način ozračenja ljudi ionizirajućim zračenjima koje se mogu spriječiti samo odgovarajućim mjerama.

U ukupne efektivne doze iz stavka 1. ovog članka nisu uključene doze koje potječu od radionuklida iz onečišćene hrane ili vode za piće.

#### Članak 18.

Srednje godišnje koncentracije aktivnosti  $^{222}\text{Rn}$  u zraku u kućama kod kojih je opravdano započeti poduzimanje protumjera su od 200 do 600 Bq m<sup>-3</sup> zavisno o društvenim i gospodarskim čimbenicima.

Ako je srednja godišnja koncentracija aktivnosti  $^{222}\text{Rn}$  u zraku na radnim mjestima iznad 1000 Bq m<sup>-3</sup>, preporučuje se poduzimanje intervencijskih mjera.

#### Članak 19.

Ovaj Pravilnik stupa na snagu osmog dana od objave u »Narodnim novinama«.

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Ministar  
**prof. dr. sc. Željko Reiner, v. r.**

**Tablica 1.**  
**Težinski koeficijenti zračenja  $W_R$**

Vrsta i energije zračenja	Težinski koeficijenti zračenja $W_R$
Fotoni, svih energija	1
Elektroni i muoni, svih energija	1
Neutroni, energije < 10 keV	5
10 keV do 100 keV	10
> 100 keV do 2 MeV	20
> 2 MeV do 20 MeV	10
> 20 MeV	5
Protoni, osim raspršenih, energije >2 MeV	5
Alfa čestice, fisijski fragmenti, teške jezgre	20

**Tablica 2.**  
**Težinski koeficijenti tkiva  $W_T$**

Tkivo ili organ	Težinski koeficijenti tkiva $W_T$
Gonade	0,20
Koštana srž (crvena)	0,12
Debelo crijevo	0,12
Pluća	0,12
Želudac	0,12
Mjehur	0,05
Grudi	0,05
Jetra	0,05
Jednjak	0,05
Štitna žlijezda	0,05
Koža	0,01
Površina kosti	0,01

Ostatak*	0,05
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\* Ako tkivo koje je navedeno kao ostatak prima najveće ekvivalentne doze, koristi se težinski koeficijent tkiva od 0,025 za to tkivo ili organ, a 0,025 za ostali dio ostalih tkiva.

\*\* Ostatak čine sljedeća tkiva: mišići, maternica, nadbubrežne žlijezde, slezena, mozak, gušterača, bubrezi, tanko crijevo, timus.

**Tablica 3.**

**Očekivane efektivne doze po jedinici unesene aktivnosti e(g) udisanjem i gutanjem (Sv Bq<sup>-1</sup>) za djelatnike**

<b>Radionuklid</b>		<b>Fizikalno</b>		<b>Vrsta</b>	<b>f1</b>
<b>Udisanje</b>		<b>Gutanje</b>			
<b>e (g) <math>\mu\text{m}</math></b>	<b>e (g) <math>5\mu\text{m}</math></b>	<b>vrijeme poluraspada</b>	<b>e (g)</b>		
		<b>f1</b>			
<b>Vodik</b>					
	Tricirana voda	12.3 a			
1.000	1.8 E-11				
	Organski vodik	12.3 a			
1.000	4.2 E-11				
<b>Berilij</b>					
	Be-7	53.3 d		M	0.005 4.8
E-11	4.3 E-11	0.005	2.8 E-11	S	0.005 5.2
E-11	4.6 E-11				
	Be-10	1.60 E+06 a		M	0.005 9.1
E-09	6.7 E-09	0.005	1.1 E-09	S	0.005 3.2
E-08	1.9 E-08				
<b>Ugljik</b>					
	C-11	0.340 h			
1.000	2.4 E-11				
	C-14	5.73E+03 a			
1.000	5.8 E-10				
<b>Fluor</b>					
	F-18	1.83 h		F	1.000 3.0
E-11	5.4 E-11	1.000	4.9 E-11	M	1.000 5.7
E-11	8.9 E-11			S	1.000 6.0
E-11	9.3 E-11				
<b>Natrij</b>					
	Na-22	2.60 a		F	1.000 1.3
E-09	2.0 E-09	1.000	3.2 E-09		
	Na-24	15.0 h		F	1.000 2.9
E-10	5.3 E-10	1.000	4.3 E-10		
<b>Magnezij</b>					

	Ma-28	20.9 h	F	0.500	6.4
E-10	1.1 E-09	0.500 2.2 E-09	M	0.500	1.2
E-09	1.7 E-09				
	<b>Aluminij</b>				
	ell				
	Al-26	7.16E+05 a	F	0.010	1.1
E-08	1.4 E-08	0.010 3.5 E-09	M	0.010	1.8
E-08	1.2 E-08				
	<b>Silicij</b>				
	Si-31	2.62 h	F	0.010	2.9
E-11	5.1 E-11	0.010 1.6 E-10	M	0.010	7.5
E-11	1.1 E-10		S	0.010	8.0
E-11	1.1 E-10				
	Si-32	4.50E+02 a	F	0.010	3.2
E-09	3.7 E-09	0.010 5.6 E-10	M	0.010	1.5
E-08	9.6 E-09		S	0.010	1.1
E-07	5.5 E-08				
	<b>Fosfor</b>				
	P-32	14.3 d	F	0.800	8.0
E-10	1.1 E-09	0.800 2.4 E-09	M	0.800	3.2
E-09	2.9 E-09				
	P-33	25.4 d	F	0.800	9.6
E-11	1.4 E-10	0.800 2.4 E-10	M	0.800	1.4
E-09	1.3 E-09				
	<b>Sumpor</b>				
	S-35	87.4 d	F	0.800	5.3
E-11	8.0 E-11	0.800 1.4 E-10	M	0.800	1.3
	(anorganski)				
E-09	1.1 E-09	0.100 1.9 E-10			
1.000	S-35	87.4 d			
	7.7 E-10				
	(organski)				
	<b>Klor</b>				
	Cl-36	3.01E+05 a	F	1.000	3.4
E-10	4.9 E-10	1.000 9.3 E-10	M	1.000	6.9
E-09	5.1 E-09				
	Cl-38	0.620 h	F	1.000	2.7
E-11	4.6 E-11	1.000 1.2 E-10	M	1.000	4.7
E-11	7.3 E-11				
	Cl-39	0.927 h	F	1.000	2.7
E-11	4.8 E-11	1.000 8.5 E-11	M	1.000	4.8
E-11	7.6 E-11				
	<b>Kalij</b>				
	K-40	1.28E+09 a	F	1.000	2.1
E-09	3.0 E-09	1.000 6.2 E-09			
	K-42	12.4 h	F	1.000	1.3
E-10	2.0 E-10	1.000 4.3 E-10			
	K-43	22.6 h	F	1.000	1.5
E-10	2.6 E-10	1.000 2.5 E-10			

	K-44		0.369 h		F	1.000	2.1
E-11	3.7 E-11	1.000	8.4 E-11				
	K-45		0.333 h		F	1.000	1.6
E-11	2.8 E-11	1.000	5.4 E-11				
	<b>Kalcij</b>						
	Ca-41		1.40E+05 a		M	0.300	1.7
E-10	1.9 E-10	0.300	2.9 E-10				
	Ca-45		163 d		M	0.300	2.7
E-09	2.3 E-09	0.300	7.6 E-10				
	Ca-47		4.53 d		M	0.300	1.8
E-09	2.1 E-09	0.300	1.6 E-09				
	<b>Skandij</b>						
	Sc-43		3.89 h		S	1.0 E-04	1.2
E-10	1.8 E-10	1.0 E-04	1.9 E-10				
	Sc-44		3.93 h		S	1.0 E-04	1.9
E-10	3.0 E-10	1.0 E-04	3.5 E-10				
	Sc-44m		2.44 d		S	1.0 E-04	1.5
E-09	2.0 E-09	1.0 E-04	2.4 E-09				
	Sc-46		83.8 d		S	1.0 E-04	6.4
E-09	4.8 E-09	1.0 E-04	1.5 E-09				
	Sc-47		3.35 d		S	1.0 E-04	7.0
E-10	7.3 E-10	1.0 E-04	5.4 E-10				
	Sc-48		1.82 d		S	1.0 E-04	1.1
E-09	1.6 E-09	1.0 E-04	1.7 E-09				
	Sc-49		0.956 h		S	1.0 E-04	4.1
E-11	6.1 E-11	1.0 E-04	8.2 E-11				
	<b>Titan</b>						
	Ti-44		47.3 a		F	0.010	6.1
E-08	7.2 E-08	0.010	5.8 E-09				
					M	0.010	4.0
E-08	2.7 E-08						
					S	0.010	1.2
E-07	6.2 E-08						
	Ti-45		3.08 h		F	0.010	4.6
E-11	8.3 E-11	0.010	1.5 E-10				
					M	0.010	9.1
E-11	1.4 E-10						
					S	0.010	9.6
E-11	1.5 E-10						
	<b>Vanadij</b>						
	V-47		0.543 h		F	0.010	1.9
E-11	3.2 E-11	0.010	6.3 E-11				
					M	0.010	3.1
E-11	5.0 E-11						
	V-48		16.2 d		F	0.010	1.1
E-09	1.7 E-09	0.010	2.0 E-09				
					M	0.010	2.3
E-09	2.7 E-09						
	V-49		330 d		F	0.010	2.1
E-11	2.6 E-11	0.010	1.8 E-11				
					M	0.010	3.2
E-11	2.3 E-11						
	<b>Krom</b>						
	Cr-48		23.0 h		F	0.100	1.0
E-10	1.7 E-10	0.100	2.0 E-10				
					M	0.100	2.0
E-10	2.3 E-10	0.010	2.0 E-10				
					S	0.100	2.2
E-10	2.5 E-10						

	Cr-49		0.702 h		F	0.100	2.0
E-11	3.5 E-11		0.100 6.1 E-11		M	0.100	3.5
E-11	5.6 E-11		0.010 6.1 E-11		S	0.100	3.7
E-11	5.9 E-11				F	0.100	2.1
	Cr-51		27.7 d		F	0.100	2.1
E-11	3.0 E-11		0.100 3.8 E-11		M	0.100	3.1
E-11	3.4 E-11		0.010 3.7 E-11		S	0.100	3.6
E-11	3.6 E-11						
	<b>Mangan</b>						
	Mn-51		0.770 h		F	0.100	2.4
E-11	4.2 E-11		0.100 9.3 E-11		M	0.100	4.3
E-11	6.8 E-11				F	0.100	9.9
	Mn-52		5.59 d		F	0.100	9.9
E-10	1.6 E-09		0.100 1.8 E-09		M	0.100	1.4
E-09	1.8 E-09				F	0.100	2.0
	Mn-52m		0.352 h		F	0.100	2.0
E-11	3.5 E-11		0.100 6.9 E-11		M	0.100	3.0
E-11	5.0 E-11				F	0.100	2.9
	Mn-53		3.70E+06 a		F	0.100	2.9
E-11	3.6 E-11		0.100 3.0 E-11		M	0.100	5.2
E-11	3.6 E-11				F	0.100	8.7
	Mn-54		312 d		F	0.100	8.7
E-10	1.1 E-09		0.100 7.1 E-10		M	0.100	1.5
E-09	1.2 E-09				F	0.100	6.9
	Mn-56		2.58 h		F	0.100	6.9
E-11	1.2 E-10		0.100 2.5 E-10		M	0.100	1.3
E-10	2.0 E-10						
	<b>Željezo</b>						
	Fe-52		8.28 h		F	0.100	4.1
E-10	6.9 E-10		0.100 1.4 E-09		M	0.100	6.3
E-10	9.5 E-10				F	0.100	7.7
	Fe-55		2.70 a		F	0.100	7.7
E-10	9.2 E-10		0.100 3.3 E-10		M	0.100	3.7
E-10	3.3 E-10				F	0.100	2.2
	Fe-59		44.5 d		F	0.100	2.2
E-09	3.0 E-09		0.100 1.8 E-09		M	0.100	3.5
E-09	3.2 E-09				F	0.100	2.8
	Fe-60		1.00E+05 a		F	0.100	2.8
E-07	3.3 E-07		0.100 1.1 E-07		M	0.100	1.3
E-07	1.2 E-07						
	<b>Kobalt</b>						
	Co-55		17.5 h		M	0.100	5.1
E-10	7.8 E-10		0.100 1.0 E-09		S	0.050	5.5
E-10	8.3 E-10		0.050 1.1 E-09		M	0.100	4.6
	Co-56		78.7 d		M	0.100	4.6
E-09	4.0 E-09		0.100 2.5 E-09				

E-09	4.9 E-09	0.050	2.3 E-09	S	0.050	6.3
	Co-57		271 d	M	0.100	5.2
E-10	3.9 E-10	0.100	2.1 E-10	S	0.050	9.4
E-10	6.0 E-10	0.050	1.9 E-10	M	0.100	1.5
	Co-58		70.8 d	M	0.100	1.5
E-09	1.4 E-09	0.100	7.4 E-10	S	0.050	2.0
E-09	1.7 E-09	0.050	7.0 E-10	M	0.100	1.3
	Co-58m		9.15 h	M	0.100	1.3
E-11	1.5 E-11	0.100	2.4 E-11	S	0.050	1.6
E-11	1.7 E-11	0.050	2.4 E-11	M	0.100	9.6
	Co-60		5.27 a	M	0.100	9.6
E-09	7.1 E-09	0.100	3.4 E-09	S	0.050	2.9
E-08	1.7 E-08	0.050	2.5 E-09	M	0.100	1.1
	Co-60m		0.174 h	M	0.100	1.1
E-12	1.2 E-12	0.100	1.7 E-12	S	0.050	1.3
E-12	1.2 E-12	0.050	1.7 E-12	M	0.100	4.8
	Co-61		1.65 h	M	0.100	4.8
E-11	7.1 E-11	0.100	7.4 E-11	S	0.050	5.1
E-11	7.5 E-11	0.050	7.4 E-11	M	0.100	2.1
	Co-62m		0.232 h	M	0.100	2.1
E-11	3.6 E-11	0.100	4.7 E-11	S	0.050	2.2
E-11	3.7 E-11	0.050	4.7 E-11	S	0.050	2.2
	<b>Nikal</b>					
	Ni-56		6.10 d	F	0.050	5.1
E-10	7.9 E-10	0.050	8.6 E-10	M	0.050	8.6
E-10	9.6 E-10			M	0.050	8.6
	Ni-57		1.50 d	F	0.050	2.8
E-10	5.0 E-10	0.050	8.7 E-10	M	0.050	5.1
E-10	7.6 E-10			M	0.050	5.1
	Ni-59		7.50E+04 a	F	0.050	1.8
E-10	2.2 E-10	0.050	6.3 E-11	M	0.050	1.3
E-10	9.4 E-11			M	0.050	1.3
	Ni-63		96.0 a	F	0.050	4.4
E-10	5.2 E-10	0.050	1.5 E-10	F	0.050	4.4
E-10	3.1 E-10			M	0.050	4.4
	Ni-65		2.52 h	F	0.050	4.4
E-11	7.5 E-11	0.050	1.8 E-10	M	0.050	8.7
E-11	1.3 E-10			M	0.050	8.7
	Ni-66		2.27 d	F	0.050	4.5
E-10	7.6 E-10	0.050	3.0 E-09	F	0.050	4.5
E-09	1.9 E-09			M	0.050	1.6
	<b>Bakar</b>					
	Cu-60		0.387 h	F	0.500	2.4
E-11	4.4 E-11	0.500	7.0 E-11	F	0.500	2.4
E-11	6.0 E-11			M	0.500	3.5

E-11	6.2 E-11			S	0.500	3.6
	Cu-61	3.41 h		F	0.500	4.0
E-11	7.3 E-11	0.500	1.2 E-10	M	0.500	7.6
E-11	1.2 E-10			S	0.500	8.0
E-11	1.2 E-10			F	0.500	3.8
	Cu-64	12.7 h		F	0.500	3.8
E-11	6.8 E-11	0.500	1.2 E-10	M	0.500	1.1
E-10	1.5 E-10			S	0.500	1.2
E-10	1.5 E-10			F	0.500	1.1
	Cu-67	2.58 d		F	0.500	1.1
E-10	1.8 E-10	0.500	3.4 E-10	M	0.500	5.2
E-10	5.3 E-10			S	0.500	5.8
E-10	5.8 E-10					
	<b>Cink</b>					
	Zn-62	9.26 h		S	0.500	4.7
E-10	6.6 E-10	0.500	9.4 E-10	S	0.500	3.8
	Zn-63	0.635 h		S	0.500	3.8
E-11	6.1 E-11	0.500	7.9 E-11	S	0.500	2.9
	Zn-65	244 d		S	0.500	2.9
E-09	2.8 E-09	0.500	3.9 E-09	S	0.500	2.8
	Zn-69	0.950 h		S	0.500	2.8
E-11	4.3 E-11	0.500	3.1 E-11	S	0.500	2.6
	Zn-69m	13.8 h		S	0.500	2.6
E-10	3.3 E-10	0.500	3.3 E-10	S	0.500	1.6
	Zn-71m	3.92 h		S	0.500	1.6
E-10	2.4 E-10	0.500	2.4 E-10	S	0.500	1.2
	Zn-72	1.94 d		S	0.500	1.2
E-09	1.5 E-09	0.500	1.4 E-09			
	<b>Galij</b>					
	Ga-65	0.253 h		F	0.001	1.2
E-11	2.0 E-11	0.001	3.7 E-11	M	0.001	1.8
E-11	2.9 E-11			F	0.001	2.7
	Ga-66	9.40 h		F	0.001	2.7
E-10	4.7 E-10	0.001	1.2 E-09	M	0.001	4.6
E-10	7.1 E-10			F	0.001	6.8
	Ga-67	3.26 d		F	0.001	6.8
E-11	1.1 E-10	0.001	1.9 E-10	M	0.001	2.3
E-10	2.8 E-10			F	0.001	2.8
	Ga-68	1.13 h		F	0.001	2.8
E-11	4.9 E-11	0.001	1.0 E-10	M	0.001	5.1
E-11	8.1 E-11			F	0.001	9.3
	Ga-70	0.353 h		F	0.001	9.3
E-12	1.6 E-11	0.001	3.1 E-11	M	0.001	1.6
E-11	2.6 E-11			F	0.001	3.1
	Ga-72	14.1 h		F	0.001	3.1
E-10	5.6 E-10	0.001	1.1 E-09	M	0.001	5.5
E-10	8.4 E-10					

E-11	Ga-73	4.91 h	F	0.001	5.8
E-11	1.0 E-10	0.001 2.6 E-10	M	0.001	1.5
E-10	2.0 E-10				
<b>Germanij</b>					
E-11	Ge-66	2.27 h	F	1.000	5.7
E-11	9.9 E-11	1.000 1.0 E-10	M	1.000	9.2
E-11	1.3 E-10				
E-11	Ge-67	0.312 h	F	1.000	1.6
E-11	2.8 E-11	1.000 6.5 E-11	M	1.000	2.6
E-11	4.2 E-11				
E-10	Ge-68	288 d	F	1.000	5.4
E-10	8.3 E-10	1.000 1.3 E-09	M	1.000	1.3
E-08	7.9 E-09				
E-10	Ge-69	1.63 d	F	1.000	1.4
E-10	2.5 E-10	1.000 2.4 E-10	M	1.000	2.9
E-10	3.7 E-10				
E-12	Ge-71	11.8 d	F	1.000	5.0
E-12	7.8 E-12	1.000 1.2 E-11	M	1.000	1.0
E-11	1.1 E-11				
E-11	Ge-75	1.38 h	F	1.000	1.6
E-11	2.7 E-11	1.000 4.6 E-11	M	1.000	3.7
E-11	5.4 E-11				
E-10	Ge-77	11.3 h	F	1.000	1.5
E-10	2.5 E-10	1.000 3.3 E-10	M	1.000	3.6
E-10	4.5 E-10				
E-11	Ge-78	1.45 h	F	1.000	4.8
E-11	8.1 E-11	1.000 1.2 E-10	M	1.000	9.7
E-11	1.4 E-10				
<b>Arsen</b>					
E-11	As-69	0.253 h	M	0.500	2.2
E-11	3.5 E-11	0.500 5.7 E-11			
E-11	As-70	0.876 h	M	0.500	7.2
E-11	1.2 E-10	0.500 1.3 E-10			
E-10	As-71	2.70 d	M	0.500	4.0
E-10	5.0 E-10	0.500 4.6 E-10			
E-10	As-72	1.08 d	M	0.500	9.2
E-10	1.3 E-09	0.500 1.8 E-09			
E-10	As-73	80.3 d	M	0.500	9.3
E-10	6.5 E-10	0.500 2.6 E-10			
E-09	As-74	17.8 d	M	0.500	2.1
E-09	1.8 E-09	0.500 1.3 E-09			
E-10	As-76	1.10 d	M	0.500	7.4
E-10	9.2 E-10	0.500 1.6 E-09			
E-10	As-77	1.62 d	M	0.500	3.8
E-10	4.2 E-10	0.500 4.0 E-10			
E-11	As-78	1.51 h	M	0.500	9.2
E-11	1.4 E-10	0.500 2.1 E-10			
<b>Selen</b>					
E-11	Se-70	0.683 h	F	0.800	4.5
E-11	8.2 E-11	0.800 1.2 E-10	M	0.800	7.3
E-11	1.2 E-10	0.050 1.4 E-10			

	Se-73		7.15 h		F	0.800	8.6
E-11	1.5 E-10	0.800	2.1 E-10		M	0.800	1.6
E-10	2.4 E-10	0.050	3.9 E-10		F	0.800	9.9
	Se-73m		0.650 h		F	0.800	9.9
E-12	1.7 E-11	0.800	2.8 E-11		M	0.800	1.8
E-11	2.7 E-11	0.050	4.1 E-11		F	0.800	1.0
	Se-75		120 d		F	0.800	1.0
E-09	1.4 E-09	0.800	2.6 E-09		M	0.800	1.4
E-09	1.7 E-09	0.050	4.1 E-10		F	0.800	1.2
	Se-79		6.50E+04 a		F	0.800	1.2
E-09	1.6 E-09	0.800	2.9 E-09		M	0.800	2.9
E-09	3.1 E-09	0.050	3.9 E-10		F	0.800	8.6
	Se-81		0.308 h		F	0.800	8.6
E-12	1.4 E-11	0.800	2.7 E-11		M	0.800	1.5
E-11	2.4 E-11	0.050	2.7 E-11		F	0.800	1.7
	Se-81m		0.954 h		F	0.800	1.7
E-11	3.0 E-11	0.800	5.3 E-11		M	0.800	4.7
E-11	6.8 E-11	0.050	5.9 E-11		F	0.800	1.9
	Se-83		0.375 h		F	0.800	1.9
E-11	3.4 E-11	0.800	4.7 E-11		M	0.800	3.3
E-11	5.3 E-11	0.050	5.1 E-11				
	<b>Brom</b>						
	Br-74		0.422 h		F	1.000	2.8
E-11	5.0 E-11	1.000	8.4 E-11		M	1.000	4.1
E-11	6.8 E-11				F	1.000	4.2
	Br-74m		0.691 h		F	1.000	4.2
E-11	7.5 E-11	1.000	1.4 E-10		M	1.000	6.5
E-11	1.1 E-10				F	1.000	3.1
	Br-75		1.63 h		F	1.000	3.1
E-11	5.6 E-11	1.000	7.9 E-11		M	1.000	5.5
E-11	8.5 E-11				F	1.000	2.6
	Br-76		16.2 h		F	1.000	2.6
E-10	4.5 E-10	1.000	4.6 E-10		M	1.000	4.2
E-10	5.8 E-10				F	1.000	6.7
	Br-77		2.33 d		F	1.000	6.7
E-11	1.2 E-10	1.000	9.6 E-11		M	1.000	8.7
E-11	1.3 E-10				F	1.000	6.3
	Br-80		0.290 h		F	1.000	6.3
E-12	1.1 E-11	1.000	3.1 E-11		M	1.000	1.0
E-11	1.7 E-11				F	1.000	3.5
	Br-80m		4.42 h		F	1.000	3.5
E-11	5.8 E-11	1.000	1.1 E-10		M	1.000	7.6
E-11	1.0 E-10				F	1.000	3.7
	Br-82		1.47 d		F	1.000	3.7
E-10	6.4 E-10	1.000	5.4 E-10		M	1.000	6.4
E-10	8.8 E-10						

	Br-83		2.39 h		F	1.000	1.7
E-11	2.9 E-11	1.000	4.3 E-11		M	1.000	4.8
E-11	6.7 E-11				F	1.000	2.3
E-11	Br-84		0.530 h		M	1.000	3.9
E-11	4.0 E-11	1.000	8.8 E-11				
E-11	6.2 E-11						
	<b>Rubidij</b>						
E-11	Rb-79		0.382 h		F	1.000	1.7
E-11	3.0 E-11	1.000	5.0 E-11		F	1.000	3.7
E-11	Rb-81		4.58 h		F	1.000	7.3
E-11	6.8 E-11	1.000	5.4 E-11		F	1.000	1.2
E-12	Rb-81m		0.533 h		F	1.000	7.1
E-12	1.3 E-11	1.000	9.7 E-12		F	1.000	1.1
E-10	Rb-82m		6.20 h		F	1.000	9.6
E-10	2.2 E-10	1.000	1.3 E-10		F	1.000	5.1
E-10	Rb-83		86.2 d		F	1.000	1.7
E-10	1.0 E-09	1.000	1.9 E-09		F	1.000	1.4
E-09	Rb-84		32.8 d		F	1.000	7.6
E-09	1.5 E-09	1.000	2.8 E-09		S	0.010	1.4
E-10	Rb-86		18.6 d		F	1.000	2.2
E-10	1.3 E-09	1.000	2.8 E-09		S	0.010	1.0
E-10	Rb-87		4.70E+10 a		F	1.000	1.7
E-10	7.6 E-10	1.000	1.5 E-09		F	1.000	3.4
E-11	Rb-88		0.297 h		F	1.000	3.9
E-11	2.8 E-11	1.000	9.0 E-11		S	0.010	7.7
E-11	Rb-89		0.253 h		F	1.000	3.1
E-11	2.5 E-11	1.000	4.7 E-11		S	0.010	4.5
	<b>Stroncij</b>						
E-11	Sr-80		1.67 h		F	0.300	7.6
E-11	1.3 E-10	0.300	3.4 E-10		S	0.010	1.4
E-10	2.1 E-10	0.010	3.5 E-10		F	0.300	2.2
E-11	Sr-81		0.425 h		S	0.010	3.8
E-11	3.9 E-11	0.300	7.7 E-11		F	0.300	2.2
E-11	6.1 E-11	0.010	7.8 E-11		S	0.010	1.0
E-09	Sr-82		25.0 d		F	0.300	1.7
E-09	3.3 E-09	0.300	6.1 E-09		S	0.010	1.0
E-08	7.7 E-09	0.010	6.0 E-09		F	0.300	1.7
E-10	Sr-83		1.35 d		S	0.010	3.4
E-10	3.0 E-10	0.300	4.9 E-10		F	0.300	3.9
E-10	4.9 E-10	0.010	5.8 E-10		S	0.010	7.7
E-10	Sr-85		64.8 d		F	0.300	3.1
E-10	5.6 E-10	0.300	5.6 E-10		S	0.010	4.5
E-10	6.4 E-10	0.010	3.3 E-10		F	0.300	1.2
E-12	Sr-85m		1.16 h		S	0.010	2.2
E-12	5.6 E-12	0.300	6.1 E-12		F	0.300	1.0
E-12	7.4 E-12	0.010	6.1 E-12		S	0.010	2.2
E-11	Sr-87m		2.80 h		F	0.300	1.2
E-11	2.2 E-11	0.300	3.0 E-11		S	0.010	2.2
E-11	3.5 E-11	0.010	3.3 E-11		F	0.300	1.0
E-09	Sr-89		50.5 d		S	0.010	2.2
E-09	1.4 E-09	0.300	2.6 E-09		F	0.300	1.0

E-09	5.6 E-09	0.010	2.3 E-09	S	0.010	7.5
	Sr-90		29.1 a	F	0.300	2.4
E-08	3.0 E-08	0.300	2.8 E-08	S	0.010	1.5
E-07	7.7 E-08	0.010	2.7 E-09	F	0.300	1.7
	Sr-91		9.50 h	F	0.300	1.7
E-10	2.9 E-10	0.300	6.5 E-10	S	0.010	4.1
E-10	5.7 E-10	0.010	7.6 E-10	F	0.300	1.1
	Sr-92		2.71 h	F	0.300	1.1
E-10	1.8 E-10	0.300	4.3 E-10	S	0.010	2.3
E-10	3.4 E-10	0.010	4.9 E-10			
	<b>Itrij</b>					
	Y-86		14.7 h	M	1.0 E-04	4.8
E-10	8.0 E-10	1.0 E-04	9.6 E-10	S	1.0 E-04	4.9
E-10	8.1 E-10			M	1.0 E-04	2.9
	Y-86m		0.800 h	M	1.0 E-04	2.9
E-11	4.8 E-11	1.0 E-04	5.6 E-11	S	1.0 E-04	3.0
E-11	4.9 E-11			M	1.0 E-04	3.8
	Y-87		3.35 d	M	1.0 E-04	3.8
E-10	5.2 E-10	1.0 E-04	5.5 E-10	S	1.0 E-04	4.0
E-10	5.3 E-10			M	1.0 E-04	3.9
	Y-88		107 d	M	1.0 E-04	3.9
E-09	3.3 E-09	1.0 E-04	1.3 E-09	S	1.0 E-04	4.1
E-09	3.0 E-09			M	1.0 E-04	1.4
	Y-90		2.67 d	M	1.0 E-04	1.4
E-09	1.6 E-09	1.0 E-04	2.7 E-09	S	1.0 E-04	1.5
E-09	1.7 E-09			M	1.0 E-04	9.6
	Y-90m		3.19 h	M	1.0 E-04	9.6
E-11	1.3 E-10	1.0 E-04	1.7 E-10	S	1.0 E-04	1.0
E-10	1.3 E-10			M	1.0 E-04	6.7
	Y-91		58.5 d	M	1.0 E-04	6.7
E-09	5.2 E-09	1.0 E-04	2.4 E-09	S	1.0 E-04	8.4
E-09	6.1 E-09			M	1.0 E-04	1.0
	Y-91m		0.828 h	M	1.0 E-04	1.0
E-11	1.4 E-11	1.0 E-04	1.1 E-11	S	1.0 E-04	1.1
E-11	1.5 E-11			M	1.0 E-04	1.9
	Y-92		3.54 h	M	1.0 E-04	1.9
E-10	2.7 E-10	1.0 E-04	4.9 E-10	S	1.0 E-04	2.0
E-10	2.8 E-10			M	1.0 E-04	4.1
	Y-93		10.1 h	M	1.0 E-04	4.1
E-10	5.7 E-10	1.0 E-04	1.2 E-09	S	1.0 E-04	4.3
E-10	6.0 E-10			M	1.0 E-04	2.8
	Y-94		0.318 h	M	1.0 E-04	2.8
E-11	4.4 E-11	1.0 E-04	8.1 E-11	S	1.0 E-04	2.9
E-11	4.6 E-11			M	1.0 E-04	1.6
	Y-95		0.178 h	M	1.0 E-04	1.6
E-11	2.5 E-11	1.0 E-04	4.6 E-11			

E-11	2.6 E-11		S	1.0 E-04	1.7
<b>Cirkonij</b>					
	Zr-86	16.5 h			
E-10	5.2 E-10	0.002 8.6 E-10	F	0.002	3.0
E-10	6.8 E-10		M	0.002	4.3
E-10	7.0 E-10		S	0.002	4.5
	Zr-88	83.4 d			
E-09	4.1 E-09	0.002 3.3 E-10	F	0.002	3.5
E-09	1.7 E-09		M	0.002	2.5
E-09	1.8 E-09		S	0.002	3.3
	Zr-89	3.27 d			
E-10	5.2 E-10	0.002 7.9 E-10	F	0.002	3.1
E-10	7.2 E-10		M	0.002	5.3
E-10	7.5 E-10		S	0.002	5.5
	Zr-93	1.53E+06 a			
E-08	2.9 E-08	0.002 2.8 E-10	F	0.002	2.5
E-09	6.6 E-09		M	0.002	9.6
E-09	1.7 E-09		S	0.002	3.1
	Zr-95	64.0 d			
E-09	3.0 E-09	0.002 8.8 E-10	F	0.002	2.5
E-09	3.6 E-09		M	0.002	4.5
E-09	4.2 E-09		S	0.002	5.5
	Zr-97	16.9 h			
E-10	7.4 E-10	0.002 2.1 E-09	F	0.002	4.2
E-10	1.3 E-09		M	0.002	9.4
E-09	1.4 E-09		S	0.002	1.0
<b>Niobij</b>					
	Nb-88	0.238 h			
E-11	4.8 E-11	0.010 6.3 E-11	M	0.010	2.9
E-11	5.0 E-11		S	0.010	3.0
	Nb-89	2.03 h			
E-10	1.8 E-10	0.010 3.0 E-10	M	0.010	1.2
E-10	1.9 E-10		S	0.010	1.3
	Nb-89	1.10 h			
E-11	1.1 E-10	0.010 1.4 E-10	M	0.010	7.1
E-11	1.2 E-10		S	0.010	7.4
	Nb-90	14.6 h			
E-10	1.0 E-09	0.010 1.2 E-09	M	0.010	6.6
E-10	1.1 E-09		S	0.010	6.9
	Nb-93m	13.6 a			
E-10	2.9 E-10	0.010 1.2 E-10	M	0.010	4.6
E-09	8.6 E-10		S	0.010	1.6

