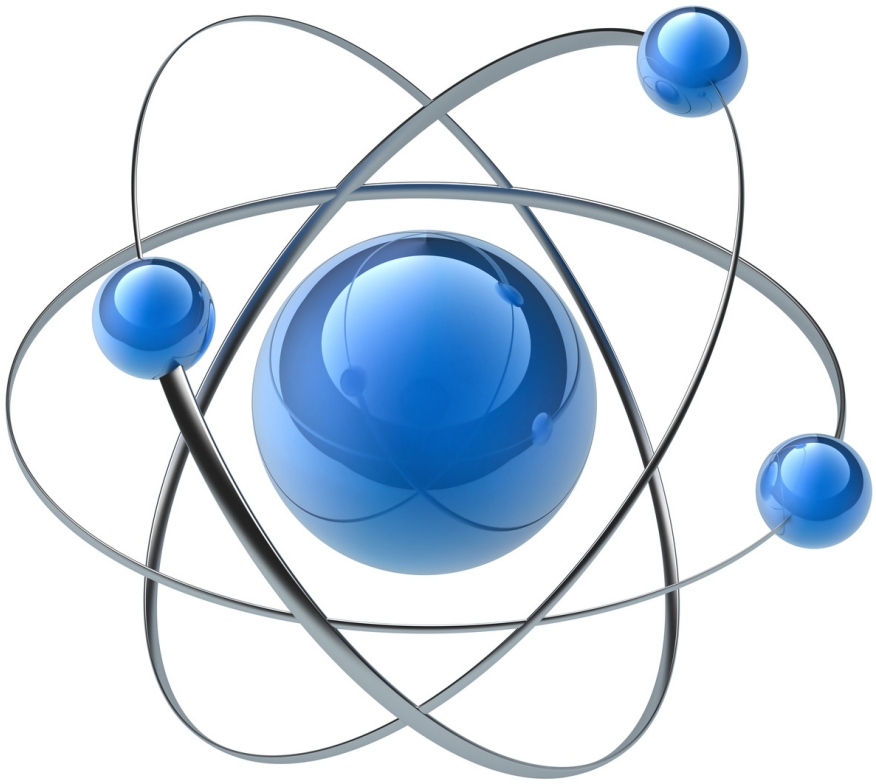
Literaturverzeichnis blume Periodensysteme



Sebastian Blumentritt

Elementname	Ordnungszahl	Elektronegativität (Allred & Rochow)	Elektronegativität (Pauling)	relative Atommassen	Schmelzpunkte	Siedepunkte
Wasserstoff	1	k.a.	[3]	[113]	[112]	[112]
Helium	2	[2]	[3]	[113]	[112]	[112]
Lithium	3	[4]	[3]	[113]	[112]	[112]
Beryllium	4	[4]	[3]	[113]	[112]	[112]
Bor	5	[4]	[3]	[113]	[112]	[112]
Kohlenstoff	6	[4]	[3]	[113]	[112]	[112]
Stickstoff	7	[4]	[3]	[113]	[112]	[112]
Sauerstoff	8	[4]	[3]	[113]	[112]	[112]
Fluor	9	[4]	[3]	[113]	[112]	[112]
Neon	10	[2]	k.a.	[113]	[112]	[112]
Natrium	11	[4]	[3]	[113]	[112]	[112]
Magnesium	12	[4]	[3]	[113]	[112]	[112]
Aluminium	13	[4]	[3]	[113]	[112]	[112]
Silicium	14	[41]	[3]	[113]	[112]	[112]
Phosphor	15	[4]	[3]	[113]	[112]	[112]
Schwefel	16	[4]	[3]	[113]	[112]	[112]
Chlor	17	[4]	[3]	[113]	[112]	[112]
Argon	18	[2]	k.a.	[113]	[112]	[112]
Kalium	19	[4]	[3]	[113]	[112]	[112]
Calcium	20	[4]	[3]	[113]	[112]	[112]
Scandium	21	[4]	[3]	[113]	[112]	[112]
Titan	22	[4]	[3]	[113]	[112]	[112]
Vanadium	23	[4]	[3]	[113]	[112]	[112]
Chrom	24	[4]	[3]	[113]	[112]	[112]
Mangan	25	[4]	[3]	[113]	[112]	[112]
Eisen	26	[4]	[3]	[113]	[112]	[112]
Cobalt	27	[4]	[3]	[113]	[112]	[112]
Nickel	28	[4]	[3]	[113]	[112]	[112]
Kupfer	29	[4]	[3]	[113]	[112]	[112]
Zink	30	[4]	[3]	[113]	[112]	[112]
Gallium	31	[4]	[3]	[113]	[112]	[112]
Germanium	32	[4]	[3]	[113]	[112]	[112]
Arsen	33	[4]	[3]	[113]	[112]	[112]
Selen	34	[4]	[3]	[113]	[112]	[112]
Brom	35	[4]	[3]	[113]	[112]	[112]
Krypton	36	[2]	[2]	[113]	[112]	[112]
Rubidium	37	[4]	[3]	[113]	[112]	[112]
Strontium	38	[4]	[3]	[113]	[112]	[112]
Yttrium	39	[4]	[3]	[113]	[112]	[112]
Zirconium	40	[41]	[3]	[113]	[112]	[112]
Niob	41	[41]	k.a.	[113]	[112]	[112]
Molybdän	42	[41]	[3]	[113]	[112]	[112]
Technetium	43	[41]	k.a.	[113]	[112]	[112]
Ruthenium	44	[41]	k.a.	[113]	[112]	[112]
Rhodium	45	[41]	[3]	[113]	[112]	[112]
Palladium	46	[41]	[3]	[113]	[112]	[112]
Silber	47	[4]	[3]	[113]	[112]	[112]
Cadmium	48	[4]	[3]	[113]	[112]	[112]
Indium	49	[4]	[3]	[113]	[112]	[112]
Zinn	50	[4]	[3]	[113]	[112]	[112]
Antimon	51	[4]	[3]	[113]	[112]	[112]
Tellur	52	[4]	[1]	[113]	[112]	[112]
Iod	53	[4]	[3]	[113]	[112]	[112]
Xenon	54	[2]	[2]	[113]	[112]	[112]
Caesium	55	[4]	[3]	[113]	[112]	[112]
Barium	56	[4]	[3]	[113]	[112]	[112]
Lanthan	57	[4]	[3]	[113]	[112]	[112]
Cer	58	[41]	[3]	[113]	[112]	[112]
Praseodym	59	[41]	[3]	[113]	[112]	[112]
Neodym	60	[41]	[3]	[113]	[112]	[112]
Promethium	61	[41]	k.a.	[113]	[112]	[112]
Samarium	62	[41]	[3]	[113]	[112]	[112]
Europium	63	[41]	k.a.	[113]	[112]	[112]
Gadolinium	64	[41]	[3]	[113]	[112]	[112]
Terbium	65	[41]	k.a.	[113]	[112]	[112]
Dysprosium	66	[41]	[3]	[113]	[112]	[112]
Holmium	67	[41]	[3]	[113]	[112]	[112]
Erbium	68	[41]	[3]	[113]	[112]	[112]
Thulium	69	[41]	[3]	[113]	[112]	[112]
Ytterbium	70	[41]	k.a.	[113]	[112]	[112]
Lutetium	71	[41]	[3]	[113]	[112]	[112]
Hafnium	72	[41]	k.a.	[113]	[112]	[112]
Tantal	73	[41]	k.a.	[113]	[112]	[112]
Wolfram	74	[41]	[3]	[113]	[112]	[112]
Rhenium	75	[41]	k.a.	[113]	[112]	[112]
Osmium	76	[41]	k.a.	[113]	[112]	[112]

