

Feuille1

Mass	Nuclei	cross section (mb) @ 66 MeV	cross section (mb) @ 70 MeV	cross section (mb) @ 76 MeV	cross section (mb) @ 80 MeV
221	Ac	1.0	1.2	0.7	0.5
	Pa	0.8	4.1	10.8	10.6
222	Pa	5.0	5.5	3.6	3.4
223	Th	1.5	3.5	7.7	9.6
	Pa	15.2	19.6	20.1	18.3
224	Th	4.2	7.0	9.2	8.1
	Pa	22.5	22.1	16.0	10.3
	U	0.8	3.2	6.8	10.1
	Th	6.2	7.6	6.2	5.1
225	Pa	9.6	5.8	4.2	4.8
	U	4.6	8.1	14.4	17.1
	Np	2.7	9.3	14.8	13.6
	Th	3.2	2.5	1.7	1.6
226	Pa	4.6	4.3	5.0	4.9
	U	19.0	27.2	33.2	36.0
	Np	23.0	24.2	20.8	17.3
	Th	0.4	0.4	0.3	0.3
227	Pa	0.5	0.6	0.7	0.8
	U	45.9	51.1	53.3	51.8
	Np	36.4	30.2	21.2	15.8

Feuille1

half life	decay chain long lived isotopes	half life	Decay mode
52ms			alpha
5.9us	35s (213Fr)		alpha
2.9ms	5ms (214Fr)		alpha
600ms			alpha
5.1ms			alpha
1.04s			alpha
846ms			alpha
840ms	23min (212Rn) 2.9y (208Po)		alpha
8.75min			alpha
1.7s			alpha
95ms	124y (209Po)		alpha
3.6ms	5ms (214Fr)		alpha
30.57min			alpha
1.8min			alpha
268ms	138d (210Po)		alpha
35ms	138d (210Po)		alpha
18.7d			alpha
38.3min			alpha
1.1min			alpha
510ms			alpha

Decay spectroscopy interest

I262 measurement

direct alpha decay to ground state

alpha know, gamma unknown

very well known

2 alpha know, gamma unknown

well known

very well known

2 alpha and 1 gamma known

very well known

I262 measurement

3 alpha known, gamma unknown

No measurement referenced in ENSDF

very well known

I262 measurement

2 alpha know, gamma unknown

2 alpha know, gamma unknown

very well known

very well known

alpha know (large uncertainties), gamma known

2 alpha know, gamma unknown