	Nb-94		2.03E+04 a		M	0.010	1.0
E-08	7.2 E-09		0.010 1.7 E-09		S	0.010	4.5
E-08	2.5 E-08						
	Nb-95		35.1 d		M	0.010	1.4
E-09	1.3 E-09		0.010 5.8 E-10		S	0.010	1.6
E-09	1.3 E-09						
	Nb-95m		3.61 d		M	0.010	7.6
E-10	7.7 E-10		0.010 5.6 E-10		S	0.010	8.5
E-10	8.5 E-10						
	Nb-96		23.3 h		M	0.010	6.5
E-10	9.7 E-10		0.010 1.1 E-09		S	0.010	6.8
E-10	1.0 E-09						
	Nb-97		1.20 h		M	0.010	4.4
E-11	6.9 E-11		0.010 6.8 E-11		S	0.010	4.7
E-11	7.2 E-11						
	Nb-98		0.858 h		M	0.010	5.9
E-11	9.6 E-11		0.010 1.1 E-10		S	0.010	6.1
E-11	9.9 E-11						
	<b>Molibden</b>						
	Mo-90		5.67 h		F	0.800	1.7
E-10	2.9 E-10		0.800 3.1 E-10		S	0.050	3.7
E-10	5.6 E-10		0.050 6.2 E-10		F	0.800	1.0
	Mo-93		3.50E+03 a		F	0.800	1.0
E-09	1.4 E-09		0.800 2.6 E-09		S	0.050	2.2
E-09	1.2 E-09		0.050 2.0 E-10		F	0.800	1.0
	Mo-93m		6.85 h		F	0.800	1.0
E-10	1.9 E-10		0.800 1.6 E-10		S	0.050	1.8
E-10	3.0 E-10		0.050 2.8 E-10		F	0.800	2.3
	Mo-99		2.75 d		F	0.800	2.3
E-10	3.6 E-10		0.800 7.4 E-10		S	0.050	9.7
E-10	1.1 E-09		0.050 1.2 E-09		F	0.800	1.5
	Mo-101		0.244 h		F	0.800	1.5
E-11	2.7 E-11		0.800 4.2 E-11		S	0.050	2.7
E-11	4.5 E-11		0.050 4.2 E-11				
	<b>Tehnecij</b>						
	Tc-93		2.75 h		F	0.800	3.4
E-11	6.2 E-11		0.800 4.9 E-11		M	0.800	3.6
E-11	6.5 E-11						
	Tc-93m		0.725 h		F	0.800	1.5
E-11	2.6 E-11		0.800 2.4 E-11		M	0.800	1.7
E-11	3.1 E-11						
	Tc-94		4.88 h		F	0.800	1.2
E-10	2.1 E-10		0.800 1.8 E-10		M	0.800	1.3
E-10	2.2 E-10						
	Tc-94m		0.867 h		F	0.800	4.3
E-11	6.9 E-11		0.800 1.1 E-10				

E-11	8.0 E-11			M	0.800	4.9
	Tc-95	20.0 h		F	0.800	1.0
E-10	1.8 E-10	0.800	1.6 E-10	M	0.800	1.0
E-10	1.8 E-10			F	0.800	3.1
	Tc-95m	61.0 d		F	0.800	3.1
E-10	4.8 E-10	0.800	6.2 E-10	M	0.800	8.7
E-10	8.6 E-10			F	0.800	6.0
	Tc-96	4.28 d		F	0.800	6.0
E-10	9.8 E-10	0.800	1.1 E-09	M	0.800	7.1
E-10	1.0 E-09			F	0.800	6.5
	Tc-96m	0.858 h		F	0.800	6.5
E-12	1.1 E-11	0.800	1.3 E-11	M	0.800	7.7
E-12	1.1 E-11			F	0.800	4.5
	Tc-97	2.60E+06 a		F	0.800	4.5
E-11	7.2 E-11	0.800	8.3 E-11	M	0.800	2.1
E-10	1.6 E-10			F	0.800	2.8
	Tc-97m	87.0 d		F	0.800	2.8
E-10	4.0 E-10	0.800	6.6 E-10	M	0.800	3.1
E-09	2.7 E-09			F	0.800	1.0
	Tc-98	4.20E+06 a		F	0.800	1.0
E-09	1.5 E-09	0.800	2.3 E-09	M	0.800	8.1
E-09	6.1 E-09			F	0.800	2.9
	Tc-99	2.13E+05 a		F	0.800	2.9
E-10	4.0 E-10	0.800	7.8 E-10	M	0.800	3.9
E-09	3.2 E-09			F	0.800	1.2
	Tc-99m	6.02 h		F	0.800	1.2
E-11	2.0 E-11	0.800	2.2 E-11	M	0.800	1.9
E-11	2.9 E-11			F	0.800	8.7
	Tc-101	0.237 h		F	0.800	8.7
E-12	1.5 E-11	0.800	1.9 E-11	M	0.800	1.3
E-11	2.1 E-11			F	0.800	2.4
	Tc-104	0.303 h		F	0.800	2.4
E-11	3.9 E-11	0.800	8.1 E-11	M	0.800	3.0
E-11	4.8 E-11			F	0.050	2.7
	<b>Rutenij</b>			F	0.050	2.7
	Ru-94	0.863 h		F	0.050	2.7
E-11	4.9 E-11	0.050	9.4 E-11	M	0.050	4.4
E-11	7.2 E-11			S	0.050	4.6
E-11	7.4 E-11			F	0.050	6.7
	Ru-97	2.90 d		F	0.050	6.7
E-11	1.2 E-10	0.050	1.5 E-10	M	0.050	1.1
E-10	1.6 E-10			S	0.050	1.1
E-10	1.6 E-10			F	0.050	4.9
	Ru-103	39.3 d		F	0.050	4.9
E-10	6.8 E-10	0.050	7.3 E-10			

E-09	1.9 E-09			M	0.050	2.3
E-09	2.2 E-09			S	0.050	2.8
E-11	Ru-105	4.44 h		F	0.050	7.1
E-11	1.3 E-10	0.050	2.6 E-10			
E-10	2.4 E-10			M	0.050	1.7
E-10	2.5 E-10			S	0.050	1.8
E-09	Ru-106	1.01 a		F	0.050	8.0
E-09	9.8 E-09	0.050	7.0 E-09			
E-08	1.7 E-08			M	0.050	2.6
E-08	3.5 E-08			S	0.050	6.2
	<b>Rodij</b>					
E-10	Rh-99	16.0 d		F	0.050	3.3
E-10	4.9 E-10	0.050	5.1 E-10			
E-10	8.2 E-10			M	0.050	7.3
E-10	8.9 E-10			S	0.050	8.3
E-11	Rh-99m	4.70 h		F	0.050	3.0
E-11	5.7 E-11	0.050	6.6 E-11			
E-11	7.2 E-11			M	0.050	4.1
E-11	7.3 E-11			S	0.050	4.3
E-10	Rh-100	20.8 h		F	0.050	2.8
E-10	5.1 E-10	0.050	7.1 E-10			
E-10	6.2 E-10			M	0.050	3.6
E-10	6.3 E-10			S	0.050	3.7
E-09	Rh-101	3.20 a		F	0.050	1.4
E-09	1.7 E-09	0.050	5.5 E-10			
E-09	1.7 E-09			M	0.050	2.2
E-09	3.1 E-09			S	0.050	5.0
E-10	Rh-101m	4.34 d		F	0.050	1.0
E-10	1.7 E-10	0.050	2.2 E-10			
E-10	2.5 E-10			M	0.050	2.0
E-10	2.7 E-10			S	0.050	2.1
E-09	Rh-102	2.90 a		F	0.050	7.3
E-09	8.9 E-09	0.050	2.6 E-09			
E-09	5.0 E-09			M	0.050	6.5
E-08	9.0 E-09			S	0.050	1.6
E-09	Rh-102m	207 d		F	0.050	1.5
E-09	1.9 E-09	0.050	1.2 E-09			
E-09	2.7 E-09			M	0.050	3.8
E-09	4.2 E-09			S	0.050	6.7
E-13	Rh-103m	0.935 h		F	0.050	8.6
E-13	1.2 E-12	0.050	3.8 E-12			

E-12	2.4 E-12			M	0.050	2.3
E-12	2.5 E-12			S	0.050	2.5
E-11	Rh-105	1.47 d		F	0.050	8.7
E-11	1.5 E-10	0.050	3.7 E-10	M	0.050	3.1
E-10	4.1 E-10			S	0.050	3.4
E-10	4.4 E-10			F	0.050	7.0
E-11	Rh-106m	2.20 h		M	0.050	1.1
E-11	1.3 E-10	0.050	1.6 E-10	S	0.050	1.2
E-10	1.8 E-10			F	0.050	9.6
E-10	1.9 E-10	0.362 h		M	0.050	1.7
E-12	Rh-107	0.362 h		S	0.050	1.7
E-12	1.6 E-11	0.050	2.4 E-11	F	0.050	4.9
E-11	2.7 E-11			M	0.005	7.9
E-11	2.8 E-11			S	0.005	8.3
E-11	<b>Paladij</b>			F	0.005	4.2
E-10	Pd-100	3.63 d		M	0.005	6.2
E-10	7.6 E-10	0.005	9.4 E-10	S	0.005	6.4
E-10	9.5 E-10			F	0.005	9.0
E-10	9.7 E-10			M	0.005	3.5
E-11	Pd-101	8.27 h		S	0.005	4.0
E-11	7.5 E-11	0.005	9.4 E-11	F	0.005	2.6
E-11	9.8 E-11			M	0.005	8.0
E-11	1.0 E-10			S	0.005	5.5
E-11	Pd-103	17.0 d		F	0.005	1.2
E-11	1.2 E-10	0.005	1.9 E-10	M	0.005	3.4
E-10	3.0 E-10			S	0.005	3.6
E-10	2.9 E-10			F	0.005	1.4
E-11	Pd-107	6.50E+06 a		M	0.005	1.8
E-11	3.3 E-11	0.005	3.7 E-11	S	0.050	1.9
E-11	5.2 E-11			F	0.050	1.4
E-10	2.9 E-10			M	0.050	1.8
E-10	Pd-109	13.4 h		S	0.050	1.9
E-10	2.1 E-10	0.005	5.5 E-10			
E-10	4.7 E-10					
E-10	5.0 E-10					
E-11	<b>Srebro</b>					
E-11	Ag-102	0.215 h				
E-11	2.4 E-11	0.050	4.0 E-11			
E-11	3.2 E-11					
E-11	3.2 E-11					

	Ag-103		1.09 h		F	0.050	1.6
E-11	2.8 E-11	0.050	4.3 E-11		M	0.050	2.7
E-11	4.3 E-11				S	0.050	2.8
E-11	4.5 E-11				F	0.050	3.0
E-11	Ag-104		1.15 h		F	0.050	3.0
E-11	5.7 E-11	0.050	6.0 E-11		M	0.050	3.9
E-11	6.9 E-11				S	0.050	4.0
E-11	7.1 E-11				F	0.050	1.7
E-11	Ag-104m		0.558 h		F	0.050	1.7
E-11	3.1 E-11	0.050	5.4 E-11		M	0.050	2.6
E-11	4.4 E-11				S	0.050	2.7
E-11	4.5 E-11				F	0.050	5.4
E-10	Ag-105		41.0 d		F	0.050	5.4
E-10	8.0 E-10	0.050	4.7 E-10		M	0.050	6.9
E-10	7.0 E-10				S	0.050	7.8
E-10	7.3 E-10				F	0.050	9.8
E-12	Ag-106		0.399 h		F	0.050	9.8
E-12	1.7 E-11	0.050	3.2 E-11		M	0.050	1.6
E-11	2.6 E-11				S	0.050	1.6
E-11	2.7 E-11				F	0.050	1.1
E-09	Ag-106m		8.41 d		F	0.050	1.1
E-09	1.6 E-09	0.050	1.5 E-09		M	0.050	1.1
E-09	1.5 E-09				S	0.050	1.1
E-09	1.4 E-09				F	0.050	6.1
E-09	Ag-108m		1.27E+02 a		F	0.050	6.1
E-09	7.3 E-09	0.050	2.3 E-09		M	0.050	7.0
E-09	5.2 E-09				S	0.050	3.5
E-08	1.9 E-08				F	0.050	5.5
E-09	Ag-110m		250 d		F	0.050	5.5
E-09	6.7 E-09	0.050	2.8 E-09		M	0.050	7.2
E-09	5.9 E-09				S	0.050	1.2
E-08	7.3 E-09				F	0.050	4.1
E-10	Ag-111		7.45 d		F	0.050	4.1
E-10	5.7 E-10	0.050	1.3 E-09		M	0.050	1.5
E-09	1.5 E-09				S	0.050	1.7
E-09	1.6 E-09				F	0.050	8.2
E-11	Ag-112		3.12 h		F	0.050	8.2
E-11	1.4 E-10	0.050	4.3 E-10		M	0.050	1.7
E-10	2.5 E-10				S	0.050	1.8
E-10	2.6 E-10						

E-11	Ag-115	0.333 h	F	0.050	1.6
E-11	2.6 E-11	0.050 6.0 E-11	M	0.050	2.8
E-11	4.3 E-11		S	0.050	3.0
E-11	4.4 E-11				
<b>Kadmij</b>					
E-11	Cd-104	0.961 h	F	0.050	2.7
E-11	5.0 E-11	0.050 5.8 E-11	M	0.050	3.6
E-11	6.2 E-11		S	0.050	3.7
E-11	6.3 E-11				
E-11	Cd-107	6.49 h	F	0.050	2.3
E-11	4.2 E-11	0.050 6.2 E-11	M	0.050	8.1
E-11	1.0 E-10		S	0.050	8.7
E-11	1.1 E-10				
E-09	Cd-109	1.27 a	F	0.050	8.1
E-09	9.6 E-09	0.050 2.0 E-09	M	0.050	6.2
E-09	5.1 E-09		S	0.050	5.8
E-09	4.4 E-09				
E-07	Cd-113	9.30E+15 a	F	0.050	1.2
E-07	1.4 E-07	0.050 2.5 E-08	M	0.050	5.3
E-08	4.3 E-08		S	0.050	2.5
E-08	2.1 E-08				
E-07	Cd-113m	13.6 a	F	0.050	1.1
E-07	1.3 E-07	0.050 2.3 E-08	M	0.050	5.0
E-08	4.0 E-08		S	0.050	3.0
E-08	2.4 E-08				
E-10	Cd-115	2.23 d	F	0.050	3.7
E-10	5.4 E-10	0.050 1.4 E-09	M	0.050	9.7
E-10	1.2 E-09		S	0.050	1.1
E-09	1.3 E-09				
E-09	Cd-115m	44.6 d	F	0.050	5.3
E-09	6.4 E-09	0.050 3.3 E-09	M	0.050	5.9
E-09	5.5 E-09		S	0.050	7.3
E-09	5.5 E-09				
E-11	Cd-117	2.49 h	F	0.050	7.3
E-11	1.3 E-10	0.050 2.8 E-10	M	0.050	1.6
E-10	2.4 E-10		S	0.050	1.7
E-10	2.5 E-10				
E-10	Cd-117m	3.36 h	F	0.050	1.0
E-10	1.9 E-10	0.050 2.8 E-10	M	0.050	2.0
E-10	3.1 E-10		S	0.050	2.1
E-10	3.2 E-10				

		<b>Indij</b>				
	In-109		4.20 h	F	0.020	3.2
E-11	5.7 E-11	0.020	6.6 E-11	M	0.020	4.4
E-11	7.3 E-11					
	In-110		4.90 h	F	0.020	1.2
E-10	2.2 E-10	0.020	2.4 E-10	M	0.020	1.4
E-10	2.5 E-10					
	In-110		1.15 h	F	0.020	3.1
E-11	5.5 E-11	0.020	1.0 E-10	M	0.020	5.0
E-11	8.1 E-11					
	In-111		2.83 d	F	0.020	1.3
E-10	2.2 E-10	0.020	2.9 E-10	M	0.020	2.3
E-10	3.1 E-10					
	In-112		0.240 h	F	0.020	5.0
E-12	8.6 E-12	0.020	1.0 E-11	M	0.020	7.8
E-12	1.3 E-11					
	In-113m		1.66 h	F	0.020	1.0
E-11	1.9 E-11	0.020	2.8 E-11	M	0.020	2.0
E-11	3.2 E-11					
	In-114m		49.5 d	F	0.020	9.3
E-09	1.1 E-08	0.020	4.1 E-09	M	0.020	5.9
E-09	5.9 E-09					
	In-115		5.10E+15 a	F	0.020	3.9
E-07	4.5 E-07	0.020	3.2 E-08	M	0.020	1.5
E-07	1.1 E-07					
	In-115m		4.49 h	F	0.020	2.5
E-11	4.5 E-11	0.020	8.6 E-11	M	0.020	6.0
E-11	8.7 E-11					
	In-116m		0.902 h	F	0.020	3.0
E-11	5.5 E-11	0.020	6.4 E-11	M	0.020	4.8
E-11	8.0 E-11					
	In-117		0.730 h	F	0.020	1.6
E-11	2.8 E-11	0.020	3.1 E-11	M	0.020	3.0
E-11	4.8 E-11					
	In-117m		1.94 h	F	0.020	3.1
E-11	5.5 E-11	0.020	1.2 E-10	M	0.020	7.3
E-11	1.1 E-10					
	In-119m		0.300 h	F	0.020	1.1
E-11	1.8 E-11	0.020	4.7 E-11	M	0.020	1.8
E-11	2.9 E-11					
		<b>Kositar</b>				
	Sn-110		4.00 h	F	0.020	1.1
E-10	1.9 E-10	0.020	3.5 E-10	M	0.020	1.6
E-10	2.6 E-10					
	Sn-111		0.588 h	F	0.020	8.3
E-12	1.5 E-11	0.020	2.3 E-11			

E-11	2.2 E-11			M	0.020	1.4
	Sn-113	115 d		F	0.020	5.4
E-10	7.9 E-10	0.020	7.3 E-10	M	0.020	2.5
E-09	1.9 E-09			F	0.020	2.9
	Sn-117m	13.6 d		F	0.020	2.9
E-10	3.9 E-10	0.020	7.1 E-10	M	0.020	2.3
E-09	2.2 E-09			F	0.020	2.9
	Sn-119m	293 d		F	0.020	2.9
E-10	3.6 E-10	0.020	3.4 E-10	M	0.020	2.0
E-09	1.5 E-09			F	0.020	6.4
	Sn-121	1.13 d		F	0.020	6.4
E-11	1.0 E-10	0.020	2.3 E-10	M	0.020	2.2
E-10	2.8 E-10			F	0.020	8.0
	Sn-121m	55.0 a		F	0.020	8.0
E-10	9.7 E-10	0.020	3.8 E-10	M	0.020	4.2
E-09	3.3 E-09			F	0.020	1.2
	Sn-123	129 d		F	0.020	1.2
E-09	1.6 E-09	0.020	2.1 E-09	M	0.020	7.7
E-09	5.6 E-09			F	0.020	1.4
	Sn-123m	0.668 h		F	0.020	1.4
E-11	2.4 E-11	0.020	3.8 E-11	M	0.020	2.8
E-11	4.4 E-11			F	0.020	9.2
	Sn-125	9.64 d		F	0.020	9.2
E-10	1.3 E-09	0.020	3.1 E-09	M	0.020	3.0
E-09	2.8 E-09			F	0.020	1.1
	Sn-126	1.00E+05 a		F	0.020	1.1
E-08	1.4 E-08	0.020	4.7 E-09	M	0.020	2.7
E-08	1.8 E-08			F	0.020	6.9
	Sn-127	2.10 h		F	0.020	6.9
E-11	1.2 E-10	0.020	2.0 E-10	M	0.020	1.3
E-10	2.0 E-10			F	0.020	5.4
	Sn-128	0.985 h		F	0.020	5.4
E-11	9.5 E-11	0.020	1.5 E-10	M	0.020	9.6
E-11	1.5 E-10					
	<b>Antimon</b>					
	Sb-115	0.530 h		F	0.100	9.2
E-12	1.7 E-11	0.100	2.4 E-11	M	0.010	1.4
E-11	2.3 E-11			F	0.100	9.9
	Sb-116	0.263 h		F	0.100	9.9
E-12	1.8 E-11	0.100	2.6 E-11	M	0.010	1.4
E-11	2.3 E-11			F	0.100	3.5
	Sb-116m	1.00 h		F	0.100	3.5
E-11	6.4 E-11	0.100	6.7 E-11	M	0.010	5.0
E-11	8.5 E-11			F	0.100	9.3
	Sb-117	2.80 h		F	0.100	9.3
E-12	1.7 E-11	0.100	1.8 E-11			

E-11	2.7 E-11			M	0.010	1.7
	Sb-118m	5.00 h		F	0.100	1.0
E-10	1.9 E-10	0.100	2.1 E-10	M	0.010	1.3
E-10	2.3 E-10			F	0.100	2.5
	Sb-119	1.59 d		M	0.010	3.7
E-11	4.5 E-11	0.100	8.1 E-11	F	0.100	5.9
E-11	5.9 E-11			M	0.010	1.0
	Sb-120	5.76 d		F	0.100	4.9
E-10	9.8 E-10	0.100	1.2 E-09	M	0.010	7.4
E-09	1.3 E-09			F	0.100	3.9
	Sb-120	0.265 h		M	0.010	1.0
E-12	8.5 E-12	0.100	1.4 E-11	F	0.100	1.3
E-12	1.2 E-11			M	0.010	6.1
	Sb-122	2.70 d		F	0.100	3.0
E-10	6.3 E-10	0.100	1.7 E-09	M	0.010	5.5
E-09	1.2 E-09			F	0.100	1.4
	Sb-124	60.2 d		M	0.010	4.5
E-09	1.9 E-09	0.100	2.5 E-09	F	0.100	1.1
E-09	4.7 E-09			M	0.010	2.7
	Sb-124m	0.337 h		F	0.100	1.3
E-12	5.3 E-12	0.100	8.0E-12	M	0.010	2.0
E-12	8.3 E-12			F	0.100	4.6
	Sb-125	2.77 a		M	0.010	1.6
E-09	1.7 E-09	0.100	1.1 E-09	F	0.100	2.5
E-09	3.3 E-09			M	0.010	4.2
	Sb-126	12.4 d		F	0.100	1.1
E-09	1.7 E-09	0.100	2.4 E-09	M	0.010	1.5
E-09	3.2 E-09			F	0.100	3.5
	Sb-126m	0.317 h		M	0.010	2.4
E-11	2.3 E-11	0.100	3.6 E-11	F	0.100	1.1
E-11	3.3 E-11			M	0.010	1.5
	Sb-127	3.85 d		F	0.100	1.1
E-10	7.4 E-10	0.100	1.7 E-09	M	0.010	1.6
E-09	1.7 E-09			F	0.100	2.5
	Sb-128	9.01 h		M	0.010	4.2
E-10	4.6 E-10	0.100	7.6 E-10	F	0.100	1.1
E-10	6.7 E-10			M	0.010	1.5
	Sb-128	0.173 h		F	0.100	1.1
E-11	1.9 E-11	0.100	3.3 E-11	M	0.010	2.4
E-11	2.6 E-11			F	0.100	3.5
	Sb-129	4.32 h		M	0.010	2.4
E-10	2.0 E-10	0.100	4.2 E-10	F	0.100	3.5
E-10	3.5 E-10			M	0.010	2.4
	Sb-130	0.667 h		F	0.100	3.5
E-11	6.3 E-11	0.100	9.1 E-11	M	0.010	2.4

E-11	9.1 E-11			M	0.010	5.4
	Sb-131	0.383 h		F	0.100	3.7
E-11	5.9 E-11	0.100	1.0 E-10	M	0.010	5.2
E-11	8.3 E-11					
	<b>Telur</b>					
	Te-116	2.49 h		F	0.300	6.3
E-11	1.2 E-10	0.300	1.7 E-10	M	0.300	1.1
E-10	1.7 E-10					
	Te-121	17.0 d		F	0.300	2.5
E-10	3.9 E-10	0.300	4.3 E-10	M	0.300	3.9
E-10	4.4 E-10					
	Te-121m	154 d		F	0.300	1.8
E-09	2.3 E-09	0.300	2.3 E-09	M	0.300	4.2
E-09	3.6 E-09					
	Te-123	1.00E+13 a		F	0.300	4.0
E-09	5.0 E-09	0.300	4.4 E-09	M	0.300	2.6
E-09	2.8 E-09					
	Te-123m	120 d		F	0.300	9.7
E-10	1.2 E-09	0.300	1.4 E-09	M	0.300	3.9
E-09	3.4 E-09					
	Te-125m	58.0 d		F	0.300	5.1
E-10	6.7 E-10	0.300	8.7 E-10	M	0.300	3.3
E-09	2.9 E-09					
	Te-127	9.35 h		F	0.300	4.2
E-11	7.2 E-11	0.300	1.7 E-10	M	0.300	1.2
E-10	1.8 E-10					
	Te-127m	109 d		F	0.300	1.6
E-09	2.0 E-09	0.300	2.3 E-09	M	0.300	7.2
E-09	6.2 E-09					
	Te-129	1.16 h		F	0.300	1.7
E-11	2.9 E-11	0.300	6.3 E-11	M	0.300	3.8
E-11	5.7 E-11					
	Te-129m	33.6 d		F	0.300	1.3
E-09	1.8 E-09	0.300	3.0 E-09	M	0.300	6.3
E-09	5.4 E-09					
	Te-131	0.417 h		F	0.300	2.3
E-11	4.6 E-11	0.300	8.7 E-11	M	0.300	3.8
E-11	6.1 E-11					
	Te-131m	1.25 d		F	0.300	8.7
E-10	1.2 E-09	0.300	1.9 E-09	M	0.300	1.1
E-09	1.6 E-09					
	Te-132	3.26 d		F	0.300	1.8
E-09	2.4 E-09	0.300	3.7 E-09	M	0.300	2.2
E-09	3.0 E-09					
	Te-133	0.207 h		F	0.300	2.0
E-11	3.8 E-11	0.300	7.2 E-11	M	0.300	2.0

				M	0.300	2.7
E-11	4.4 E-11					
	Te-133m	0.923 h		F	0.300	8.4
E-11	1.2 E-10	0.300	2.8 E-10			
				M	0.300	1.2
E-10	1.9 E-10					
	Te-134	0.696 h		F	0.300	5.0
E-11	8.3 E-11	0.300	1.1 E-10			
				M	0.300	7.1
E-11	1.1 E-10					
	<b>Jod</b>					
	I-120	1.35 h		F	1.000	1.0
E-10	1.9 E-10	1.000	3.4 E-10			
	I-120m	0.883 h		F	1.000	8.7
E-11	1.4 E-10	1.000	2.1 E-10			
	I-121	2.12 h		F	1.000	2.8
E-11	3.9 E-11	1.000	8.2 E-11			
	I-123	13.2 h		F	1.000	7.6
E-11	1.1 E-10	1.000	2.1 E-10			
	I-124	4.18 d		F	1.000	4.5
E-09	6.3 E-09	1.000	1.3 E-08			
	I-125	60.1 d		F	1.000	5.3
E-09	7.3 E-09	1.000	1.5 E-08			
	I-126	13.0 d		F	1.000	1.0
E-08	1.4 E-08	1.000	2.9 E-08			
	I-128	0.416 h		F	1.000	1.4
E-11	2.2 E-11	1.000	4.6 E-11			
	I-129	1.57E+07 a		F	1.000	3.7
E-08	5.1 E-08	1.000	1.1 E-07			
	I-130	12.4 h		F	1.000	6.9
E-10	9.6 E-10	1.000	2.0 E-09			
	I-131	8.04 d		F	1.000	7.6
E-09	1.1 E-08	1.000	2.2 E-08			
	I-132	2.30 h		F	1.000	9.6
E-11	2.0 E-10	1.000	2.9 E-10			
	I-132m	1.39 h		F	1.000	8.1
E-11	1.1 E-10	1.000	2.2 E-10			
	I-133	20.8 h		F	1.000	1.5
E-09	2.1 E-09	1.000	4.3 E-09			
	I-134	0.876 h		F	1.000	4.8
E-11	7.9 E-11	1.000	1.1 E-10			
	I-135	6.61 h		F	1.000	3.3
E-10	4.6 E-10	1.000	9.3 E-10			
	<b>Cezij</b>					
	Cs-125	0.750 h		F	1.000	1.3
E-11	2.3 E-11	1.000	3.5 E-11			
	Cs-127	6.25 h		F	1.000	2.2
E-11	4.0 E-11	1.000	2.4 E-11			
	Cs-129	1.34 d		F	1.000	4.5
E-11	8.1 E-11	1.000	6.0 E-11			
	Cs-130	0.498 h		F	1.000	8.4
E-12	1.5 E-11	1.000	2.8 E-11			
	Cs-131	9.69 d		F	1.000	2.8
E-11	4.5 E-11	1.000	5.8 E-11			
	Cs-132	6.48 d		F	1.000	2.4
E-10	3.8 E-10	1.000	5.0 E-10			
	Cs-134	2.06 a		F	1.000	6.8
E-09	9.6 E-09	1.000	1.9 E-08			
	Cs-134m	2.90 h		F	1.000	1.5
E-11	2.6 E-11	1.000	2.0 E-11			

	Cs-135		2.30E+06 a		F	1.000	7.1
E-10	9.9 E-10		1.000 2.0 E-09				
	Cs-135m		0.883 h		F	1.000	1.3
E-11	2.4 E-11		1.000 1.9 E-11				
	Cs-136		13.1 d		F	1.000	1.3
E-09	1.9 E-09		1.000 3.0 E-09				
	Cs-137		30.0 a		F	1.000	4.8
E-09	6.7 E-09		1.000 1.3 E-08				
	Cs-138		0.536 h		F	1.000	2.6
E-11	4.6 E-11		1.000 9.2 E-11				
	<b>Barij</b>						
	Ba-126		1.61 h		F	0.100	7.8
E-11	1.2 E-10		0.100 2.6 E-10				
	Ba-128		2.43 d		F	0.100	8.0
E-10	1.3 E-09		0.100 2.7 E-09				
	Ba-131		11.8 d		F	0.100	2.3
E-10	3.5 E-10		0.100 4.5 E-10				
	Ba-131m		0.243 h		F	0.100	4.1
E-12	6.4 E-12		0.100 4.9 E-12				
	Ba-133		10.7 a		F	0.100	1.5
E-09	1.8 E-09		0.100 1.0 E-09				
	Ba-133m		1.62 d		F	0.100	1.9
E-10	2.8 E-10		0.100 5.5 E-10				
	Ba-135m		1.20 d		F	0.100	1.5
E-10	2.3 E-10		0.100 4.5 E-10				
	Ba-139		1.38 h		F	0.100	3.5
E-11	5.5 E-11		0.100 1.2 E-10				
	Ba-140		12.7 d		F	0.100	1.0
E-09	1.6 E-09		0.100 2.5 E-09				
	Ba-141		0.305 h		F	0.100	2.2
E-11	3.5 E-11		0.100 7.0 E-11				
	Ba-142		0.177 h		F	0.100	1.6
E-11	2.7 E-11		0.100 3.5 E-11				
	<b>Lantan</b>						
	La-131		0.983 h		F	5.0 E-04	
1.4 E-11	2.4 E-11		5.0 E-04	3.5 E-11	M	5.0 E-04	
2.3 E-11	3.6 E-11						
	La-132		4.80 h		F	5.0 E-04	
1.1 E-10	2.0 E-10		5.0 E-04	3.9 E-10	M	5.0 E-04	
1.7 E-10	2.8 E-10						
	La-135		19.5 h		F	5.0 E-04	
1.1 E-11	2.0 E-11		5.0 E-04	3.0 E-11	M	5.0 E-04	
1.5 E-11	2.5 E-11						
	La-137		6.00E+04 a		F	5.0 E-04	
8.6 E-09	1.0 E-08		5.0 E-04	8.1 E-11	M	5.0 E-04	
3.4 E-09	2.3 E-09						
	La-138		1.35E+11 a		F	5.0 E-04	
1.5 E-07	1.8 E-07		5.0 E-04	1.1 E-09	M	5.0 E-04	
6.1 E-08	4.2 E-08						
	La-140		1.68 d		F	5.0 E-04	
6.0 E-10	1.0 E-09		5.0 E-04	2.0 E-09	M	5.0 E-04	
1.1 E-09	1.5 E-09						
	La-141		3.93 h		F	5.0 E-04	
6.7 E-11	1.1 E-10		5.0 E-04	3.6 E-10			

				M	5.0 E-04
1.5 E-10	2.2 E-10				
	La-142	1.54 h		F	5.0 E-04
5.6 E-11	1.0 E-10	5.0 E-04	1.8 E-10		
				M	5.0 E-04
9.3 E-11	1.5 E-10				
	La-143	0.237 h		F	5.0 E-04
1.2 E-11	2.0 E-11	5.0 E-04	5.6 E-11		
				M	5.0 E-04
2.2 E-11	3.3 E-11				
	<b>Cerij</b>				
	Ce-134	3.00 d		M	5.0 E-04
1.3 E-09	1.5 E-09	5.0 E-04	2.5 E-09		
				S	5.0 E-04
1.3 E-09	1.6 E-09				
	Ce-135	17.6 h		M	5.0 E-04
4.9 E-10	7.3 E-10	5.0 E-04	7.9 E-10		
				S	5.0 E-04
5.1 E-10	7.6 E-10				
	Ce-137	9.00 h		M	5.0 E-04
1.0 E-11	1.8 E-11	5.0 E-04	2.5 E-11		
				S	5.0 E-04
1.1 E-11	1.9 E-11				
	Ce-137m	1.43 d		M	5.0 E-04
4.0 E-10	5.5 E-10	5.0 E-04	5.4 E-10		
				S	5.0 E-04
4.3 E-10	5.9 E-10				
	Ce-139	138 d		M	5.0 E-04
1.6 E-09	1.3 E-09	5.0 E-04	2.6 E-10		
				S	5.0 E-04
1.8 E-09	1.4 E-09				
	Ce-141	32.5 d		M	5.0 E-04
3.1 E-09	2.7 E-09	5.0 E-04	7.1 E-10		
				S	5.0 E-04
3.6 E-09	3.1 E-09				
	Ce-143	1.38 d		M	5.0 E-04
7.4 E-10	9.5 E-10	5.0 E-04	1.1 E-09		
				S	5.0 E-04
8.1 E-10	1.0 E-09				
	Ce-144	284 d		M	5.0 E-04
3.4 E-08	2.3 E-08	5.0 E-04	5.2 E-09		
				S	5.0 E-04
	<b>Praezodij</b>				
4.9 E-08	2.9 E-08				
	Pr-136	0.218 h		M	5.0 E-04
1.4 E-11	2.4 E-11	5.0 E-04	3.3 E-11		
				S	5.0 E-04
1.5 E-11	2.5 E-11				
	Pr-137	1.28 h		M	5.0 E-04
2.1 E-11	3.4 E-11	5.0 E-04	4.0 E-11		
				S	5.0 E-04
2.2 E-11	3.5 E-11				
	Pr-138m	2.10 h		M	5.0 E-04
7.6 E-11	1.3 E-10	5.0 E-04	1.3 E-10		
				S	5.0 E-04
7.9 E-11	1.3 E-10				
	Pr-139	4.51 h		M	5.0 E-04
1.9 E-11	2.9 E-11	5.0 E-04	3.1 E-11		
				S	5.0 E-04
2.0 E-11	3.0 E-11				

