Periodensystem der Elemente

Relative Atommasse
Ordnungszahl **Elementsymbol**
Elektronenkonfiguration
Oxidationsstufen

* radioaktives Element (stabilstes Isotop)

Nichtmetalle ● Säurebildner
Halbmetalle □ amphoter
Metalle ■ Basenbildner
Übergangsmetalle

Übergangsmetalle (Nebengruppen)

Periode	Elektronenkonfiguration	s^1	s^2										p^1	p^2	p^3	p^4	p^5	p^6	Schale
		1	2										13	14	15	16	17	18	
		Hauptgruppen													Hauptgruppen				
		I a	II a										III a	IV a	V a	VI a	VII a	0	
1		1,0079 **H** $1s^1$ **-1, +1**																4,0026 **He** $1s^2$ **0**	K
2	[He]	6,941 **Li** $2s^1$ **+1** ■	9,0122 **Be** $2s^2$ **+2** □										10,811 **B** $2s^22p^1$ **+3** ●	12,011 **C** $2s^22p^2$ **-4**, 2, 4 ●	14,007 **N** $2s^22p^3$ 2,+3,4,5 ●	15,9994 **O** $2s^22p^4$ **-2** (-1) ●	18,998 **F** $2s^22p^5$ **-1** ●	20,18 **Ne** $2s^22p^6$ **0**	L
3	[Ne]	22,990 **Na** $3s^1$ **+1** ■	24,305 **Mg** $3s^2$ **+2** ■	d^1	d^2	d^3	d^4	d^5	d^6	d^7	d^8	d^9	d^{10}	26,982 **Al** $3s^23p^1$ **+3** □	28,086 **Si** $3s^23p^2$ **4** ●	30,974 **P** $3s^23p^3$ -3, 3, **5** ●	32,066 **S** $3s^23p^4$ **-2**, 2, 4, **6** ●	35,453 **Cl** $3s^23p^5$ **-1**,1,3,5,7●	39,948 **Ar** $3s^23p^6$ **0**	M
				3	4	5	6	7	8	9	10	11	12							
				III b	IV b	V b	VI b	VII b	← VIII →			I b	II b							
4	[Ar]	39,098 **K** $4s^1$ **+1** ■	40,078 **Ca** $4s^2$ **+2** ■	44,956 **Sc** $3d^14s^2$ **+3** ■	47,88 **Ti** $3d^24s^2$ +3, **+4** □	50,942 **V** $3d^34s^2$ **2**, 3, 4, **5**○	51,996 **Cr** **$3d^54s^1$** 2, **3**, 6 ○	54,938 **Mn** $3d^54s^2$ **2**,3,4,6,**7**○	55,845 **Fe** $3d^64s^2$ **2, 3**, 6 □	58,933 **Co** $3d^74s^2$ **2**, 3 □	58,693 **Ni** $3d^84s^2$ **2**, 3 ■	63,546 **Cu** **$3d^{10}4s^1$** 1, **2** ■	65,409 **Zn** $3d^{10}4s^2$ **2** □	69,723 **Ga** $3d^{10}4s^24p^1$ **+3** □	72,61 **Ge** $3d^{10}4s^24p^2$ **4** □	74,922 **As** $3d^{10}4s^24p^3$ -3, **3, 5** ○	78,96 **Se** $3d^{10}4s^24p^4$ -2, **4**, 6 ●	79,904 **Br** $3d^{10}4s^24p^5$ **-1**,1,3,5,7●	83,798 **Kr** $3d^{10}4s^24p^6$ 0, (2, 4)	N
5	[Kr]	85,468 **Rb** $5s^1$ **+1** ■	87,62 **Sr** $5s^2$ **+2** ■	88,906 **Y** $4d^15s^2$ **+3** ■	91,224 **Zr** $4d^25s^2$ **+4** □	92,906 **Nb** **$4d^45s^1$** 3, **5** ○	95,94 **Mo** **$4d^55s^1$** 2,3,4,5,**6**○	(98,906) **Tc** **$4d^65s^1$** **7** ○	101,07 **Ru** **$4d^75s^1$** **3**, 4, 8 ○	102,91 **Rh** **$4d^85s^1$** **1**, 2, **3**, 4 ■	106,42 **Pd** **$4d^{10}$** **2**, 4 ■	107,87 **Ag** **$4d^{10}5s^1$** **1** ■	112,41 **Cd** $4d^{10}5s^2$ **2** ■	114,82 **In** $4d^{10}5s^25p^1$ **3** □	118,71 **Sn** $4d^{10}5s^25p^2$ **2, 4** □	121,76 **Sb** $4d^{10}5s^25p^3$ -3, **3, 5** ○	127,60 **Te** $4d^{10}5s^25p^4$ -2, **4**, 6 ○	126,90 **I** $4d^{10}5s^25p^5$ **-1**,1,3,5,7●	131,29 **Xe** $4d^{10}5s^25p^6$ 0,(2, 4, 6)	O
6	[Xe]	132,91 **Cs** $6s^1$ **+1** ■	137,33 **Ba** $6s^2$ **+2** ■	138,91 **La** $5d^16s^2$ **+3** ■	178,49 **Hf** $4f^{14}5d^26s^2$ **+4** □	180,95 **Ta** $4f^{14}5d^36s^2$ **+5** ○	183,84 **W** $4f^{14}5d^46s^2$ 2,3,4,5,**6**○	186,21 **Re** $4f^{14}5d^56s^2$ 2, 4, **7** ○	190,23 **Os** $4f^{14}5d^66s^2$ 2,3,**4**,6,8 ○	192,22 **Ir** $4f^{14}5d^76s^2$ **1**,2,3,**4**,6 ■	195,08 **Pt** $4f^{14}$**$5d^96s^1$** **2, 4** ■	196,97 **Au** $4f^{14}$**$5d^{10}6s^1$** 1, **3** ■	200,59 **Hg** $4f^{14}5d^{10}6s^2$ 1, **2** ■	204,38 **Tl** $4f^{14}5d^{10}$ $6s^26p^1$ **1**, 3 □	207,2 **Pb** $4f^{14}5d^{10}$ $6s^26p^2$ **2, 4** □	208,98 **Bi** $4f^{14}5d^{10}$ $6s^26p^3$ **3**, 5 ■	(209,98) **Po*** $4f^{14}5d^{10}$ $6s^26p^4$ **2, 4**, 6 ○	(209,99) **At*** $4f^{14}5d^{10}$ $6s^26p^5$ **-1**,1,3,5,7●	(222,02) **Rn*** $4f^{14}5d^{10}$ $6s^26p^6$ 0, (2)	P
7	[Rn]	(233,02) **Fr*** $7s^1$ **+1** ■	(226,03) **Ra*** $7s^2$ **+2** ■	227,03 **Ac** $6d^17s^2$ **+3** ■	(261) **Rf***	(262) **Db***	(266) **Sg***	(264) **Bh***	(277) **Hs***	(268) **Mt***	(281) **Ds***	(272) **Rg***	(285) **Uub***	(284) **Uut***	(289) **Uuq***	(288) **Uup***				Q

