

Periodensystem der Elemente
Periodic table of the elements



1 H 1.0079 -259.14 -252.87 2.2 -1,1															2 He 4.0026 -272.2 -268.93			
3 Li 6.941 180.54 1347 1.0 1	4 Be 9.0122 1278 2970 1.5 2															10 Ne 20.18 -248.67 -246.05		
11 Na 22.990 97.81 882.9 1.0 1	12 Mg 24.305 648.8 1090 1.2 2															18 Ar 39.948 -189.2 -185.7		
19 K 39.098 63.65 774 0.9 1	20 Ca 40.078 839 1484 1.0 2	21 Sc 44.956 1541 2831 1.2 3	22 Ti 47.88 1660 3287 1.3 3, 4	23 V 50.942 1890 3380 1.5 2, 3, 4, 5	24 Cr 51.996 1857 2672 1.6 2, 3, 6	25 Mn 54.938 1244 1962 1.6 2, 3, 4, 6, 7	26 Fe 55.845 1535 2750 1.6 2, 3, 6	27 Co 58.933 1495 2670 1.7 2, 3	28 Ni 58.693 1453 2732 1.8 2, 3	29 Cu 63.546 1083 2567 1.8 1, 2	30 Zn 65.39 419.6 907 1.7 2	31 Ga 69.723 29.78 2403 1.8 3	32 Ge 72.61 937.4 2830 2.0 4	33 As 74.922 817 613 2.2 -3, 3, 5	34 Se 78.96 217 684.9 2.5 -2, 4, 6	35 Br 79.904 58.78 58.78 2.7 -1, 1, 3, 5, 7	36 Kr 83.80 -156.6 -152.3 2, 4	
37 Rb 85.468 38.89 769 0.9 1	38 Sr 87.62 769 1384 1.0 2	39 Y 88.906 1522 3338 1.1 3	40 Zr 91.224 1852 4377 1.2 4	41 Nb 92.906 1862 4742 1.2 3, 5	42 Mo 95.94 2617 4612 1.3 2, 3, 4, 5, 6	43 Tc 98.906 2172 4877 1.4 7	44 Ru 101.07 2310 3900 1.4 3, 4, 8	45 Rh 102.91 1966 3727 1.5 1, 2, 3, 4	46 Pd 106.42 1552 3140 1.4 2, 4	47 Ag 107.87 961.9 2212 1.4 1, 2	48 Cd 112.41 320.9 765 1.5 2	49 In 114.82 156.6 2080 1.5 3	50 Sn 118.71 232.0 2270 1.7 2, 4	51 Sb 121.76 630.7 1750 1.8 -3, 3, 5	52 Te 127.60 449.5 990 2.0 -2, 4, 6	53 I 126.90 113.5 184.4 2.2 -1, 1, 3, 5, 7	54 Xe 131.29 -111.9 -107.1 2, 4, 6	
55 Cs 132.91 28.40 678.4 0.9 1	56 Ba 137.33 725 1640 1.0 2	57–71 Lanthaniden Lanthanides 3		72 Hf 178.49 2227 4602 1.2 4	73 Ta 180.95 2996 5425 1.3 5	74 W 183.84 3410 5660 1.4 2, 3, 4, 5, 6	75 Re 186.21 3180 5627 1.5 2, 4, 7	76 Os 190.23 3045 5027 1.5 2, 3, 4, 6, 8	77 Ir 192.22 2410 4130 1.6 1, 2, 3, 4, 6	78 Pt 195.08 1772 3827 1.4 2, 4	79 Au 196.97 1064 2807 1.4 1, 3	80 Hg 200.59 -38.84 356.6 1.5 1, 2	81 Tl 204.38 303.5 1457 1.4 1, 3	82 Pb 207.2 327.5 1740 1.6 2, 4	83 Bi 208.98 271.3 1560 1.7 3, 5	84 Po 209.98 254 962 1.8 2, 4, 6	85 At 209.98 302 337 2.0 -1, 1, 3, 5, 7	86 Rn 222.02 -71 -61.8 2
87 Fr 223.02 27 677 0.9 1	88 Ra 226.03 700 1140 1.0 2	89–103 Actiniden Actinides 3		104 Rf 261.11 4	105 Db 262.11 5	106 Sg 266.12 6	107 Bh 264.12 7	108 Hs 269.13 8	109 Mt 268.14 9	110 Ds 271.15 10	111 Uuu 272.15 11	112 Uub 277 12	Inorganics from Merck - Setting the Standard Merck KGaA Darmstadt, Germany Fax: ++49 6151 7198 33 E-Mail: lsa.ms@merck.de					
Lanthaniden Lanthanides				57 La 138.91 921 3457 1.1 3	58 Ce 140.12 799 3426 1.1 3, 4	59 Pr 140.91 931 3512 1.1 3, 4	60 Nd 144.24 1021 3068 1.1 3	61 Pm 146.92 1168 2460 1.1 3	62 Sm 150.36 1077 1597 1.1 2, 3	63 Eu 151.96 822 1597 1.0 2, 3	64 Gd 157.25 1313 3266 1.1 3	65 Tb 158.93 1356 3123 1.1 3, 4	66 Dy 162.50 1412 2562 1.1 3	67 Ho 164.93 1474 2695 1.1 3	68 Er 167.26 1497 2900 1.1 3	69 Tm 168.93 1545 1947 1.1 2, 3	70 Yb 173.04 819 1194 1.1 2, 3	71 Lu 174.97 1663 3395 1.1 3
Actiniden Actinides				89 Ac 227.03 1050 3200 1.0 3	90 Th 232.04 1750 4790 1.1 4	91 Pa 231.04 1600 4, 5	92 U 238.03 1132 3818 1.2 3, 4, 5, 6	93 Np 237.05 640 3902 1.2 3, 4, 5, 6	94 Pu 244.06 641 3232 1.2 3, 4, 5, 6	95 Am 243.06 641 2607 ~1.2 3, 4, 5, 6	96 Cm 247.07 1340 ~1.2 3, 4	97 Bk 247.07 ~1.2 3, 4	98 Cf 251.08 ~1.2 3, 4	99 Es 252.08 ~1.2 3	100 Fm 257.18 ~1.2 3	101 Md 258.10 ~1.2 3	102 No 259.10 2, 3	103 Lr 262.11 3