Tabelle 1: Literaturnachweis für das blume Periodensystem in der Version 4.0

Elementname	Ordnungszahl	Elektronegativität (Allred & Rochow)	Elektronegativität (Pauling)	relative Atommassen	Schmelzpunkte	Siedepunkte
Iridium	77	[41]	[3]	[113]	[112]	[112]
Platin	78	[41]	[3]	[113]	[112]	[112]
Gold	79	[41]	[3]	[113]	[112]	[112]
Quecksilber	80	[41]	[3]	[113]	[112]	[112]
Thallium	81	[41]	k.a.	[113]	[112]	[112]
Blei	82	[41]	[3]	[113]	[112]	[112]
Bismut	83	[41]	[3]	[113]	[112]	[112]
Polonium	84	[41]	k.a.	[113]	[112]	[112]
Astat	85	[41]	k.a.	[113]	[112]	[112]
Radon	86	[2]	[4]	[113]	[112]	[112]
Francium	87	[41]	[41]	[113]	[112]	[112]
Radium	88	[41]	k.a.	[113]	[112]	[112]
Actinium	89	[41]	[3]	[113]	[112]	[112]
Thorium	90	[41]	[2]	[113]	[112]	[112]
Protactinium	91	[41]	k.a.	[113]	[112]	[112]
Uran	92	[41]	[3]	[113]	[112]	[112]
Neptunium	93	[41]	[3]	[113]	[112]	[112]
Plutonium	94	[41]	[3]	[113]	[112]	[112]
Americium	95	[41]	k.a.	[113]	[112]	[112]
Curium	96	[41]	k.a.	[113]	[112]	[112]
Berkelium	97	[41]	k.a.	[113]	[112]	[112]
Californium	98	[41]	k.a.	[113]	[112]	[112]
Einsteinium	99	[41]	k.a.	[113]	[112]	k.a.
Fermium	100	[41]	k.a.	[113]	[112]	k.a.
Mendelevium	101	[41]	k.a.	[113]	[112]	k.a.
Nobelium	102	[41]	k.a.	[113]	k.a.	k.a.
Lawrencium	103	k.a.	k.a.	[113]	[112]	k.a.
Rutherfordium	104	k.a.	k.a.	[113]	k.a.	k.a.
Dubnium	105	k.a.	k.a.	[113]	k.a.	k.a.
Seaborgium	106	k.a.	k.a.	[113]	k.a.	k.a.
Bohrium	107	k.a.	k.a.	[113]	k.a.	k.a.
Hassium	108	k.a.	k.a.	[113]	k.a.	k.a.
Meitnerium	109	k.a.	k.a.	[113]	k.a.	k.a.
Darmstadtium	110	k.a.	k.a.	[113]	k.a.	k.a.
Roentgenium	111	k.a.	k.a.	[113]	k.a.	k.a.
Copernicium	112	k.a.	k.a.	[113]	k.a.	k.a.
Ununtrium	113	k.a.	k.a.	[113]	k.a.	k.a.
Ununquadium	114	k.a.	k.a.	[113]	k.a.	k.a.
Ununpentium	115	k.a.	k.a.	[113]	k.a.	k.a.
Ununhexium	116	k.a.	k.a.	[113]	k.a.	k.a.
Ununseptium	117	k.a.	k.a.	[113]	k.a.	k.a.
Ununoctium	118	k.a.	k.a.	[113]	k.a.	k.a.

