

PHYSIK

Oberstufe

Atommassen und Trennenergien

www.dokspeicher.de/100666
 Quelle der Atommassen:
<http://www.nist.gov/pml/data/comp.cfm>

p	1-0	Masse: 1,007276 u	$u = 1,660539 \cdot 10^{-27} \text{ kg}$
n	0-1	Masse: 1,008664 u	$c = 299\,792\,458 \text{ m/s}$
e	-1-0	Masse: 0,000549 u	$e = 1,602177 \cdot 10^{-19} \text{ C}$

Atom	Z-N	Atommasse in u	Trenn- energie in pJ	~ Kern- masse in u	Atom	Z-N	Atommasse in u	Trenn- energie in pJ	~ Kern- masse in u
H 1	1-0	1,007825	0,00	1,007	I 127	53-74	126,904473	171,85	126,876
H 2	1-1	2,014102	0,36	2,014	I 131	53-78	130,906125	176,77	130,877
H 3	1-2	3,016049	1,36	3,016	I 137	53-84	136,917871	182,78	136,889
He 3	2-1	3,016029	1,24	3,015	Xe 140	54-86	139,921641	185,97	139,892
He 4	2-2	4,002603	4,53	4,002	Xe 143	54-89	142,935112	187,84	142,906
Li 6	3-3	6,015123	5,13	6,013	Cs 137	55-82	136,907090	184,14	136,877
Li 7	3-4	7,016005	6,29	7,014	Cs 140	55-85	139,917283	186,49	139,887
Be 7	4-3	7,016930	6,02	7,015	Ba 137	56-81	136,905827	184,20	136,875
Be 8	4-4	8,005305	9,05	8,003	Ba 139	56-83	138,908841	186,34	138,878
Be 9	4-5	9,012182	9,32	9,010	Ba 141	56-85	140,914412	188,09	140,884
C 12	6-6	12,000000	14,77	11,997	Ba 142	56-86	141,916454	189,08	141,886
C 13	6-7	13,003355	15,56	13,000	Ba 144	56-88	143,922953	190,70	143,892
C 14	6-8	14,003242	16,87	14,000	Pb 204	82-122	203,973044	257,55	203,929
N 14	7-7	14,003074	16,77	13,999	Pb 205	82-123	204,974482	258,63	204,930
N 15	7-8	15,000109	18,50	14,996	Pb 206	82-124	205,974465	259,93	205,930
O 16	8-8	15,994915	20,45	15,991	Pb 207	82-125	206,975897	261,00	206,931
O 17	8-9	16,999132	21,11	16,995	Pb 208	82-126	207,976652	262,19	207,932
Ne 20	10-10	19,992440	25,74	19,987	Po 210	84-126	209,982874	263,59	209,937
Na 22	11-11	21,994436	27,90	21,988	Po 211	84-127	210,986653	264,32	210,941
Na 23	11-12	22,989769	29,89	22,984	Po 214	84-130	213,995201	266,93	213,950
P 32	15-17	31,973907	43,40	31,966	Po 216	84-132	216,001915	268,51	215,956
S 32	16-16	31,972071	43,54	31,963	Rn 220	86-134	220,011394	272,02	219,965
K 39	19-20	38,963707	53,47	38,953	Rn 222	86-136	222,017578	273,68	221,971
K 40	19-21	39,963998	54,72	39,954	Ra 226	88-138	226,025410	277,43	225,978
K 41	19-22	40,961826	56,34	40,951	Th 231	90-141	231,036304	282,02	230,988
Fe 56	26-30	55,934938	78,87	55,921	Th 232	90-142	232,038055	283,05	231,989
Co 59	27-32	58,933195	82,88	58,918	Th 233	90-143	233,041582	283,82	232,993
Co 60	27-33	59,933817	84,08	59,919	U 233	92-141	233,039635	283,86	232,990
Kr 89	36-53	88,917631	122,87	88,898	U 234	92-142	234,040952	284,96	233,991
Kr 90	36-54	89,919517	123,88	89,900	U 235	92-143	235,043930	285,81	234,994
Kr 92	36-56	91,926156	125,48	91,906	U 236	92-144	236,045568	286,86	235,996
Kr 95	36-59	94,939844	127,32	94,920	U 237	92-145	237,048730	287,68	236,999
Kr 96	36-60	95,943075	128,13	95,923	U 238	92-146	238,050788	288,66	238,001
Rb 93	37-56	92,922043	127,26	92,902	Np 237	93-144	237,048173	287,63	236,998
Rb 96	37-59	95,934270	129,32	95,914	Np 239	93-146	239,052939	289,51	239,003
Sr 89	38-51	88,907451	124,14	88,887	Pu 238	94-144	238,049560	288,60	237,999
Sr 90	38-52	89,907738	125,39	89,887	Pu 239	94-145	239,052163	289,50	239,001
Sr 94	38-56	93,915362	129,43	93,895	Pu 240	94-146	240,053814	290,55	240,003
Tc 107	43-64	106,915081	145,65	106,892	Pu 241	94-147	241,056852	291,39	241,006
Sb 130	51-79	129,911656	174,90	129,884	Am 241	95-146	241,056829	291,26	241,005