	Pr-142		19.1 h		M	5.0 E-04
5.3 E-10	7.0 E-10		5.0 E-04	1.3 E-09	S	5.0 E-04
5.6 E-10	7.4 E-10					
	Pr-142m		0.243 h		M	5.0 E-04
6.7 E-12	8.9 E-12		5.0 E-04	1.7 E-11	S	5.0 E-04
7.1 E-12	9.4 E-12					
	Pr-143		13.6 d		M	5.0 E-04
2.1 E-09	1.9 E-09		5.0 E-04	1.2 E-09	S	5.0 E-04
2.3 E-09	2.2 E-09					
	Pr-144		0.288 h		M	5.0 E-04
1.8 E-11	2.9 E-11		5.0 E-04	5.0 E-11	S	5.0 E-04
1.9 E-11	3.0 E-11					
	Pr-145		5.98 h		M	5.0 E-04
1.6 E-10	2.5 E-10		5.0 E-04	3.9 E-10	S	5.0 E-04
1.7 E-10	2.6 E-10					
	Pr-147		0.227 h		M	5.0 E-04
1.8 E-11	2.9 E-11		5.0 E-04	3.3 E-11	S	5.0 E-04
1.9 E-11	3.0 E-11					
	<b>Neodij</b>					
	Nd-136		0.844 h		M	5.0 E-04
5.3 E-11	8.5 E-11		5.0 E-04	9.9 E-11	S	5.0 E-04
5.6 E-11	8.9 E-11					
	Nd-138		5.04 h		M	5.0 E-04
2.4 E-10	3.7 E-10		5.0 E-04	6.4 E-10	S	5.0 E-04
2.6 E-10	3.8 E-10					
	Nd-139		0.495 h		M	5.0 E-04
1.0 E-11	1.7 E-11		5.0 E-04	2.0 E-11	S	5.0 E-04
1.1 E-11	1.7 E-11					
	Nd-139m		5.50 h		M	5.0 E-04
1.5 E-10	2.5 E-10		5.0 E-04	2.5 E-10	S	5.0 E-04
1.6 E-10	2.5 E-10					
	Nd-141		2.49 h		M	5.0 E-04
5.1 E-12	8.5 E-12		5.0 E-04	8.3 E-12	S	5.0 E-04
5.3 E-12	8.8 E-12					
	Nd-147		11.0 d		M	5.0 E-04
2.0 E-09	1.9 E-09		5.0 E-04	1.1 E-09	S	5.0 E-04
2.3 E-09	2.1 E-09					
	Nd-149		1.73 h		M	5.0 E-04
8.5 E-11	1.2 E-10		5.0 E-04	1.2 E-10	S	5.0 E-04
9.0 E-11	1.3 E-10					
	Nd-151		0.207 h		M	5.0 E-04
1.7 E-11	2.8 E-11		5.0 E-04	3.0 E-11	S	5.0 E-04
1.8 E-11	2.9 E-11					
	<b>Promecij</b>					
	Pm-141		0.348 h		M	5.0 E-04
1.5 E-11	2.4 E-11		5.0 E-04	3.6 E-11		

				S	5.0 E-04
1.6 E-11	2.5 E-11				
	Pm-143	265 d		M	5.0 E-04
1.4 E-09	9.6 E-10	5.0 E-04	2.3 E-10		
				S	5.0 E-04
1.3 E-09	8.3 E-10				
	Pm-144	363 d		M	5.0 E-04
7.8 E-09	5.4 E-09	5.0 E-04	9.7 E-10		
				S	5.0 E-04
7.0 E-09	3.9 E-09				
	Pm-145	17.7 a		M	5.0 E-04
3.4 E-09	2.4 E-09	5.0 E-04	1.1 E-10		
				S	5.0 E-04
2.1 E-09	1.2 E-09				
	Pm-146	5.53 a		M	5.0 E-04
1.9 E-08	1.3 E-08	5.0 E-04	9.0 E-10		
				S	5.0 E-04
1.6 E-08	9.0 E-09				
	Pm-147	2.62 a		M	5.0 E-04
4.7 E-09	3.5 E-09	5.0 E-04	2.6 E-10		
				S	5.0 E-04
4.6 E-09	3.2 E-09				
	Pm-148	5.37 d		M	5.0 E-04
2.0 E-09	2.1 E-09	5.0 E-04	2.7 E-09		
				S	5.0 E-04
2.1 E-09	2.2 E-09				
	Pm-148m	41.3 d		M	5.0 E-04
4.9 E-09	4.1 E-09	5.0 E-04	1.8 E-09		
				S	5.0 E-04
5.4 E-09	4.3 E-09				
	Pm-149	2.21 d		M	5.0 E-04
6.6 E-10	7.6 E-10	5.0 E-04	9.9 E-10		
				S	5.0 E-04
7.2 E-10	8.2 E-10				
	Pm-150	2.68 h		M	5.0 E-04
1.3 E-10	2.0 E-10	5.0 E-04	2.6 E-10		
				S	5.0 E-04
1.4 E-10	2.1 E-10				
	Pm-151	1.18 d		M	5.0 E-04
4.2 E-10	6.1 E-10	5.0 E-04	7.3 E-10		
				S	5.0 E-04
4.5 E-10	6.4 E-10				
	Pm-149	2.21 d		M	5.0 E-04
6.6 E-10	7.6 E-10	5.0 E-04	9.9 E-10		
				S	5.0 E-04
7.2 E-10	8.2 E-10				
<b>Samarij</b>					
	Sm-141	0.170 h		M	5.0 E-04
1.6 E-11	2.7 E-11	5.0 E-04	3.9 E-11		
	Sm-141m	0.377 h		M	5.0 E-04
3.4 E-11	5.6 E-11	5.0 E-04	6.5 E-11		
	Sm-142	1.21 h		M	5.0 E-04
7.4 E-11	1.1 E-10	5.0 E-04	1.9 E-10		
	Sm-145	340 d		M	5.0 E-04
1.5 E-09	1.1 E-09	5.0 E-04	2.1 E-10		
	Sm-146	1.03E+08 a		M	5.0 E-04
9.9 E-06	6.7 E-06	5.0 E-04	5.4 E-08		
	Sm-147	1.06E+11 a		M	5.0 E-04
8.9 E-06	6.1 E-06	5.0 E-04	4.9 E-08		

	Sm-151		90.0 a	M	5.0 E-04
3.7 E-09		2.6 E-09	5.0 E-04	9.8 E-11	
	Sm-153		1.95 d	M	5.0 E-04
6.1 E-10		6.8 E-10	5.0 E-04	7.4 E-10	
	Sm-155		0.368 h	M	5.0 E-04
1.7 E-11		2.8 E-11	5.0 E-04	2.9 E-11	
	Sm-156		9.40 h	M	5.0 E-04
2.1 E-10		2.8 E-10	5.0 E-04	2.5 E-10	

### Europij

	Eu-145		5.94 d	M	5.0 E-04
5.6 E-10		7.3 E-10	5.0 E-04	7.5 E-10	
	Eu-146		4.61 d	M	5.0 E-04
8.2 E-10		1.2 E-09	5.0 E-04	1.3 E-09	
	Eu-147		24.0 d	M	5.0 E-04
1.0 E-09		1.0 E-09	5.0 E-04	4.4 E-10	
	Eu-148		54.5 d	M	5.0 E-04
2.7 E-09		2.3 E-09	5.0 E-04	1.3 E-09	
	Eu-149		93.1 d	M	5.0 E-04
2.7 E-10		2.3 E-10	5.0 E-04	1.0 E-10	
	Eu-150		34.2 a	M	5.0 E-04
5.0 E-08		3.4 E-08	5.0 E-04	1.3 E-09	
	Eu-150		12.6 h	M	5.0 E-04
1.9 E-10		2.8 E-10	5.0 E-04	3.8 E-10	
	Eu-152		13.3 a	M	5.0 E-04
3.9 E-08		2.7 E-08	5.0 E-04	1.4 E-09	
	Eu-152m		9.32 h	M	5.0 E-04
2.2 E-10		3.2 E-10	5.0 E-04	5.0 E-10	
	Eu-154		8.80 a	M	5.0 E-04
5.0 E-08		3.5 E-08	5.0 E-04	2.0 E-09	
	Eu-155		4.96 a	M	5.0 E-04
6.5 E-09		4.7 E-09	5.0 E-04	3.2 E-10	
	Eu-156		15.2 d	M	5.0 E-04
3.3 E-09		3.0 E-09	5.0 E-04	2.2 E-09	
	Eu-157		15.1 h	M	5.0 E-04
3.2 E-10		4.4 E-10	5.0 E-04	6.0 E-10	
	Eu-158		0.765 h	M	5.0 E-04
4.8 E-11		7.5 E-11	5.0 E-04	9.4 E-11	

### Gadolinij

	Gd-145		0.382 h	F	5.0 E-04
1.5 E-11		2.6 E-11	5.0 E-04	4.4 E-11	
				M	5.0 E-04
2.1 E-11		3.5 E-11			
	Gd-146		48.3 d	F	5.0 E-04
4.4 E-09		5.2 E-09	5.0 E-04	9.6 E-10	
				M	5.0 E-04
6.0 E-09		4.6 E-09			
	Gd-147		1.59 d	F	5.0 E-04
2.7 E-10		4.5 E-10	5.0 E-04	6.1 E-10	
				M	5.0 E-04
4.1 E-10		5.9 E-10			
	Gd-148		93.0 a	F	5.0 E-04
2.5 E-05		3.0 E-05	5.0 E-04	5.5 E-08	
				M	5.0 E-04
1.1 E-05		7.2 E-06			
	Gd-149		9.40 d	F	5.0 E-04
2.6 E-10		4.5 E-10	5.0 E-04	4.5 E-10	

				M	5.0 E-04
7.0 E-10	7.9 E-10				
	Gd-151	120 d		F	5.0 E-04
7.8 E-10	9.3 E-10	5.0 E-04	2.0 E-10		
				M	5.0 E-04
8.1 E-10	6.5 E-10				
	Gd-152	1.08E+14 a		F	5.0 E-04
1.9 E-05	2.2 E-05	5.0 E-04	4.1 E-08		
				M	5.0 E-04
7.4 E-06	5.0 E-06				
	Gd-153	242 d		F	5.0 E-04
2.1 E-09	2.5 E-09	5.0 E-04	2.7 E-10		
				M	5.0 E-04
1.9 E-09	1.4 E-09				
	Gd-159	18.6 h		F	5.0 E-04
1.1 E-10	1.8 E-10	5.0 E-04	4.9 E-10		
				M	5.0 E-04
2.7 E-10	3.9 E-10				
<b>Terbij</b>					
	Tb-147	1.65 h		M	5.0 E-04
7.9 E-11	1.2 E-10	5.0 E-04	1.6 E-10		
	Tb-149	4.15 h		M	5.0 E-04
4.3 E-09	3.1 E-09	5.0 E-04	2.5 E-10		
	Tb-150	3.27 h		M	5.0 E-04
1.1 E-10	1.8 E-10	5.0 E-04	2.5 E-10		
	Tb-151	17.6 h		M	5.0 E-04
2.3 E-10	3.3 E-10	5.0 E-04	3.4 E-10		
	Tb-153	2.34 d		M	5.0 E-04
2.0 E-10	2.4 E-10	5.0 E-04	2.5 E-10		
	Tb-154	21.4 h		M	5.0 E-04
3.8 E-10	6.0 E-10	5.0 E-04	6.5 E-10		
	Tb-155	5.32 d		M	5.0 E-04
2.1 E-10	2.5 E-10	5.0 E-04	2.1 E-10		
	Tb-156	5.34 d		M	5.0 E-04
1.2 E-09	1.4 E-09	5.0 E-04	1.2 E-09		
	Tb-156m	1.02 d		M	5.0 E-04
2.0 E-10	2.3 E-10	5.0 E-04	1.7 E-10		
	Tb-156m	5.00 h		M	5.0 E-04
9.2 E-11	1.3 E-10	5.0 E-04	8.1 E-11		
	Tb-157	1.50E+02 a		M	5.0 E-04
1.1 E-09	7.9 E-10	5.0 E-04	3.4 E-11		
	Tb-158	1.50E+02 a		M	5.0 E-04
4.3 E-08	3.0 E-08	5.0 E-04	1.1 E-09		
	Tb-160	72.3 d		M	5.0 E-04
6.6 E-09	5.4 E-09	5.0 E-04	1.6 E-09		
	Tb-161	6.91 d		M	5.0 E-04
1.2 E-09	1.2 E-09	5.0 E-04	7.2 E-10		
<b>Disprozij</b>					
	Dy-155	10.0 h		M	5.0 E-04
8.0 E-11	1.2 E-10	5.0 E-04	1.3 E-10		
	Dy-157	8.10 h		M	5.0 E-04
3.2 E-11	5.5 E-11	5.0 E-04	6.1 E-11		
	Dy-159	144 d		M	5.0 E-04
3.5 E-10	2.5 E-10	5.0 E-04	1.0 E-10		
	Dy-165	2.33 h		M	5.0 E-04
6.1 E-11	8.7 E-11	5.0 E-04	1.1 E-10		
	Dy-166	3.40 d		M	5.0 E-04
1.8 E-09	1.8 E-09	5.0 E-04	1.6 E-09		

### Holmij

	Ho-155		0.800 h		M	5.0 E-04
2.0 E-11		3.2 E-11	5.0 E-04	3.7 E-11		
	Ho-157		0.210 h		M	5.0 E-04
4.5 E-12		7.6 E-12	5.0 E-04	6.5 E-12		
	Ho-159		0.550 h		M	5.0 E-04
6.3 E-12		1.0 E-11	5.0 E-04	7.9 E-12		
	Ho-161		2.50 h		M	5.0 E-04
6.3 E-12		1.0 E-11	5.0 E-04	1.3 E-11		
	Ho-162		0.250 h		M	5.0 E-04
2.9 E-12		4.5 E-12	5.0 E-04	3.3 E-12		
	Ho-162m		1.13 h		M	5.0 E-04
2.2 E-11		3.3 E-11	5.0 E-04	2.6 E-11		
	Ho-164		0.483 h		M	5.0 E-04
8.6 E-12		1.3 E-11	5.0 E-04	9.5 E-12		
	Ho-164m		0.625 h		M	5.0 E-04
1.2 E-11		1.6 E-11	5.0 E-04	1.6 E-11		
	Ho-166		1.12 d		M	5.0 E-04
6.6 E-10		8.3 E-10	5.0 E-04	1.4 E-09		
	Ho-166m		1.20E+03 a		M	5.0 E-04
1.1 E-07		7.8 E-08	5.0 E-04	2.0 E-09		
	Ho-167		3.10 h		M	5.0 E-04
7.1 E-11		1.0 E-10	5.0 E-04	8.3 E-11		

### Erbij

	Er-161		3.24 h		M	5.0 E-04
5.1 E-11		8.5 E-11	5.0 E-04	8.0 E-11		
	Er-165		10.4 h		M	5.0 E-04
8.3 E-12		1.4 E-11	5.0 E-04	1.9 E-11		
	Er-169		9.30 d		M	5.0 E-04
9.8 E-10		9.2 E-10	5.0 E-04	3.7 E-10		
	Er-171		7.52 h		M	5.0 E-04
2.2 E-10		3.0 E-10	5.0 E-04	3.6 E-10		
	Er-172		2.05 d		M	5.0 E-04
1.1 E-09		1.2 E-09	5.0 E-04	1.0 E-09		

### Tulij

	Tm-162		0.362 h		M	5.0 E-04
1.6 E-11		2.7 E-11	5.0 E-04	2.9 E-11		
	Tm-166		7.70 h		M	5.0 E-04
1.8 E-10		2.8 E-10	5.0 E-04	2.8 E-10		
	Tm-167		9.24 d		M	5.0 E-04
1.1 E-09		1.0 E-09	5.0 E-04	5.6 E-10		
	Tm-170		129 d		M	5.0 E-04
6.6 E-09		5.2 E-09	5.0 E-04	1.3 E-09		
	Tm-171		1.92 a		M	5.0 E-04
1.3 E-09		9.1 E-10	5.0 E-04	1.1 E-10		
	Tm-172		2.65 d		M	5.0 E-04
1.1 E-09		1.4 E-09	5.0 E-04	1.7 E-09		
	Tm-173		8.24 h		M	5.0 E-04
1.8 E-10		2.6 E-10	5.0 E-04	3.1 E-10		
	Tm-175		0.253 h		M	5.0 E-04
1.9 E-11		3.1 E-11	5.0 E-04	2.7 E-11		

### Iterbij

	Yb-162		0.315 h		M	5.0 E-04
1.4 E-11		2.2 E-11	5.0 E-04	2.3 E-11	S	5.0 E-04
1.4 E-11		2.3 E-11				
	Yb-166		2.36 d		M	5.0 E-04
7.2 E-10		9.1 E-10	5.0 E-04	9.5 E-10	S	5.0 E-04
7.6 E-10		9.5 E-10				
	Yb-167		0.292 h		M	5.0 E-04
6.5 E-12		9.0 E-12	5.0 E-04	6.7 E-12	S	5.0 E-04
6.9 E-12		9.5 E-12				
	Yb-169		32.0 d		M	5.0 E-04
2.4 E-09		2.1 E-09	5.0 E-04	7.1 E-10	S	5.0 E-04
2.8 E-09		2.4 E-09				
	Yb-175		4.19 d		M	5.0 E-04
6.3 E-10		6.4 E-10	5.0 E-04	4.4 E-10	S	5.0 E-04
7.0 E-10		7.0 E-10				
	Yb-177		1.90 h		M	5.0 E-04
6.4 E-11		8.8 E-11	5.0 E-04	9.7 E-11	S	5.0 E-04
6.9 E-11		9.4 E-11				
	Yb-178		1.23 h		M	5.0 E-04
7.1 E-11		1.0 E-10	5.0 E-04	1.2 E-10	S	5.0 E-04
7.6 E-11		1.1 E-10				
	<b>Lutecij</b>					
	Lu-169		1.42 d		M	5.0 E-04
3.5 E-10		4.7 E-10	5.0 E-04	4.6 E-10	S	5.0 E-04
3.8 E-10		4.9 E-10				
	Lu-170		2.00 d		M	5.0 E-04
6.4 E-10		9.3 E-10	5.0 E-04	9.9 E-10	S	5.0 E-04
6.7 E-10		9.5 E-10				
	Lu-171		8.22 d		M	5.0 E-04
7.6 E-10		8.8 E-10	5.0 E-04	6.7 E-10	S	5.0 E-04
8.3 E-10		9.3 E-10				
	Lu-172		6.70 d		M	5.0 E-04
1.4 E-09		1.7 E-09	5.0 E-04	1.3 E-09	S	5.0 E-04
1.5 E-09		1.8 E-09				
	Lu-173		1.37 a		M	5.0 E-04
2.0 E-09		1.5 E-09	5.0 E-04	2.6 E-10	S	5.0 E-04
2.3 E-09		1.4 E-09				
	Lu-174		3.31 a		M	5.0 E-04
4.0 E-09		2.9 E-09	5.0 E-04	2.7 E-10	S	5.0 E-04
3.9 E-09		2.5 E-09				
	Lu-174m		142 d		M	5.0 E-04
3.4 E-09		2.4 E-09	5.0 E-04	5.3 E-10	S	5.0 E-04
3.8 E-09		2.6 E-09				
	Lu-176		3.60E+10 a		M	5.0 E-04
6.6 E-08		4.6 E-08	5.0 E-04	1.8 E-09		

				S	5.0 E-04
5.2 E-08	3.0 E-08				
	Lu-176m	3.68 h		M	5.0 E-04
1.1 E-10	1.5 E-10	5.0 E-04	1.7 E-10	S	5.0 E-04
1.2 E-10	1.6 E-10				
	Lu-177	6.71 d		M	5.0 E-04
1.0 E-09	1.0 E-09	5.0 E-04	5.3 E-10	S	5.0 E-04
1.1 E-09	1.1 E-09				
	Lu-177m	161 d		M	5.0 E-04
1.2 E-08	1.0 E-08	5.0 E-04	1.7 E-09	S	5.0 E-04
1.5 E-08	1.2 E-08				
	Lu-178	0.473 h		M	5.0 E-04
2.5 E-11	3.9 E-11	5.0 E-04	4.7 E-11	S	5.0 E-04
2.6 E-11	4.1 E-11				
	Lu-178m	0.378 h		M	5.0 E-04
3.3 E-11	5.4 E-11	5.0 E-04	3.8 E-11	S	5.0 E-04
3.5 E-11	5.6 E-11				
	Lu-179	4.59 h		M	5.0 E-04
1.1 E-10	1.6 E-10	5.0 E-04	2.1 E-10	S	5.0 E-04
1.2 E-10	1.6 E-10				

### Hafnij

	Hf-170	16.0 h		F	0.002	1.7
E-10	2.9 E-10	0.002	4.8 E-10	M	0.002	3.2
E-10	4.3 E-10					
	Hf-172	1.87 a		F	0.002	3.2
E-08	3.7 E-08	0.002	1.0 E-09	M	0.002	1.9
E-08	1.3 E-08					
	Hf-173	24.0 h		F	0.002	7.9
E-11	1.3 E-10	0.002	2.3 E-10	M	0.002	1.6
E-10	2.2 E-10					
	Hf-175	70.0 d		F	0.002	7.2
E-10	8.7 E-10	0.002	4.1 E-10	M	0.002	1.1
E-09	8.8 E-10					
	Hf-177m	0.856 h		F	0.002	4.7
E-11	8.4 E-11	0.002	8.1 E-11	M	0.002	9.2
E-11	1.5 E-10					
	Hf-178m	31.0 a		F	0.002	2.6
E-07	3.1 E-07	0.002	4.7 E-09	M	0.002	1.1
E-07	7.8 E-08					
	Hf-179m	25.1 d		F	0.002	1.1
E-09	1.4 E-09	0.002	1.2 E-09	M	0.002	3.6
E-09	3.2 E-09					
	Hf-180m	5.50 h		F	0.002	6.4
E-11	1.2 E-10	0.002	1.7 E-10	M	0.002	1.4
E-10	2.0 E-10					

	Hf-181		42.4 d		F	0.002	1.4
E-09	1.8 E-09		0.002 1.1 E-09		M	0.002	4.7
E-09	4.1 E-09				F	0.002	3.0
	Hf-182		9.00E+06 a		F	0.002	3.0
E-07	3.6 E-07		0.002 3.0 E-09		M	0.002	1.2
E-07	8.3 E-08				F	0.002	2.3
	Hf-182m		1.02 h		F	0.002	2.3
E-11	4.0 E-11		0.002 4.2 E-11		M	0.002	4.7
E-11	7.1 E-11				F	0.002	2.6
	Hf-183		1.07 h		F	0.002	2.6
E-11	4.4 E-11		0.002 7.3 E-11		M	0.002	5.8
E-11	8.3 E-11				F	0.002	1.3
	Hf-184		4.12 h		F	0.002	1.3
E-10	2.3 E-10		0.002 5.2 E-10		M	0.002	3.3
E-10	4.5 E-10						

### Tantal

	Ta-172		0.613 h		M	0.001	3.4
E-11	5.5 E-11		0.001 5.3 E-11		S	0.001	3.6
E-11	5.7 E-11				M	0.001	1.1
	Ta-173		3.65 h		M	0.001	1.1
E-10	1.6 E-10		0.001 1.9 E-10		S	0.001	1.2
E-10	1.6 E-10				M	0.001	4.2
	Ta-174		1.20 h		M	0.001	4.2
E-11	6.3 E-11		0.001 5.7 E-11		S	0.001	4.4
E-11	6.6 E-11				M	0.001	1.3
	Ta-175		10.5 h		M	0.001	1.3
E-10	2.0 E-10		0.001 2.1 E-10		S	0.001	1.4
E-10	2.0 E-10				M	0.001	2.0
	Ta-176		8.08 h		M	0.001	2.0
E-10	3.2 E-10		0.001 3.1 E-10		S	0.001	2.1
E-10	3.3 E-10				M	0.001	9.3
	Ta-177		2.36 d		M	0.001	9.3
E-11	1.2 E-10		0.001 1.1 E-10		S	0.001	1.0
E-10	1.3 E-10				M	0.001	6.6
	Ta-178		2.20 h		M	0.001	6.6
E-11	1.0 E-10		0.001 7.8 E-11		S	0.001	6.9
E-11	1.1 E-10				M	0.001	2.0
	Ta-179		1.82 a		M	0.001	2.0
E-10	1.3 E-10		0.001 6.5 E-11		S	0.001	5.2
E-10	2.9 E-10				M	0.001	6.0
	Ta-180		1.00E+13 a		M	0.001	6.0
E-09	4.6 E-09		0.001 8.4 E-10		S	0.001	2.4
E-08	1.4 E-08				M	0.001	4.4
	Ta-180m		8.10 h		M	0.001	4.4
E-11	5.8 E-11		0.001 5.4 E-11				

				S	0.001	4.7
E-11	6.2 E-11					
	Ta-182	115 d		M	0.001	7.2
E-09	5.8 E-09	0.001	1.5 E-09			
				S	0.001	9.7
E-09	7.4 E-09					
	Ta-182m	0.264 h		M	0.001	2.1
E-11	3.4 E-11	0.001	1.2 E-11			
				S	0.001	2.2
E-11	3.6 E-11					
	Ta-183	5.10 d		M	0.001	1.8
E-09	1.8 E-09	0.001	1.3 E-09			
				S	0.001	2.0
E-09	2.0 E-09					
	Ta-184	8.70 h		M	0.001	4.1
E-10	6.0 E-10	0.001	6.8 E-10			
				S	0.001	4.4
E-10	6.3 E-10					
	Ta-185	0.816 h		M	0.001	4.6
E-11	6.8 E-11	0.001	6.8 E-11			
				S	0.001	4.9
E-11	7.2 E-11					
	Ta-186	0.175 h		M	0.001	1.8
E-11	3.0 E-11	0.001	3.3 E-11			
				S	0.001	1.9
E-11	3.1 E-11					
	<b>Volfram</b>					
	W-176	2.30 h		F	0.300	4.4
E-11	7.6 E-11	0.300	1.0 E-10			
0.010	1.1 E-10					
	W-177	2.25 h		F	0.300	2.6
E-11	4.6 E-11	0.300	5.8 E-11			
0.010	6.1 E-11					
	W-178	21.7 d		F	0.300	7.6
E-11	1.2 E-10	0.300	2.2 E-10			
0.010	2.5 E-10					
	W-179	0.625 h		F	0.300	9.9
E-13	1.8 E-12	0.300	3.3 E-12			
0.010	3.3 E-12					
	W-181	121 d		F	0.300	2.8
E-11	4.3 E-11	0.300	7.6 E-11			
0.010	8.2 E-11					
	W-185	75.1 d		F	0.300	1.4
E-10	2.2 E-10	0.300	4.4 E-10			
0.010	5.0 E-10					
	W-187	23.9 h		F	0.300	2.0
E-10	3.3 E-10	0.300	6.3 E-10			
0.010	7.1 E-10					
	W-188	69.4 d		F	0.300	5.9
E-10	8.4 E-10	0.300	2.1 E-09			
0.010	2.3 E-09					
	<b>Renij</b>					

	Re-177		0.233 h		F	0.800	1.0
E-11	1.7 E-11		0.800	2.2 E-11	M	0.800	1.4
E-11	2.2 E-11				F	0.800	1.1
E-11	Re-178		0.220 h		M	0.800	1.5
E-11	1.8 E-11		0.800	2.5 E-11	F	0.800	1.9
E-11	2.4 E-11				M	0.800	2.5
E-10	Re-181		20.0 h		F	0.800	6.8
E-10	3.0 E-10		0.800	4.2 E-10	M	0.800	1.3
E-10	3.7 E-10				F	0.800	1.5
E-10	Re-182		2.67 d		M	0.800	2.0
E-10	1.1 E-09		0.800	1.4 E-09	F	0.800	4.6
E-09	1.7 E-09				M	0.800	1.8
E-10	Re-182		12.7 h		F	0.800	6.1
E-10	2.4 E-10		0.800	2.7 E-10	M	0.800	5.3
E-10	3.0 E-10				F	0.800	1.1
E-10	Re-184		38.0 d		M	0.800	1.8
E-10	7.0 E-10		0.800	1.0 E-09	F	0.800	8.5
E-09	1.8 E-09				M	0.800	1.1
E-10	Re-184m		165 d		F	0.800	1.9
E-10	8.8 E-10		0.800	1.5 E-09	M	0.800	6.0
E-09	4.8 E-09				F	0.800	4.7
E-10	Re-186		3.78 d		M	0.800	5.5
E-10	7.3 E-10		0.800	1.5 E-09	F	0.800	1.0
E-09	1.2 E-09				M	0.800	1.4
E-10	Re-186m		2.00E+05 a		F	0.800	2.7
E-10	1.2 E-09		0.800	2.2 E-09	M	0.800	4.3
E-08	7.9 E-09				F	0.800	4.7
E-12	Re-187		5.00E+10 a		M	0.800	5.5
E-12	2.6 E-12		0.800	5.1 E-12	F	0.800	1.0
E-12	4.6 E-12				M	0.800	1.4
E-10	Re-188		17.0 h		F	0.800	2.7
E-10	6.6 E-10		0.800	1.4 E-09	M	0.800	4.3
E-10	7.4 E-10				F	0.800	4.7
E-11	Re-188m		0.310 h		M	0.800	5.5
E-11	1.6 E-11		0.800	3.0 E-11	F	0.800	1.0
E-11	2.0 E-11				M	0.800	1.4
E-10	Re-189		1.01 d		F	0.800	2.7
E-10	4.3 E-10		0.800	7.8 E-10	M	0.800	4.3
E-10	6.0 E-10				F	0.800	4.7
E-10	Re-188		17.0 h		M	0.800	5.5
E-10	6.6 E-10		0.800	1.4 E-09	F	0.800	1.0
E-10	7.4 E-10				M	0.800	1.4
E-11	Re-188m		0.310 h		F	0.800	2.7
E-11	1.6 E-11		0.800	3.0 E-11	M	0.800	4.3
E-11	2.0 E-11				F	0.800	4.7

	Re-189		1.01 d		F	0.800	2.7
E-10	4.3 E-10		0.800	7.8 E-10			
					M	0.800	4.3
E-10	6.0 E-10						
<b>Osmij</b>							
	Os-180		0.366 h		F	0.010	8.8
E-12	1.6 E-11		0.010	1.7 E-11			
					M	0.010	1.4
E-11	2.4 E-11						
					S	0.010	1.5
E-11	2.5 E-11						
	Os-181		1.75 h		F	0.010	3.6
E-11	6.4 E-11		0.010	8.9 E-11			
					M	0.010	6.3
E-11	9.6 E-11						
					S	0.010	6.6
E-11	1.0 E-10						
	Os-182		22.0 h		F	0.010	1.9
E-10	3.2 E-10		0.010	5.6 E-10			
					M	0.010	3.7
E-10	5.0 E-10						
					S	0.010	3.9
E-10	5.2 E-10						
	Os-185		94.0 d		F	0.010	1.1
E-09	1.4 E-09		0.010	5.1 E-10			
					M	0.010	1.2
E-09	1.0 E-09						
					S	0.010	1.5
E-09	1.1 E-09						
	Os-189m		6.00 h		F	0.010	2.7
E-12	5.2 E-12		0.010	1.8 E-11			
					M	0.010	5.1
E-12	7.6 E-12						
					S	0.010	5.4
E-12	7.9 E-12						
	Os-191		15.4 d		F	0.010	2.5
E-10	3.5 E-10		0.010	5.7 E-10			
					M	0.010	1.5
E-09	1.3 E-09						
					S	0.010	1.8
E-09	1.5 E-09						
	Os-191m		13.0 h		F	0.010	2.6
E-11	4.1 E-11		0.010	9.6 E-11			
					M	0.010	1.3
E-10	1.3 E-10						
					S	0.010	1.5
E-10	1.4 E-10						
	Os-193		1.25 d		F	0.010	1.7
E-10	2.8 E-10		0.010	8.1 E-10			
					M	0.010	4.7
E-10	6.4 E-10						
					S	0.010	5.1
E-10	6.8 E-10						
	Os-194		6.00 a		F	0.010	1.1
E-08	1.3 E-08		0.010	2.4 E-09			
					M	0.010	2.0
E-08	1.3 E-08						
					S	0.010	7.9
E-08	4.2 E-08						