Tabelle 1: Literaturnachweis für das blume Periodensystem in der Version 4.0

Elementname	Ordnungszahl	1. Ionisierungsenergie	Atomradien	Kristallstrukturen
Wasserstoff	1	[57][78]	[96]	[?]
Helium	2	[40][16]	[33]	[91]
Lithium	3	[67]	[96]	[81]
Beryllium	4	[14]	[96]	[116]
Bor	5	[42][20]	[96]	[75]
Kohlenstoff	6	[56]	[96]	[107]
Stickstoff	7	[46]	[96]	[92]
Sauerstoff	8	[45]	[96]	[12]
Fluor	9	[39][64]	[96]	[84]
Neon	10	[60]	[33]	[50]
Natrium	11	[13]	[96]	[]
Magnesium	12	[58][30]	[96]	[]
Aluminium	13	[59][31]	[96]	[]
Silicium	14	[72]	[96]	[]
Phosphor	15	[104]	[96]	[]
Schwefel	16	[73]	[96]	[]
Chlor	17	[86]	[96]	[]
Argon	18	[109]	[33]	[]
Kalium	19	[68][36]	[96]	[]
Calcium	20	[102]	[96]	[]
Scandium	21	[103]	[96]	[]
Titan	22	[97]	[96]	[]
Vanadium	23	[53]	[96]	[]
Chrom	24	[99]	[96]	[]
Mangan	25	[35]	[96]	[]
Eisen	26	[37]	[96]	[]
Cobalt	27	[83]	[96]	[]

Tabelle 2: Literaturangaben zur 1. Ionisierungsenergie und den Atomradien. Theoretische Grundlagen werden im *Atomic, Molecular, & Optical Physics Handbook*[71] beschrieben. Sowohl Daten zur Ionisierungsenergie, als auch die Literaturangaben stammen von `http://physics.nist.gov/PhysRefData/IonEnergy/tblNew.html`. Die Bedingungen, unter denen die Kristallstrukturen ermittelt wurden sind den einzelnen Quellen zu entnehmen.

Elementname	Ordnungszahl	1. Ionisierungs-energie	Atomradien	Kristallstrukturen
Nickel	28	[61]	[96]	[]
Kupfer	29	[94][65][66]	[96]	[]
Zink	30	[23]	[96]	[]
Gallium	31	[108]	[96]	[]
Germanium	32	[101]	[96]	[]
Arsen	33	[17]	[96]	[]
Selen	34	[80][28]	[96]	[]
Brom	35	[105][51]	[96]	[]
Krypton	36	[100]	[33]	[]
Rubidium	37	[55][68]	[96]	[]
Strontium	38	[90]	[96]	[]
Yttrium	39	[48][52]	[96]	[]
Zirconium	40	[49]	[96]	[]
Niob	41	[89]	[96]	[]
Molybdän	42	[89]	[96]	[]
Technetium	43	[47]	[96]	[]
Ruthenium	44	[88][25]	[96]	[]
Rhodium	45	[25]	[96]	[]
Palladium	46	[25]	[96]	[]
Silber	47	[93][66]	[96]	[]
Cadmium	48	[23]	[96]	[]
Indium	49	[38]	[96]	[]
Zinn	50	[22]	[96]	[]
Antimon	51	[15]	[96]	[]
Tellur	52	[29]	[96]	[]
Iod	53	[76]	[96]	[]
Xenon	54	[62][18]	[33]	[]
Caesium	55	[111]	[96]	[]
Barium	56	[85]	[96]	[]
Lanthan	57	[5]	[96]	[]
Cer	58	[114]	[96]	[]
Praseodym	59	[114]	[96]	[]
Neodym	60	[114]	[96]	[]
Promethium	61	[114]	[96]	[]
Samarium	62	[54]	[96]	[]
Europium	63	[82]	[96]	[]
Gadolinium	64	[77]	[96]	[]
Terbium	65	[114]	[96]	[]
Dysprosium	66	[114]	[96]	[]
Holmium	67	[114]	[96]	[]
Erbium	68	[114]	[96]	[]
Thulium	69	[27]	[96]	[]
Ytterbium	70	[8]	[96]	[]
Lutetium	71	[69]	[96]	[]
Hafnium	72	[24]	[96]	[]
Tantal	73	[95]	[96]	[]
Wolfram	74	[26]	[96]	[]
Rhenium	75	[26]	[96]	[]
Osmium	76	[34]	[96]	[]
Iridium	77	[34]	[96]	[]
Platin	78	[70][52]	[96]	[]
Gold	79	[19][66]	[96]	[]
Quecksilber	80	[9]	[96]	[]
Thallium	81	[10][11]	[96]	[]
Blei	82	[21]	[96]	[]
Bismut	83	[74]	[96]	[]
Polonium	84	[32] Mittelwert aus 67840 and 67885 cm^{-1}	[96]	[]
Astat	85	k.a.	[96]	[]
Radon	86	[87][79]	[33]	[]
Francium	87	[7]	[96]	[]
Radium	88	[6]	[96]	[]
Actinium	89	[63][110]	[96]	[]
Thorium	90	[63]	[96]	[]
Protactinium	91	[98]	[96]	[]
Uran	92	[63][110]	[96]	[]
Neptunium	93	[115][106][63]	[96]	[]
Plutonium	94	[63]	[96]	[]
Americium	95	[63]	[96]	[]
Curium	96	[63]	k.a.	[]
Berkelium	97	[63]	k.a.	[]
Californium	98	[63]	k.a.	[]
Einsteinium	99	[63][110]	k.a.	[]
Fermium	100	[98]	k.a.	[]
Mendelevium	101	[98]	k.a.	[]
Nobelium	102	[98]	k.a.	[]

