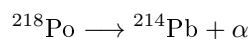
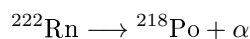
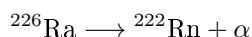
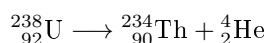


Radioaktivni razpad

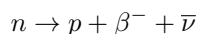
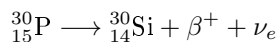
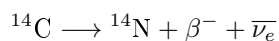
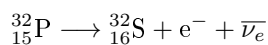
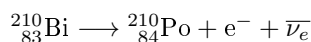
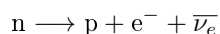
primeri razpadov in podatki

Podatki o relativnih atomskih masah so v tabeli 1.

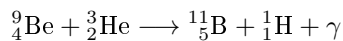
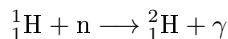
α razpad



β razpad



γ razpad

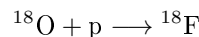
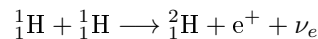
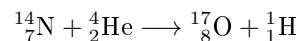
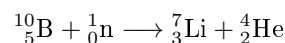
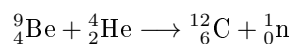
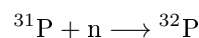
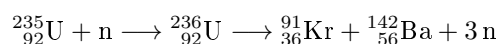


nekaj konstant

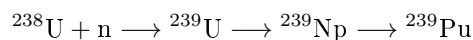
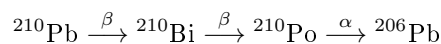
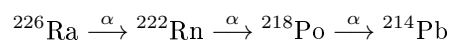
$$c = 299\,792\,458 \text{ m/s}$$

$$e_o = 1,60217653 \cdot 10^{-19} \text{ As}$$

jedrske reakcije



verižni razpad



$$m_e = 9,1093826 \cdot 10^{-31} \text{ kg}$$

$$m_p = 1836,15 m_e = \frac{1836,15}{1838,68} m_n$$

$$1u = 1,660538782 \cdot 10^{-27} \text{ kg} = 1,492417830 \cdot 10^{-10} \text{ J} = 931,494028 \text{ MeV}/c^2$$

$$m_p = 1,007276466879 \text{ u} = 1,672621898 \cdot 10^{-27} \text{ kg} = 938,2720813 \text{ MeV}/c^2$$