## Iridij

	Ir-182	0.250 h	F	0.010	1.5
E-11	2.6 E-11	0.010 4.8 E-11	M	0.010	2.4
E-11	3.9 E-11		S	0.010	2.5
E-11	4.0 E-11		F	0.010	6.7
E-11	Ir-184	3.02 h	M	0.010	1.1
E-11	1.2 E-10	0.010 1.7 E-10	S	0.010	1.2
E-10	1.8 E-10		F	0.010	8.8
E-10	1.9 E-10		M	0.010	1.8
E-11	Ir-185	14.0 h	S	0.010	1.9
E-11	1.5 E-10	0.010 2.6 E-10	F	0.010	1.8
E-10	2.5 E-10		M	0.010	3.2
E-10	2.6 E-10		S	0.010	3.3
E-10	Ir-186	15.8 h	F	0.010	2.5
E-10	3.3 E-10	0.010 4.9 E-10	M	0.010	4.3
E-10	4.8 E-10		S	0.010	4.5
E-10	5.0 E-10		F	0.010	4.0
E-11	Ir-186	1.75 h	M	0.010	7.5
E-11	4.5 E-11	0.010 6.1 E-11	S	0.010	7.9
E-11	6.9 E-11		F	0.010	2.6
E-11	7.1 E-11		M	0.010	4.1
E-11	Ir-187	10.5 h	S	0.010	4.3
E-11	7.2 E-11	0.010 1.2 E-10	F	0.010	1.1
E-11	1.1 E-10		M	0.010	4.8
E-11	1.2 E-10		S	0.010	5.5
E-10	Ir-188	1.73 d	F	0.010	7.9
E-10	4.4 E-10	0.010 6.3 E-10	M	0.010	2.0
E-10	6.0 E-10		S	0.010	2.3
E-10	6.2 E-10		F	0.010	5.3
E-10	Ir-189	13.3 d	M	0.010	8.3
E-10	1.7 E-10	0.010 2.4 E-10	S	0.010	
E-10	4.1 E-10		F	0.010	7.9
E-10	4.6 E-10		M	0.010	2.0
E-10	Ir-190	12.1 d	S	0.010	2.3
E-10	1.2 E-09	0.010 1.2 E-09	F	0.010	5.3
E-09	2.3 E-09		M	0.010	8.3
E-09	2.5 E-09		S	0.010	
E-11	Ir-190m	3.10 h	F	0.010	5.3
E-11	9.7 E-11	0.010 1.2 E-10	M	0.010	8.3
E-11	1.4 E-10		S	0.010	

E-11	1.4 E-10			S	0.010	8.6
	Ir-190m	1.20 h		F	0.010	3.7
E-12	5.6 E-12	0.010	8.0 E-12	M	0.010	9.0
E-12	1.0 E-11			S	0.010	1.0
E-11	1.1 E-11			F	0.010	1.8
	Ir-192	74.0 d		F	0.010	1.8
E-09	2.2 E-09	0.010	1.4 E-09	M	0.010	4.9
E-09	4.1 E-09			S	0.010	6.2
E-09	4.9 E-09			F	0.010	4.8
	Ir-192m	2.41E+02 a		F	0.010	4.8
E-09	5.6 E-09	0.010	3.1 E-10	M	0.010	5.4
E-09	3.4 E-09			S	0.010	3.6
E-08	1.9 E-08			F	0.010	1.0
	Ir-193m	11.9 d		F	0.010	1.0
E-10	1.6 E-10	0.010	2.7 E-10	M	0.010	1.0
E-09	9.1 E-10			S	0.010	1.2
E-09	1.0 E-09			F	0.010	2.2
	Ir-194	19.1 h		F	0.010	2.2
E-10	3.6 E-10	0.010	1.3 E-09	M	0.010	5.3
E-10	7.1 E-10			S	0.010	5.6
E-10	7.5 E-10			F	0.010	5.4
	Ir-194m	171 d		F	0.010	5.4
E-09	6.5 E-09	0.010	2.1 E-09	M	0.010	8.5
E-09	6.5 E-09			S	0.010	1.2
E-08	8.2 E-09			F	0.010	2.6
	Ir-195	2.50 h		F	0.010	2.6
E-11	4.5 E-11	0.010	1.0 E-10	M	0.010	6.7
E-11	9.6 E-11			S	0.010	7.2
E-11	1.0 E-10			F	0.010	6.5
	Ir-195m	3.80 h		F	0.010	6.5
E-11	1.1 E-10	0.010	2.1 E-10	M	0.010	1.6
E-10	2.3 E-10			S	0.010	1.7
E-10	2.4 E-10					
<b>Platina</b>						
	Pt-186	2.00 h		F	0.010	3.6
E-11	6.6 E-11	0.010	9.3 E-11	F	0.010	4.3
	Pt-188	10.2 d		F	0.010	4.3
E-10	6.3 E-10	0.010	7.6 E-10	F	0.010	4.1
	Pt-189	10.9 h		F	0.010	4.1
E-11	7.3 E-11	0.010	1.2 E-10	F	0.010	1.1
	Pt-191	2.80 d		F	0.010	1.1
E-10	1.9 E-10	0.010	3.4 E-10			

	Pt-193		50.0 a		F	0.010	2.1
E-11	2.7 E-11		0.010 3.1 E-11				
	Pt-193m		4.33 d		F	0.010	1.3
E-10	2.1 E-10		0.010 4.5 E-10				
	Pt-195m		4.02 d		F	0.010	1.9
E-10	3.1 E-10		0.010 6.3 E-10				
	Pt-197		18.3 h		F	0.010	9.1
E-11	1.6 E-10		0.010 4.0 E-10				
	Pt-197m		1.57 h		F	0.010	2.5
E-11	4.3 E-11		0.010 8.4 E-11				
	Pt-199		0.513 h		F	0.010	1.3
E-11	2.2 E-11		0.010 3.9 E-11				
	Pt-200		12.5 h		F	0.010	2.4
E-10	4.0 E-10		0.010 1.2 E-09				
	<b>Zlato</b>						
	Au-193		17.6 h		F	0.100	3.9
E-11	7.1 E-11		0.100 1.3 E-10				
					M	0.100	1.1
E-10	1.5 E-10				S	0.100	1.2
E-10	1.6 E-10						
	Au-194		1.64 d		F	0.100	1.5
E-10	2.8 E-10		0.100 4.2 E-10				
					M	0.100	2.4
E-10	3.7 E-10				S	0.100	2.5
E-10	3.8 E-10						
	Au-195		183 d		F	0.100	7.1
E-11	1.2 E-10		0.100 2.5 E-10				
					M	0.100	1.0
E-09	8.0 E-10				S	0.100	1.6
E-09	1.2 E-09						
	Au-198		2.69 d		F	0.100	2.3
E-10	3.9 E-10		0.100 1.0 E-09				
					M	0.100	7.6
E-10	9.8 E-10				S	0.100	8.4
E-10	1.1 E-09						
	Au-198m		2.30 d		F	0.100	3.4
E-10	5.9 E-10		0.100 1.3 E-09				
					M	0.100	1.7
E-09	2.0 E-09				S	0.100	1.9
E-09	1.9 E-09						
	Au-199		3.14 d		F	0.100	1.1
E-10	1.9 E-10		0.100 4.4 E-10				
					M	0.100	6.8
E-10	6.8 E-10				S	0.100	7.5
E-10	7.6 E-10						
	Au-200		0.807 h		F	0.100	1.7
E-11	3.0 E-11		0.100 6.8 E-11				
					M	0.100	3.5
E-11	5.3 E-11				S	0.100	3.6
E-11	5.6 E-11						
	Au-200m		18.7 h		F	0.100	3.2
E-10	5.7 E-10		0.100 1.1 E-09				
					M	0.100	6.9
E-10	9.8 E-10						

E-10	1.0 E-09			S	0.100	7.3
	Au-201	0.440 h		F	0.100	9.2
E-12	1.6 E-11	0.100	2.4 E-11	M	0.100	1.7
E-11	2.8 E-11			S	0.100	1.8
E-11	2.9 E-11					
	<b>Živa</b>					
	Hg-193	3.50 h		F	0.400	2.6
E-11	4.7 E-11	1.000	3.1 E-11		0.400	6.6
	(organska)					
E-11	Hg-193	3.50 h		F	0.020	2.8
E-11	5.0 E-11	0.020	8.2 E-11	M	0.020	7.5
	(anorganska)					
E-11	1.0 E-10			F	0.400	1.1
	Hg-193m	11.1 h				
E-10	2.0 E-10	1.000	1.3 E-10		0.400	3.0
	(organska)					
E-10	Hg-193m	11.1 h		F	0.020	1.2
E-10	2.3 E-10	0.020	4.0 E-10	M	0.020	2.6
	(anorganska)					
E-10	3.8 E-10			F	0.400	1.5
	Hg-194	2.60E+02 a				
E-08	1.9 E-08	1.000	5.1 E-08		0.400	2.1
	(organska)					
E-08	Hg-194	2.60E+02 a		F	0.020	1.3
E-08	1.5 E-08	0.020	1.4 E-09	M	0.020	7.8
	(anorganska)					
E-09	5.3 E-09			F	0.400	2.4
	Hg-195	9.90 h				
E-11	4.4 E-11	1.000	3.4 E-11		0.400	7.5
	(organska)					
E-11	Hg-195	9.90 h		F	0.020	2.7
E-11	4.8 E-11	0.020	9.7 E-11	M	0.020	7.2
	(anorganska)					
E-11	9.2 E-11			F	0.400	1.3
	Hg-195m	1.73 d				
E-10	2.2 E-10	1.000	2.2 E-10		0.400	4.1
	(organska)					
E-10	Hg-195m	1.73 d		F	0.020	1.5
E-10	2.6 E-10	0.020	5.6 E-10	M	0.020	5.1
	(anorganska)					
E-10	6.5 E-10			F	0.400	5.0
	Hg-197	2.67 d				
E-11	8.5 E-11	1.000	9.9 E-11		0.400	1.7
	(organska)					
E-10	Ha-197	2.67 d		F	0.020	6.0
E-11	1.0 E-10	0.020	2.3 E-10	M	0.020	2.9
	(anorganska)					
E-10	2.8 E-10			F	0.400	1.0
	Hg-197m	23.8 h				
E-10	1.8 E-10	1.000	1.5 E-10		0.400	3.4
	(organska)					
E-10						

	Hg-197m	23.8 h		F	0.020	1.2
E-10	2.1 E-10	0.020	4.7 E-10			
	(anorganska)			M	0.020	5.1
E-10	6.6 E-10					
	Hg-199m	0.710 h		F	0.400	1.6
E-11	2.7 E-11	1.000	2.8 E-11			
	(organska)				0.400	3.1
E-11						
	Hg-199m	0.710 h		F	0.020	1.6
E-11	2.7 E-11	0.020	3.1 E-11			
	(anorganska)			M	0.020	3.3
E-11	5.2 E-11					
	Hg-203	46.6 d		F	0.400	5.7
E-10	7.5 E-10	1.000	1.9 E-09			
	(organska)				0.400	1.1
E-09						
	Hg-203	46.6 d		F	0.020	4.7
E-10	5.9 E-10	0.020	5.4 E-10			
	(anorganska)			M	0.020	2.3
E-09	1.9 E-09					

### Talij

	Tl-194	0.550 h		F	1.000	4.8
E-12	8.9 E-12	1.000	8.1 E-12			
	Tl-194m	0.546 h		F	1.000	2.0
E-11	3.6 E-11	1.000	4.0 E-11			
	Tl-195	1.16 h		F	1.000	1.6
E-11	3.0 E-11	1.000	2.7 E-11			
	Tl-197	2.84 h		F	1.000	1.5
E-11	2.7 E-11	1.000	2.3 E-11			
	Tl-198	5.30 h		F	1.000	6.6
E-11	1.2 E-10	1.000	7.3 E-11			
	Tl-198m	1.87 h		F	1.000	4.0
E-11	7.3 E-11	1.000	5.4 E-11			
	Tl-199	7.42 h		F	1.000	2.0
E-11	3.7 E-11	1.000	2.6 E-11			
	Tl-200	1.09 d		F	1.000	1.4
E-10	2.5 E-10	1.000	2.0 E-10			
	Tl-201	3.04 d		F	1.000	4.7
E-11	7.6 E-11	1.000	9.5 E-11			
	Tl-202	12.2 d		F	1.000	2.0
E-10	3.1 E-10	1.000	4.5 E-10			
	Tl-204	3.78 a		F	1.000	4.4
E-10	6.2 E-10	1.000	1.3 E-09			

### Olovo

	Pb-195m	0.263 h		F	0.200	1.7
E-11	3.0 E-11	0.200	2.9 E-11			
	Pb-198	2.40 h		F	0.200	4.7
E-11	8.7 E-11	0.200	1.0 E-10			
	Pb-199	1.50 h		F	0.200	2.6
E-11	4.8 E-11	0.200	5.4 E-11			
	Pb-200	21.5 h		F	0.200	1.5
E-10	2.6 E-10	0.200	4.0 E-10			
	Pb-201	9.40 h		F	0.200	6.5
E-11	1.2 E-10	0.200	1.6 E-10			
	Pb-202	3.00E+05 a		F	0.200	1.1
E-08	1.4 E-08	0.200	8.7 E-09			

	Pb-202m		3.62 h		F	0.200	6.7
E-11	1.2 E-10		0.200 1.3 E-10				
	Pb-203		2.17 d		F	0.200	9.1
E-11	1.6 E-10		0.200 2.4 E-10				
	Pb-205		1.43E+07 a		F	0.200	3.4
E-10	4.1 E-10		0.200 2.8 E-10				
	Pb-209		3.25 h		F	0.200	1.8
E-11	3.2 E-11		0.200 5.7 E-11				
	Pb-210		22.3 a		F	0.200	8.9
E-07	1.1 E-06		0.200 6.8 E-07				
	Pb-211		0.601 h		F	0.200	3.9
E-09	5.6 E-09		0.200 1.8 E-10				
	Pb-212		10.6 h		F	0.200	1.9
E-08	3.3 E-08		0.200 5.9 E-09				
	Pb-214		0.447 h		F	0.200	2.9
E-09	4.8 E-09		0.200 1.4 E-10				

### Bizmut

	Bi-200		0.606 h		F	0.050	2.4
E-11	4.2 E-11		0.050 5.1 E-11				
					M	0.050	3.4
E-11	5.6 E-11						
	Bi-201		1.80 h		F	0.050	4.7
E-11	8.3 E-11		0.050 1.2 E-10				
					M	0.050	7.0
E-11	1.1 E-10						
	Bi-202		1.67 h		F	0.050	4.6
E-11	8.4 E-11		0.050 8.9 E-11				
					M	0.050	5.8
E-11	1.0 E-10						
	Bi-203		11.8 h		F	0.050	2.0
E-10	3.6 E-10		0.050 4.8 E-10				
					M	0.050	2.8
E-10	4.5 E-10						
	Bi-205		15.3 d		F	0.050	4.0
E-10	6.8 E-10		0.050 9.0 E-10				
					M	0.050	9.2
E-10	1.0 E-09						
	Bi-206		6.24 d		F	0.050	7.9
E-10	1.3 E-09		0.050 1.9 E-09				
					M	0.050	1.7
E-09	2.1 E-09						
	Bi-207		38.0 a		F	0.050	5.2
E-10	8.4 E-10		0.050 1.3 E-09				
					M	0.050	5.2
E-09	3.2 E-09						
	Bi-210		5.01 d		F	0.050	1.1
E-09	1.4 E-09		0.050 1.3 E-09				
					M	0.050	8.4
E-08	6.0 E-08						
	Bi-210m		3.00E+06 a		F	0.050	4.5
E-08	5.3 E-08		0.050 1.5 E-08				
					M	0.050	3.1
E-06	2.1 E-06						
	Bi-212		1.01 h		F	0.050	9.3
E-09	1.5 E-08		0.050 2.6 E-10				
					M	0.050	3.0
E-08	3.9 E-08						
	Bi-213		0.761 h		F	0.050	1.1
E-08	1.8 E-08		0.050 2.0 E-10				

E-08	4.1 E-08			M	0.050	2.9
	Bi-214	0.332 h		F	0.050	7.2
E-09	1.2 E-08	0.050	1.1 E-10			
				M	0.050	1.4
E-08	2.1 E-08					
	<b>Polonij</b>					
	Po-203	0.612 h		F	0.100	2.5
E-11	4.5 E-11	0.100	5.2 E-11			
				M	0.100	3.6
E-11	6.1 E-11					
	Po-205	1.80 h		F	0.100	3.5
E-11	6.0 E-11	0.100	5.9 E-11			
				M	0.100	6.4
E-11	8.9 E-11					
	Po-207	5.83 h		F	0.100	6.3
E-11	1.2 E-10	0.100	1.4 E-10			
				M	0.100	8.4
E-11	1.5 E-10					
	Po-210	138 d		F	0.100	6.0
E-07	7.1 E-07	0.100	2.4 E-07			
				M	0.100	3.0
E-06	2.2 E-06					
	<b>Astacij</b>					
	At-207	1.80 h		F	1.000	3.5
E-10	4.4 E-10	1.000	2.3 E-10			
				M	1.000	2.1
E-09	1.9 E-09					
	At-211	7.21 h		F	1.000	1.6
E-08	2.7 E-08	1.000	1.1 E-08			
				M	1.000	9.8
E-08	1.1 E-07					
	<b>Francij</b>					
	Fr-222	0.240 h		F	1.000	1.4
E-08	2.1 E-08	1.000	7.1 E-10			
	Fr-223	0.363 h		F	1.000	9.1
E-10	1.3 E-09	1.000	2.3 E-09			
	<b>Radij</b>					
	Ra-223	11.4 d		M	0.200	6.9
E-06	5.7 E-06	0.200	1.0 E-07			
	Ra-224	3.66 d		M	0.200	2.9
E-06	2.4 E-06	0.200	6.5 E-08			
	Ra-225	14.8 d		M	0.200	5.8
E-06	4.8 E-06	0.200	9.5 E-08			
	Ra-226	1.60E+03 a		M	0.200	3.2
E-06	2.2 E-06	0.200	2.8 E-07			
	Ra-227	0.703 h		M	0.200	2.8
E-10	2.1 E-10	0.200	8.4 E-11			
	Ra-228	5.75 a		M	0.200	2.6
E-06	1.7 E-06	0.200	6.7 E-07			
	<b>Aktinij</b>					
	Ac-224	2.90 h		F	5.0 E-04	
1.1 E-08	1.3 E-08	5.0 E-04	7.0 E-10			

				M	5.0 E-04
1.0 E-07	8.9 E-08			S	5.0 E-04
1.2 E-07	9.9 E-08			F	5.0 E-04
	Ac-225	10.0 d			
8.7 E-07	1.0 E-06	5.0 E-04	2.4 E-08	M	5.0 E-04
6.9 E-06	5.7 E-06			S	5.0 E-04
7.9 E-06	6.5 E-06			F	5.0 E-04
	Ac-226	1.21 d			
9.5 E-08	2.2 E-07	5.0 E-04	1.0 E-08	M	5.0 E-04
1.1 E-06	9.2 E-07			S	5.0 E-04
1.2 E-06	1.0 E-06			F	5.0 E-04
	Ac-227	21.8 a			
5.4 E-04	6.3 E-04	5.0 E-04	1.1 E-06	M	5.0 E-04
2.1 E-04	1.5 E-04			S	5.0 E-04
6.6 E-05	4.7 E-05			F	5.0 E-04
	Ac-228	6.13 h			
2.5 E-08	2.9 E-08	5.0 E-04	4.3 E-10	M	5.0 E-04
1.6 E-08	1.2 E-08			S	5.0 E-04
1.4 E-08	1.2 E-08				
	<b>Torij</b>				
	Th-226	0.515 h		M	5.0 E-04
5.5 E-08	7.4 E-08	5.0 E-04	3.5 E-10	S	2.0 E-04
5.9 E-08	7.8 E-08	2.0 E-04	3.6 E-10	M	5.0 E-04
	Th-227	18.7 d			
7.8 E-06	6.2 E-06	5.0 E-04	8.9 E-09	S	2.0 E-04
9.6 E-06	7.6 E-06	2.0 E-04	8.4 E-09	M	5.0 E-04
	Th-228	1.91 a			
3.1 E-05	2.3 E-05	5.0 E-04	7.0 E-08	S	2.0 E-04
3.9 E-05	3.2 E-05	2.0 E-04	3.5 E-08	M	5.0 E-04
	Th-229	7.34E+03 a			
9.9 E-05	6.9 E-05	5.0 E-04	4.8 E-07	S	2.0 E-04
6.5 E-05	4.8 E-05	2.0 E-04	2.0 E-07	M	5.0 E-04
	Th-230	7.70E+04 a			
4.0 E-05	2.8 E-05	5.0 E-04	2.1 E-07	S	2.0 E-04
1.3 E-05	7.2 E-06	2.0 E-04	8.7 E-08	M	5.0 E-04
	Th-231	1.06 d			
2.9 E-10	3.7 E-10	5.0 E-04	3.4 E-10	S	2.0 E-04
3.2 E-10	4.0 E-10	2.0 E-04	3.4 E-10	M	5.0 E-04
	Th-232	1.40E+10 a			
4.2 E-05	2.9 E-05	5.0 E-04	2.2 E-07	S	2.0 E-04
2.3 E-05	1.2 E-05	2.0 E-04	9.2 E-08	M	5.0 E-04
	Th-234	24.1 d			
6.3 E-09	5.3 E-09	5.0 E-04	3.4 E-09		

				S	2.0 E-04
7.3 E-09	5.8 E-09	2.0 E-04	3.4 E-09		
	Th-231	1.06 d		M	5.0 E-04
2.9 E-10	3.7 E-10	5.0 E-04	3.4 E-10		
				S	2.0 E-04
3.2 E-10	4.0 E-10	2.0 E-04	3.4 E-10		
	Th-232	1.40E+10 a		M	5.0 E-04
4.2 E-05	2.9 E-05	5.0 E-04	2.2 E-07		
				S	2.0 E-04
2.3 E-05	1.2 E-05	2.0 E-04	9.2 E-08		
	Th-234	24.1 d		M	5.0 E-04
6.3 E-09	5.3 E-09	5.0 E-04	3.4 E-09		
				S	2.0 E-04
7.3 E-09	5.8 E-09	2.0 E-04	3.4 E-09		

### Protaktinij

	Pa-227	0.638 h		M	5.0 E-04
7.0 E-08	9.0 E-08	5.0 E-04	4.5 E-10		
				S	5.0 E-04
7.6 E-08	9.7 E-08				
	Pa-228	22.0 h		M	5.0 E-04
5.9 E-08	4.6 E-08	5.0 E-04	7.8 E-10		
				S	5.0 E-04
6.9 E-08	5.1 E-08				
	Pa-230	17.4 d		M	5.0 E-04
5.6 E-07	4.6 E-07	5.0 E-04	9.2 E-10		
				S	5.0 E-04
7.1 E-07	5.7 E-07				
	Pa-231	3.27E+04 a		M	5.0 E-04
1.3 E-04	8.9 E-05	5.0 E-04	7.1 E-07		
				S	5.0 E-04
3.2 E-05	1.7 E-05				
	Pa-232	1.31 d		M	5.0 E-04
9.5 E-09	6.8 E-09	5.0 E-04	7.2 E-10		
				S	5.0 E-04
3.2 E-09	2.0 E-09				
	Pa-233	27.0 d		M	5.0 E-04
3.1 E-09	2.8 E-09	5.0 E-04	8.7 E-10		
				S	5.0 E-04
3.7 E-09	3.2 E-09				
	Pa-234	6.70 h		M	5.0 E-04
3.8 E-10	5.5 E-10	5.0 E-04	5.1 E-10		
				S	5.0 E-04
4.0 E-10	5.8 E-10				

### Uran

	U-230	20.8 d		F	0.020
3.6 E-07	4.2 E-07	0.020	5.5 E-08		
				M	0.020
1.2 E-05	1.0 E-05	0.002	2.8 E-08		
				S	0.002
1.5 E-05	1.2 E-05				
	U-231	4.20 d		F	0.020
8.3 E-11	1.4 E-10	0.020	2.8 E-10		
				M	0.020
3.4 E-10	3.7 E-10	0.002	2.8 E-10		
				S	0.002
3.7 E-10	4.0 E-10				

	U-232		72.0 a		F	0.020
4.0 E-06	4.7 E-06		0.020	3.3 E-07	M	0.020
7.2 E-06	4.8 E-06		0.002	3.7 E-08	S	0.002
3.5 E-05	2.6 E-05					
	U-233		1.58E+05 a		F	0.020
5.7 E-07	6.6 E-07		0.020	5.0 E-08	M	0.020
3.2 E-06	2.2 E-06		0.002	8.5 E-09	S	0.002
8.7 E-06	6.9 E-06					
	U-234		2.44E+05 a		F	0.020
5.5 E-07	6.4 E-07		0.020	4.9 E-08	M	0.020
3.1 E-06	2.1 E-06		0.002	8.3 E-09	S	0.002
8.5 E-06	6.8 E-06					
	U-235		7.04E+08 a		F	0.020
5.1 E-07	6.0 E-07		0.020	4.6 E-08	M	0.020
2.8 E-06	1.8 E-06		0.002	8.3 E-09	S	0.002
7.7 E-06	6.1 E-06					
	U-236		2.34E+07 a		F	0.020
5.2 E-07	6.1 E-07		0.020	4.6 E-08	M	0.020
2.9 E-06	1.9 E-06		0.002	7.9 E-09	S	0.002
7.9 E-06	6.3 E-06					
	U-237		6.75 d		F	0.020
1.9 E-10	3.3 E-10		0.020	7.6 E-10	M	0.020
1.6 E-09	1.5 E-09		0.002	7.7 E-10	S	0.002
1.8 E-09	1.7 E-09					
	U-238		4.47E+09 a		F	0.020
4.9 E-07	5.8 E-07		0.020	4.4 E-08	M	0.020
2.6 E-06	1.6 E-06		0.002	7.6 E-09	S	0.002
7.3 E-06	5.7 E-06					
	U-239		0.392 h		F	0.020
1.1 E-11	1.8 E-11		0.020	2.7 E-11	M	0.020
2.3 E-11	3.3 E-11		0.002	2.8 E-11	S	0.002
2.4 E-11	3.5 E-11					
	U-240		14.1 h		F	0.020
2.1 E-10	3.7 E-10		0.020	1.1 E-09	M	0.020
5.3 E-10	7.9 E-10		0.002	1.1 E-09	S	0.002
5.7 E-10	8.4 E-10					

### Neptunij

	Np-232		0.245 h		M	5.0 E-04
4.7 E-11	3.5 E-11		5.0 E-04	9.7 E-12		
	Np-233		0.603 h		M	5.0 E-04
1.7 E-12	3.0E-12		5.0 E-04	2.2 E-12		

	Np-234		4.40 d	M	5.0 E-04
5.4 E-10	7.3 E-10		5.0 E-04	8.1 E-10	
	Np-235		1.08 a	M	5.0 E-04
4.0 E-10	2.7 E-10		5.0 E-04	5.3 E-11	
	Np-236		1.15E+05 a	M	5.0 E-04
3.0 E-06	2.0 E-06		5.0 E-04	1.7 E-08	
	Np-236		22.5 h	M	5.0 E-04
5.0 E-09	3.6 E-09		5.0 E-04	1.9 E-10	
	Np-237		2.14E+06 a	M	5.0 E-04
2.1 E-05	1.5 E-05		5.0 E-04	1.1 E-07	
	Np-238		2.12 d	M	5.0 E-04
2.0 E-09	1.7 E-09		5.0 E-04	9.1 E-10	
	Np-239		2.36 d	M	5.0 E-04
9.0 E-10	1.1 E-09		5.0 E-04	8.0 E-10	
	Np-240		1.08 h	M	5.0 E-04
8.7 E-11	1.3 E-10		5.0 E-04	8.2 E-11	
<b>Plutonij</b>					
	Pu-234		8.80 h	M	5.0 E-04
1.9 E-08	1.6 E-08		5.0 E-04	1.6 E-10	
				S	1.0 E-05
2.2 E-08	1.8 E-08		1.0 E-05	1.5 E-10	
1.0 E-04	1.6 E-10				
	Pu-235		0.422 h	M	5.0 E-04
1.5 E-12	2.5 E-12		5.0 E-04	2.1 E-12	
				S	1.0 E-05
1.6 E-12	2.6 E-12		1.0 E-05	2.1 E-12	
1.0 E-04	2.1 E-12				
	Pu-236		2.85 a	M	5.0 E-04
1.8 E-05	1.3 E-05		5.0 E-04	8.6 E-08	
				S	1.0 E-05
9.6 E-06	7.4 E-06		1.0 E-05	6.3 E-09	
1.0 E-04	2.1 E-08				
	Pu-237		45.3 d	M	5.0 E-04
3.3 E-10	2.9 E-10		5.0 E-04	1.0 E-10	
				S	1.0 E-05
3.6 E-10	3.0 E-10		1.0 E-05	1.0 E-10	
1.0 E-04	1.0 E-10				
	Pu-238		87.7 a	M	5.0 E-04
4.3 E-05	3.0 E-05		5.0 E-04	2.3 E-07	
				S	1.0 E-05
1.5 E-05	1.1 E-05		1.0 E-05	8.8 E-09	
1.0 E-04	4.9 E-08				
	Pu-239		2.41E+04 a	M	5.0 E-04
4.7 E-05	3.2 E-05		5.0 E-04	2.5 E-07	
				S	1.0 E-05
1.5 E-05	8.3 E-06		1.0 E-05	9.0 E-09	
1.0 E-04	5.3 E-08				
	Pu-240		6.54E+03 a	M	5.0 E-04
4.7 E-05	3.2 E-05		5.0 E-04	2.5 E-07	
				S	1.0 E-05
1.5 E-05	8.3 E-06		1.0 E-05	9.0 E-09	
1.0 E-04	5.3 E-08				

	Pu-241		14.4 a	M	5.0 E-04
8.5 E-07	5.8 E-07	5.0 E-04	5.0 E-04	4.7 E-09	
				S	1.0 E-05
1.6 E-07	8.4 E-08	1.0 E-05	1.1 E-10		
1.0 E-04	9.6 E-10				
	Pu-242		3.76E+05 a	M	5.0 E-04
4.4 E-05	3.1 E-05	5.0 E-04	5.0 E-04	2.4 E-07	
				S	1.0 E-05
1.4 E-05	7.7 E-06	1.0 E-05	8.6 E-09		
1.0 E-04	5.0 E-08				
	Pu-243		4.95 h	M	5.0 E-04
8.2 E-11	1.1 E-10	5.0 E-04	5.0 E-04	8.5 E-11	
				S	1.0 E-05
8.5 E-11	1.1 E-10	1.0 E-05	8.5 E-11		
1.0 E-04	8.5 E-11				
	Pu-244		8.26E+07 a	M	5.0 E-04
4.4 E-05	3.0 E-05	5.0 E-04	5.0 E-04	2.4 E-07	
				S	1.0 E-05
1.3 E-05	7.4 E-06	1.0 E-05	1.1 E-08		
1.0 E-04	5.2 E-08				
	Pu-245		10.5 h	M	5.0 E-04
4.5 E-10	6.1 E-10	5.0 E-04	5.0 E-04	7.2 E-10	
				S	1.0 E-05
4.8 E-10	6.5 E-10	1.0 E-05	7.2 E-10		
1.0 E-04	7.2 E-10				
	Pu-246		10.9 d	M	5.0 E-04
7.0 E-09	6.5 E-09	5.0 E-04	5.0 E-04	3.3 E-09	
				S	1.0 E-05
7.6 E-09	7.0 E-09	1.0 E-05	3.3 E-09		
1.0 E-04	3.3 E-09				
<b>Americij</b>					
	Am-237		1.22 h	M	5.0 E-04
2.5 E-11	3.6 E-11	5.0 E-04	5.0 E-04	1.8 E-11	
	Am-238		1.63 h	M	5.0 E-04
8.5 E-11	6.6 E-11	5.0 E-04	5.0 E-04	3.2 E-11	
	Am-239		11.9 h	M	5.0 E-04
2.2 E-10	2.9 E-10	5.0 E-04	5.0 E-04	2.4 E-10	
	Am-240		2.12 d	M	5.0 E-04
4.4 E-10	5.9 E-10	5.0 E-04	5.0 E-04	5.8 E-10	
	Am-241		4.32E+02 a	M	5.0 E-04
3.9 E-05	2.7 E-05	5.0 E-04	5.0 E-04	2.0 E-07	
	Am-242		16.0 h	M	5.0 E-04
1.6 E-08	1.2 E-08	5.0 E-04	5.0 E-04	3.0 E-10	
	Am-242m		1.52E+02 a	M	5.0 E-04
3.5 E-05	2.4 E-05	5.0 E-04	5.0 E-04	1.9 E-07	
	Am-243		7.38E+03 a	M	5.0 E-04
3.9 E-05	2.7 E-05	5.0 E-04	5.0 E-04	2.0 E-07	
	Am-244		10.1 h	M	5.0 E-04
1.9 E-09	1.5 E-09	5.0 E-04	5.0 E-04	4.6 E-10	
	Am-244m		0.433 h	M	5.0 E-04
7.9 E-11	6.2 E-11	5.0 E-04	5.0 E-04	2.9 E-11	
	Am-245		2.05 h	M	5.0 E-04
5.3 E-11	7.6 E-11	5.0 E-04	5.0 E-04	6.2 E-11	

	Am-246		0.650 h		M	5.0 E-04
6.8 E-11		1.1 E-10	5.0 E-04	5.8 E-11		
	Am-246m		0.417 h		M	5.0 E-04
2.3 E-11		3.8 E-11	5.0 E-04	3.4 E-11		

### Kirij

	Cm-238		2.40 h		M	5.0 E-04
4.1 E-09		4.8 E-09	5.0 E-04	8.0 E-11		
	Cm-240		27.0 d		M	5.0 E-04
2.9 E-06		2.3 E-06	5.0 E-04	7.6 E-09		
	Cm-241		32.8 d		M	5.0 E-04
3.4 E-08		2.6 E-08	5.0 E-04	9.1 E-10		
	Cm-242		163 d		M	5.0 E-04
4.8 E-06		3.7 E-06	5.0 E-04	1.2 E-08		
	Cm-243		28.5 a		M	5.0 E-04
2.9 E-05		2.0 E-05	5.0 E-04	1.5 E-07		
	Cm-244		18.1 a		M	5.0 E-04
2.5 E-05		1.7 E-05	5.0 E-04	1.2 E-07		
	Cm-245		8.50E+03 a		M	5.0 E-04
4.0 E-05		2.7 E-05	5.0 E-04	2.1 E-07		
	Cm-246		4.73E+03 a		M	5.0 E-04
4.0 E-05		2.7 E-05	5.0 E-04	2.1 E-07		
	Cm-247		1.56E+07 a		M	5.0 E-04
3.6 E-05		2.5 E-05	5.0 E-04	1.9 E-07		
	Cm-248		3.39E+05 a		M	5.0 E-04
1.4 E-04		9.5 E-05	5.0 E-04	7.7 E-07		
	Cm-249		1.07 h		M	5.0 E-04
3.2 E-11		5.1 E-11	5.0 E-04	3.1 E-11		
	Cm-250		6.90E+03 a		M	5.0 E-04
7.9 E-04		5.4 E-04	5.0 E-04	4.4 E-06		