Tabelle 2: Literaturangaben zur 1. Ionisierungsenergie und den Atomradien. Theoretische Grundlagen werden im *Atomic, Molecular, & Optical Physics Handbook*[71] beschrieben. Sowohl Daten zur Ionisierungsenergie, als auch die Literaturangaben stammen von `http://physics.nist.gov/PhysRefData/IonEnergy/tblNew.html`. Die Bedingungen, unter denen die Kristallstrukturen ermittelt wurden sind den einzelnen Quellen zu entnehmen.

Elementname	Ordnungszahl	1. Ionisierungs-energie	Atomradien	Kristallstrukturen
Lawrencium	103	[44]	k.a.	[]
Rutherfordium	104	[43]	k.a.	[]
Dubnium	105	k.a.	k.a.	[]
Seaborgium	106	k.a.	k.a.	[]
Bohrium	107	k.a.	k.a.	[]
Hassium	108	k.a.	k.a.	[]
Meitnerium	109	k.a.	k.a.	[]
Darmstadtium	110	k.a.	k.a.	[]
Roentgenium	111	k.a.	k.a.	[]
Copernicium	112	k.a.	k.a.	[]
Ununtrium	113	k.a.	k.a.	[]
Ununquadium	114	k.a.	k.a.	[]
Ununpentium	115	k.a.	k.a.	[]
Ununhexium	116	k.a.	k.a.	[]
Ununseptium	117	k.a.	k.a.	[]
Ununoctium	118	k.a.	k.a.	[]

Tabelle 2: Literaturangaben zur 1. Ionisierungsenergie und den Atomradien. Theoretische Grundlagen werden im *Atomic, Molecular, & Optical Physics Handbook*[71] beschrieben. Sowohl Daten zur Ionisierungsenergie, als auch die Literaturangaben stammen von `http://physics.nist.gov/PhysRefData/IonEnergy/tblNew.html`. Die Bedingungen, unter denen die Kristallstrukturen ermittelt wurden sind den einzelnen Quellen zu entnehmen.

Literatur

[1] Allen, Leland C.: Electronegativity is the average one-electron energy of the valence-shell electrons in ground-state free atoms. In: J. Am. Chem. Soc. 111 (1989), December, S. 9003–9014

[2] Allen, Leland C. ; Huheey, James E.: The definition of electronegativity and the chemistry of the noble gases. In: J. Inorg. Nucl. Chem. 42 (1980), Nr. 10, S. 1523–1524

[3] Allred, A. L.: Electronegativity values from thermochemical data. In: J. Inorg. Nucl. Chem. 17 (1961), August, S. 215–221

[4] Allred, A. L. ; Rochow, E. G.: A scale of electronegativity based on electrostatic force. In: J. Inorg. Nucl. Chem. 5 (1958), S. 264–268

[5] AND, W. R. S. G.: Auto-Ionization Rydberg Series in the Spectrum of La I. In: Astrophys. J. 145 (1966), July, S. 333–336

[6] Armstrong, J. A. ; Wynne, J. J. ; Tomkins, F. S.: Bound, $7snp\ ^1P_1^0$ series in Ra I: measurements and predictions. In: J. Phys. B: At. Mol. Phys. 13 (1980), March, Nr. 5, S. L133–L137

[7] Arnold, E. ; Borchers, W. ; Duong, H. T. ; Juncar, P. ; Lerme, J. ; Lievens, P. ; Neu, W. ; Neugart, R. ; Pellarin, M. ; Pinard, J. ; Vialle, J. L. ; Wendt, K. ; ISOLDE: Optical laser spectroscopy and hyperfine structure investigation of the 10^2S, 11^2S, 8^2D, and 9^2D excited levels in francium. In: J. Phys. B 23 (1990), October, Nr. 20, S. 3511–3520

[8] Aymar, M. ; Debarre, A. ; Robaux, O.: Highly excited levels of neutral ytterbium II. Multichannel quantum defect analysis of odd- and even-parity spectra. In: J. Phys. B 13 (1980), March, Nr. 6, S. 1089–1109

[9] Baig, M. A.: High Rydberg transitions in the principal and intercombination series of mercury. In: J. Phys. B 15 (1983), May, Nr. 9, S. 1511–1523

[10] Baig, M. A. ; Connerade, J. A.: The influence of hyperfine structure on the determination of the ionisation potential of Tl I. In: J. Phys. B 18 (1985), March, Nr. 6, S. 1101–1108

[11] Baig, M. A. ; Connerade, J. P.: New high-resolution study of the 6s subshell spectrum of Tl I. In: J. Phys. B 18 (1985), September, Nr. 17, S. 3487–3497

[12] Barrett, C. S. ; Meyer, Lothar: Molecular Packing, Defects, and Transformations in Solid Oxygen. In: Phys. Rev. 160 (1967), Aug, S. 694–697. – URL http://link.aps.org/doi/10.1103/PhysRev.160.694

[13] Baugh, J. F. ; Burkhardt, C. E. ; Leventhal, J. J. ; Bergeman, T.: Precision Stark spectroscopy of sodium ^{2}P and ^{2}D states. In: Phys. Rev. A 58 (1998), August, Nr. 2, S. 1585–1588. – URL http://link.aps.org/doi/10.1103/PhysRevA.58.1585

