Periodensystem der Elemente 1.008 4.0026 0.00(1) 2.20 5.50 -259 / -253 - / -269 Н He Wasserstoff Helium Ordnungszahl 1,008 Relative Atommasse in U (früher amu 6,94 10,81 12,011 14,007 8 15,999 9 0,97 -1,79(2) Normalpotential 0.00(1)Elektronegativität (nach Allred / Rochow) -0,890(3) -3.040(1) 2.01 2.50 1.45(3) 3.07 1.229(-2) 0.206(4) 3.50 3.053(-1) [He] 2s² 2p¹ 2180 B / 3650 [He] 2s² 2p³ -210 / -196 [He] 2s² 2p⁴ -219 / -183 [Ho] 2c2 2c2 (Reduktionspotential) Elektronenkonfiguration -220 / -188 181 / 1347 1278 / 2470 3750 G / 4830 -249 / -246 E in V mit Oxidationsstufen (n) -259 / -253 Schmelz- / Siedetemperatur in °C Ne Be В 0 Lithium Kohlenstoff Beryllium Bor Stickstoff Sauerstoff Neon Symbol 22,990 12 24,305 13 26,982 14 28,085 15 30,974 16 32,06 17 35,45 18 39,948 -2,356(2) Wasserstoff -1,676(3) -0,909(4) -0,502(3) 0,144(-2) 1,358(-1) Name 2,44 [Ne] 3s² 3p¹ [Ne] 3s² 3p² [Ne] 3s² 3p³ [Nel 3s2 3p4 1278 / 2470 CI Na Mg Ar Magnesium Silicium Schwefel Chlor Natrium Aluminium Phosphor Argon 58,693 29 19 39.098 20 40.078 21 50,942 24 51,996 25 54,938 26 55,845 27 58,933 28 63,546 30 65,38 31 69,723 78.96 35 79.904 44,956 22 47,867 23 32 72,63 33 74.922 36 1.45 .0.913(2) 1.60 -0.440(2) 1.64 -0.277(2) -2 925(1) 0.91 -2.84(2) 1.04 -2.03(3) 1 20 -1 63(2) 1 32 | -1 186(2) 1.56 -1.180(2) 1.70 -0.257(2) 1.75 0.340(2) 1.75 -0.763(2) 1.66 -0.529(3) 1.82 -0.036(4) 2.02 0.240(3) 2.20 -0.40(-2) 2.48 1.065(-1) [Ar] 3d¹⁰ 4s² [Ar] 3d¹⁰ 4s² 4p² [Ar] 3d¹⁰ 4s² 4p⁴ [Ar] 3d¹⁰ 4s² 4p¹ 00/002 839 / 1484 1541 / 2836 1668 / 3262 1668 / 3262 1890 / 2640 1244 / 2032 1535 / 2750 1495 / 2870 1453 / 2732 1083 / 2595 20 / 2403 937 / 2830 817 / 615 subl 217 / 685 6.3.2 Zn Fe Sc Ni Se Br Ca Mn Co Kr Κ Cr Cu Ga Ge As Kalium Calcium Chrom Mangan Nickel Kupfer Galium Scandium Vanadium Eisen Cobalt Zink Germanium Selen Brom Krypton 85.468 87.62 39 88.906 40 91.224 41 92.906 42 95.962 43 98,906 44 101.07 45 102.91 46 106.42 47 107.87 48 112.41 49 114.82 50 118,71 51 121.76 52 127.60 53 126.90 -2.924(1) 0.89 -2.89 0.99 -2.37(3) 1.11 -1.55(4) 1.22 -1.099(3) 1.23 -0.20(3) 1.30 0.28(4) 1.36 0.623(3) 1.42 -0.76(3) 1.45 0.915(2) 0.779(1) 1.42 -0.403(2) -0.343(3) 1.49 -0.137(2) 1.72 0.150(3) 1.82 -0.69(-2) 2.01 0.536(-1) [Kr] 4d¹⁰ 5s² 5p² [Kr] 4d¹⁰ 5s² 5p³ [Kr] 4d¹ 5s [Kr] 4d² 5s² [Kr] 4d³ 5s² [Kr] 4d⁴ 5s² [Kr] 4d⁵ 5s² [Kr] 4d⁶ 5s² [Kr] 4d⁷ 5s² [Kr] 4d^a 5s² [Kr] 4d¹⁰ 5s² 5p¹ [Kr] 4d¹⁰ 5s² 5p⁴ [Kr] 4d¹⁰ 5s² 5p 39 / 688 769 / 1384 1522 / 3338 1852 / 4377 2468 / 4928 2617 / 4825 2172 / 4877 2310 / 3900 1966 / 2730 1554 / 3140 962 / 2163 321 / 765 157 / 2080 232 B / 2687 631 A / 1635 450 / 990 -112 / -108 Zr Rh Te Rb Sr Nb Tc Ru Pd Cd Sn Sb Xe Mo Ag In Rubidium Strontium Yttrium Zirconium Molybdän Technetium Ruthenium Rhodium Palladium Silber Cadmium Indium Antimon Tellur Xenon 80 200,59 81 204,38 83 208,98 84 