### Berkilij

	Bk-245		4.94 d		M	5.0 E-04
2.0 E-09		1.8 E-09	5.0 E-04	5.7 E-10		
	Bk-246		1.83 d		M	5.0 E-04
3.4 E-10		4.6 E-10	5.0 E-04	4.8 E-10		
	Bk-247		1.38E+03 a		M	5.0 E-04
6.5 E-05		4.5 E-05	5.0 E-04	3.5 E-07		
	Bk-249		320 d		M	5.0 E-04
1.5 E-07		1.0 E-07	5.0 E-04	9.7 E-10		
	Bk-250		3.22 h		M	5.0 E-04
9.6 E-10		7.1 E-10	5.0 E-04	1.4 E-10		

### Kalifornij

	Cf-244		0.323 h		M	5.0 E-04
1.3 E-08		1.8 E-08	5.0 E-04	7.0 E-11		
	Cf-246		1.49 d		M	5.0 E-04
4.2 E-07		3.5 E-07	5.0 E-04	3.3 E-09		
	Cf-248		334 d		M	5.0 E-04
8.2 E-06		6.1 E-06	5.0 E-04	2.8 E-08		
	Cf-249		3.50E+02 a		M	5.0 E-04
6.6 E-05		4.5 E-05	5.0 E-04	3.5 E-07		
	Cf-250		13.1 a		M	5.0 E-04
3.2 E-05		2.2 E-05	5.0 E-04	1.6 E-07		
	Cf-251		8.98E+02 a		M	5.0 E-04
6.7 E-05		4.6 E-05	5.0 E-04	3.6 E-07		
	Cf-252		2.64 a		M	5.0 E-04
1.8 E-05		1.3 E-05	5.0 E-04	9.0 E-08		
	Cf-253		17.8 d		M	5.0 E-04
1.2 E-06		1.0 E-06	5.0 E-04	1.4 E-09		

Cf-254		60.5 d	M	5.0 E-04
3.7 E-05	2.2 E-05	5.0 E-04	4.0 E-07	
<b>Ajnštajnij</b>				
Es-250		2.10 h	M	5.0 E-04
5.9 E-10	4.2 E-10	5.0 E-04	2.1 E-11	
Es-251		1.38 d	M	5.0 E-04
2.0 E-09	1.7 E-09	5.0 E-04	1.7 E-10	
Es-253		20.5 d	M	5.0 E-04
2.5 E-06	2.1 E-06	5.0 E-04	6.1 E-09	
Es-254		276 d	M	5.0 E-04
8.0 E-06	6.0 E-06	5.0 E-04	2.8 E-08	
Es-254m		1.64 d	M	5.0 E-04
4.4 E-07	3.7 E-07	5.0 E-04	4.2 E-09	
<b>Fermij</b>				
Fm-252		22.7 h	M	5.0 E-04
3.0 E-07	2.6 E-07	5.0 E-04	2.7 E-09	
Fm-253		3.00 d	M	5.0 E-04
3.7 E-07	3.0 E-07	5.0 E-04	9.1 E-10	
Fm-254		3.24 h	M	5.0 E-04
5.6 E-08	7.7 E-08	5.0 E-04	4.4 E-10	
Fm-255		20.1 h	M	5.0 E-04
2.5 E-07	2.6 E-07	5.0 E-04	2.5 E-09	
Fm-257		101 d	M	5.0 E-04
6.6 E-06	5.2 E-06	5.0 E-04	1.5 E-08	
<b>Mendelevij</b>				
Md-257		5.20 h	M	5.0 E-04
2.3 E-08	2.0 E-08	5.0 E-04	1.2 E-10	
Md-258		55.0 d	M	5.0 E-04
5.5 E-06	4.4 E-06	5.0 E-04	1.3 E-08	

**Tablica 4.**

**Pučanstvo: Očekivane efektivne doze po jedinici unesene aktivnosti e(g) gutanjem (Sv Bq<sup>-1</sup>)**

Dob	Radionuklid	Fizikalno Dob				Dob
		vrijeme	Dob		Dob	
a	a	a	g < 1 a	12-17 a	f1 za > 17 a	1-2
e (g)	e (g)	poluraspada	f1 e (g)	e (g)	g≥1a	e (g)
<b>Vodik</b>						
Tricirana voda	12.3 a		1.000	6.4 E-11	1.000	4.8
E-11	3.1 E-11		2.3 E-11	1.8 E-11	1.8 E-11	
<b>Organski</b>						
vezani tricij	12.3 a		1.000	1.2 E-10	1.000	1.2
E-10	7.3 E-11		5.7 E-11	4.2 E-11	4.2 E-11	
<b>Berilij</b>						

Be-7	53.3 d	0.020	1.8 E-10	0.005	1.3
E-10	7.7 E-11	5.3 E-11	3.5 E-11	2.8 E-11	
Be-10	1.60 E+06a	0.020	1.4 E-08	0.005	8.0
E-09	4.1 E-09	2.4 E-09	1.4 E-09	1.1 E-09	
<b>Ugljik</b>					
C-11	0.340 h	1.000	2.6 E-10	1.000	1.5
E-10	7.3 E-11	4.3 E-11	3.0 E-11	2.4 E-11	
C-14	5.73 E+03a	1.000	1.4 E-09	1.000	1.6
E-09	9.9 E-10	8.0 E-10	5.7 E-10	5.8 E-10	
<b>Fluor</b>					
F-18	1.83 h	1.000	5.2 E-10	1.000	3.0
E-10	1.5 E-10	9.1 E-11	6.2 E-11	4.9 E-11	
<b>Natrij</b>					
Na-22	2.60 a	1.000	2.1 E-08	1.000	1.5
E-08	8.4 E-09	5.5 E-09	3.7 E-09	3.2 E-09	
Na-24	15.0 h	1.000	3.5 E-09	1.000	2.3
E-09	1.2 E-09	7.7 E-10	5.2 E-10	4.3 E-10	
<b>Magnezij</b>					
Ma-28	20.9 h	1.000	1.2 E-08	0.500	1.4
E-08	7.4 E-09	4.5 E-09	2.7 E-09	2.2 E-09	
<b>Aluminij</b>					
Al-26	7.16 E+05a	0.020	3.4 E-08	0.010	2.1
E-08	1.1 E-08	7.1 E-09	4.3 E-09	3.5 E-09	
<b>Silicij</b>					
Si-31	2.62 h	0.020	1.9 E-09	0.010	1.0
E-09	5.1 E-10	3.0 E-10	1.8 E-10	1.6 E-10	
Si-32	4.50 E+02a	0.020	7.3 E-09	0.010	4.1
E-09	2.0 E-09	1.2 E-09	7.0 E-10	5.6 E-10	
<b>Fosfor</b>					
P-32	14.3 d	1.000	3.1 E-08	0.800	1.9
E-08	9.4 E-09	5.3 E-09	3.1 E-09	2.4 E-09	
P-33	25.4 d	1.000	2.7 E-09	0.800	1.8
E-09	9.1 E-10	5.3 E-10	3.1 E-10	2.4 E-10	
<b>Sumpor</b>					
S-35 (anorganski)	87.4 d	1.000	1.3 E-09	1.000	8.7
E-10	4.4 E-10	2.7 E-10	1.6 E-10	1.3 E-10	
S-35 (organski)	87.4 d	1.000	7.7 E-09	1.000	5.4
E-09	2.7 E-09	1.6 E-09	9.5 E-10	7.7 E-10	
<b>Klor</b>					
Cl-36	3.01 E+05a	1.000	9.8 E-09	1.000	6.3
E-09	3.2 E-09	1.9 E-09	1.2 E-09	9.3 E-10	
Cl-38	0.620 h	1.000	1.4 E-09	1.000	7.7
E-10	3.8 E-10	2.2 E-10	1.5 E-10	1.2 E-10	
Cl-39	0.927 h	1.000	9.7 E-10	1.000	5.5
E-10	2.7 E-10	1.6 E-10	1.1 E-10	8.5 E-11	
<b>Kalij</b>					
K-40	1.28 E+09a	1.000	6.2 E-08	1.000	4.2
E-08	2.1 E-08	1.3 E-08	7.6 E-09	6.2 E-09	
K-42	12.4 h	1.000	5.1 E-09	1.000	3.0
E-09	1.5 E-09	8.6 E-10	5.4 E-10	4.3 E-10	
K-43	22.6 h	1.000	2.3 E-09	1.000	1.4
E-09	7.6 E-10	4.7 E-10	3.0 E-10	2.5 E-10	
K-44	0.369 h	1.000	1.0 E-09	1.000	5.5
E-10	2.7 E-10	1.6 E-10	1.1 E-10	8.4 E-11	
K-45	0.333 h	1.000	6.2 E-10	1.000	3.5
E-10	1.7 E-10	9.9 E-11	6.8 E-11	5.4 E-11	
<b>Kalcij</b>					
Ca-41	1.40 E+05a	0.600	1.2 E-09	0.300	5.2
E-10	3.9 E-10	4.8 E-10	5.0 E-10	1.9 E-10	
Ca-45	163 d	0.600	1.1 E-08	0.300	4.9
E-09	2.6 E-09	1.8 E-09	1.3 E-09	7.1 E-10	

Ca-47	4.53 d	0.600	1.3 E-08	0.300	9.3
E-09	4.9 E-09	3.0 E-09	1.8 E-09	1.6 E-09	
<b>Skandij</b>					
Sc-43	3.89 h	0.001	1.8 E-09	1.0 E-04	1.2
E-09	6.1 E-10	3.7 E-10	2.3 E-10	1.9 E-10	
Sc-44	3.93 h	0.001	3.5 E-09	1.0 E-04	2.2
E-09	1.2 E-09	7.1 E-10	4.4 E-10	3.5 E-10	
Sc-44m	2.44 d	0.001	2.4 E-08	1.0 E-04	1.6
E-08	8.3 E-09	5.1 E-09	3.1 E-09	2.4 E-09	
Sc-46	83.8 d	0.001	1.1 E-08	1.0 E-04	7.9
E-09	4.4 E-09	2.9 E-09	1.8 E-09	1.5 E-09	
Sc-47	3.35 d	0.001	6.1 E-09	1.0 E-04	3.9
E-09	2.0 E-09	1.2 E-09	6.8 E-10	5.4 E-10	
Sc-48	1.82 d	0.001	1.3 E-08	1.0 E-04	9.3
E-09	5.1 E-09	3.3 E-09	2.1 E-09	1.7 E-09	
Sc-49	0.956 h	0.001	1.0 E-09	1.0 E-04	5.7
E-10	2.8 E-10	1.6 E-10	1.0 E-10	8.2 E-11	
<b>Titan</b>					
Ti-44	47.3 a	0.020	5.5 E-08	0.010	3.1
E-08	1.7 E-08	1.1 E-08	6.9 E-09	5.8 E-09	
Ti-45	3.08 h	0.020	1.6 E-09	0.010	9.8
E-10	5.0 E-10	3.1 E-10	1.9 E-10	1.5 E-10	
<b>Vanadij</b>					
V-47	0.543 h	0.020	7.3 E-10	0.010	4.1
E-10	2.0 E-10	1.2 E-10	8.0 E-11	6.3 E-11	
V-48	16.2 d	0.020	1.5 E-08	0.010	1.1
E-08	5.9 E-09	3.9 E-09	2.5 E-09	2.0 E-09	
V-49	330 d	0.020	2.2 E-10	0.010	1.4
E-10	6.9 E-11	4.0 E-11	2.3 E-11	1.8 E-11	
<b>Krom</b>					
Cr-48	23.0 h	0.200	1.4 E-09	0.100	9.9
E-10	5.7 E-10	3.8 E-10	2.5 E-10	2.0 E-10	
		0.020	1.4 E-09	0.010	9.9
E-10	5.7 E-10	3.8 E-10	2.5 E-10	2.0 E-10	
Cr-49	0.702 h	0.200	6.8 E-10	0.100	3.9
E-10	2.0 E-10	1.1 E-10	7.7 E-11	6.1 E-11	
		0.020	6.8 E-10	0.010	3.9
E-10	2.0 E-10	1.1 E-10	7.7 E-11	6.1 E-11	
Cr-51	27.7 d	0.200	3.5 E-10	0.100	2.3
E-10	1.2 E-10	7.8 E-11	4.8 E-11	3.8 E-11	
		0.020	3.3 E-10	0.010	2.2
E-10	1.2 E-10	7.5 E-11	4.6 E-11	3.7 E-11	
<b>Mangan</b>					
Mn-51	0.770 h	0.200	1.1 E-09	0.100	6.1
E-10	3.0 E-10	1.8 E-10	1.2 E-10	9.3 E-11	
Mn-52	5.59 d	0.200	1.2 E-08	0.100	8.8
E-09	5.1 E-09	3.4 E-09	2.2 E-09	1.8 E-09	
Mn-52m	0.352 h	0.200	7.8 E-10	0.100	4.4
E-10	2.2 E-10	1.3 E-10	8.8 E-11	6.9 E-11	
Mn-53	3.70 E+06a	0.200	4.1 E-10	0.100	2.2
E-10	1.1 E-10	6.5 E-11	3.7 E-11	3.0 E-11	
Mn-54	312 d	0.200	5.4 E-09	0.100	3.1
E-09	1.9 E-09	1.3 E-09	8.7 E-10	7.1 E-10	
Mn-56	2.58 h	0.200	2.7 E-09	0.100	1.7
E-09	8.5 E-10	5.1 E-10	3.2 E-10	2.5 E-10	
<b>Željezo</b>					
Fe-52	8.28 h	0.600	1.3 E-08	0.100	9.1
E-09	4.6 E-09	2.8 E-09	1.7 E-09	1.4 E-09	
Fe-55	2.70 a	0.600	7.6 E-09	0.100	2.4
E-09	1.7 E-09	1.1 E-09	7.7 E-10	3.3 E-10	

Fe-59	44.5 d	0.600	3.9 E-08	0.100	1.3
E-08	7.5 E-09	4.7 E-09	3.1 E-09	1.8 E-09	
Fe-60	1.00 E+05a	0.600	7.9 E-07	0.100	2.7
E-07	2.7 E-07	2.5 E-07	2.3 E-07	1.1 E-07	
<b>Kobalt</b>					
Co-55	17.5 h	0.600	6.0 E-09	0.100	5.5
E-09	2.9 E-09	1.8 E-09	1.1 E-09	1.0 E-09	
Co-56	78.7 d	0.600	2.5 E-08	0.100	1.5
E-08	8.8 E-09	5.8 E-09	3.8 E-09	2.5 E-09	
Co-57	271 d	0.600	2.9 E-09	0.100	1.6
E-09	8.9 E-10	5.8 E-10	3.7 E-10	2.1 E-10	
Co-58	70.8 d	0.600	7.3 E-09	0.100	4.4
E-09	2.6 E-09	1.7 E-09	1.1 E-09	7.4 E-10	
Co-58m	9.15 h	0.600	2.0 E-10	0.100	1.5
E-10	7.8 E-11	4.7 E-11	2.8 E-11	2.4 E-11	
Co-60	5.27 a	0.600	5.4 E-08	0.100	2.7
E-08	1.7 E-08	1.1 E-08	7.9 E-09	3.4 E-09	
Co-60m	0.174 h	0.600	2.2 E-11	0.100	1.2
E-11	5.7 E-12	3.2 E-12	2.2 E-12	1.7 E-12	
Co-61	1.65 h	0.600	8.2 E-10	0.100	5.1
E-10	2.5 E-10	1.4 E-10	9.2 E-11	7.4 E-11	
Co-62m	0.232 h	0.600	5.3 E-10	0.100	3.0
E-10	1.5 E-10	8.7 E-11	6.0 E-11	4.7 E-11	
<b>Nikal</b>					
Ni-56	6.10 d	0.100	5.3 E-09	0.050	4.0
E-09	2.3 E-09	1.6 E-09	1.1 E-09	8.6 E-10	
Ni-57	1.50 d	0.100	6.8 E-09	0.050	4.9
E-09	2.7 E-09	1.7 E-09	1.1 E-09	8.7 E-10	
Ni-59	7.50 E+04a	0.100	6.4 E-10	0.050	3.4
E-10	1.9 E-10	1.1 E-10	7.3 E-11	6.3 E-11	
Ni-63	96.0 a	0.100	1.6 E-09	0.050	8.4
E-10	4.6 E-10	2.8 E-10	1.8 E-10	1.5 E-10	
Ni-65	2.52 h	0.100	2.1 E-09	0.050	1.3
E-09	6.3 E-10	3.8 E-10	2.3 E-10	1.8 E-10	
Ni-66	2.27 d	0.100	3.3 E-08	0.050	2.2
E-08	1.1 E-08	6.6 E-09	3.7 E-09	3.0 E-09	
<b>Bakar</b>					
Cu-60	0.387 h	1.000	7.0 E-10	0.500	4.2
E-10	2.2 E-10	1.3 E-10	8.9 E-11	7.0 E-11	
Cu-61	3.41 h	1.000	7.1 E-10	0.500	7.5
E-10	3.9 E-10	2.3 E-10	1.5 E-10	1.2 E-10	
Cu-64	12.7 h	1.000	5.2 E-10	0.500	8.3
E-10	4.2 E-10	2.5 E-10	1.5 E-10	1.2 E-10	
Cu-67	2.58 d	1.000	2.1 E-09	0.500	2.4
E-09	1.2 E-09	7.2 E-10	4.2 E-10	3.4 E-10	
<b>Cink</b>					
Zn-62	9.26 h	1.000	4.2 E-09	0.500	6.5
E-09	3.3 E-09	2.0 E-09	1.2 E-09	9.4 E-10	
Zn-63	0.635 h	1.000	8.7 E-10	0.500	5.2
E-10	2.6 E-10	1.5 E-10	1.0 E-10	7.9 E-11	
Zn-65	244 d	1.000	3.6 E-08	0.500	1.6
E-08	9.7 E-09	6.4 E-09	4.5 E-09	3.9 E-09	
Zn-69	0.950 h	1.000	3.5 E-10	0.500	2.2
E-10	1.1 E-10	6.0 E-11	3.9 E-11	3.1 E-11	
Zn-69m	13.8 h	1.000	1.3 E-09	0.500	2.3
E-09	1.2 E-09	7.0 E-10	4.1 E-10	3.3 E-10	
Zn-71m	3.92 h	1.000	1.4 E-09	0.500	1.5
E-09	7.8 E-10	4.8 E-10	3.0 E-10	2.4 E-10	
Zn-72	1.94 d	1.000	8.7 E-09	0.500	8.6
E-09	4.5 E-09	2.8 E-09	1.7 E-09	1.4 E-09	
<b>Galij</b>					

Ga-65	0.253 h	0.010	4.3 E-10	0.001	2.4
E-10	1.2 E-10	6.9 E-11	4.7 E-11	3.7 E-11	
Ga-66	9.40 h	0.010	1.2 E-08	0.001	7.9
E-09	4.0 E-09	2.5 E-09	1.5 E-09	1.2 E-09	
Ga-67	3.26 d	0.010	1.8 E-09	0.001	1.2
E-09	6.4 E-10	4.0 E-10	2.4 E-10	1.9 E-10	
Ga-68	1.13 h	0.010	1.2 E-09	0.001	6.7
E-10	3.4 E-10	2.0 E-10	1.3 E-10	1.0 E-10	
Ga-70	0.353 h	0.010	3.9 E-10	0.001	2.2
E-10	1.0 E-10	5.9 E-11	4.0 E-11	3.1 E-11	
Ga-72	14.1 h	0.010	1.0 E-08	0.001	6.8
E-09	3.6 E-09	2.2 E-09	1.4 E-09	1.1 E-09	
Ga-73	4.91 h	0.010	3.0 E-09	0.001	1.9
E-09	9.3 E-10	5.5 E-10	3.3 E-10	2.6 E-10	
<b>Germanij</b>					
Ge-66	2.27 h	1.000	8.3 E-10	1.000	5.3
E-10	2.9 E-10	1.9 E-10	1.3 E-10	1.0 E-10	
Ge-67	0.312 h	1.000	7.7 E-10	1.000	4.2
E-10	2.1 E-10	1.2 E-10	8.2 E-11	6.5 E-11	
Ge-68	288 d	1.000	1.2 E-08	1.000	8.0
E-09	4.2 E-09	2.6 E-09	1.6 E-09	1.3 E-09	
Ge-69	1.63 d	1.000	2.0 E-09	1.000	1.3
E-09	7.1 E-10	4.6 E-10	3.0 E-10	2.4 E-10	
Ge-71	11.8 d	1.000	1.2 E-10	1.000	7.8
E-11	4.0 E-11	2.4 E-11	1.5 E-11	1.2 E-11	
Ge-75	1.38 h	1.000	5.5 E-10	1.000	3.1
E-10	1.5 E-10	8.7 E-11	5.9 E-11	4.6 E-11	
Ge-77	11.3 h	1.000	3.0 E-09	1.000	1.8
E-09	9.9 E-10	6.2 E-10	4.1 E-10	3.3 E-10	
Ge-78	1.45 h	1.000	1.2 E-09	1.000	7.0
E-10	3.6 E-10	2.2 E-10	1.5 E-10	1.2 E-10	
<b>Arsen</b>					
As-69	0.253 h	1.000	6.6 E-10	0.500	3.7
E-10	1.8 E-10	1.1 E-10	7.2 E-11	5.7 E-11	
As-70	0.876 h	1.000	1.2 E-09	0.500	7.8
E-10	4.1 E-10	2.5 E-10	1.7 E-10	1.3 E-10	
As-71	2.70 d	1.000	2.8 E-09	0.500	2.8
E-09	1.5 E-09	9.3 E-10	5.7 E-10	4.6 E-10	
As-72	1.08 d	1.000	1.1 E-08	0.500	1.2
E-08	6.3 E-09	3.8 E-09	2.3 E-09	1.8 E-09	
As-73	80.3 d	1.000	2.6 E-09	0.500	1.9
E-09	9.3 E-10	5.6 E-10	3.2 E-10	2.6 E-10	
As-74	17.8 d	1.000	1.0 E-08	0.500	8.2
E-09	4.3 E-09	2.6 E-09	1.6 E-09	1.3 E-09	
As-76	1.10 d	1.000	1.0 E-08	0.500	1.1
E-08	5.8 E-09	3.4 E-09	2.0 E-09	1.6 E-09	
As-77	1.62 d	1.000	2.7 E-09	0.500	2.9
E-09	1.5 E-09	8.7 E-10	5.0 E-10	4.0 E-10	
As-78	1.51 h	1.000	2.0 E-09	0.500	1.4
E-09	7.0 E-10	4.1 E-10	2.7 E-10	2.1 E-10	
<b>Selen</b>					
Se-70	0.683 h	1.000	1.0 E-09	0.800	7.1
E-10	3.6 E-10	2.2 E-10	1.5 E-10	1.2 E-10	
Se-73	7.15 h	1.000	1.6 E-09	0.800	1.4
E-09	7.4 E-10	4.8 E-10	2.5 E-10	2.1 E-10	
Se-73m	0.650 h	1.000	2.6 E-10	0.800	1.8
E-10	9.5 E-11	5.9 E-11	3.5 E-11	2.8 E-11	
Se-75	120 d	1.000	2.0 E-08	0.800	1.3
E-08	8.3 E-09	6.0 E-09	3.1 E-09	2.6 E-09	
Se-79	6.50 E+04a	1.000	4.1 E-08	0.800	2.8
E-08	1.9 E-08	1.4 E-08	4.1 E-09	2.9 E-09	

Se-81	0.308 h	1.000	3.4 E-10	0.800	1.9
E-10	9.0 E-11	5.1 E-11	3.4 E-11	2.7 E-11	
Se-81m	0.954 h	1.000	6.0 E-10	0.800	3.7
E-10	1.8 E-10	1.1 E-10	6.7 E-11	5.3 E-11	
Se-83	0.375 h	1.000	4.6 E-10	0.800	2.9
E-10	1.5 E-10	8.7 E-11	5.9 E-11	4.7 E-11	

#### Brom

Br-74	0.422 h	1.000	9.0 E-10	1.000	5.2
E-10	2.6 E-10	1.5 E-10	1.1 E-10	8.4 E-11	
Br-74m	0.691 h	1.000	1.5 E-09	1.000	8.5
E-10	4.3 E-10	2.5 E-10	1.7 E-10	1.4 E-10	
Br-75	1.63 h	1.000	8.5 E-10	1.000	4.9
E-10	2.5 E-10	1.5 E-10	9.9 E-11	7.9 E-11	
Br-76	16.2 h	1.000	4.2 E-09	1.000	2.7
E-09	1.4 E-09	8.7 E-10	5.6 E-10	4.6 E-10	
Br-77	2.33 d	1.000	6.3 E-10	1.000	4.4
E-10	2.5 E-10	1.7 E-10	1.1 E-10	9.6 E-11	
Br-80	0.290 h	1.000	3.9 E-10	1.000	2.1
E-10	1.0 E-10	5.8 E-11	3.9 E-11	3.1 E-11	
Br-80m	4.42 h	1.000	1.4 E-09	1.000	8.0
E-10	3.9 E-10	2.3 E-10	1.4 E-10	1.1 E-10	
Br-82	1.47 d	1.000	3.7 E-09	1.000	2.6
E-09	1.5 E-09	9.5 E-10	6.4 E-10	5.4 E-10	
Br-83	2.39 h	1.000	5.3 E-10	1.000	3.0
E-10	1.4 E-10	8.3 E-11	5.5 E-11	4.3 E-11	
Br-84	0.530 h	1.000	1.0 E-09	1.000	5.8
E-10	2.8 E-10	1.6 E-10	1.1 E-10	8.8 E-11	

#### Rubidij

Rb-79	0.382 h	1.000	5.7 E-10	1.000	3.2
E-10	1.6 E-10	9.2 E-11	6.3 E-11	5.0 E-11	
Rb-81	4.58 h	1.000	5.4 E-10	1.000	3.2
E-10	1.6 E-10	1.0 E-10	6.7 E-11	5.4 E-11	
Rb-81m	0.533 h	1.000	1.1 E-10	1.000	6.2
E-11	3.1 E-11	1.8 E-11	1.2 E-11	9.7 E-12	
Rb-82m	6.20 h	1.000	8.7 E-10	1.000	5.9
E-10	3.4 E-10	2.2 E-10	1.5 E-10	1.3 E-10	
Rb-83	86.2 d	1.000	1.1 E-08	1.000	8.4
E-09	4.9 E-09	3.2 E-09	2.2 E-09	1.9 E-09	
Rb-84	32.8 d	1.000	2.0 E-08	1.000	1.4
E-08	7.9 E-09	5.0 E-09	3.3 E-09	2.8 E-09	
Rb-86	18.7 d	1.000	3.1 E-08	1.000	2.0
E-08	9.9 E-09	5.9 E-09	3.5 E-09	2.8 E-09	
Rb-87	4.70 E+10a	1.000	1.5 E-08	1.000	1.0
E-08	5.2 E-09	3.1 E-09	1.8 E-09	1.5 E-09	
Rb-88	0.297 h	1.000	1.1 E-09	1.000	6.2
E-10	3.0 E-10	1.7 E-10	1.2 E-10	9.0 E-11	
Rb-89	0.253 h	1.000	5.4 E-10	1.000	3.0
E-10	1.5 E-10	8.6 E-11	5.9 E-11	4.7 E-11	

#### Stroncij

Sr-80	1.67 h	0.600	3.7 E-09	0.300	2.3
E-09	1.1 E-09	6.5 E-10	4.2 E-10	3.4 E-10	
Sr-81	0.425 h	0.600	8.4 E-10	0.300	4.9
E-10	2.4 E-10	1.4 E-10	9.6 E-11	7.7 E-11	
Sr-82	25.0 d	0.600	7.2 E-08	0.300	4.1
E-08	2.1 E-08	1.3 E-08	8.7 E-09	6.1 E-09	
Sr-83	1.35 d	0.600	3.4 E-09	0.300	2.7
E-09	1.4 E-09	9.1 E-10	5.7 E-10	4.9 E-10	
Sr-85	64.8 d	0.600	7.7 E-09	0.300	3.1
E-09	1.7 E-09	1.5 E-09	1.3 E-09	5.6 E-10	
Sr-85m	1.16 h	0.600	4.5 E-11	0.300	3.0
E-11	1.7 E-11	1.1 E-11	7.8 E-12	6.1 E-12	

Sr-87m	2.80 h	0.600	2.4 E-10	0.300	1.7
E-10	9.0 E-11	5.6 E-11	3.6 E-11	3.0 E-11	
Sr-89	50.5 d	0.600	3.6 E-08	0.300	1.8
E-08	8.9 E-09	5.8 E-09	4.0 E-09	2.6 E-09	
Sr-90	29.1 a	0.600	2.3 E-07	0.300	7.3
E-08	4.7 E-08	6.0 E-08	8.0 E-08	2.8 E-08	
Sr-91	9.50 h	0.600	5.2 E-09	0.300	4.0
E-09	2.1 E-09	1.2 E-09	7.4 E-10	6.5 E-10	
Sr-92	2.71 h	0.600	3.4 E-09	0.300	2.7
E-09	1.4 E-09	8.2 E-10	4.8 E-10	4.3 E-10	

### Itrij

Y-86	14.7 h	0.001	7.6 E-09	1.0 E-04	5.2
E-09	2.9 E-09	1.9 E-09	1.2 E-09	9.6 E-10	
Y-86m	0.800 h	0.001	4.5 E-10	1.0 E-04	3.1
E-10	1.7 E-10	1.1 E-10	7.1 E-11	5.6 E-11	
Y-87	3.35 d	0.001	4.6 E-09	1.0 E-04	3.2
E-09	1.8 E-09	1.1 E-09	7.0 E-10	5.5 E-10	
Y-88	107 d	0.001	8.1 E-09	1.0 E-04	6.0
E-09	3.5 E-09	2.4 E-09	1.6 E-09	1.3 E-09	
Y-90	2.67 d	0.001	3.1 E-08	1.0 E-04	2.0
E-08	1.0 E-08	5.9 E-09	3.3 E-09	2.7 E-09	
Y-90m	3.19 h	0.001	1.8 E-09	1.0 E-04	1.2
E-09	6.1 E-10	3.7 E-10	2.2 E-10	1.7 E-10	
Y-91	58.5 d	0.001	2.8 E-08	1.0 E-04	1.8
E-08	8.8 E-09	5.2 E-09	2.9 E-09	2.4 E-09	
Y-91m	0.828 h	0.001	9.2 E-11	1.0 E-04	6.0
E-11	3.3 E-11	2.1 E-11	1.4 E-11	1.1 E-11	
Y-92	3.54 h	0.001	5.9 E-09	1.0 E-04	3.6
E-09	1.8 E-09	1.0 E-09	6.2 E-10	4.9 E-10	
Y-93	10.1 h	0.001	1.4 E-08	1.0 E-04	8.5
E-09	4.3 E-09	2.5 E-09	1.4 E-09	1.2 E-09	
Y-94	0.318 h	0.001	9.9 E-10	1.0 E-04	5.5
E-10	2.7 E-10	1.5 E-10	1.0 E-10	8.1 E-11	
Y-95	0.178 h	0.001	5.7 E-10	1.0 E-04	3.1
E-10	1.5 E-10	8.7 E-11	5.9 E-11	4.6 E-11	

### Cirkonij

Zr-86	16.5 h	0.020	6.9 E-09	0.010	4.8
E-09	2.7 E-09	1.7 E-09	1.1 E-09	8.6 E-10	
Zr-88	83.4 d	0.020	2.8 E-09	0.010	2.0
E-09	1.2 E-09	8.0 E-10	5.4 E-10	4.5 E-10	
Zr-89	3.27 d	0.020	6.5 E-09	0.010	4.5
E-09	2.5 E-09	1.6 E-09	9.9 E-10	7.9 E-10	
Zr-93	1.53 E+06a	0.020	1.2 E-09	0.010	7.6
E-10	5.1 E-10	5.8 E-10	8.6 E-10	1.1 E-09	
Zr-95	64.0 d	0.020	8.5 E-09	0.010	5.6
E-09	3.0 E-09	1.9 E-09	1.2 E-09	9.5 E-10	
Zr-97	16.9 h	0.020	2.2 E-08	0.010	1.4
E-08	7.3 E-09	4.4 E-09	2.6 E-09	2.1 E-09	

### Niobij

Nb-88	0.238 h	0.020	6.7 E-10	0.010	3.8
E-10	1.9 E-10	1.1 E-10	7.9 E-11	6.3 E-11	
Nb-89	2.03 h	0.020	3.0 E-09	0.010	2.0
E-09	1.0 E-09	6.0 E-10	3.4 E-10	2.7 E-10	
Nb-89	1.10 h	0.020	1.5 E-09	0.010	8.7
E-10	4.4 E-10	2.7 E-10	1.8 E-10	1.4 E-10	
Nb-90	14.6 h	0.020	1.1 E-08	0.010	7.2
E-09	3.9 E-09	2.5 E-09	1.6 E-09	1.2 E-09	
Nb-93m	13.6 a	0.020	1.5 E-09	0.010	9.1
E-10	4.6 E-10	2.7 E-10	1.5 E-10	1.2 E-10	
Nb-94	2.03 E+04a	0.020	1.5 E-08	0.010	9.7
E-09	5.3 E-09	3.4 E-09	2.1 E-09	1.7 E-09	

Nb-95	35.1 d	0.020	4.6 E-09	0.010	3.2
E-09	1.8 E-09	1.1 E-09	7.4 E-10	5.8 E-10	
Nb-95m	3.61 d	0.020	6.4 E-09	0.010	4.1
E-09	2.1 E-09	1.2 E-09	7.1 E-10	5.6 E-10	
Nb-96	23.3 h	0.020	9.2 E-09	0.010	6.3
E-09	3.4 E-09	2.2 E-09	1.4 E-09	1.1 E-09	
Nb-97	1.20 h	0.020	7.7 E-10	0.010	4.5
E-10	2.3 E-10	1.3 E-10	8.7 E-11	6.8 E-11	
Nb-98	0.858 h	0.020	1.2 E-09	0.010	7.1
E-10	3.6 E-10	2.2 E-10	1.4 E-10	1.1 E-10	