[14] Beigang, R. ; Schmidt, D. ; West, P.J.: Laser Spectroscopy of high Rydberg States of light Alkaline-Earth Elements : Be and Mg. In: J. Phys. Colloques 44 (1983), S. C7–229–C7–237

[15] Beigang, R. ; Wynne, J. J.: Bound, odd-parity Rydberg spectra of Sb I: $5s^25p^2np$ and $5s^25p^2nf$ series for J = $\frac{1}{2}$, $\frac{3}{2}$, and $\frac{5}{2}$. In: J. Opt. Soc. Am. B 3 (1986), July, Nr. 7, S. 949–958. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-3-7-949

[16] Bergeson, S. D. ; Balakrishnan, A. ; Baldwin, K. G. H. ; Lucatorto, T. B. ; Marangos, J. P. ; McIlrath, T. J. ; O'Brian, T. R. ; Rolston, S. L. ; Sansonetti, C. J. ; Wen, Jesse ; Westbrook, N.: Measurement of the He Ground State Lamb Shift via the Two-Photon $1\ ^1S - 2\ ^1S$ Transition. In: Phys. Rev. Lett. 80 (1998), April, Nr. 16, S. 3475–3478. – URL http://link.aps.org/doi/10.1103/PhysRevLett.80.3475

[17] Bhatia, K. S. ; Jones, W. E.: Autoionized Series in the Arc Spectrum of Arsenic. In: Can. J. Phys. 49 (1971), Nr. 13, S. 1773–1782

[18] Brandi, F. ; Velchev, I. ; Hogervorst, W. ; Ubachs, W.: Vacuum-ultraviolet spectroscopy of Xe: Hyperfine splittings, isotope shifts, and isotope-dependent ionization energies. In: Phys. Rev. A 64 (2001), Aug, S. 032505. – URL http://link.aps.org/doi/10.1103/PhysRevA.64.032505

[19] Brown, C. M. ; Glinter, M. L.: Absorption spectrum of Au I between 1300 and 1900 Å. In: J. Opt. Soc. Am. 68 (1978), February, Nr. 2, S. 243–246. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-68-2-243

[20] Brown, C. M. ; Tilford, S. G. ; Ginter, M. L.: Absorption spectrum of B I in the 1350-1900-Å region. In: J. Opt. Soc. Am. 64 (1974), June, Nr. 6, S. 877–879

[21] Brown, C. M. ; Tilford, S. G. ; Ginter, Marshall L.: Absorption spectrum of Pb I between 1350 and 2041 Å. In: J. Opt. Soc. Am. 67 (1977), September, Nr. 9, S. 1240–1252. – URL http://www.opticsinfobase.org/abstract.cfm?URI=josa-67-9-1240

[22] Brown, C. M. ; Tilford, S. G. ; Ginter, Marshall L.: Absorption spectrum of Sn I between 1580 and 2040 Å. In: J. Opt. Soc. Am. 67 (1977), May, Nr. 5, S. 607–622. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-67-5-607

[23] Brown, Charles M. ; Tilford, S. G.: Absorption spectra of Zn I and Cd I in the 1300–1750 Å region. In: J. Opt. Soc. Am. 65 (1975), December, Nr. 12, S. 1404–1409. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-65-12-1404

[24] Callender, C. L. ; Hackett, P. A. ; Rayner, D. M.: First ionization potential of hafnium by double-resonance field-ionization spectroscopy. In: J. Opt. Soc. Am. B 5 (1988), June, Nr. 6, S. 1341–1342. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-5-6-1341

[25] Callender, C. L. ; Hackett, P. A. ; Rayner, D. M.: First-ionization potential of ruthenium, rhodium, and palladium by double-resonance ionization spectroscopy. In: J. Opt. Soc. Am. B 5 (1988), March, Nr. 3, S. 614–618. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-5-3-614

[26] Campbell-Miller, Margot D. ; Simard, Benoit: First ionization potentials of tungsten and rhenium by mass-selected double-resonance ionization spectroscopy. In: J. Opt. Soc. Am. B 13 (1996), October, Nr. 10, S. 2115–2120. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-13-10-2115

[27] Camus, P.: Classification des spectres d'arc et détincelle du thulium par l'étude de la structure Zeeman des raies et l'interprétation des configurations électroniques. Étude des spectres d'absorption de l'ytterbium, du lutecium et du thulium entre 2700 Å et 1900 Å, Univ. Paris-XI, Orsay, France, Thèse Sc. Phys., 1971. – pp. 265

[28] Cantú, A. M. ; Mazzoni, M. ; Joshi, Y. N.: Absorption Spectrum of Se I in the Vacuum Ultraviolet Region. In: Phys. Scr. 27 (1983), S. 59

[29] Cantú, A. M. ; Mazzoni, M. ; Joshi, Y. N.: Rydberg Series in the Absorption Spectrum of Te I Limiting on $5s^2\ 5p^3\ ^4S^0_{3/2}$ Ionization Limit. In: Phys. Scr. 27 (1983), Nr. 4, S. 261–266

[30] Chang, Edward S.: Solar Emission Lines Revisited: Extended Study of Magnesium. In: Phys. Scr. 35 (1987), S. 792–797. – URL http://iopscience.iop.org/1402-4896/35/6/006

[31] Chang, Edward S.: Energy Levels of Atomic Aluminum with Hyperfine Structure. In: J. Phys. Chem. Ref. Data 19 (1990), Nr. 1, S. 119–125