Lanthanoide **f^1…f^{14}**	6 [Xe]	140,12 **Ce** $4f^26s^2$ **3**, 4 ■	140,91 **Pr** $4f^36s^2$ **3, 4** ■	144,24 **Nd** $4f^46s^2$ **3** ■	(146,92) **Pm*** $4f^56s^2$ **3** ■	150,36 **Sm** $4f^66s^2$ 2, **3** ■	151,96 **Eu** $4f^76s^2$ 2, **3** ■	157,25 **Gd** **$4f^75d^16s^2$** **3** ■	158,93 **Tb** $4f^96s^2$ 3, **4** ■	162,50 **Dy** $4f^{10}6s^2$ **3** ■	164,93 **Ho** $4f^{11}6s^2$ **3** ■	167,26 **Er** $4f^{12}6s^2$ **3** ■	168,93 **Tm** $4f^{13}6s^2$ 2, **3** ■	173,04 **Yb** $4f^{14}6s^2$ 2, **3** ■	174,97 **Lu** $4f^{14}5d^16s^2$ **3** ■	P
Actinoide **f^1…f^{14}**	7 [Rn]	(232,04) **Th*** $6d^27s^2$ **4** ■	(231,04) **Pa*** **$5f^26d^17s^2$** 4, 5 ■	(238,03) **U*** **$5f^36d^17s^2$** 3, 4, 5, **6** □	(237,05) **Np*** **$5f^46d^17s^2$** 3, **4**, 5, 6 □	(244,06) **Pu*** $5f^67s^2$ 3, **4**, 5, 6 □	(243,06) **Am*** $5f^77s^2$ 3, 4, 5, 6	(247,07) **Cm*** **$5f^76d^17s^2$** **3**, 4	(247,07) **Bk*** $5f^97s^2$ **3**, 4	(251,08) **Cf*** $5f^{10}7s^2$ **3**, 4	(252,08) **Es*** $5f^{11}7s^2$ **3**	(257,18) **Fm*** $5f^{12}7s^2$ **3**	(258,10) **Md*** $5f^{13}7s^2$ **3**	(259,10) **No*** $5f^{14}7s^2$ **2**, 3	(262,11) **Lr*** $5f^{14}6d^17s^2$ **3**	Q