**Molibden**

Mo-90	5.67 h	1.000	1.7 E-09	1.000	1.2
E-09	6.3 E-10	4.0 E-10	2.7 E-10	2.2 E-10	
Mo-93	3.50 E+03a	1.000	7.9 E-09	1.000	6.9
E-09	5.0 E-09	4.0 E-09	3.4 E-09	3.1 E-09	
Mo-93m	6.85 h	1.000	8.0 E-10	1.000	5.4
E-10	3.1 E-10	2.0 E-10	1.4 E-10	1.1 E-10	
Mo-99	2.75 d	1.000	5.5 E-09	1.000	3.5
E-09	1.8 E-09	1.1 E-09	7.6 E-10	6.0 E-10	
Mo-101	0.244 h	1.000	4.8 E-10	1.000	2.7
E-10	1.3 E-10	7.6 E-11	5.2 E-11	4.1 E-11	

B>

**Tehnecij**

Tc-93	2.75 h	1.000	2.7 E-10	0.500	2.5
E-10	1.5 E-10	9.8 E-11	6.8 E-11	5.5 E-11	
Tc-93m	0.725 h	1.000	2.0 E-10	0.500	1.3
E-10	7.3 E-11	4.6 E-11	3.2 E-11	2.5 E-11	
Tc-94	4.88 h	1.000	1.2 E-09	0.500	1.0
E-09	5.8 E-10	3.7 E-10	2.5 E-10	2.0 E-10	
Tc-94m	0.867 h	1.000	1.3 E-09	0.500	6.5
E-10	3.3 E-10	1.9 E-10	1.3 E-10	1.0 E-10	
Tc-95	20.0 h	1.000	9.9 E-10	0.500	8.7
E-10	5.0 E-10	3.3 E-10	2.3 E-10	1.8 E-10	
Tc-95m	61.0 d	1.000	4.7 E-09	0.500	2.8
E-09	1.6 E-09	1.0 E-09	7.0 E-10	5.6 E-10	
Tc-96	4.28 d	1.000	6.7 E-09	0.500	5.1
E-09	3.0 E-09	2.0 E-09	1.4 E-09	1.1 E-09	
Tc-96m	0.858 h	1.000	1.0 E-10	0.500	6.5
E-11	3.6 E-11	2.3 E-11	1.6 E-11	1.2 E-11	
Tc-97	2.60 E+06a	1.000	9.9 E-10	0.500	4.9
E-10	2.4 E-10	1.4 E-10	8.8 E-11	6.8 E-11	
Tc-97m	87.0 d	1.000	8.7 E-09	0.500	4.1
E-09	2.0 E-09	1.1 E-09	7.0 E-10	5.5 E-10	
Tc-98	4.20 E+06a	1.000	2.3 E-08	0.500	1.2
E-08	6.1 E-09	3.7 E-09	2.5 E-09	2.0 E-09	
Tc-99	2.13 E+05a	1.000	1.0 E-08	0.500	4.8
E-09	2.3 E-09	1.3 E-09	8.2 E-10	6.4 E-10	
Tc-99m	6.02 h	1.000	2.0 E-10	0.500	1.3
E-10	7.2 E-11	4.3 E-11	2.8 E-11	2.2 E-11	
Tc-101	0.237 h	1.000	2.4 E-10	0.500	1.3
E-10	6.1 E-11	3.5 E-11	2.4 E-11	1.9 E-11	
Tc-104	0.303 h	1.000	1.0 E-09	0.500	5.3
E-10	2.6 E-10	1.5 E-10	1.0 E-10	8.0 E-11	

**Rutenij**

Ru-94	0.863 h	0.100	9.3 E-10	0.050	5.9
E-10	3.1 E-10	1.9 E-10	1.2 E-10	9.4 E-11	
Ru-97	2.90 d	0.100	1.2 E-09	0.050	8.5
E-10	4.7 E-10	3.0 E-10	1.9 E-10	1.5 E-10	
Ru-103	39.3 d	0.100	7.1 E-09	0.050	4.6
E-09	2.4 E-09	1.5 E-09	9.2 E-10	7.3 E-10	

Ru-105	4.44 h	0.100	2.7 E-09	0.050	1.8
E-09	9.1 E-10	5.5 E-10	3.3 E-10	2.6 E-10	
Ru-106	1.01 a	0.100	8.4 E-08	0.050	4.9
E-08	2.5 E-08	1.5 E-08	8.6 E-09	7.0 E-09	
<b>Rodij</b>					
Rh-99	16.0 d	0.100	4.2 E-09	0.050	2.9
E-09	1.6 E-09	1.0 E-09	6.5 E-10	5.1 E-10	
Rh-99m	4.70 h	0.100	4.9 E-10	0.050	3.5
E-10	2.0 E-10	1.3 E-10	8.3 E-11	6.6 E-11	
Rh-100	20.8 h	0.100	4.9 E-09	0.050	3.6
E-09	2.0 E-09	1.4 E-09	8.8 E-10	7.1 E-10	
Rh-101	3.20 a	0.100	4.9 E-09	0.050	2.8
E-09	1.6 E-09	1.0 E-09	6.7 E-10	5.5 E-10	
Rh-101m	4.34 d	0.100	1.7 E-09	0.050	1.2
E-09	6.8 E-10	4.4 E-10	2.8 E-10	2.2 E-10	
Rh-102	2.90 a	0.100	1.9 E-08	0.050	1.0
E-08	6.4 E-09	4.3 E-09	3.0 E-09	2.6 E-09	
Rh-102m	207 d	0.100	1.2 E-08	0.050	7.4
E-09	3.9 E-09	2.4 E-09	1.4 E-09	1.2 E-09	
Rh-103m	0.935 h	0.100	4.7 E-11	0.050	2.7
E-11	1.3 E-11	7.4 E-12	4.8 E-12	3.8 E-12	
Rh-105	1.47 d	0.100	4.0 E-09	0.050	2.7
E-09	1.3 E-09	8.0 E-10	4.6 E-10	3.7 E-10	
Rh-106m	2.20 h	0.100	1.4 E-09	0.050	9.7
E-10	5.3 E-10	3.3 E-10	2.0 E-10	1.6 E-10	
Rh-107	0.362 h	0.100	2.9 E-10	0.050	1.6
E-10	7.9 E-11	4.5 E-11	3.1 E-11	2.4 E-11	
<b>Paladij</b>					
Pd-100	3.63 d	0.050	7.4 E-09	0.005	5.2
E-09	2.9 E-09	1.9 E-09	1.2 E-09	9.4 E-10	
Pd-101	8.27 h	0.050	8.2 E-10	0.005	5.7
E-10	3.1 E-10	1.9 E-10	1.2 E-10	9.4 E-11	
Pd-103	17.0 d	0.050	2.2 E-09	0.005	1.4
E-09	7.2 E-10	4.3 E-10	2.4 E-10	1.9 E-10	
Pd-107	6.50 E+06a	0.050	4.4 E-10	0.005	2.8
E-10	1.4 E-10	8.1 E-11	4.6 E-11	3.7 E-11	
Pd-109	13.4 h	0.050	6.3 E-09	0.005	4.1
E-09	2.0 E-09	1.2 E-09	6.8 E-10	5.5 E-10	
<b>Srebro</b>					
Ag-102	0.215 h	0.100	4.2 E-10	0.050	2.4
E-10	1.2 E-10	7.3 E-11	5.0 E-11	4.0 E-11	
Ag-103	1.09 h	0.100	4.5 E-10	0.050	2.7
E-10	1.4 E-10	8.3 E-11	5.5 E-11	4.3 E-11	
Ag-104	1.15 h	0.100	4.3 E-10	0.050	2.9
E-10	1.7 E-10	1.1 E-10	7.5 E-11	6.0 E-11	
Ag-104m	0.558 h	0.100	5.6 E-10	0.050	3.3
E-10	1.7 E-10	1.0 E-10	6.8 E-11	5.4 E-11	
Ag-105	41.0 d	0.100	3.9 E-09	0.050	2.5
E-09	1.4 E-09	9.1 E-10	5.9 E-10	4.7 E-10	
Ag-106	0.399 h	0.100	3.7 E-10	0.050	2.1
E-10	1.0 E-10	6.0 E-11	4.1 E-11	3.2 E-11	
Ag-106m	8.41 d	0.100	9.7 E-09	0.050	6.9
E-09	4.1 E-09	2.8 E-09	1.8 E-09	1.5 E-09	
Ag-108m	1.27 E+02a	0.100	2.1 E-08	0.050	1.1
E-08	6.5 E-09	4.3 E-09	2.8 E-09	2.3 E-09	
Ag-110m	250 d	0.100	2.4 E-08	0.050	1.4
E-08	7.8 E-09	5.2 E-09	3.4 E-09	2.8 E-09	
Ag-111	7.45 d	0.100	1.4 E-08	0.050	9.3
E-09	4.6 E-09	2.7 E-09	1.6 E-09	1.3 E-09	
Ag-112	3.12 h	0.100	4.9 E-09	0.050	3.0
E-09	1.5 E-09	8.9 E-10	5.4 E-10	4.3 E-10	

Ag-115	0.333 h	0.100	7.2 E-10	0.050	4.1
E-10	2.0 E-10	1.2 E-10	7.7 E-11	6.0 E-11	
<b>Kadmi j</b>					
Cd-104	0.961 h	0.100	4.2 E-10	0.050	2.9
E-10	1.7 E-10	1.1 E-10	7.2 E-11	5.4 E-11	
Cd-107	6.49 h	0.100	7.1 E-10	0.050	4.6
E-10	2.3 E-10	1.3 E-10	7.8 E-11	6.2 E-11	
Cd-109	1.27 a	0.100	2.1 E-08	0.050	9.5
E-09	5.5 E-09	3.5 E-09	2.4 E-09	2.0 E-09	
Cd-113	9.30 E+15a	0.100	1.0 E-07	0.050	4.8
E-08	3.7 E-08	3.0 E-08	2.6 E-08	2.5 E-08	
Cd-113m	13.6 a	0.100	1.2 E-07	0.050	5.6
E-08	3.9 E-08	2.9 E-08	2.4 E-08	2.3 E-08	
Cd-115	2.23 d	0.100	1.4 E-08	0.050	9.7
E-09	4.9 E-09	2.9 E-09	1.7 E-09	1.4 E-09	
Cd-115m	44.6 d	0.100	4.1 E-08	0.050	1.9
E-08	9.7 E-09	6.9 E-09	4.1 E-09	3.3 E-09	
Cd-117	2.49 h	0.100	2.9 E-09	0.050	1.9
E-09	9.5 E-10	5.7 E-10	3.5 E-10	2.8 E-10	
Cd-117m	3.36 h	0.100	2.6 E-09	0.050	1.7
E-09	9.0 E-10	5.6 E-10	3.5 E-10	2.8 E-10	
<b>Indij</b>					
In-109	4.20 h	0.040	5.2 E-10	0.020	3.6
E-10	2.0 E-10	1.3 E-10	8.2 E-11	6.6 E-11	
In-110	4.90 h	0.040	1.5 E-09	0.020	1.1
E-09	6.5 E-10	4.4 E-10	3.0 E-10	2.4 E-10	
In-110	1.15 h	0.040	1.1 E-09	0.020	6.4
E-10	3.2 E-10	1.9 E-10	1.3 E-10	1.0 E-10	
In-111	2.83 d	0.040	2.4 E-09	0.020	1.7
E-09	9.1 E-10	5.9 E-10	3.7 E-10	2.9 E-10	
In-112	0.240 h	0.040	1.2 E-10	0.020	6.7
E-11	3.3 E-11	1.9 E-11	1.3 E-11	1.0 E-11	
In-113m	1.66 h	0.040	3.0 E-10	0.020	1.8
E-10	9.3 E-11	6.2 E-11	3.6 E-11	2.8 E-11	
In-114m	49.5 d	0.040	5.6 E-08	0.020	3.1
E-08	1.5 E-08	9.0 E-09	5.2 E-09	4.1 E-09	
In-115	5.10 E+15a	0.040	1.3 E-07	0.020	6.4
E-08	4.8 E-08	4.3 E-08	3.6 E-08	3.2 E-08	
In-115m	4.49 h	0.040	9.6 E-10	0.020	6.0
E-10	3.0 E-10	1.8 E-10	1.1 E-10	8.6 E-11	
In-116m	0.902 h	0.040	5.8 E-10	0.020	3.6
E-10	1.9 E-10	1.2 E-10	8.0 E-11	6.4 E-11	
In-117	0.730 h	0.040	3.3 E-10	0.020	1.9
E-10	9.7 E-11	5.8 E-11	3.9 E-11	3.1 E-11	
In-117m	1.94 h	0.040	1.4 E-09	0.020	8.6
E-10	4.3 E-10	2.5 E-10	1.6 E-10	1.2 E-10	
In-119m	0.300 h	0.040	5.9 E-10	0.020	3.2
E-10	1.6 E-10	8.8 E-11	6.0 E-11	4.7 E-11	
<b>Kositar</b>					
Sn-110	4.00 h	0.040	3.5 E-09	0.020	2.3
E-09	1.2 E-09	7.4 E-10	4.4 E-10	3.5 E-10	
Sn-111	0.588 h	0.040	2.5 E-10	0.020	1.5
E-10	7.4 E-11	4.4 E-11	3.0 E-11	2.3 E-11	
Sn-113	115 d	0.040	7.8 E-09	0.020	5.0
E-09	2.6 E-09	1.6 E-09	9.2 E-10	7.3 E-10	
Sn-117m	13.6 d	0.040	7.7 E-09	0.020	5.0
E-09	2.5 E-09	1.5 E-09	8.8 E-10	7.1 E-10	
Sn-119m	293 d	0.040	4.1 E-09	0.020	2.5
E-09	1.3 E-09	7.5 E-10	4.3 E-10	3.4 E-10	
Sn-121	1.13 d	0.040	2.6 E-09	0.020	1.7
E-09	8.4 E-10	5.0 E-10	2.8 E-10	2.3 E-10	

Sn-121m	55.0 a	0.040	4.6 E-09	0.020	2.7
E-09	1.4 E-09	8.2 E-10	4.7 E-10	3.8 E-10	
Sn-123	129 d	0.040	2.5 E-08	0.020	1.6
E-08	7.8 E-09	4.6 E-09	2.6 E-09	2.1 E-09	
Sn-123m	0.668 h	0.040	4.7 E-10	0.020	2.6
E-10	1.3 E-10	7.3 E-11	4.9 E-11	3.8 E-11	
Sn-125	9.64 d	0.040	3.5 E-08	0.020	2.2
E-08	1.1 E-08	6.7 E-09	3.8 E-09	3.1 E-09	
Sn-126	1.00 E+05a	0.040	5.0 E-08	0.020	3.0
E-08	1.6 E-08	9.8 E-09	5.9 E-09	4.7 E-09	
Sn-127	2.10 h	0.040	2.0 E-09	0.020	1.3
E-09	6.6 E-10	4.0 E-10	2.5 E-10	2.0 E-10	
Sn-128	0.985 h	0.040	1.6 E-09	0.020	9.7
E-10	4.9 E-10	3.0 E-10	1.9 E-10	1.5 E-10	
<b>Antimon</b>					
Sb-115	0.530 h	0.200	2.5 E-10	0.100	1.5
E-10	7.5 E-11	4.5 E-11	3.1 E-11	2.4 E-11	
Sb-116	0.263 h	0.200	2.7 E-10	0.100	1.6
E-10	8.0 E-11	4.8 E-11	3.3 E-11	2.6 E-11	
Sb-116m	1.00 h	0.200	5.0 E-10	0.100	3.3
E-10	1.9 E-10	1.2 E-10	8.3 E-11	6.7 E-11	
Sb-117	2.80 h	0.200	1.6 E-10	0.100	1.0
E-10	5.6 E-11	3.5 E-11	2.2 E-11	1.8 E-11	
Sb-118m	5.00 h	0.200	1.3 E-09	0.100	1.0
E-09	5.8 E-10	3.9 E-10	2.6 E-10	2.1 E-10	
Sb-119	1.59 d	0.200	8.4 E-10	0.100	5.8
E-10	3.0 E-10	1.8 E-10	1.0 E-10	8.0 E-11	
Sb-120	5.76 d	0.200	8.1 E-09	0.100	6.0
E-09	3.5 E-09	2.3 E-09	1.6 E-09	1.2 E-09	
Sb-120	0.265 h	0.200	1.7 E-10	0.100	9.4
E-11	4.6 E-11	2.7 E-11	1.8 E-11	1.4 E-11	
Sb-122	2.70 d	0.200	1.8 E-08	0.100	1.2
E-08	6.1 E-09	3.7 E-09	2.1 E-09	1.7 E-09	
Sb-124	60.2 d	0.200	2.5 E-08	0.100	1.6
E-08	8.4 E-09	5.2 E-09	3.2 E-09	2.5 E-09	
Sb-124m	0.337 h	0.200	8.5 E-11	0.100	4.9
E-11	2.5 E-11	1.5 E-11	1.0 E-11	8.0 E-12	
Sb-125	2.77 a	0.200	1.1 E-08	0.100	6.1
E-09	3.4 E-09	2.1 E-09	1.4 E-09	1.1 E-09	
Sb-126	12.4 d	0.200	2.0 E-08	0.100	1.4
E-08	7.6 E-09	4.9 E-09	3.1 E-09	2.4 E-09	
Sb-126m	0.317 h	0.200	3.9 E-10	0.100	2.2
E-10	1.1 E-10	6.6 E-11	4.5 E-11	3.6 E-11	
Sb-127	3.85 d	0.200	1.7 E-08	0.100	1.2
E-08	5.9 E-09	3.6 E-09	2.1 E-09	1.7 E-09	
Sb-128	9.01 h	0.200	6.3 E-09	0.100	4.5
E-09	2.4 E-09	1.5 E-09	9.5 E-10	7.6 E-10	
Sb-128	0.173 h	0.200	3.7 E-10	0.100	2.1
E-10	1.0 E-10	6.0 E-11	4.1 E-11	3.3 E-11	
Sb-129	4.32 h	0.200	4.3 E-09	0.100	2.8
E-09	1.5 E-09	8.8 E-10	5.3 E-10	4.2 E-10	
Sb-130	0.667 h	0.200	9.1 E-10	0.100	5.4
E-10	2.8 E-10	1.7 E-10	1.2 E-10	9.1 E-11	
Sb-131	0.383 h	0.200	1.1 E-09	0.100	7.3
E-10	3.9 E-10	2.1 E-10	1.4 E-10	1.0 E-10	
<b>Telur</b>					
Te-116	2.49 h	0.600	1.4 E-09	0.300	1.0
E-09	5.5 E-10	3.4 E-10	2.1 E-10	1.7 E-10	
Te-121	17.0 d	0.600	3.1 E-09	0.300	2.0
E-09	1.2 E-09	8.0 E-10	5.4 E-10	4.3 E-10	

Te-121m	154 d	0.600	2.7 E-08	0.300	1.2
E-08	6.9 E-09	4.2 E-09	2.8 E-09	2.3 E-09	
Te-123	1.00 E+13a	0.600	2.0 E-08	0.300	9.3
E-09	6.9 E-09	5.4 E-09	4.7 E-09	4.4 E-09	
Te-123m	120 d	0.600	1.9 E-08	0.300	8.8
E-09	4.9 E-09	2.8 E-09	1.7 E-09	1.4 E-09	
Te-125m	58.0 d	0.600	1.3 E-08	0.300	6.3
E-09	3.3 E-09	1.9 E-09	1.1 E-09	8.7 E-10	
Te-127	9.35 h	0.600	1.5 E-09	0.300	1.2
E-09	6.2 E-10	3.6 E-10	2.1 E-10	1.7 E-10	
Te-127m	109 d	0.600	4.1 E-08	0.300	1.8
E-08	9.5 E-09	5.2 E-09	3.0 E-09	2.3 E-09	
Te-129	1.16 h	0.600	7.5 E-10	0.300	4.4
E-10	2.1 E-10	1.2 E-10	8.0 E-11	6.3 E-11	
Te-129m	33.6 d	0.600	4.4 E-08	0.300	2.4
E-08	1.2 E-08	6.6 E-09	3.9 E-09	3.0 E-09	
Te-131	0.417 h	0.600	9.0 E-10	0.300	6.6
E-10	3.5 E-10	1.9 E-10	1.2 E-10	8.7 E-11	
Te-131m	1.25 d	0.600	2.0 E-08	0.300	1.4
E-08	7.8 E-09	4.3 E-09	2.7 E-09	1.9 E-09	
Te-132	3.26 d	0.600	4.8 E-08	0.300	3.0
E-08	1.6 E-08	8.3 E-09	5.3 E-09	3.8 E-09	
Te-133	0.207 h	0.600	8.4 E-10	0.300	6.3
E-10	3.3 E-10	1.6 E-10	1.1 E-10	7.2 E-11	
Te-133m	0.923 h	0.600	3.1 E-09	0.300	2.4
E-09	1.3 E-09	6.3 E-10	4.1 E-10	2.8 E-10	
Te-134	0.696 h	0.600	1.1 E-09	0.300	7.5
E-10	3.9 E-10	2.2 E-10	1.4 E-10	1.1 E-10	
<b>Jod</b>					
I-120	1.35 h	1.000	3.9 E-09	1.000	2.8
E-09	1.4 E-09	7.2 E-10	4.8 E-10	3.4 E-10	
I-120m	0.883 h	1.000	2.3 E-09	1.000	1.5
E-09	7.8 E-10	4.2 E-10	2.9 E-10	2.1 E-10	
I-121	2.12 h	1.000	6.2 E-10	1.000	5.3
E-10	3.1 E-10	1.7 E-10	1.2 E-10	8.2 E-11	
I-123	13.2 h	1.000	2.2 E-09	1.000	1.9
E-09	1.1 E-09	4.9 E-10	3.3 E-10	2.1 E-10	
I-124	4.18 d	1.000	1.2 E-07	1.000	1.1
E-07	6.3 E-08	3.1 E-08	2.0 E-08	1.3 E-08	
I-125	60.1 d	1.000	5.2 E-08	1.000	5.7
E-08	4.1 E-08	3.1 E-08	2.2 E-08	1.5 E-08	
I-126	13.0 d	1.000	2.1 E-07	1.000	2.1
E-07	1.3 E-07	6.8 E-08	4.5 E-08	2.9 E-08	
I-128	0.416 h	1.000	5.7 E-10	1.000	3.3
E-10	1.6 E-10	8.9 E-11	6.0 E-11	4.6 E-11	
I-129	1.57 E+07a	1.000	1.8 E-07	1.000	2.2
E-07	1.7 E-07	1.9 E-07	1.4 E-07	1.1 E-07	
I-130	12.4 h	1.000	2.1 E-08	1.000	1.8
E-08	9.8 E-09	4.6 E-09	3.0 E-09	2.0 E-09	
I-131	8.04 d	1.000	1.8 E-07	1.000	1.8
E-07	1.0 E-07	5.2 E-08	3.4 E-08	2.2 E-08	
I-132	2.30 h	1.000	3.0 E-09	1.000	2.4
E-09	1.3 E-09	6.2 E-10	4.1 E-10	2.9 E-10	
I-132m	1.39 h	1.000	2.4 E-09	1.000	2.0
E-09	1.1 E-09	5.0 E-10	3.3 E-10	2.2 E-10	
I-133	20.8 h	1.000	4.9 E-08	1.000	4.4
E-08	2.3 E-08	1.0 E-08	6.8 E-09	4.3 E-09	
I-134	0.876 h	1.000	1.1 E-09	1.000	7.5
E-10	3.9 E-10	2.1 E-10	1.4 E-10	1.1 E-10	
I-135	6.61 h	1.000	1.0 E-08	1.000	8.9
E-09	4.7 E-09	2.2 E-09	1.4 E-09	9.3 E-10	

**Cezij**

Cs-125	0.750 h	1.000	3.9 E-10	1.000	2.2
E-10	1.1 E-10	6.5 E-11	4.4 E-11	3.5 E-11	
Cs-127	6.25 h	1.000	1.8 E-10	1.000	1.2
E-10	6.6 E-11	4.2 E-11	2.9 E-11	2.4 E-11	
Cs-129	1.34 d	1.000	4.4 E-10	1.000	3.0
E-10	1.7 E-10	1.1 E-10	7.2 E-11	6.0 E-11	
Cs-130	0.498 h	1.000	3.3 E-10	1.000	1.8
E-10	9.0 E-11	5.2 E-11	3.6 E-11	2.8 E-11	
Cs-131	9.69 d	1.000	4.6 E-10	1.000	2.9
E-10	1.6 E-10	1.0 E-10	6.9 E-11	5.8 E-11	
Cs-132	6.48 d	1.000	2.7 E-09	1.000	1.8
E-09	1.1 E-09	7.7 E-10	5.7 E-10	5.0 E-10	
Cs-134	2.06 a	1.000	2.6 E-08	1.000	1.6
E-08	1.3 E-08	1.4 E-08	1.9 E-08	1.9 E-08	
Cs-134m	2.90 h	1.000	2.1 E-10	1.000	1.2
E-10	5.9 E-11	3.5 E-11	2.5 E-11	2.0 E-11	
Cs-135	2.30 E+06a	1.000	4.1 E-09	1.000	2.3
E-09	1.7 E-09	1.7 E-09	2.0 E-09	2.0 E-09	
Cs-135m	0.883 h	1.000	1.3 E-10	1.000	8.6
E-11	4.9 E-11	3.2 E-11	2.3 E-11	1.9 E-11	
Cs-136	13.1 d	1.000	1.5 E-08	1.000	9.5
E-09	6.1 E-09	4.4 E-09	3.4 E-09	3.0 E-09	
Cs-137	30.0 a	1.000	2.1 E-08	1.000	1.2
E-08	9.6 E-09	1.0 E-08	1.3 E-08	1.3 E-08	
Cs-138	0.536 h	1.000	1.1 E-09	1.000	5.9
E-10	2.9 E-10	1.7 E-10	1.2 E-10	9.2 E-11	

**Barij**

Ba-126	1.61 h	0.600	2.7 E-09	0.200	1.7
E-09	8.5 E-10	5.0 E-10	3.1 E-10	2.6 E-10	
Ba-128	2.43 d	0.600	2.0 E-08	0.200	1.7
E-08	9.0 E-09	5.2 E-09	3.0 E-09	2.7 E-09	
Ba-131	11.8 d	0.600	4.2 E-09	0.200	2.6
E-09	1.4 E-09	9.4 E-10	6.2 E-10	4.5 E-10	
Ba-131m	0.243 h	0.600	5.8 E-11	0.200	3.2
E-11	1.6 E-11	9.3 E-12	6.3 E-12	4.9 E-12	
Ba-133	10.7 a	0.600	2.2 E-08	0.200	6.2
E-09	3.9 E-09	4.6 E-09	7.3 E-09	1.5 E-09	
Ba-133m	1.62 d	0.600	4.2 E-09	0.200	3.6
E-09	1.8 E-09	1.1 E-09	5.9 E-10	5.4 E-10	
Ba-135m	1.20 d	0.600	3.3 E-09	0.200	2.9
E-09	1.5 E-09	8.5 E-10	4.7 E-10	4.3 E-10	
Ba-139	1.38 h	0.600	1.4 E-09	0.200	8.4
E-10	4.1 E-10	2.4 E-10	1.5 E-10	1.2 E-10	
Ba-140	12.7 d	0.600	3.2 E-08	0.200	1.8
E-08	9.2 E-09	5.8 E-09	3.7 E-09	2.6 E-09	
Ba-141	0.305 h	0.600	7.6 E-10	0.200	4.7
E-10	2.3 E-10	1.3 E-10	8.6 E-11	7.0 E-11	
Ba-142	0.177 h	0.600	3.6 E-10	0.200	2.2
E-10	1.1 E-10	6.6 E-11	4.3 E-11	3.5 E-11	

**Lantan**

La-131	0.983 h	0.005	3.5 E-10	5.0 E-04	2.1
E-10	1.1 E-10	6.6 E-11	4.4 E-11	3.5 E-11	
La-132	4.80 h	0.005	3.8 E-09	5.0 E-04	2.4
E-09	1.3 E-09	7.8 E-10	4.8 E-10	3.9 E-10	
La-135	19.5 h	0.005	2.8 E-10	5.0 E-04	1.9
E-10	1.0 E-10	6.4 E-11	3.9 E-11	3.0 E-11	
La-137	6.00 E+04a	0.005	1.1 E-09	5.0 E-04	4.5
E-10	2.5 E-10	1.6 E-10	1.0 E-10	8.1 E-11	
La-138	1.35 E+11a	0.005	1.3 E-08	5.0 E-04	4.6
E-09	2.7 E-09	1.9 E-09	1.3 E-09	1.1 E-09	

La-140	1.68 d	0.005	2.0 E-08	5.0 E-04	1.3
E-08	6.8 E-09	4.2 E-09	2.5 E-09	2.0 E-09	
La-141	3.93 h	0.005	4.3 E-09	5.0 E-04	2.6
E-09	1.3 E-09	7.6 E-10	4.5 E-10	3.6 E-10	
La-142	1.54 h	0.005	1.9 E-09	5.0 E-04	1.1
E-09	5.8 E-10	3.5 E-10	2.3 E-10	1.8 E-10	
La-143	0.237 h	0.005	6.9 E-10	5.0 E-04	3.9
E-10	1.9 E-10	1.1 E-10	7.1 E-11	5.6 E-11	
<b>Cerij</b>					
Ce-134	3.00 d	0.005	2.8 E-08	5.0 E-04	1.8
E-08	9.1 E-09	5.5 E-09	3.2 E-09	2.5 E-09	
Ce-135	17.6 h	0.005	7.0 E-09	5.0 E-04	4.7
E-09	2.6 E-09	1.6 E-09	1.0 E-09	7.9 E-10	
Ce-137	9.00 h	0.005	2.6 E-10	5.0 E-04	1.7
E-10	8.8 E-11	5.4 E-11	3.2 E-11	2.5 E-11	
Ce-137m	1.43 d	0.005	6.1 E-09	5.0 E-04	3.9
E-09	2.0 E-09	1.2 E-09	6.8 E-10	5.4 E-10	
Ce-139	138 d	0.005	2.6 E-09	5.0 E-04	1.6
E-09	8.6 E-10	5.4 E-10	3.3 E-10	2.6 E-10	
Ce-141	32.5 d	0.005	8.1 E-09	5.0 E-04	5.1
E-09	2.6 E-09	1.5 E-09	8.8 E-10	7.1 E-10	
Ce-143	1.38 d	0.005	1.2 E-08	5.0 E-04	8.0
E-09	4.1 E-09	2.4 E-09	1.4 E-09	1.1 E-09	
Ce-144	284 d	0.005	6.6 E-08	5.0 E-04	3.9
E-08	1.9 E-08	1.1 E-08	6.5 E-09	5.2 E-09	
<b>Praezodij</b>					
Pr-136	0.218 h	0.005	3.7 E-10	5.0 E-04	2.1
E-10	1.0 E-10	6.1 E-11	4.2 E-11	3.3 E-11	
Pr-137	1.28 h	0.005	4.1 E-10	5.0 E-04	2.5
E-10	1.3 E-10	7.7 E-11	5.0 E-11	4.0 E-11	
Pr-138m	2.10 h	0.005	1.0 E-09	5.0 E-04	7.4
E-10	4.1 E-10	2.6 E-10	1.6 E-10	1.3 E-10	
Pr-139	4.51 h	0.005	3.2 E-10	5.0 E-04	2.0
E-10	1.1 E-10	6.5 E-11	4.0 E-11	3.1 E-11	
Pr-142	19.1 h	0.005	1.5 E-08	5.0 E-04	9.8
E-09	4.9 E-09	2.9 E-09	1.6 E-09	1.3 E-09	
Pr-142m	0.243 h	0.005	2.0 E-10	5.0 E-04	1.2
E-10	6.2 E-11	3.7 E-11	2.1 E-11	1.7 E-11	
Pr-143	13.6 d	0.005	1.4 E-08	5.0 E-04	8.7
E-09	4.3 E-09	2.6 E-09	1.5 E-09	1.2 E-09	
Pr-144	0.288 h	0.005	6.4 E-10	5.0 E-04	3.5
E-10	1.7 E-10	9.5 E-11	6.5 E-11	5.0 E-11	
Pr-145	5.98 h	0.005	4.7 E-09	5.0 E-04	2.9
E-09	1.4 E-09	8.5 E-10	4.9 E-10	3.9 E-10	
Pr-147	0.227 h	0.005	3.9 E-10	5.0 E-04	2.2
E-10	1.1 E-10	6.1 E-11	4.2 E-11	3.3 E-11	
<b>Neodij</b>					
Nd-136	0.844 h	0.005	1.0 E-09	5.0 E-04	6.1
E-10	3.1 E-10	1.9 E-10	1.2 E-10	9.9 E-11	
Nd-138	5.04 h	0.005	7.2 E-09	5.0 E-04	4.5
E-09	2.3 E-09	1.3 E-09	8.0 E-10	6.4 E-10	
Nd-139	0.495 h	0.005	2.1 E-10	5.0 E-04	1.2
E-10	6.3 E-11	3.7 E-11	2.5 E-11	2.0 E-11	
Nd-139m	5.50 h	0.005	2.1 E-09	5.0 E-04	1.4
E-09	7.8 E-10	5.0 E-10	3.1 E-10	2.5 E-10	
Nd-141	2.49 h	0.005	7.8 E-11	5.0 E-04	5.0
E-11	2.7 E-11	1.6 E-11	1.0 E-11	8.3 E-12	
Nd-147	11.0 d	0.005	1.2 E-08	5.0 E-04	7.8
E-09	3.9 E-09	2.3 E-09	1.3 E-09	1.1 E-09	
Nd-149	1.73 h	0.005	1.4 E-09	5.0 E-04	8.7
E-10	4.3 E-10	2.6 E-10	1.6 E-10	1.2 E-10	