[32] Charles, G. W.: Spectra of ^{208}Po and the Hyperfine Structure of ^{209}Po. In: J. Opt. Soc. Am. 56 (1966), October, Nr. 10, S. 1292–1297. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-56-10-1292

[33] Clementi, E. ; Raimondi, L.: Atomic Screening Constants from SCF Functions. In: J. Chem. Phys. 38 (1963), February, Nr. 11, S. 2686–1689

[34] Colarusso, Pina ; Lebeault-Dorget, Marie-Ange ; Simard, Benoit: First ionization potentials of osmium and iridium determined by mass-analyzed double-resonance field-ionization spectroscopy. In: Phys. Rev. A 55 (1997), Feb, S. 1526–1529. – URL http://link.aps.org/doi/10.1103/PhysRevA.55.1526

[35] Corliss, C. ; Sugar, J.: Energy levels of manganese, Mn I through Mn XXV. In: J. Phys. Chem. Ref. Data 6 (1977), Nr. 4, S. 1253–1329

[36] Corliss, C. ; Sugar, J.: Energy levels of Potassium, K I through K XIX. In: J. Phys. Chem. Ref. Data 8 (1979), S. 1109–1145

[37] Corliss, C. ; Sugar, J.: Energy Levels of Iron, Fe I Through Fe XXVI. In: J. Phys. Chem. Ref. Data 11 (1982), Nr. 1, S. 135–241

[38] Dönszelmann, A. ; Neijzen, J. H. M.: Spectroscopy with Rydberg Atoms; the Neutral Spectrum of Indium. In: Acta Phys. Pol. A 63 (1983), S. 201–222

[39] Edlén, B.: On the Identification of Ar X and Ar XIV in the Solar Corona and the Origin of the Unidentified Coronal Lines. In: Sol. Phy. 9 (1969), October, Nr. 2, S. 439–445

[40] Eikema, K. S. E. ; Ubachs, W. ; Vassen, W. ; Hogevorst, W.: Lamb shift measurement of the $1\ ^1S$ ground state of helium. In: Phys. Rev. A 55 (1997), March, Nr. 3, S. 1866–1884. – URL http://link.aps.org/doi/10.1103/PhysRevA.55.1866

[41] Elbert, Jr. ; Jones, Mark M.: A Complete Table of Electronegativities. In: J. Chem. Educ. 57 (1960), Nr. 5, S. 231–233

[42] Eldén, B. ; Ölme, A. ; Herzberg, G. ; Johns, J. W. C.: Ionization Potential of Boron, and the Isotopic and Fine Structure of $2s2p^2\ ^2D$. In: J. Opt. Soc. Am. 60 (1970), July, Nr. 7, S. 889–891

[43] Eliav, Ephraim ; Kaldor, Uzi ; Ishikawa, Yasuyuki: Ground State Electron Configuration of Rutherfordium: Role of Dynamic Correlation. In: Phys. Rev. Lett. 74 (1995), Feb, S. 1079–1082. – URL http://link.aps.org/doi/10.1103/PhysRevLett.74.1079

[44] Eliav, Ephraim ; Kaldor, Uzi ; Ishikawa, Yasuyuki: Transition energies of ytterbium, lutetium, and lawrencium by the relativistic coupled-cluster method. In: Phys. Rev. A 52 (1995), Jul, S. 291–296. – URL http://link.aps.org/doi/10.1103/PhysRevA.52.291

[45] Eriksson, K. B. S. ; Isberg, H. B. S.: New Measurements in the Spectrum of Atomic Oxygen, O I. In: Ark. Fys. 37 (1968), S. 221–230

[46] Eriksson, K. B. S. ; Pettersson, J. E.: New Measurement in the Spectrum of the Neutral Nitrogen Atom. In: Phys. Scr. 3 (1971), Nr. 5, S. 211–217

[47] Finkelnburg, W. ; Humbach, W.: Ionisierungsenergien von Atomen und Atomionen. In: Naturwiss. 42 (1955), Nr. 2, S. 35–37

[48] Garton, W. R. S. ; Reeves, E. M. ; Tomkins, F. S. ; Ercoli, B.: Rydberg Series and Autoionization Resonances in the Y I Absorption Spectrum. In: Proc. R. Soc. Lond. A 333 (1973), April, Nr. 1592, S. 17–24

[49] Hackett, P. A. ; Humphries, M. R. ; Mitchell, S. A. ; Rayner, D. M.: The first ionization potential of zirconium atoms determined by two laser, field-ionization spectroscopy of high lying Rydberg series. In: J. Chem. Phys. 85 (1986), S. 3194–3197

[50] Henshaw, D. G.: Atomic Distribution in Liquid and Solid Neon and Solid Argon by Neutron Diffraction. In: Phys. Rev. 111 (1958), Sep, S. 1470–1475. – URL http://link.aps.org/doi/10.1103/PhysRev.111.1470

[51] Huffman, R. E. ; Larrabee, J. C. ; Tanaka, Y.: New Absorption Series and Ionization Potentials of Atomic Fluorine, Chlorine, Bromine, and Iodine. In: J. Chem. Phys. 47 (1967), Nr. 2, S. 856–857

[52] Jakubek, Z. J. ; Simard, B.: Rydberg series and the first ionization potential of platinum and yttrium atoms. In: J. Phys. B 33 (2000), Nr. 10, S. 1827–1841