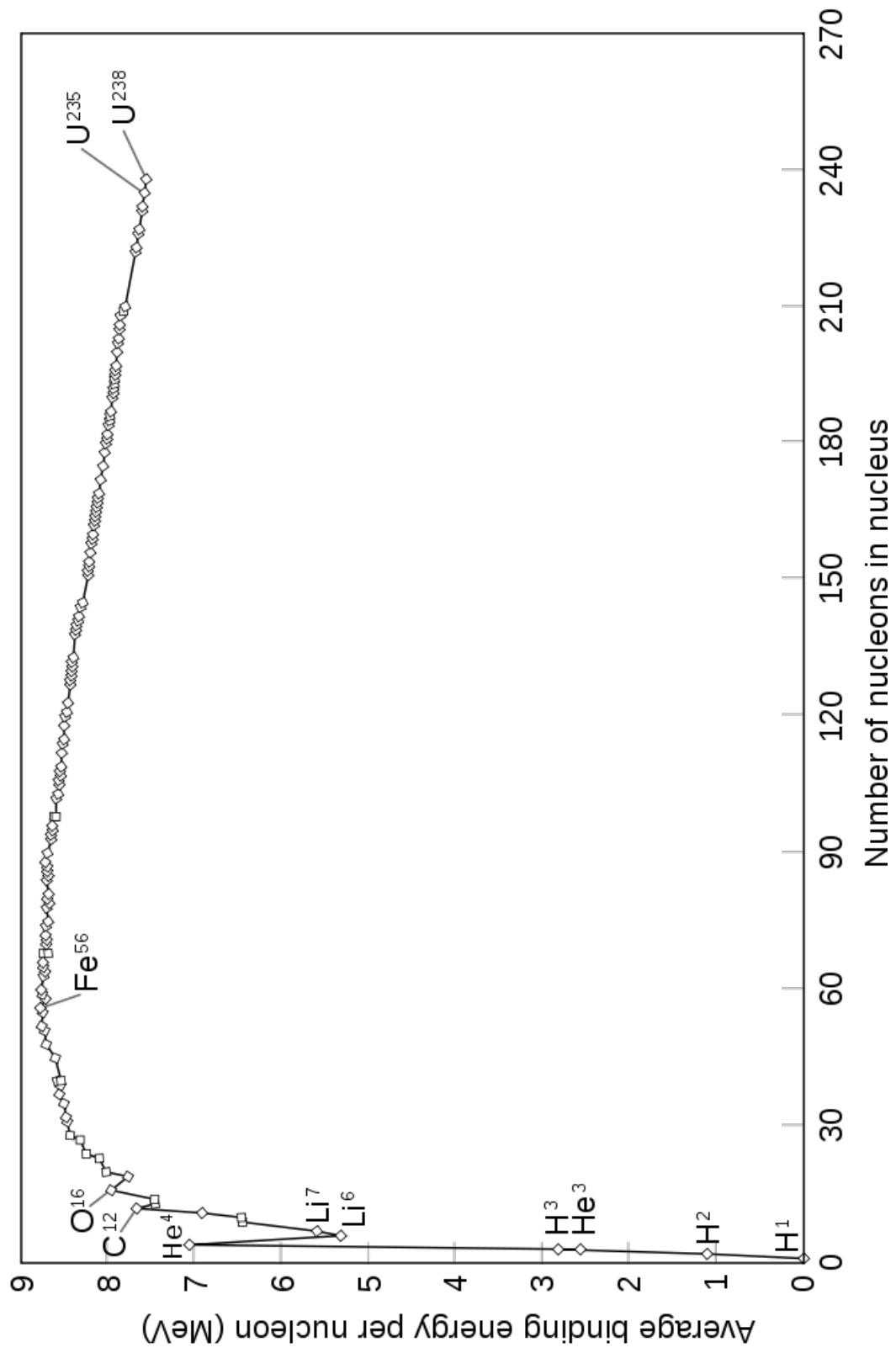
$$m_n = 1,00866491588 \text{ u} = 1,674927471 \cdot 10^{-27} \text{ kg} = 939,5654133 \text{ MeV}/c^2$$

$$m_e = 5,48579909070 \cdot 10^{-4} \text{ u} = 9,10938356 \cdot 10^{-31} \text{ kg} = 0,5109989461 \text{ MeV}/c^2$$

Tabela 1: ATOMSKE MASE NEKATERIH ELEMENTOV.

N je število nevtronov, Z je število protonov, Xx je simbol elementa; masa je podana v atomskih enotah mase

N	Z	Xx	masa [u]
1	0	n	1,008664924
0	1	H	1,00782503207
1	1	H	2,0141017778
2	1	H	3,0160492777
1	2	He	3,0160293191
2	2	He	4,00260325415
3	2	He	5,012220
3	3	Li	6,015122795
4	3	Li	7,01600455
5	3	Li	8,02248736
4	4	Be	8,00530510
5	4	Be	9,0121822
6	4	Be	10,0135338
7	4	Be	11,021658
4	5	B	9,0133288
5	5	B	10,0129370
6	5	B	11,0093054
5	6	C	11,0114336
6	6	C	12,0000000
7	6	C	13,0033548378
8	6	C	14,003241989
6	7	N	13,00573861
7	7	N	14,0030740048
8	7	N	15,0001088982
7	8	O	15,0030656
8	8	O	15,99491461956
9	8	O	16,99913170
10	8	O	17,9991610
9	9	F	18,0009380
16	14	Si	29,97377017
15	15	P	29,9783138
16	15	P	30,97376163
17	15	P	31,97390727
16	16	S	31,97207100
124	82	Pb	205,9744653
127	82	Pb	208,9810901
128	82	Pb	209,9841885
132	82	Pb	213,9998054
127	83	Bi	209,9841204
126	84	Po	209,9828737
134	84	Po	218,0089730
136	86	Rn	222,0175777
138	88	Ra	226,025402
140	88	Ra	228,0310703
143	92	U	235,0439299
144	92	U	236,0455680
146	92	U	238,0507882
147	92	U	239,0542933
144	90	Th	234,043601
55	36	Kr	90,923450
86	56	Ba	141,916453
146	93	Np	239,0529390
145	94	Pu	239,0521634



Slika 1: Vezavna energija jeder preračunana na nukleon.