

Pagrindinės konstantos ir sąryšiai

Pavadinimas	Žymėjimas	Vertė
Elementarus elektros krūvis	e	$1,602 \cdot 10^{-19} \text{ C}$
Elektrono masė	m_e	$9,109 \cdot 10^{-31} \text{ kg}$ $5,486 \cdot 10^{-4} u$ $0,511 \text{ MeV}/c^2$
Protono masė	m_p	$1,673 \cdot 10^{-27} \text{ kg}$ $1,00727647 u$ $938,272 \text{ MeV}/c^2$ $1836,1527 m_e$
Neutrono masė	m_n	$1,675 \cdot 10^{-27} \text{ kg}$ $1,00866490 u$ $939,565 \text{ MeV}/c^2$ $1838,684 m_e$
Šviesos greitis vakuume	c	$2,9979 \cdot 10^8 \text{ m/s}$
Elektrinė konstanta	$\epsilon_0 = 1/\mu_0 c^2$	$8,854 \cdot 10^{-12} \text{ F/m}$
Kulono konstanta	$k_c = \frac{1}{4\pi\epsilon_0}$	$8,988 \cdot 10^9 \frac{\text{N} \cdot \text{m}^2}{\text{C}^2}$
Gravitacijos konstanta	G	$6,672 \cdot 10^{-11} \frac{\text{Nm}^2}{\text{kg}^2}$
Avogadro skaičius	N_A	$6,022 \cdot 10^{23} \text{ mol}^{-1}$
Bolcmano konstanta	k_B	$1,381 \cdot 10^{-23} \text{ J/K}$ $8,617 \cdot 10^{-5} \text{ eV/K}$
Planko konstanta	h	$6,626 \cdot 10^{-34} \text{ J} \cdot \text{s}$ $4,136 \cdot 10^{-15} \text{ eV} \cdot \text{s}$
Mažoji Planko konstanta	\hbar	$1,055 \cdot 10^{-34} \text{ J} \cdot \text{s}$ $6,582 \cdot 10^{-16} \text{ eV} \cdot \text{s}$
Rydbergas	Ry	$13,606 \text{ eV}$
Rydbergo konstanta	R' R	$1,09737315 \cdot 10^7 \text{ m}^{-1}$ $3,28984195 \cdot 10^{15} \text{ Hz}$
Masės atominis vienetas	u	$1,6605402 \cdot 10^{-27} \text{ kg}$ $931,49432 \text{ MeV}/c^2$
Elektronvoltas	eV	$1,602 \cdot 10^{-19} \text{ J}$ $11604,5 \text{ K}$
Džaulis	J	$6,242 \cdot 10^{12} \text{ MeV}$ $2,778 \cdot 10^{-7} \text{ kWh}$ $0,2388 \text{ cal}$
Vatas	W	$6,242 \cdot 10^{12} \text{ MeV/s}$
Fermis	fm	10^{-15} m
Barnas	b	$10^{-28} \text{ m}^2 = 100 \text{ fm}^2$
Šviesmetis	šm	$9,46 \cdot 10^{15} \text{ km}$ 63240 av
Astronominis vienetas	av	$1,496 \cdot 10^{11} \text{ m}$
Parsekas	pc	$3,262 \text{ šm}$
Hablo konstanta	H	$20 \text{ km/s} \cdot \text{mln.šm}$

Atomų pirmosios jonizacijos energijos

Z	Elementas	Joniz. energ. eV	Z	Elementas	Joniz. energ. eV	Z	Elementas	Joniz. energ. eV
1	H Vanden.	13,598	36	Kr Kriptonas	13,9996	71	Lu Lutecis	5,4259
2	He Helis	24,587	37	Rb Rubidis	4,1771	72	Hf Hafnis	6,8251
3	Li Litis	5,3917	38	Sr Stroncis	5,6948	73	Ta Tantalas	7,89
4	Be Berilis	9,3226	39	Y Itris	6,217	74	W Volfram.	7,98
5	B Boras	8,2980	40	Zr Cirkonis	6,6339	75	Re Renis	7,88
6	C Anglis	11,260	41	Nb Nionis	6,7589	76	Os Osmis	8,7
7	N Azotas	14,534	42	Mo Molibden.	7,0924	77	Ir Iridis	9,1
8	O Deguon.	13,618	43	Tc Technecis	7,28	78	Pt Platina	9,0
9	F Fluoras	17,422	44	Ru Rutenis	7,3605	79	Au Auksas	9,2257
10	Ne Neonas	21,564	45	Rh Rodis	7,4589	80	Hg Gyvsidab.	10,437
11	Na Natris	5,1391	46	Pd Paladis	8,3369	81	Tl Talis	6,1083
12	Mg Magn.	7,6462	47	Ag Sidabras	7,5762	82	Pb Švinas	7,4167
13	Al Alium.	5,9858	48	Cd Kadmis	8,9937	83	Bi Bismutas	7,289
14	Si Silicis	8,1517	49	In Indis	5,7864	84	Po Polonis	8,4167
15	P Fosforas	10,486	50	Sn Alavas	7,3438	85	At Astatas	
16	S Siera	10,360	51	Sb Stibis	8,64	86	Rn Radonas	10,748
17	Cl Chloras	12,967	52	Te Telūras	9,0096	87	Fr Francis	
18	Ar Argon.	15,759	53	I Jodas	10,4513	88	Ra Radis	5,2789
19	K Kalis	4,3407	54	Xe Ksenonas	12,1299	89	Ac Aktinis	5,17
20	Ca Kalcis	6,1132	55	Cs Cezis	3,8939	90	Th Toris	6,08
21	Sc Skandis	6,5614	56	Ba Baris	5,2117	91	Pa Protaktin.	5,89
22	Ti Titanas	6,8282	57	La Lantanas	5,5770	92	U Uranas	6,1941
23	V Vanadis	6,7463	58	Ce Ceris	5,5387	93	Np Neptūnis	6,2657
24	Cr Chrom.	6,7666	59	Pr Prazėodimis	5,464	94	Pu Plutonis	6,06
25	Mn Mang.	7,4340	60	Nd Neodimis	5,5250	95	Am Americ.	5,993
26	Fe Geležis	7,9024	61	Pm Prometis	5,55	96	Cm Kiuris	6,02
27	Co Kobalt.	7,8810	62	Sm Samaris	5,6437	97	Bk Berklis	6,23
28	Ni Nikelis	7,6398	63	Eu Europis	5,6704	98	Cf Kaliforn.	6,30
29	Cu Varis	7,7264	64	Gd Gadolinis	6,1500	99	Es Einštein.	6,42
30	Zn Cinkas	9,3941	65	Tb Terbis	5,8639	100	Fm Fermis	6,50
31	Ga Galis	5,9993	66	Dy Disprozis	5,9389	101	Md Mendel.	6,58
32	Ge Germ.	7,900	67	Ho Holmis	6,0216	102	No Nobelis	6,65
33	As Arsenas	9,8152	68	Er Erbis	6,1078	103	Lr Laurensis	
34	Se Selenas	9,7524	69	Tm Tulus	6,1843	104	Rf Rezerfor.	
35	Br Bromas	11,813	70	Yb Iterbis	6,2542	104	Ku Kurčiat.	