[53] James, Andrew M. ; Kowalczyk, Pawel ; Langlois, Etienne ; Campell, Margot D. ; Ogawa, Ayano ; Simard, Benoit: Resonant two photon ionization spectroscopy of the molecules V_2, VNb, and Nb_2. In: J. Chem. Phys. 101 (1994), September, S. 4485–4495

[54] Jayasekharan, T. ; Razvi, M. A. N. ; Bhale, G. L.: Even-parity bound and autoionizing Rydberg series of the samarium atom. In: J. Phys. B 33 (2000), August, Nr. 16, S. 3123–3136

[55] Johansson, I.: Spectra of the Alkali Metals in the Lead-Sulphide Region. In: Ark. Fys. 20 (1961), S. 135–146

[56] Johansson, L.: Spectrum and Term System of Neutral Carbon Atom. In: Ark. Fys. 31 (1966), Nr. 3, S. 207

[57] Johnson, W. R. ; Soff, Gerhard: The lamb Shift of H-like Atoms, $1 \leq Z \leq 10$. In: Atom. Data. Nucl. Data 33 (1985), November, Nr. 3, S. 405–446

[58] Kaufman, V. ; Martin, W. C.: Wavelengths and Energy Level Classifications of Magnesium Spectra for All Stages of Ionization (Mg I through Mg XII). In: J. Phys. Chem. Ref. Data 20 (1991), Nr. 1, S. 83–152

[59] Kaufman, Victor ; Martin, W. C.: Wavelengths and Energy Level Classifications for the Spectra of Aluminum (Al Ithrough AI XIII). In: J. Phys. Chem. Ref. Data 20 (1991), Nr. 5, S. 775–858

[60] Kaufman, Victor ; Minnhagen, Lennard: Accurate Ground-Term Combinations in Ne I. In: J. Opt. Soc. Am. 62 (1972), Nr. 1, S. 92–95. – URL http://www.opticsinfobase.org/abstract.cfm?URI=josa-62-1-92

[61] Kessler, T. ; Brück, K. ; Baktash, C. ; Beene, J. R. ; Geppert, Ch. ; Havener, C. C. ; Krause, H. F. ; Liu, Y. ; Schultz, D. R. ; Stracener, D. W. ; Vane, C. R. ; Wendt, K.: Three-step resonant photoionization spectroscopy of Ni and Ge: ionization potential and odd-parity Rydberg levels. In: J. Phys. B: At. Mol. Opt. Phys. 40 (2007), December, Nr. 23, S. 4413–4432

[62] Knight, R. D. ; Wang, Liang guo: One-photon laser spectroscopy of the np and nf Rydberg series in xenon. In: J. Opt. Soc. Am. B 2 (1985), July, Nr. 7, S. 1084–1087. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-2-7-1084

[63] Köhler, S. ; Deissenberger, R. ; Eberhardt, K. ; Erdmann, N. ; Herrmann, G. ; Huber, G. ; Kratz, J. V. ; Nunnemann, M. ; Passler, G. ; Rao, P. M. ; Riegel, J. ; Trautmann, N. ; Wendt, K.: Determination of the first ionization potential of actinide elements by resonance ionization mass spectroscopy. In: Spectrochim. Acta B 52 (1997), June, Nr. 6, S. 117–726

[64] Lidén, K.: The Arc Spectrum of Fluorine. In: Ark. Fys. 1 (1949), Nr. 9, S. 229–267

[65] Longmire, M. S. ; Brown, C. M. ; Ginter, M. L.: Absorption spectrum of Cu I between 1570 Å and 2500 Å. In: J. Opt. Soc. Am. 70 (1980), April, Nr. 4, S. 423–429. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-70-4-423

[66] Loock, Hans-Peter ; Beaty, Leanne M. ; Simard, Benoit: Reassessment of the first ionization potentials of copper, silver, and gold. In: Phys. Rev. A 59 (1999), Jan, S. 873–875. – URL http://link.aps.org/doi/10.1103/PhysRevA.59.873

[67] Lorenzen, C-J ; Niemax, K.: Level isotope shifts of ^{6,7}Li. In: J. Phys. B: At. Mol. Phys. 15 (1982), S. L139–L145. – URL http://iopscience.iop.org/0022-3700/15/5/002

[68] Lorenzen, C-J ; Niemax, K: Quantum Defects of the $n^2P_{1/2,3/2}$ Levels in ^{39}K I and ^{85}Rb I. In: Phys. Scr. 27 (1983), Nr. 4, S. 300–305

[69] Maeda, H. ; Mizugai, Y. ; Matsumoto, Y. ; Suzuki, A. ; Takami, A.: Highly excited even Rydberg series of Lu I studied by two-step laser photoionisation spectroscopy. In: J. Phys. B 22 (1989), September, Nr. 18, S. L511–L516

[70] Marijnissen, Adrian ; Meulen, J. J. ter ; Hackett, Peter A. ; Simard, Benoit: First ionization potential of platinum by mass-selected double-resonance field-ionization spectroscopy. In: Phys. Rev. A 52 (1995), Oct, S. 2606–2610. – URL http://link.aps.org/doi/10.1103/PhysRevA.52.2606

[71] Martin, W. C. ; Wiese, W. L. ; Drake, G. W. F. (Hrsg.): Atomic, Molecular, & Optical Physics Handbook. AIP, 1996. – 135–153 S. – URL http://www.nist.gov/pml/pubs/atspec/index.cfm

[72] Martin, W. C. ; Zalubas, Romuald: Energy Levels of Silicon, Si I through Si XIV. In: J. Phys. Chem. Ref. Data 12 (1983), S. 323–379