209,98 85 210,99 55 132,91 | 56 137,33 78 195,08 79 196,97 82 207,2 86 222,02 0.440(2) -0,440(2) -0 199(4) 0,22(4) 1,46 0,687(4) 1,52 1,156(3) 1,55 1,188(2) 1,691(1) -0,336(1) -0,125(2) 0,317(3) <-1 0(-2) [Xe] 4f¹⁴5d⁴ 6s² [Xe] 4f¹⁴5d⁶ 6s² [Xe] 4f¹⁴5d⁷ 6s² [Xe] 4f¹⁴5d¹⁰6s² [Xe] 4f¹⁴5d⁵ 6s² [Xe] 4f¹⁴5d⁸ 6s² [Xe] 4f¹⁴5d² 6s² [Xe] 4f¹⁴5d¹⁰6s²6p¹ [Xe] 4f¹⁴5d¹⁰ 6s² 6p² [Xe] 4f¹⁴5d¹⁰ 6s² 6p³ [Xe] 4f¹⁴5d¹⁰ 6s² 6p⁴ 1535 / 2750 303 / 1457 254 / 962 1535 / 2750 227 / 4602 2996 / 5425 3410 / 5657 3180 / 5630 3054 / 5027 2410 / 4530 1772 / 3827 1064 / 2908 -39 / 357 328 / 1740 271 / 1560 Re Pb Bi Po Cs Hf Hg Rn Ва Os Au ıa Caesium Hafnium Worlfram Rhenium Osmium Platin Gold Quecksilber Thallium Rlei Bismut Radon Rarium Tantal Iridium Polonium Astat 106 271,13 107 267,13 108 277,15 109 276,15 110 281,16 111 280,16 112 285,17 114 289,19 115 288,19 116 292,20 117 118 223,02 88 105 268,13 113 284,18 228,03 104 267,12 -2,916(2) [Rn] 5f¹⁴6d² 7s² [Rn] 5f¹⁴6d⁷ 7s² [Rn] 5f¹⁴6d⁸ 7s² [Rn] 5f¹⁴6d⁹ 7s² [Rn] 5f¹⁴6d¹⁰ 7s² 7p [Rn] 5f¹⁴6d¹⁰ 7s² 7p² [Rn] 5f¹⁴6d¹⁰ 7s² 7p³ [Rn] 5f¹⁴6d¹⁰ 7s² 7p⁴ [Rn] 5f¹⁴6d³ 4s [Rn] 5f146d4 7s2 [Rn] 5f146d5 7s2 [Rn] 5f146d6 7s2 [Rn] 5f146d10 7s [Rn] 5f146d107s27p [Rn] 5f146d107s27c Ra Db Sg Bh Hs Rg Ds Uup Uuo Radium Rutherfordium Dubnium Seaborgium Bohrium Hassium Meitnerium Darmstadtium Roentgenium Copernicium Ununtrium Flerovium Ununpentium Livermorium Ununseptium Ununoctium Francium 66 162,50 67 164,93 68 167,26 69 168,93 70 173.05 71 174.97 ?) 1,01 -2,28(3) [Xe] 4f² 6s² | [Xe] 3) 1,10 [Xe] 4f° 6s² 3) 1,10 [Xe] 4f¹⁰6s² 3) 1,10 [Xe] 4f¹¹6s² -2.38(3) 1.08 -1.33(4) 1.08 -0.96(4) 1.07 -2.29(3) 1.07 -2.29(3) 1.07 -2.67(2) 1.07 -2.80(2) 1.11 -2.31(3) -2.29(3) -2.33(3) -2.32(3) 1 11 -2.32(3) 1.11 -2.22(3) 1.06 -2.30(3) [Xe] 4f 5d 6s2 [Xe] 4f¹⁴5d¹ 6s² [Xe] 4f² 6s² [Xe] 4f 6s2 [Xe] 4f° 6s² [Xe] 4f 6s2 [Xe] 4f¹² 6s² [Xe] 4f¹³6s² [Xe] 4f¹⁴ 6s² 920 / 3469 798 / 3443 931 / 3250 1024 / 3074 931 / 2730 1074 / 1794 826 / 1439 1312 / 3273 1356 / 3230 1407 / 2562 1474 / 2720 1497 / 2863 1545 / 1947 819 / 1196 Sm Eu La Nd Pm Ga Er Ce Tm I D Lanthan Paseodym Neodym Promethium Samarium Europium Gadolinium Terbium Dysprosium Holmium Ytterhium Lutetium



231,04 92 238,05

Uran

1,14 -0,836(3)

1845 / 4027

1,19(5)

Pa

Protactinium

-2,13(3)

AC

Actinium

1050 / 3200

-1,83(4)

Th

Thorium

1750 / 4788

93 237,05

Np

Neptunium

1,22 -1,01(5)

1132 / 3930

[Rn] 5f³ 6d³ 7e

94

Pu

Plutonium

1,22 -1,25

630 / 3902

244,06

641 / 3232

1,22 -1,96(2)

95

Am

Americium

243,06

994 / 2607

96

-2,06(3)

Cm

Curium

248,07

1340 / 3110

97

-1,96(3)

Bk

Berkelium

249,08

986 / 2950

98

-1,91(3)

Cf

Californium

252,08

950 /

99

1,98(3)

Es

Einsteinium

254,09

860 /

100

-2,5(2)

Fm

Fermium

101 260,10

-2,6(2)

No

Nobelium

-2,1(3)

Lawrencium

-2,53(2)

Md

Medelivium

900 /