Kai kurių elementų izotopų atominės masės (*atominės masės vienetais u*)

Izotopas	Masė, <i>u</i>	Izotopas	Masė, <i>u</i>	Izotopas	Masė, <i>u</i>
${}^1_0\text{n}$	1,00867	${}^{10}_6\text{C}$	10,00168	${}^{27}_{13}\text{Al}$	26,98153
${}^1_1\text{H}$	1,00783	${}^{12}_6\text{C}$	12,00000	${}^{30}_{13}\text{Al}$	29,99817
${}^2_1\text{H}$	2,01410	${}^{13}_6\text{C}$	13,00355	${}^{31}_{14}\text{Si}$	30,97535
${}^3_1\text{H}$	3,01605	${}^{14}_6\text{C}$	14,00324	${}^{30}_{15}\text{P}$	29,97867
${}^3_2\text{He}$	3,01603	${}^{13}_7\text{N}$	13,00574	${}^{31}_{15}\text{P}$	30,97376
${}^4_2\text{He}$	4,00260	${}^{14}_7\text{N}$	14,00307	${}^{35}_{17}\text{Cl}$	34,96885
${}^6_3\text{Li}$	6,01513	${}^{15}_7\text{N}$	15,00011	${}^{40}_{20}\text{Ca}$	39,97542
${}^7_3\text{Li}$	7,01601	${}^{16}_8\text{O}$	15,99491	${}^{56}_{27}\text{Co}$	55,95769
${}^7_4\text{Be}$	7,01693	${}^{17}_8\text{O}$	16,99913	${}^{200}_{80}\text{Hg}$	200,02800
${}^8_4\text{Be}$	8,00531	${}^{18}_8\text{O}$	17,99916	${}^{206}_{82}\text{Pb}$	205,97446
${}^9_4\text{Be}$	9,01219	${}^{19}_9\text{F}$	18,9984	${}^{222}_{86}\text{Rn}$	222,01922
${}^{10}_4\text{Be}$	10,01354	${}^{20}_{10}\text{Ne}$	19,99244	${}^{226}_{88}\text{Ra}$	226,02435
${}^9_5\text{B}$	9,01333	${}^{22}_{11}\text{Na}$	21,99444	${}^{235}_{92}\text{U}$	235,04299
${}^{10}_5\text{B}$	10,01294	${}^{23}_{11}\text{Na}$	22,98977	${}^{238}_{92}\text{U}$	238,05006
${}^{11}_5\text{B}$	11,00931	${}^{23}_{12}\text{Mg}$	22,99414	${}^{239}_{92}\text{U}$	239,05122
				${}^{239}_{94}\text{Pu}$	239,05122

Istorinių ir norminių nuklidų žymėjimų atitikmenys

RaA – ${}^{218}_{84}\text{Po}$	ThC – ${}^{212}_{83}\text{Bi}$	UX ₂ ir jo izomeras UZ – ${}^{234}_{91}\text{Pa}$
RaB – ${}^{214}_{82}\text{Pb}$	ThC' – ${}^{212}_{84}\text{Po}$	Em (Torio emanacija) – ${}^{222}_{86}\text{Rn}$
RaC – ${}^{214}_{83}\text{Bi}$	ThC'' – ${}^{208}_{81}\text{Tl}$	Tn (Toronas) – ${}^{200}_{86}\text{Rn}$
RaC' – ${}^{214}_{84}\text{Po}$	ThD – ${}^{208}_{82}\text{Pb}$	An (Aktinonas) – ${}^{219}_{86}\text{Rn}$
RaC'' – ${}^{210}_{81}\text{Tl}$	U I – ${}^{238}_{92}\text{U}$	
RaD – ${}^{210}_{82}\text{Pb}$	U II – ${}^{234}_{92}\text{U}$	
RaE – ${}^{210}_{83}\text{Bi}$	AcU – ${}^{235}_{92}\text{U}$	
RaF – ${}^{218}_{84}\text{Po}$	U X ₁ – ${}^{234}_{90}\text{Th}$	
AcC' – ${}^{211}_{84}\text{Po}$	MsTh – ${}^{228}_{88}\text{Ra}$	