Nd-151	0.207 h	0.005	3.4 E-10	5.0 E-04	2.0
E-10	9.7 E-11	5.7 E-11	3.8 E-11	3.0 E-11	
<b>Promecij</b>					
Pm-141	0.348 h	0.005	4.2 E-10	5.0 E-04	2.4
E-10	1.2 E-10	6.8 E-11	4.6 E-11	3.6 E-11	
Pm-143	265 d	0.005	1.9 E-09	5.0 E-04	1.2
E-09	6.7 E-10	4.4 E-10	2.9 E-10	2.3 E-10	
Pm-144	363 d	0.005	7.6 E-09	5.0 E-04	4.7
E-09	2.7 E-09	1.8 E-09	1.2 E-09	9.7 E-10	
Pm-145	17.7 a	0.005	1.5 E-09	5.0 E-04	6.8
E-10	3.7 E-10	2.3 E-10	1.4 E-10	1.1 E-10	
Pm-146	5.53 a	0.005	1.0 E-08	5.0 E-04	5.1
E-09	2.8 E-09	1.8 E-09	1.1 E-09	9.0 E-10	
Pm-147	2.62 a	0.005	3.6 E-09	5.0 E-04	1.9
E-09	9.6 E-10	5.7 E-10	3.2 E-10	2.6 E-10	
Pm-148	5.37 d	0.005	3.0 E-08	5.0 E-04	1.9
E-08	9.7 E-09	5.8 E-09	3.3 E-09	2.7 E-09	
Pm-148m	41.3 d	0.005	1.5 E-08	5.0 E-04	1.0
E-08	5.5 E-09	3.5 E-09	2.2 E-09	1.7 E-09	
Pm-149	2.21 d	0.005	1.2 E-08	5.0 E-04	7.4
E-09	3.7 E-09	2.2 E-09	1.2 E-09	9.9 E-10	
Pm-150	2.68 h	0.005	2.8 E-09	5.0 E-04	1.7
E-09	8.7 E-10	5.2 E-10	3.2 E-10	2.6 E-10	
Pm-151	1.18 d	0.005	8.0 E-09	5.0 E-04	5.1
E-09	2.6 E-09	1.6 E-09	9.1 E-10	7.3 E-10	
<b>Samarij</b>					
Sm-141	0.170 h	0.005	4.5 E-10	5.0 E-04	2.5
E-10	1.3 E-10	7.3 E-11	5.0 E-11	3.9 E-11	
Sm-141m	0.377 h	0.005	7.0 E-10	5.0 E-04	4.0
E-10	2.0 E-10	1.2 E-10	8.2 E-11	6.5 E-11	
Sm-142	1.21 h	0.005	2.2 E-09	5.0 E-04	1.3
E-09	6.2 E-10	3.6 E-10	2.4 E-10	1.9 E-10	
Sm-145	340 d	0.005	2.4 E-09	5.0 E-04	1.4
E-09	7.3 E-10	4.5 E-10	2.7 E-10	2.1 E-10	
Sm-146	1.03 E+08a	0.005	1.5 E-06	5.0 E-04	1.5
E-07	1.0 E-07	7.0 E-08	5.8 E-08	5.4 E-08	
Sm-147	1.06 E+11a	0.005	1.4 E-06	5.0 E-04	1.4
E-07	9.2 E-08	6.4 E-08	5.2 E-08	4.9 E-08	
Sm-151	90.0 a	0.005	1.5 E-09	5.0 E-04	6.4
E-10	3.3 E-10	2.0 E-10	1.2 E-10	9.8 E-11	
Sm-153	1.95 d	0.005	8.4 E-09	5.0 E-04	5.4
E-09	2.7 E-09	1.6 E-09	9.2 E-10	7.4 E-10	
Sm-155	0.368 h	0.005	3.6 E-10	5.0 E-04	2.0
E-10	9.7 E-11	5.5 E-11	3.7 E-11	2.9 E-11	
Sm-156	9.40 h	0.005	2.8 E-09	5.0 E-04	1.8
E-09	9.0 E-10	5.4 E-10	3.1 E-10	2.5 E-10	
<b>Europij</b>					
Eu-145	5.94 d	0.005	5.1 E-09	5.0 E-04	3.7
E-09	2.1 E-09	1.4 E-09	9.4 E-10	7.5 E-10	
Eu-146	4.61 d	0.005	8.5 E-09	5.0 E-04	6.2
E-09	3.6 E-09	2.4 E-09	1.6 E-09	1.3 E-09	
Eu-147	24.0 d	0.005	3.7 E-09	5.0 E-04	2.5
E-09	1.4 E-09	8.9 E-10	5.6 E-10	4.4 E-10	
Eu-148	54.5 d	0.005	8.5 E-09	5.0 E-04	6.0
E-09	3.5 E-09	2.4 E-09	1.6 E-09	1.3 E-09	
Eu-149	93.1 d	0.005	9.7 E-10	5.0 E-04	6.3
E-10	3.4 E-10	2.1 E-10	1.3 E-10	1.0 E-10	
Eu-150	34.2 a	0.005	1.3 E-08	5.0 E-04	5.7
E-09	3.4 E-09	2.3 E-09	1.5 E-09	1.3 E-09	
Eu-150	12.6 h	0.005	4.4 E-09	5.0 E-04	2.8
E-09	1.4 E-09	8.2 E-10	4.7 E-10	3.8 E-10	

Eu-152	13.3 a	0.005	1.6 E-08	5.0 E-04	7.4
E-09	4.1 E-09	2.6 E-09	1.7 E-09	1.4 E-09	
Eu-152m	9.32 h	0.005	5.7 E-09	5.0 E-04	3.6
E-09	1.8 E-09	1.1 E-09	6.2 E-10	5.0 E-10	
Eu-154	8.80 a	0.005	2.5 E-08	5.0 E-04	1.2
E-08	6.5 E-09	4.1 E-09	2.5 E-09	2.0 E-09	
Eu-155	4.96 a	0.005	4.3 E-09	5.0 E-04	2.2
E-09	1.1 E-09	6.8 E-10	4.0 E-10	3.2 E-10	
Eu-156	15.2 d	0.005	2.2 E-08	5.0 E-04	1.5
E-08	7.5 E-09	4.6 E-09	2.7 E-09	2.2 E-09	
Eu-157	15.1 h	0.005	6.7 E-09	5.0 E-04	4.3
E-09	2.2 E-09	1.3 E-09	7.5 E-10	6.0 E-10	
Eu-158	0.765 h	0.005	1.1 E-09	5.0 E-04	6.2
E-10	3.1 E-10	1.8 E-10	1.2 E-10	9.4 E-11	
<b>Gadolinij</b>					
Gd-145	0.382 h	0.005	4.5 E-10	5.0 E-04	2.6
E-10	1.3 E-10	8.1 E-11	5.6 E-11	4.4 E-11	
Gd-146	48.3 d	0.005	9.4 E-09	5.0 E-04	6.0
E-09	3.2 E-09	2.0 E-09	1.2 E-09	9.6 E-10	
Gd-147	1.59 d	0.005	4.5 E-09	5.0 E-04	3.2
E-09	1.8 E-09	1.2 E-09	7.7 E-10	6.1 E-10	
Gd-148	93.0 a	0.005	1.7 E-06	5.0 E-04	1.6
E-07	1.1 E-07	7.3 E-08	5.9 E-08	5.6 E-08	
Gd-149	9.40 d	0.005	4.0 E-09	5.0 E-04	2.7
E-09	1.5 E-09	9.3 E-10	5.7 E-10	4.5 E-10	
Gd-151	120 d	0.005	2.1 E-09	5.0 E-04	1.3
E-09	6.8 E-10	4.2 E-10	2.4 E-10	2.0 E-10	
Gd-152	1.08 E+14a	0.005	1.2 E-06	5.0 E-04	1.2
E-07	7.7 E-08	5.3 E-08	4.3 E-08	4.1 E-08	
Gd-153	242 d	0.005	2.9 E-09	5.0 E-04	1.8
E-09	9.4 E-10	5.8 E-10	3.4 E-10	2.7 E-10	
Gd-159	18.6 h	0.005	5.7 E-09	5.0 E-04	3.6
E-09	1.8 E-09	1.1 E-09	6.2 E-10	4.9 E-10	
<b>Terbij</b>					
Tb-147	1.65 h	0.005	1.5 E-09	5.0 E-04	1.0
E-09	5.4 E-10	3.3 E-10	2.0 E-10	1.6 E-10	
Tb-149	4.15 h	0.005	2.4 E-09	5.0 E-04	1.5
E-09	8.0 E-10	5.0 E-10	3.1 E-10	2.5 E-10	
Tb-150	3.27 h	0.005	2.5 E-09	5.0 E-04	1.6
E-09	8.3 E-10	5.1 E-10	3.2 E-10	2.5 E-10	
Tb-151	17.6 h	0.005	2.7 E-09	5.0 E-04	1.9
E-09	1.0 E-09	6.7 E-10	4.2 E-10	3.4 E-10	
Tb-153	2.34 d	0.005	2.3 E-09	5.0 E-04	1.5
E-09	8.2 E-10	5.1 E-10	3.1 E-10	2.5 E-10	
Tb-154	21.4 h	0.005	4.7 E-09	5.0 E-04	3.4
E-09	1.9 E-09	1.3 E-09	8.1 E-10	6.5 E-10	
Tb-155	5.32 d	0.005	1.9 E-09	5.0 E-04	1.3
E-09	6.8 E-10	4.3 E-10	2.6 E-10	2.1 E-10	
Tb-156	5.34 d	0.005	9.0 E-09	5.0 E-04	6.3
E-09	3.5 E-09	2.3 E-09	1.5 E-09	1.2 E-09	
Tb-156m	1.02 d	0.005	1.5 E-09	5.0 E-04	1.0
E-09	5.6 E-10	3.5 E-10	2.2 E-10	1.7 E-10	
Tb-156m	5.00 h	0.005	8.0 E-10	5.0 E-04	5.2
E-10	2.7 E-10	1.7 E-10	1.0 E-10	8.1 E-11	
Tb-157	1.50 E+02a	0.005	4.9 E-10	5.0 E-04	2.2
E-10	1.1 E-10	6.8 E-11	4.1 E-11	3.4 E-11	
Tb-158	1.50 E+02a	0.005	1.3 E-08	5.0 E-04	5.9
E-09	3.3 E-09	2.1 E-09	1.4 E-09	1.1 E-09	
Tb-160	72.3 d	0.005	1.6 E-08	5.0 E-04	1.0
E-08	5.4 E-09	3.3 E-09	2.0 E-09	1.6 E-09	

Tb-161	6.91 d	0.005	8.3 E-09	5.0 E-04	5.3
E-09	2.7 E-09	1.6 E-09	9.0 E-10	7.2 E-10	
<b>Disprozij</b>					
Dy-155	10.0 h	0.005	9.7 E-10	5.0 E-04	6.8
E-10	3.8 E-10	2.5 E-10	1.6 E-10	1.3 E-10	
Dy-157	8.10 h	0.005	4.4 E-10	5.0 E-04	3.1
E-10	1.8 E-10	1.2 E-10	7.7 E-11	6.1 E-11	
Dy-159	144 d	0.005	1.0 E-09	5.0 E-04	6.4
E-10	3.4 E-10	2.1 E-10	1.3 E-10	1.0 E-10	
Dy-165	2.33 h	0.005	1.3 E-09	5.0 E-04	7.9
E-10	3.9 E-10	2.3 E-10	1.4 E-10	1.1 E-10	
Dy-166	3.40 d	0.005	1.9 E-08	5.0 E-04	1.2
E-08	6.0 E-09	3.6 E-09	2.0 E-09	1.6 E-09	
<b>Holmij</b>					
Ho-155	0.800 h	0.005	3.8 E-10	5.0 E-04	2.3
E-10	1.2 E-10	7.1 E-11	4.7 E-11	3.7 E-11	
Ho-157	0.210 h	0.005	5.8 E-11	5.0 E-04	3.6
E-11	1.9 E-11	1.2 E-11	8.1 E-12	6.5 E-12	
Ho-159	0.550 h	0.005	7.1 E-11	5.0 E-04	4.3
E-11	2.3 E-11	1.4 E-11	9.9 E-12	7.9 E-12	
Ho-161	2.50 h	0.005	1.4 E-10	5.0 E-04	8.1
E-11	4.2 E-11	2.5 E-11	1.6 E-11	1.3 E-11	
Ho-162	0.250 h	0.005	3.5 E-11	5.0 E-04	2.0
E-11	1.0 E-11	6.0 E-12	4.2 E-12	3.3 E-12	
Ho-162m	1.13 h	0.005	2.4 E-10	5.0 E-04	1.5
E-10	7.9 E-11	4.9 E-11	3.3 E-11	2.6 E-11	
Ho-164	0.483 h	0.005	1.2 E-10	5.0 E-04	6.5
E-11	3.2 E-11	1.8 E-11	1.2 E-11	9.5 E-12	
Ho-164m	0.625 h	0.005	2.0 E-10	5.0 E-04	1.1
E-10	5.5 E-11	3.2 E-11	2.1 E-11	1.6 E-11	
Ho-166	1.12 d	0.005	1.6 E-08	5.0 E-04	1.0
E-08	5.2 E-09	3.1 E-09	1.7 E-09	1.4 E-09	
Ho-166m	1.20 E+03a	0.005	2.6 E-08	5.0 E-04	9.3
E-09	5.3 E-09	3.5 E-09	2.4 E-09	2.0 E-09	
Ho-167	3.10 h	0.005	8.8 E-10	5.0 E-04	5.5
E-10	2.8 E-10	1.7 E-10	1.0 E-10	8.3 E-11	
<b>Erbij</b>					
Er-161	3.24 h	0.005	6.5 E-10	5.0 E-04	4.4
E-10	2.4 E-10	1.6 E-10	1.0 E-10	8.0 E-11	
Er-165	10.4 h	0.005	1.7 E-10	5.0 E-04	1.1
E-10	6.2 E-11	3.9 E-11	2.4 E-11	1.9 E-11	
Er-169	9.30 d	0.005	4.4 E-09	5.0 E-04	2.8
E-09	1.4 E-09	8.2 E-10	4.7 E-10	3.7 E-10	
Er-171	7.52 h	0.005	4.0 E-09	5.0 E-04	2.5
E-09	1.3 E-09	7.6 E-10	4.5 E-10	3.6 E-10	
Er-172	2.05 d	0.005	1.0 E-08	5.0 E-04	6.8
E-09	3.5 E-09	2.1 E-09	1.3 E-09	1.0 E-09	
<b>Tulij</b>					
Tm-162	0.362 h	0.005	2.9 E-10	5.0 E-04	1.7
E-10	8.7 E-11	5.2 E-11	3.6 E-11	2.9 E-11	
Tm-166	7.70 h	0.005	2.1 E-09	5.0 E-04	1.5
E-09	8.3 E-10	5.5 E-10	3.5 E-10	2.8 E-10	
Tm-167	9.24 d	0.005	6.0 E-09	5.0 E-04	3.9
E-09	2.0 E-09	1.2 E-09	7.0 E-10	5.6 E-10	
Tm-170	129 d	0.005	1.6 E-08	5.0 E-04	9.8
E-09	4.9 E-09	2.9 E-09	1.6 E-09	1.3 E-09	
Tm-171	1.92 a	0.005	1.5 E-09	5.0 E-04	7.8
E-10	3.9 E-10	2.3 E-10	1.3 E-10	1.1 E-10	
Tm-172	2.65 d	0.005	1.9 E-08	5.0 E-04	1.2
E-08	6.1 E-09	3.7 E-09	2.1 E-09	1.7 E-09	

Tm-173	8.24 h	0.005	3.3 E-09	5.0 E-04	2.1
E-09	1.1 E-09	6.5 E-10	3.8 E-10	3.1 E-10	
Tm-175	0.253 h	0.005	3.1 E-10	5.0 E-04	1.7
E-10	8.6 E-11	5.0 E-11	3.4 E-11	2.7 E-11	
<b>Terbij</b>					
Yb-162	0.315 h	0.005	2.2 E-10	5.0 E-04	1.3
E-10	6.9 E-11	4.2 E-11	2.9 E-11	2.3 E-11	
Yb-166	2.36 d	0.005	7.7 E-09	5.0 E-04	5.4
E-09	2.9 E-09	1.9 E-09	1.2 E-09	9.5 E-10	
Yb-167	0.292 h	0.005	7.0 E-11	5.0 E-04	4.1
E-11	2.1 E-11	1.2 E-11	8.4 E-12	6.7 E-12	
Yb-169	32.0 d	0.005	7.1 E-09	5.0 E-04	4.6
E-09	2.4 E-09	1.5 E-09	8.8 E-10	7.1 E-10	
Yb-175	4.19 d	0.005	5.0 E-09	5.0 E-04	3.2
E-09	1.6 E-09	9.5 E-10	5.4 E-10	4.4 E-10	
Yb-177	1.90 h	0.005	1.0 E-09	5.0 E-04	6.8
E-10	3.4 E-10	2.0 E-10	1.1 E-10	8.8 E-11	
Yb-178	1.23 h	0.005	1.4 E-09	5.0 E-04	8.4
E-10	4.2 E-10	2.4 E-10	1.5 E-10	1.2 E-10	
<b>Lutecij</b>					
Lu-169	1.42 d	0.005	3.5 E-09	5.0 E-04	2.4
E-09	1.4 E-09	8.9 E-10	5.7 E-10	4.6 E-10	
Lu-170	2.00 d	0.005	7.4 E-09	5.0 E-04	5.2
E-09	2.9 E-09	1.9 E-09	1.2 E-09	9.9 E-10	
Lu-171	8.22 d	0.005	5.9 E-09	5.0 E-04	4.0
E-09	2.2 E-09	1.4 E-09	8.5 E-10	6.7 E-10	
Lu-172	6.70 d	0.005	1.0 E-08	5.0 E-04	7.0
E-09	3.9 E-09	2.5 E-09	1.6 E-09	1.3 E-09	
Lu-173	1.37 a	0.005	2.7 E-09	5.0 E-04	1.6
E-09	8.6 E-10	5.3 E-10	3.2 E-10	2.6 E-10	
Lu-174	3.31 a	0.005	3.2 E-09	5.0 E-04	1.7
E-09	9.1 E-10	5.6 E-10	3.3 E-10	2.7 E-10	
Lu-174m	142 d	0.005	6.2 E-09	5.0 E-04	3.8
E-09	1.9 E-09	1.1 E-09	6.6 E-10	5.3 E-10	
Lu-176	3.60 E+10a	0.005	2.4 E-08	5.0 E-04	1.1
E-08	5.7 E-09	3.5 E-09	2.2 E-09	1.8 E-09	
Lu-176m	3.68 h	0.005	2.0 E-09	5.0 E-04	1.2
E-09	6.0 E-10	3.5 E-10	2.1 E-10	1.7 E-10	
Lu-177	6.71 d	0.005	6.1 E-09	5.0 E-04	3.9
E-09	2.0 E-09	1.2 E-09	6.6 E-10	5.3 E-10	
Lu-177m	161 d	0.005	1.7 E-08	5.0 E-04	1.1
E-08	5.8 E-09	3.6 E-09	2.1 E-09	1.7 E-09	
Lu-178	0.473 h	0.005	5.9 E-10	5.0 E-04	3.3
E-10	1.6 E-10	9.0 E-11	6.1 E-11	4.7 E-11	
Lu-178m	0.378 h	0.005	4.3 E-10	5.0 E-04	2.4
E-10	1.2 E-10	7.1 E-11	4.9 E-11	3.8 E-11	
Lu-179	4.59 h	0.005	2.4 E-09	5.0 E-04	1.5
E-09	7.5 E-10	4.4 E-10	2.6 E-10	2.1 E-10	
<b>Hafnij</b>					
Hf-170	16.0 h	0.020	3.9 E-09	0.002	2.7
E-09	1.5 E-09	9.5 E-10	6.0 E-10	4.8 E-10	
Hf-172	1.87 a	0.020	1.9 E-08	0.002	6.1
E-09	3.3 E-09	2.0 E-09	1.3 E-09	1.0 E-09	
Hf-173	24.0 h	0.020	1.9 E-09	0.002	1.3
E-09	7.2 E-10	4.6 E-10	2.8 E-10	2.3 E-10	
Hf-175	70.0 d	0.020	3.8 E-09	0.002	2.4
E-09	1.3 E-09	8.4 E-10	5.2 E-10	4.1 E-10	
Hf-177m	0.856 h	0.020	7.8 E-10	0.002	4.7
E-10	2.5 E-10	1.5 E-10	1.0 E-10	8.1 E-11	
Hf-178m	31.0 a	0.020	7.0 E-08	0.002	1.9
E-08	1.1 E-08	7.8 E-09	5.5 E-09	4.7 E-09	

Hf-179m	25.1 d	0.020	1.2 E-08	0.002	7.8
E-09	4.1 E-09	2.6 E-09	1.6 E-09	1.2 E-09	
Hf-180m	5.50 h	0.020	1.4 E-09	0.002	9.7
E-10	5.3 E-10	3.3 E-10	2.1 E-10	1.7 E-10	
Hf-181	42.4 d	0.020	1.2 E-08	0.002	7.4
E-09	3.8 E-09	2.3 E-09	1.4 E-09	1.1 E-09	
Hf-182	9.00 E+06a	0.020	5.6 E-08	0.002	7.9
E-09	5.4 E-09	4.0 E-09	3.3 E-09	3.0 E-09	
Hf-182m	1.02 h	0.020	4.1 E-10	0.002	2.5
E-10	1.3 E-10	7.8 E-11	5.2 E-11	4.2 E-11	
Hf-183	1.07 h	0.020	8.1 E-10	0.002	4.8
E-10	2.4 E-10	1.4 E-10	9.3 E-11	7.3 E-11	
Hf-184	4.12 h	0.020	5.5 E-09	0.002	3.6
E-09	1.8 E-09	1.1 E-09	6.6 E-10	5.2 E-10	
<b>Tantal</b>					
Ta-172	0.613 h	0.010	5.5 E-10	0.001	3.2
E-10	1.6 E-10	9.8 E-11	6.6 E-11	5.3 E-11	
Ta-173	3.65 h	0.010	2.0 E-09	0.001	1.3
E-09	6.5 E-10	3.9 E-10	2.4 E-10	1.9 E-10	
Ta-174	1.20 h	0.010	6.2 E-10	0.001	3.7
E-10	1.9 E-10	1.1 E-10	7.2 E-11	5.7 E-11	
Ta-175	10.5 h	0.010	1.6 E-09	0.001	1.1
E-09	6.2 E-10	4.0 E-10	2.6 E-10	2.1 E-10	
Ta-176	8.08 h	0.010	2.4 E-09	0.001	1.7
E-09	9.2 E-10	6.1 E-10	3.9 E-10	3.1 E-10	
Ta-177	2.36 d	0.010	1.0 E-09	0.001	6.9
E-10	3.6 E-10	2.2 E-10	1.3 E-10	1.1 E-10	
Ta-178	2.20 h	0.010	6.3 E-10	0.001	4.5
E-10	2.4 E-10	1.5 E-10	9.1 E-11	7.2 E-11	
Ta-179	1.82 a	0.010	6.2 E-10	0.001	4.1
E-10	2.2 E-10	1.3 E-10	8.1 E-11	6.5 E-11	
Ta-180	1.00 E+13a	0.010	8.1 E-09	0.001	5.3
E-09	2.8 E-09	1.7 E-09	1.1 E-09	8.4 E-10	
Ta-180m	8.10 h	0.010	5.8 E-10	0.001	3.7
E-10	1.9 E-10	1.1 E-10	6.7 E-11	5.4 E-11	
Ta-182	115 d	0.010	1.4 E-08	0.001	9.4
E-09	5.0 E-09	3.1 E-09	1.9 E-09	1.5 E-09	
Ta-182m	0.264 h	0.010	1.4 E-10	0.001	7.5
E-11	3.7 E-11	2.1 E-11	1.5 E-11	1.2 E-11	
Ta-183	5.10 d	0.010	1.4 E-08	0.001	9.3
E-09	4.7 E-09	2.8 E-09	1.6 E-09	1.3 E-09	
Ta-184	8.70 h	0.010	6.7 E-09	0.001	4.4
E-09	2.3 E-09	1.4 E-09	8.5 E-10	6.8 E-10	
Ta-185	0.816 h	0.010	8.3 E-10	0.001	4.6
E-10	2.3 E-10	1.3 E-10	8.6 E-11	6.8 E-11	
Ta-186	0.175 h	0.010	3.8 E-10	0.001	2.1
E-10	1.1 E-10	6.1 E-11	4.2 E-11	3.3 E-11	
<b>Volfram</b>					
W-176	2.30 h	0.600	6.8 E-10	0.300	5.5
E-10	3.0 E-10	2.0 E-10	1.3 E-10	1.0 E-10	
W-177	2.25 h	0.600	4.4 E-10	0.300	3.2
E-10	1.7 E-10	1.1 E-10	7.2 E-11	5.8 E-11	
W-178	21.7 d	0.600	1.8 E-09	0.300	1.4
E-09	7.3 E-10	4.5 E-10	2.7 E-10	2.2 E-10	
W-179	0.625 h	0.600	3.4 E-11	0.300	2.0
E-11	1.0 E-11	6.2 E-12	4.2 E-12	3.3 E-12	
W-181	121 d	0.600	6.3 E-10	0.300	4.7
E-10	2.5 E-10	1.6 E-10	9.5 E-11	7.6 E-11	
W-185	75.1 d	0.600	4.4 E-09	0.300	3.3
E-09	1.6 E-09	9.7 E-10	5.5 E-10	4.4 E-10	

W-187	23.9 h	0.600	5.5 E-09	0.300	4.3
E-09	2.2 E-09	1.3 E-09	7.8 E-10	6.3 E-10	
W-188	69.4 d	0.600	2.1 E-08	0.300	1.5
E-08	7.7 E-09	4.6 E-09	2.6 E-09	2.1 E-09	
<b>Renij</b>					
Re-177	0.233 h	1.000	2.5 E-10	0.800	1.4
E-10	7.2 E-11	4.1 E-11	2.8 E-11	2.2 E-11	
Re-178	0.220 h	1.000	2.9 E-10	0.800	1.6
E-10	7.9 E-11	4.6 E-11	3.1 E-11	2.5 E-11	
Re-181	20.0 h	1.000	4.2 E-09	0.800	2.8
E-09	1.4 E-09	8.2 E-10	5.4 E-10	4.2 E-10	
Re-182	2.67 d	1.000	1.4 E-08	0.800	8.9
E-09	4.7 E-09	2.8 E-09	1.8 E-09	1.4 E-09	
Re-182	12.7 h	1.000	2.4 E-09	0.800	1.7
E-09	8.9 E-10	5.2 E-10	3.5 E-10	2.7 E-10	
Re-184	38.0 d	1.000	8.9 E-09	0.800	5.6
E-09	3.0 E-09	1.8 E-09	1.3 E-09	1.0 E-09	
Re-184m	165 d	1.000	1.7 E-08	0.800	9.8
E-09	4.9 E-09	2.8 E-09	1.9 E-09	1.5 E-09	
Re-186	3.78 d	1.000	1.9 E-08	0.800	1.1
E-08	5.5 E-09	3.0 E-09	1.9 E-09	1.5 E-09	
Re-186m	2.00 E+05a	1.000	3.0 E-08	0.800	1.6
E-08	7.6 E-09	4.4 E-09	2.8 E-09	2.2 E-09	
Re-187	5.00 E+10a	1.000	6.8 E-11	0.800	3.8
E-11	1.8 E-11	1.0 E-11	6.6 E-12	5.1 E-12	
Re-188	17.0 h	1.000	1.7 E-08	0.800	1.1
E-08	5.4 E-09	2.9 E-09	1.8 E-09	1.4 E-09	
Re-188m	0.310 h	1.000	3.8 E-10	0.800	2.3
E-10	1.1 E-10	6.1 E-11	4.0 E-11	3.0 E-11	
Re-189	1.01 d	1.000	9.8 E-09	0.800	6.2
E-09	3.0 E-09	1.6 E-09	1.0 E-09	7.8 E-10	
<b>Osmij</b>					
Os-180	0.366 h	0.020	1.6 E-10	0.010	9.8
E-11	5.1 E-11	3.2 E-11	2.2 E-11	1.7 E-11	
Os-181	1.75 h	0.020	7.6 E-10	0.010	5.0
E-10	2.7 E-10	1.7 E-10	1.1 E-10	8.9 E-11	
Os-182	22.0 h	0.020	4.6 E-09	0.010	3.2
E-09	1.7 E-09	1.1 E-09	7.0 E-10	5.6 E-10	
Os-185	94.0 d	0.020	3.8 E-09	0.010	2.6
E-09	1.5 E-09	9.8 E-10	6.5 E-10	5.1 E-10	
Os-189m	6.00 h	0.020	2.1 E-10	0.010	1.3
E-10	6.5 E-11	3.8 E-11	2.2 E-11	1.8 E-11	
Os-191	15.4 d	0.020	6.3 E-09	0.010	4.1
E-09	2.1 E-09	1.2 E-09	7.0 E-10	5.7 E-10	
Os-191m	13.0 h	0.020	1.1 E-09	0.010	7.1
E-10	3.5 E-10	2.1 E-10	1.2 E-10	9.6 E-11	
Os-193	1.25 d	0.020	9.3 E-09	0.010	6.0
E-09	3.0 E-09	1.8 E-09	1.0 E-09	8.1 E-10	
Os-194	6.00 a	0.020	2.9 E-08	0.010	1.7
E-08	8.8 E-09	5.2 E-09	3.0 E-09	2.4 E-09	
<b>Iridij</b>					
Ir-182	0.250 h	0.020	5.3 E-10	0.010	3.0
E-10	1.5 E-10	8.9 E-11	6.0 E-11	4.8 E-11	
Ir-184	3.02 h	0.020	1.5 E-09	0.010	9.7
E-10	5.2 E-10	3.3 E-10	2.1 E-10	1.7 E-10	
Ir-185	14.0 h	0.020	2.4 E-09	0.010	1.6
E-09	8.6 E-10	5.3 E-10	3.3 E-10	2.6 E-10	
Ir-186	15.8 h	0.020	3.8 E-09	0.010	2.7
E-09	1.5 E-09	9.6 E-10	6.1 E-10	4.9 E-10	
Ir-186	1.75 h	0.020	5.8 E-10	0.010	3.6
E-10	2.1 E-10	1.3 E-10	7.7 E-11	6.1 E-11	

Ir-187	10.5 h	0.020	1.1 E-09	0.010	7.3
E-10	3.9 E-10	2.5 E-10	1.5 E-10	1.2 E-10	
Ir-188	1.73 d	0.020	4.6 E-09	0.010	3.3
E-09	1.8 E-09	1.2 E-09	7.9 E-10	6.3 E-10	
Ir-189	13.3 d	0.020	2.5 E-09	0.010	1.7
E-09	8.6 E-10	5.2 E-10	3.0 E-10	2.4 E-10	
Ir-190	12.1 d	0.020	1.0 E-08	0.010	7.1
E-09	3.9 E-09	2.5 E-09	1.6 E-09	1.2 E-09	
Ir-190m	3.10 h	0.020	9.4 E-10	0.010	6.4
E-10	3.5 E-10	2.3 E-10	1.5 E-10	1.2 E-10	
Ir-190m	1.20 h	0.020	7.9 E-11	0.010	5.0
E-11	2.6 E-11	1.6 E-11	1.0 E-11	8.0 E-12	
Ir-192	74.0 d	0.020	1.3 E-08	0.010	8.7
E-09	4.6 E-09	2.8 E-09	1.7 E-09	1.4 E-09	
Ir-192m	2.41 E+02a	0.020	2.8 E-09	0.010	1.4
E-09	8.3 E-10	5.5 E-10	3.7 E-10	3.1 E-10	
Ir-193m	11.9 d	0.020	3.2 E-09	0.010	2.0
E-09	1.0 E-09	6.0 E-10	3.4 E-10	2.7 E-10	
Ir-194	19.1 h	0.020	1.5 E-08	0.010	9.8
E-09	4.9 E-09	2.9 E-09	1.7 E-09	1.3 E-09	
Ir-194m	171 d	0.020	1.7 E-08	0.010	1.1
E-08	6.4 E-09	4.1 E-09	2.6 E-09	2.1 E-09	
Ir-195	2.50 h	0.020	1.2 E-09	0.010	7.3
E-10	3.6 E-10	2.1 E-10	1.3 E-10	1.0 E-10	
Ir-195m	3.80 h	0.020	2.3 E-09	0.010	1.5
E-09	7.3 E-10	4.3 E-10	2.6 E-10	2.1 E-10	
<b>Platina</b>					
Pt-186	2.00 h	0.020	7.8 E-10	0.010	5.3
E-10	2.9 E-10	1.8 E-10	1.2 E-10	9.3 E-11	
Pt-188	10.2 d	0.020	6.7 E-09	0.010	4.5
E-09	2.4 E-09	1.5 E-09	9.5 E-10	7.6 E-10	
Pt-189	10.9 h	0.020	1.1 E-09	0.010	7.4
E-10	3.9 E-10	2.5 E-10	1.5 E-10	1.2 E-10	
Pt-191	2.80 d	0.020	3.1 E-09	0.010	2.1
E-09	1.1 E-09	6.9 E-10	4.2 E-10	3.4 E-10	
Pt-193	50.0 a	0.020	3.7 E-10	0.010	2.4
E-10	1.2 E-10	6.9 E-11	3.9 E-11	3.1 E-11	
Pt-193m	4.33 d	0.020	5.2 E-09	0.010	3.4
E-09	1.7 E-09	9.9 E-10	5.6 E-10	4.5 E-10	
Pt-195m	4.02 d	0.020	7.1 E-09	0.010	4.6
E-09	2.3 E-09	1.4 E-09	7.9 E-10	6.3 E-10	
Pt-197	18.3 h	0.020	4.7 E-09	0.010	3.0
E-09	1.5 E-09	8.8 E-10	5.1 E-10	4.0 E-10	
Pt-197m	1.57 h	0.020	1.0 E-09	0.010	6.1
E-10	3.0 E-10	1.8 E-10	1.1 E-10	8.4 E-11	
Pt-199	0.513 h	0.020	4.7 E-10	0.010	2.7
E-10	1.3 E-10	7.5 E-11	5.0 E-11	3.9 E-11	
Pt-200	12.5 h	0.020	1.4 E-08	0.010	8.8
E-09	4.4 E-09	2.6 E-09	1.5 E-09	1.2 E-09	
<b>Zlato</b>					
Au-193	17.6 h	0.200	1.2 E-09	0.100	8.8
E-10	4.6 E-10	2.8 E-10	1.7 E-10	1.3 E-10	
Au-194	1.65 d	0.200	2.9 E-09	0.100	2.2
E-09	1.2 E-09	8.1 E-10	5.3 E-10	4.2 E-10	
Au-195	183 d	0.200	2.4 E-09	0.100	1.7
E-09	8.9 E-10	5.4 E-10	3.2 E-10	2.5 E-10	
Au-198	2.69 d	0.200	1.0 E-08	0.100	7.2
E-09	3.7 E-09	2.2 E-09	1.3 E-09	1.0 E-09	
Au-198m	2.30 d	0.200	1.2 E-08	0.100	8.5
E-09	4.4 E-09	2.7 E-09	1.6 E-09	1.3 E-09	

Au-199	3.14 d	0.200	4.5 E-09	0.100	3.1
E-09	1.6 E-09	9.5 E-10	5.5 E-10	4.4 E-10	
Au-200	0.807 h	0.200	8.3 E-10	0.100	4.7
E-10	2.3 E-10	1.3 E-10	8.7 E-11	6.8 E-11	
Au-200m	18.7 h	0.200	9.2 E-09	0.100	6.6
E-09	3.5 E-09	2.2 E-09	1.3 E-09	1.1 E-09	
Au-201	0.440 h	0.200	3.1 E-10	0.100	1.7
E-10	8.2 E-11	4.6 E-11	3.1 E-11	2.4 E-11	
<b>Živa</b>					
Hg -193	3.50 h	1.000	3.3 E-10	1.000	1.9
E-10	9.8 E-11	5.8 E-11	3.9 E-11	3.1 E-11	
(organska)		0.800	4.7 E-10	0.400	4.4
E-10	2.2 E-10	1.4 E-10	8.3 E-11	6.6 E-11	
Hg -193	3.50 h	0.040	8.5 E-10	0.020	5.5
E-10	2.8 E-10	1.7 E-10	1.0 E-10	8.2 E-11	
(anorganska)					
Hg -193m	11.1 h	1.000	1.1 E-09	1.000	6.8
E-10	3.7 E-10	2.3 E-10	1.5 E-10	1.3 E-10	
(organska)		0.800	1.6 E-09	0.400	1.8
E-09	9.5 E-10	6.0 E-10	3.7 E-10	3.0 E-10	
Hg -193m	11.1 h	0.040	3.6 E-09	0.020	2.4
E-09	1.3 E-09	8.1 E-10	5.0 E-10	4.0 E-10	
(anorganska)					
Hg -194	2.60 E+02a	1.000	1.3 E-07	1.000	1.2
E-07	8.4 E-08	6.6 E-08	5.5 E-08	5.1 E-08	
(organska)		0.800	1.1 E-07	0.400	4.8
E-08	3.5 E-08	2.7 E-08	2.3 E-08	2.1 E-08	
Hg -194	2.60 E+02a	0.040	7.2 E-09	0.020	3.6
E-09	2.6 E-09	1.9 E-09	1.5 E-09	1.4 E-09	
(anorganska)					
Hg -195	9.90 h	1.000	3.0 E-10	1.000	2.0
E-10	1.0 E-10	6.4 E-11	4.2 E-11	3.4 E-11	
(organska)		0.800	4.6 E-10	0.400	4.8
E-10	2.5 E-10	1.5 E-10	9.3 E-11	7.5 E-11	
Hg -195	9.90 h	0.040	9.5 E-10	0.020	6.3
E-10	3.3 E-10	2.0 E-10	1.2 E-10	9.7 E-11	
(anorganska)					
Hg -195m	1.73 d	1.000	2.1 E-09	1.000	1.3
E-09	6.8 E-10	4.2 E-10	2.7 E-10	2.2 E-10	
(organska)		0.800	2.6 E-09	0.400	2.8
E-09	1.4 E-09	8.7 E-10	5.1 E-10	4.1 E-10	
Hg -195m	1.73 d	0.040	5.8 E-09	0.020	3.8
E-09	2.0 E-09	1.2 E-09	7.0 E-10	5.6 E-10	
(anorganska)					
Hg -197	2.67 d	1.000	9.7 E-10	1.000	6.2
E-10	3.1 E-10	1.9 E-10	1.2 E-10	9.9 E-11	
(organska)		0.800	1.3 E-09	0.400	1.2
E-09	6.1 E-10	3.7 E-10	2.2 E-10	1.7 E-10	
Hg -197	2.67 d	0.040	2.5 E-09	0.020	1.6
E-09	8.3 E-10	5.0 E-10	2.9 E-10	2.3 E-10	
(anorganska)					
Hg -197m	23.8 h	1.000	1.5 E-09	1.000	9.5
E-10	4.8 E-10	2.9 E-10	1.8 E-10	1.5 E-10	
(organska)		0.800	2.2 E-09	0.400	2.5
E-09	1.2 E-09	7.3 E-10	4.2 E-10	3.4 E-10	
Hg -197m	23.8 h	0.040	5.2 E-09	0.020	3.4
E-09	1.7 E-09	1.0 E-09	5.9 E-10	4.7 E-10	
(anorganska)					
Ha-199m	0.710 h	1.000	3.4 E-10	1.000	1.9
E-10	9.3 E-11	5.3 E-11	3.6 E-11	2.8 E-11	

(organska)		0.800	3.6 E-10	0.400	2.1
E-10	1.0 E-10	5.8 E-11	3.9 E-11	3.1 E-11	
Hg -199m	0.710 h	0.040	3.7 E-10	0.020	2.1
E-10	1.0 E-10	5.9 E-11	3.9 E-11	3.1 E-11	
(anorganska)					
Hg -203	46.6 d	1.000	1.5 E-08	1.000	1.1
E-08	5.7 E-09	3.6 E-09	2.3 E-09	1.9 E-09	
(organska)		0.800	1.3 E-08	0.400	6.4
E-09	3.4 E-09	2.1 E-09	1.3 E-09	1.1 E-09	
Hg -203	46.6 d	0.040	5.5 E-09	0.020	3.6
E-09	1.8 E-09	1.1 E-09	6.7 E-10	5.4 E-10	
(anorganska)					
<b>Talij</b>					
Tl-194	0.550 h	1.000	6.1 E-11	1.000	3.9
E-11	2.2 E-11	1.4 E-11	1.0 E-11	8.1 E-12	
Tl-194m	0.546 h	1.000	3.8 E-10	1.000	2.2
E-10	1.2 E-10	7.0 E-11	4.9 E-11	4.0 E-11	
Tl-195	1.16 h	1.000	2.3 E-10	1.000	1.4
E-10	7.5 E-11	4.7 E-11	3.3 E-11	2.7 E-11	
Tl-197	2.84 h	1.000	2.1 E-10	1.000	1.3
E-10	6.7 E-11	4.2 E-11	2.8 E-11	2.3 E-11	
Tl-198	5.30 h	1.000	4.7 E-10	1.000	3.3
E-10	1.9 E-10	1.2 E-10	8.7 E-11	7.3 E-11	
Tl-198m	1.87 h	1.000	4.8 E-10	1.000	3.0
E-10	1.6 E-10	9.7 E-11	6.7 E-11	5.4 E-11	
Tl-199	7.42 h	1.000	2.3 E-10	1.000	1.5
E-10	7.7 E-11	4.8 E-11	3.2 E-11	2.6 E-11	
Tl-200	1.09 d	1.000	1.3 E-09	1.000	9.1
E-10	5.3 E-10	3.5 E-10	2.4 E-10	2.0 E-10	
Tl-201	3.04 d	1.000	8.4 E-10	1.000	5.5
E-10	2.9 E-10	1.8 E-10	1.2 E-10	9.5 E-11	
Tl-202	12.2 d	1.000	2.9 E-09	1.000	2.1
E-09	1.2 E-09	7.9 E-10	5.4 E-10	4.5 E-10	
Tl-204	3.78 a	1.000	1.3 E-08	1.000	8.5
E-09	4.2 E-09	2.5 E-09	1.5 E-09	1.2 E-09	
<b>Olovo</b>					
Pb-195m	0.263 h	0.600	2.6 E-10	0.200	1.6
E-10	8.4 E-11	5.2 E-11	3.5 E-11	2.9 E-11	
Pb-198	2.40 h	0.600	5.9 E-10	0.200	4.8
E-10	2.7 E-10	1.7 E-10	1.1 E-10	1.0 E-10	
Pb-199	1.50 h	0.600	3.5 E-10	0.200	2.6
E-10	1.5 E-10	9.4 E-11	6.3 E-11	5.4 E-11	
Pb-200	21.5 h	0.600	2.5 E-09	0.200	2.0
E-09	1.1 E-09	7.0 E-10	4.4 E-10	4.0 E-10	
Pb-201	9.40 h	0.600	9.4 E-10	0.200	7.8
E-10	4.3 E-10	2.7 E-10	1.8 E-10	1.6 E-10	
Pb-202	3.00 E+05a	0.600	3.4 E-08	0.200	1.6
E-08	1.3 E-08	1.9 E-08	2.7 E-08	8.8 E-09	
Pb-202m	3.62 h	0.600	7.6 E-10	0.200	6.1
E-10	3.5 E-10	2.3 E-10	1.5 E-10	1.3 E-10	
Pb-203	2.17 d	0.600	1.6 E-09	0.200	1.3
E-09	6.8 E-10	4.3 E-10	2.7 E-10	2.4 E-10	
Pb-205	1.43 E+07a	0.600	2.1 E-09	0.200	9.9
E-10	6.2 E-10	6.1 E-10	6.5 E-10	2.8 E-10	
Pb-209	3.25 h	0.600	5.7 E-10	0.200	3.8
E-10	1.9 E-10	1.1 E-10	6.6 E-11	5.7 E-11	
Pb-210	22.3 a	0.600	8.4 E-06	0.200	3.6
E-06	2.2 E-06	1.9 E-06	1.9 E-06	6.9 E-07	
Pb-211	0.601 h	0.600	3.1 E-09	0.200	1.4
E-09	7.1 E-10	4.1 E-10	2.7 E-10	1.8 E-10	

Pb-212	10.6 h	0.600	1.5 E-07	0.200	6.3
E-08	3.3 E-08	2.0 E-08	1.3 E-08	6.0 E-09	
Pb-214	0.447 h	0.600	2.7 E-09	0.200	1.0
E-09	5.2 E-10	3.1 E-10	2.0 E-10	1.4 E-10	
<b>Bizmut</b>					
Bi-200	0.606 h	0.100	4.2 E-10	0.050	2.7
E-10	1.5 E-10	9.5 E-11	6.4 E-11	5.1 E-11	
Bi-201	1.80 h	0.100	1.0 E-09	0.050	6.7
E-10	3.6 E-10	2.2 E-10	1.4 E-10	1.2 E-10	
Bi-202	1.67 h	0.100	6.4 E-10	0.050	4.4
E-10	2.5 E-10	1.6 E-10	1.1 E-10	8.9 E-11	
Bi-203	11.8 h	0.100	3.5 E-09	0.050	2.5
E-09	1.4 E-09	9.3 E-10	6.0 E-10	4.8 E-10	
Bi-205	15.3 d	0.100	6.1 E-09	0.050	4.5
E-09	2.6 E-09	1.7 E-09	1.1 E-09	9.0 E-10	
Bi-206	6.24 d	0.100	1.4 E-08	0.050	1.0
E-08	5.7 E-09	3.7 E-09	2.4 E-09	1.9 E-09	
Bi-207	38.0 a	0.100	1.0 E-08	0.050	7.1
E-09	3.9 E-09	2.5 E-09	1.6 E-09	1.3 E-09	
Bi-210	5.01 d	0.100	1.5 E-08	0.050	9.7
E-09	4.8 E-09	2.9 E-09	1.6 E-09	1.3 E-09	
Bi-210m	3.00 E+06a	0.100	2.1 E-07	0.050	9.1
E-08	4.7 E-08	3.0 E-08	1.9 E-08	1.5 E-08	
Bi-212	1.01 h	0.100	3.2 E-09	0.050	1.8
E-09	8.7 E-10	5.0 E-10	3.3 E-10	2.6 E-10	
Bi-213	0.761 h	0.100	2.5 E-09	0.050	1.4
E-09	6.7 E-10	3.9 E-10	2.5 E-10	2.0 E-10	
Bi-214	0.332 h	0.100	1.4 E-09	0.050	7.4
E-10	3.6 E-10	2.1 E-10	1.4 E-10	1.1 E-10	
<b>Polonij</b>					
Po-203	0.612 h	1.000	2.9 E-10	0.500	2.4
E-10	1.3 E-10	8.5 E-11	5.8 E-11	4.6 E-11	
Po-205	1.80 h	1.000	3.5 E-10	0.500	2.8
E-10	1.6 E-10	1.1 E-10	7.2 E-11	5.8 E-11	
Po-207	5.83 h	1.000	4.4 E-10	0.500	5.7
E-10	3.2 E-10	2.1 E-10	1.4 E-10	1.1 E-10	
Po-210	138 d	1.000	2.6 E-05	0.500	8.8
E-06	4.4 E-06	2.6 E-06	1.6 E-06	1.2 E-06	
<b>Astacij</b>					
At-207	1.80 h	1.000	2.5 E-09	1.000	1.6
E-09	8.0 E-10	4.8 E-10	2.9 E-10	2.4 E-10	
At-211	7.21 h	1.000	1.2 E-07	1.000	7.8
E-08	3.8 E-08	2.3 E-08	1.3 E-08	1.1 E-08	
<b>Francij</b>					
Fr-222	0.240 h	1.000	6.2 E-09	1.000	3.9
E-09	2.0 E-09	1.3 E-09	8.5 E-10	7.2 E-10	
Fr-223	0.363 h	1.000	2.6 E-08	1.000	1.7
E-08	8.3 E-09	5.0 E-09	2.9 E-09	2.4 E-09	
<b>Radij</b>					
Ra-223	11.4 d	0.600	5.3 E-06	0.200	1.1
E-06	5.7 E-07	4.5 E-07	3.7 E-07	1.0 E-07	
Ra-224	3.66 d	0.600	2.7 E-06	0.200	6.6
E-07	3.5 E-07	2.6 E-07	2.0 E-07	6.5 E-08	
Ra-225	14.8 d	0.600	7.1 E-06	0.200	1.2
E-06	6.1 E-07	5.0 E-07	4.4 E-07	9.9 E-08	
Ra-226	1.60 E+03a	0.600	4.7 E-06	0.200	9.6
E-07	6.2 E-07	8.0 E-07	1.5 E-06	2.8 E-07	
Ra-227	0.703 h	0.600	1.1 E-09	0.200	4.3
E-10	2.5 E-10	1.7 E-10	1.3 E-10	8.1 E-11	
Ra-228	5.75 a	0.600	3.0 E-05	0.200	5.7
E-06	3.4 E-06	3.9 E-06	5.3 E-06	6.9 E-07	

**Aktinij**

Ac-224	2.90 h	0.005	1.0 E-08	5.0 E-04	5.2
E-09	2.6 E-09	1.5 E-09	8.8 E-10	7.0 E-10	
Ac-225	10.0 d	0.005	4.6 E-07	5.0 E-04	1.8
E-07	9.1 E-08	5.4 E-08	3.0 E-08	2.4 E-08	
Ac-226	1.21 d	0.005	1.4 E-07	5.0 E-04	7.6
E-08	3.8 E-08	2.3 E-08	1.3 E-08	1.0 E-08	
Ac-227	21.8 a	0.005	3.3 E-05	5.0 E-04	3.1
E-06	2.2 E-06	1.5 E-06	1.2 E-06	1.1 E-06	
Ac-228	6.13 h	0.005	7.4 E-09	5.0 E-04	2.8
E-09	1.4 E-09	8.7 E-10	5.3 E-10	4.3 E-10	

**Torij**

Th-226	0.515 h	0.005	4.4 E-09	5.0 E-04	2.4
E-09	1.2 E-09	6.7 E-10	4.5 E-10	3.5 E-10	
Th-227	18.7 d	0.005	3.0 E-07	5.0 E-04	7.0
E-08	3.6 E-08	2.3 E-08	1.5 E-08	8.8 E-09	
Th-228	1.91 a	0.005	3.7 E-06	5.0 E-04	3.7
E-07	2.2 E-07	1.5 E-07	9.4 E-08	7.2 E-08	
Th-229	7.34 E+03a	0.005	1.1 E-05	5.0 E-04	1.0
E-06	7.8 E-07	6.2 E-07	5.3 E-07	4.9 E-07	
Th-230	7.70 E+04a	0.005	4.1 E-06	5.0 E-04	4.1
E-07	3.1 E-07	2.4 E-07	2.2 E-07	2.1 E-07	
Th-231	1.06 d	0.005	3.9 E-09	5.0 E-04	2.5
E-09	1.2 E-09	7.4 E-10	4.2 E-10	3.4 E-10	
Th-232	1.40 E+10a	0.005	4.6 E-06	5.0 E-04	4.5
E-07	3.5 E-07	2.9 E-07	2.5 E-07	2.3 E-07	
Th-234	24.1 d	0.005	4.0 E-08	5.0 E-04	2.5
E-08	1.3 E-08	7.4 E-09	4.2 E-09	3.4 E-09	

**Protaktinij**

Pa-227	0.638 h	0.005	5.8 E-09	5.0 E-04	3.2
E-09	1.5 E-09	8.7 E-10	5.8 E-10	4.5 E-10	
Pa-228	22.0 h	0.005	1.2 E-08	5.0 E-04	4.8
E-09	2.6 E-09	1.6 E-09	9.7 E-10	7.8 E-10	
Pa-230	17.4 d	0.005	2.6 E-08	5.0 E-04	5.7
E-09	3.1 E-09	1.9 E-09	1.1 E-09	9.2 E-10	
Pa-231	3.27 E+04a	0.005	1.3 E-05	5.0 E-04	1.3
E-06	1.1 E-06	9.2 E-07	8.0 E-07	7.1 E-07	
Pa-232	1.31 d	0.005	6.3 E-09	5.0 E-04	4.2
E-09	2.2 E-09	1.4 E-09	8.9 E-10	7.2 E-10	
Pa-233	27.0 d	0.005	9.7 E-09	5.0 E-04	6.2
E-09	3.2 E-09	1.9 E-09	1.1 E-09	8.7 E-10	
Pa-234	6.70 h	0.005	5.0 E-09	5.0 E-04	3.2
E-09	1.7 E-09	1.0 E-09	6.4 E-10	5.1 E-10	

**Uran**

U-230	20.8 d	0.040	7.9 E-07	0.020	3.0
E-07	1.5 E-07	1.0 E-07	6.6 E-08	5.6 E-08	
U-231	4.20 d	0.040	3.1 E-09	0.020	2.0
E-09	1.0 E-09	6.1 E-10	3.5 E-10	2.8 E-10	
U-232	72.0 a	0.040	2.5 E-06	0.020	8.2
E-07	5.8 E-07	5.7 E-07	6.4 E-07	3.3 E-07	
U-233	1.58 E+05a	0.040	3.8 E-07	0.020	1.4
E-07	9.2 E-08	7.8 E-08	7.8 E-08	5.1 E-08	
U-234	2.44 E+05a	0.040	3.7 E-07	0.020	1.3
E-07	8.8 E-08	7.4 E-08	7.4 E-08	4.9 E-08	
U-235	7.04 E+08a	0.040	3.5 E-07	0.020	1.3
E-07	8.5 E-08	7.1 E-08	7.0 E-08	4.7 E-08	
U-236	2.34 E+07a	0.040	3.5 E-07	0.020	1.3
E-07	8.4 E-08	7.0 E-08	7.0 E-08	4.7 E-08	
U-237	6.75 d	0.040	8.3 E-09	0.020	5.4
E-09	2.8 E-09	1.6 E-09	9.5 E-10	7.6 E-10	

U-238	4.47 E+09a	0.040	3.4 E-07	0.020	1.2
E-07	8.0 E-08	6.8 E-08	6.7 E-08	4.5 E-08	
U-239	0.392 h	0.040	3.4 E-10	0.020	1.9
E-10	9.3 E-11	5.4 E-11	3.5 E-11	2.7 E-11	
U-240	14.1 h	0.040	1.3 E-08	0.020	8.1
E-09	4.1 E-09	2.4 E-09	1.4 E-09	1.1 E-09	

### Neptunij

Np-232	0.245 h	0.005	8.7 E-11	5.0 E-04	5.1
E-11	2.7 E-11	1.7 E-11	1.2 E-11	9.7 E-12	
Np-233	0.603 h	0.005	2.1 E-11	5.0 E-04	1.3
E-11	6.6 E-12	4.0 E-12	2.8 E-12	2.2 E-12	
Np-234	4.40 d	0.005	6.2 E-09	5.0 E-04	4.4
E-09	2.4 E-09	1.6 E-09	1.0 E-09	8.1 E-10	
Np-235	1.08 a	0.005	7.1 E-10	5.0 E-04	4.1
E-10	2.0 E-10	1.2 E-10	6.8 E-11	5.3 E-11	
Np-236	1.15 E+05a	0.005	1.9 E-07	5.0 E-04	2.4
E-08	1.8 E-08	1.8 E-08	1.8 E-08	1.7 E-08	
Np-236	22.5 h	0.005	2.5 E-09	5.0 E-04	1.3
E-09	6.6 E-10	4.0 E-10	2.4 E-10	1.9 E-10	
Np-237	2.14 E+06a	0.005	2.0 E-06	5.0 E-04	2.1
E-07	1.4 E-07	1.1 E-07	1.1 E-07	1.1 E-07	
Np-238	2.12 d	0.005	9.5 E-09	5.0 E-04	6.2
E-09	3.2 E-09	1.9 E-09	1.1 E-09	9.1 E-10	
Np-239	2.36 d	0.005	8.9 E-09	5.0 E-04	5.7
E-09	2.9 E-09	1.7 E-09	1.0 E-09	8.0 E-10	
Np-240	1.08 h	0.005	8.7 E-10	5.0 E-04	5.2
E-10	2.6 E-10	1.6 E-10	1.0 E-10	8.2 E-11	

### Plutonij

Pu-234	8.80 h	0.005	2.1 E-09	5.0 E-04	1.1
E-09	5.5 E-10	3.3 E-10	2.0 E-10	1.6 E-10	
Pu-235	0.422 h	0.005	2.2 E-11	5.0 E-04	1.3
E-11	6.5 E-12	3.9 E-12	2.7 E-12	2.1 E-12	
Pu-236	2.85 a	0.005	2.1 E-06	5.0 E-04	2.2
E-07	1.4 E-07	1.0 E-07	8.5 E-08	8.7 E-08	
Pu-237	45.3 d	0.005	1.1 E-09	5.0 E-04	6.9
E-10	3.6 E-10	2.2 E-10	1.3 E-10	1.0 E-10	
Pu-238	87.7 a	0.005	4.0 E-06	5.0 E-04	4.0
E-07	3.1 E-07	2.4 E-07	2.2 E-07	2.3 E-07	
Pu-239	2.41 E+04a	0.005	4.2 E-06	5.0 E-04	4.2
E-07	3.3 E-07	2.7 E-07	2.4 E-07	2.5 E-07	
Pu-240	6.54 E+03a	0.005	4.2 E-06	5.0 E-04	4.2
E-07	3.3 E-07	2.7 E-07	2.4 E-07	2.5 E-07	
Pu-241	14.4 a	0.005	5.6 E-08	5.0 E-04	5.7
E-09	5.5 E-09	5.1 E-09	4.8 E-09	4.8 E-09	
Pu-242	3.76 E+05a	0.005	4.0 E-06	5.0 E-04	4.0
E-07	3.2 E-07	2.6 E-07	2.3 E-07	2.4 E-07	
Pu-243	4.95 h	0.005	1.0 E-09	5.0 E-04	6.2
E-10	3.1 E-10	1.8 E-10	1.1 E-10	8.5 E-11	
Pu-244	8.26 E+07a	0.005	4.0 E-06	5.0 E-04	4.1
E-07	3.2 E-07	2.6 E-07	2.3 E-07	2.4 E-07	
Pu-245	10.5 h	0.005	8.0 E-09	5.0 E-04	5.1
E-09	2.6 E-09	1.5 E-09	8.9 E-10	7.2 E-10	
Pu-246	10.9 d	0.005	3.6 E-08	5.0 E-04	2.3
E-08	1.2 E-08	7.1 E-09	4.1 E-09	3.3 E-09	

### Americij

Am-237	1.22 h	0.005	1.7 E-10	5.0 E-04	1.0
E-10	5.5 E-11	3.3 E-11	2.2 E-11	1.8 E-11	
Am-238	1.63 h	0.005	2.5 E-10	5.0 E-04	1.6
E-10	9.1 E-11	5.9 E-11	4.0 E-11	3.2 E-11	
Am-239	11.9 h	0.005	2.6 E-09	5.0 E-04	1.7
E-09	8.4 E-10	5.1 E-10	3.0 E-10	2.4 E-10	

Am-240	2.12 d	0.005	4.7 E-09	5.0 E-04	3.3
E-09	1.8 E-09	1.2 E-09	7.3 E-10	5.8 E-10	
Am-241	4.32 E+02a	0.005	3.7 E-06	5.0 E-04	3.7
E-07	2.7 E-07	2.2 E-07	2.0 E-07	2.0 E-07	
Am-242	16.0 h	0.005	5.0 E-09	5.0 E-04	2.2
E-09	1.1 E-09	6.4 E-10	3.7 E-10	3.0 E-10	
Am-242m	1.52 E+02a	0.005	3.1 E-06	5.0 E-04	3.0
E-07	2.3 E-07	2.0 E-07	1.9 E-07	1.9 E-07	
Am-243	7.38 E+03a	0.005	3.6 E-06	5.0 E-04	3.7
E-07	2.7 E-07	2.2 E-07	2.0 E-07	2.0 E-07	
Am-244	10.1 h	0.005	4.9 E-09	5.0 E-04	3.1
E-09	1.6 E-09	9.6 E-10	5.8 E-10	4.6 E-10	
Am-244m	0.433 h	0.005	3.7 E-10	5.0 E-04	2.0
E-10	9.6 E-11	5.5 E-11	3.7 E-11	2.9 E-11	
Am-245	2.05 h	0.005	6.8 E-10	5.0 E-04	4.5
E-10	2.2 E-10	1.3 E-10	7.9 E-11	6.2 E-11	
Am-246	0.650 h	0.005	6.7 E-10	5.0 E-04	3.8
E-10	1.9 E-10	1.1 E-10	7.3 E-11	5.8 E-11	
Am-246m	0.417 h	0.005	3.9 E-10	5.0 E-04	2.2
E-10	1.1 E-10	6.4 E-11	4.4 E-11	3.4 E-11	
<b>Kirij</b>					
Cm-238	2.40 h	0.005	7.8 E-10	5.0 E-04	4.9
E-10	2.6 E-10	1.6 E-10	1.0 E-10	8.0 E-11	
Cm-240	27.0 d	0.005	2.2 E-07	5.0 E-04	4.8
E-08	2.5 E-08	1.5 E-08	9.2 E-09	7.6 E-09	
Cm-241	32.8 d	0.005	1.1 E-08	5.0 E-04	5.7
E-09	3.0 E-09	1.9 E-09	1.1 E-09	9.1 E-10	
Cm-242	163 d	0.005	5.9 E-07	5.0 E-04	7.6
E-08	3.9 E-08	2.4 E-08	1.5 E-08	1.2 E-08	
Cm-243	28.5 a	0.005	3.2 E-06	5.0 E-04	3.3
E-07	2.2 E-07	1.6 E-07	1.4 E-07	1.5 E-07	
Cm-244	18.1 a	0.005	2.9 E-06	5.0 E-04	2.9
E-07	1.9 E-07	1.4 E-07	1.2 E-07	1.2 E-07	
Cm-245	8.50 E+03a	0.005	3.7 E-06	5.0 E-04	3.7
E-07	2.8 E-07	2.3 E-07	2.1 E-07	2.1 E-07	
Cm-246	4.73 E+03a	0.005	3.7 E-06	5.0 E-04	3.7
E-07	2.8 E-07	2.2 E-07	2.1 E-07	2.1 E-07	
Cm-247	1.56 E+07a	0.005	3.4 E-06	5.0 E-04	3.5
E-07	2.6 E-07	2.1 E-07	1.9 E-07	1.9 E-07	
Cm-248	3.39 E+05a	0.005	1.4 E-05	5.0 E-04	1.4
E-06	1.0 E-06	8.4 E-07	7.7 E-07	7.7 E-07	
Cm-249	1.07 h	0.005	3.9 E-10	5.0 E-04	2.2
E-10	1.1 E-10	6.1 E-11	4.0 E-11	3.1 E-11	
Cm-250	6.90 E+03a	0.005	7.8 E-05	5.0 E-04	8.2
E-06	6.0 E-06	4.9 E-06	4.4 E-06	4.4 E-06	
<b>Berkelij</b>					
Bk-245	4.94 d	0.005	6.1 E-09	5.0 E-04	3.9
E-09	2.0 E-09	1.2 E-09	7.2 E-10	5.7 E-10	
Bk-246	1.83 d	0.005	3.7 E-09	5.0 E-04	2.6
E-09	1.4 E-09	9.4 E-10	6.0 E-10	4.8 E-10	
Bk-247	1.38 E+03a	0.005	8.9 E-06	5.0 E-04	8.6
E-07	6.3 E-07	4.6 E-07	3.8 E-07	3.5 E-07	
Bk-249	320 d	0.005	2.2 E-08	5.0 E-04	2.9
E-09	1.9 E-09	1.4 E-09	1.1 E-09	9.7 E-10	
Bk-250	3.22 h	0.005	1.5 E-09	5.0 E-04	8.5
E-10	4.4 E-10	2.7 E-10	1.7 E-10	1.4 E-10	
<b>Kalifornij</b>					
Cf-244	0.323 h	0.005	9.8 E-10	5.0 E-04	4.8
E-10	2.4 E-10	1.3 E-10	8.9 E-11	7.0 E-11	
Cf-246	1.49 d	0.005	5.0 E-08	5.0 E-04	2.4
E-08	1.2 E-08	7.3 E-09	4.1 E-09	3.3 E-09	

Cf-248	334 d	0.005	1.5 E-06	5.0 E-04	1.6
E-07	9.9 E-08	6.0 E-08	3.3 E-08	2.8 E-08	
Cf-249	3.50 E+02a	0.005	9.0 E-06	5.0 E-04	8.7
E-07	6.4 E-07	4.7 E-07	3.8 E-07	3.5 E-07	
Cf-250	13.1 a	0.005	5.7 E-06	5.0 E-04	5.5
E-07	3.7 E-07	2.3 E-07	1.7 E-07	1.6 E-07	
Cf-251	8.98 E+02a	0.005	9.1 E-06	5.0 E-04	8.8
E-07	6.5 E-07	4.7 E-07	3.9 E-07	3.6 E-07	
Cf-252	2.64 a	0.005	5.0 E-06	5.0 E-04	5.1
E-07	3.2 E-07	1.9 E-07	1.0 E-07	9.0 E-08	
Cf-253	17.8 d	0.005	1.0 E-07	5.0 E-04	1.1
E-08	6.0 E-09	3.7 E-09	1.8 E-09	1.4 E-09	
Cf-254	60.5 d	0.005	1.1 E-05	5.0 E-04	2.6
E-06	1.4 E-06	8.4 E-07	5.0 E-07	4.0 E-07	
<b>Ajnštajnij</b>					
Es-250	2.10 h	0.005	2.3 E-10	5.0 E-04	9.9
E-11	5.7 E-11	3.7 E-11	2.6 E-11	2.1 E-11	
Es-251	1.38 d	0.005	1.9 E-09	5.0 E-04	1.2
E-09	6.1 E-10	3.7 E-10	2.2 E-10	1.7 E-10	
Es-253	20.5 d	0.005	1.7 E-07	5.0 E-04	4.5
E-08	2.3 E-08	1.4 E-08	7.6 E-09	6.1 E-09	
Es-254	276 d	0.005	1.4 E-06	5.0 E-04	1.6
E-07	9.8 E-08	6.0 E-08	3.3 E-08	2.8 E-08	
Es-254m	1.64 d	0.005	5.7 E-08	5.0 E-04	3.0
E-08	1.5 E-08	9.1 E-09	5.2 E-09	4.2 E-09	
<b>Fermij</b>					
Fm-252	22.7 h	0.005	3.8 E-08	5.0 E-04	2.0
E-08	9.9 E-09	5.9 E-09	3.3 E-09	2.7 E-09	
Fm-253	3.00 d	0.005	2.5 E-08	5.0 E-04	6.7
E-09	3.4 E-09	2.1 E-09	1.1 E-09	9.1 E-10	
Fm-254	3.24 h	0.005	5.6 E-09	5.0 E-04	3.2
E-09	1.6 E-09	9.3 E-10	5.6 E-10	4.4 E-10	
Fm-255	20.1 h	0.005	3.3 E-08	5.0 E-04	1.9
E-08	9.5 E-09	5.6 E-09	3.2 E-09	2.5 E-09	
Fm-257	101 d	0.005	9.8 E-07	5.0 E-04	1.1
E-07	6.5 E-08	4.0 E-08	1.9 E-08	1.5 E-08	
<b>Mendelevij</b>					
Md-257	5.20 h	0.005	3.1 E-09	5.0 E-04	8.8
E-10	4.5 E-10	2.7 E-10	1.5 E-10	1.2 E-10	
Md-258	55.0 d	0.005	6.3 E-07	5.0 E-04	8.9
E-08	5.0 E-08	3.0 E-08	1.6 E-08	1.3 E-08	

**Napomena:** f1 vrijednosti za kalcij za dob 1 do 15 godina jest 0,4;  
f1 vrijednosti za željezo za dob 1 do 15 godina jest 0,2;  
f1 vrijednosti za kobaltza dob 1 do 15 godina jest 0,2;  
f1 vrijednosti za stroncij za dob 1 do 15 godina jest 0,4;  
f1 vrijednosti za barij za dob 1 do 15 godina jest 0,3;  
f1 vrijednosti za olovo za dob 1 do 15 godina jest 0,4;  
f1 vrijednosti za radij za dob 1 do 15 godina jest 0,3;

**Tablica 5. – Tablica 10.**