[73] Martin, W. C. ; Zalubas, Romuald ; Musgrove, Arlene: Energy Levels of Sulfur, S I Trough S XVI. In: J. Phys. Chem. Ref. Data 19 (1990), S. 821–880

[74] Mathews, C. W. ; Ginter, M. L. ; Ginter, D. S. ; Brown, C. M. ; Hulburt, E. O.: Absorption spectrum of Bi I in the 2022- to 1307-Å region. In: J. Opt. Soc. Am. B 1989 (1989), September, Nr. 9, S. 1627–1643. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-6-9-1627

[75] McCarty, L. V. ; Kasper, J. S. ; Horn, F. H. ; Decker, B. F. ; Newkirk, A. E.: A new crystalline Modification of Boron. In: J. Am. Chem. Soc. 60 (1958), May, S. 2592

[76] Minnhagen, L.: The Energy Levels of Neutral Atomic Iodine. In: Ark. Fys. 21 (1962), Nr. 26, S. 415–465

[77] Miyabe, M. ; Oba, M. ; Wakaida, I.: Analysis of the even-parity Rydberg series of Gd I to determine its ionization potential and isotope shift. In: J. Phys. B 31 (1998), October, Nr. 20, S. 4559–4571

[78] Mohr, Peter J.: Energy Levels of hydrogen-like Atoms predicted by quantum Electrodynamics, $10 \leq Z \leq 40$. In: Atom. Data. Nucl. Data 29 (1983), November, Nr. 3, S. 453–466

[79] Moore, C. E.: Ionization Potentials and Ionization Limits Derived from the Analysis of Optical Spectra. In: Nat. Stand. Ref. Data Ser. NSRDS-NBS 34 (1970), S. 1–8

[80] Morillion, C. ; Vergès, J.: Classification du Spectre d'Arc du Sélénium (Sel) entre 3 900 et 11 844 cm^{-1}. In: Phys. Scr. 10 (1974), Nr. 4, S. 227–235

[81] Nadler, M. R. ; Kempier, C. P.: Crystallographic Data 186. Lithium. In: Anal. Chem. 31 (1959), December, S. 2109

[82] Nakhate, S. G. ; Razvi, M. A. N. ; Connerade, J. P. ; Ahmad, S. A.: Investigation of Rydberg states of the europium atom using resonance ionization spectroscopy. In: J. Phys. B 33 (2000), November, Nr. 22, S. 5191–5202

[83] Page, Ralph H. ; Gudeman, Christopher S.: Completing the iron period: double-resonance, fluorescence-dip Rydberg spectroscopy and ionization potentials of titanium, vanadium, iron, cobalt, and nickel. In: J. Opt. Soc. Am. B 7 (1990), September, Nr. 9, S. 1761–1771. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-7-9-1761

[84] Pauling, Linus ; Keaveny, Ian ; Robinson, Arthur B.: The crystal structure of α-fluorine. In: Journal of Solid State Chemistry 2 (1970), Nr. 2, S. 225 – 227. – URL http://www.sciencedirect.com/science/article/pii/0022459670900745. – ISSN 0022-4596

[85] Post, B. H. ; Vassen, W. ; Hogervorst, W. ; Aymar, M. ; Robaux, O.: Odd-parity Rydberg levels in neutral barium: term values and multichannel quantum defect theory analysis. In: J. Phys. B 18 (1985), January, Nr. 2, S. 187–206

[86] Radziemski, Leon J. ; Kaufman, Victor: Wavelengths, Energy Levels, and Analysis of Neutral Atomic Chlorine (Cl I). In: J. Opt. Soc. Am. 59 (1969), April, Nr. 4, S. 424–443. – URL http://www.opticsinfobase.org/abstract.cfm?URI=josa-59-4-424

[87] Rasmussen, E.: Serien im Funkenspektrum des Radiums. Ra II. In: Zeit. Phys. 86 (1933), Nr. 1-2, S. 24–32

[88] Rauh, E. G. ; Ackermann, R. J.: The first ionization potentials of the transition metals. In: J. Chem. Phys. 79 (1979), January, Nr. 2, S. 1004–1007

[89] Rayner, D. M. ; Mitchell, S. A. ; Bourne, O. L. ; Hackett, P. A.: First-ionization potential of niobium and molybdenum by double-resonance, field-ionization spectroscopy. In: J. Opt. Soc. Am. B 4 (1987), June, Nr. 6, S. 900–905. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-4-6-900

[90] Rubbmark, J. R. ; Borgström, S. A.: Rydberg Series in Strontium Found in Absorption by Selectively Laser-Excited Atoms. In: Phys. Scr. 18 (1978), Nr. 4, S. 196–208

[91] Schuch, A. F. ; Mills, R. L.: New Allotropic Form of He^3. In: Phys. Rev. Lett. 6 (1961), Jun, S. 596–597. – URL http://link.aps.org/doi/10.1103/PhysRevLett.6.596

[92] Schuch, A. F. ; Mills, R. L.: Crystal Structures of the Three Modifications of Nitrogen 14 and Nitrogen 15 at High Pressure. In: Journal of Chemical Physics 52 (1970), Nr. 12, S. 6000–6008

[93] Shenstone, A. G.: The Arc Spectrum of Silver. In: Phys. Rev. 57 (1940), May, S. 894–898. – URL http://link.aps.org/doi/10.1103/PhysRev.57.894

[94] Shenstone, A. G.: The First Spectrum of Copper (Cu I). In: Phil. Trans. R. Soc. Lond. A 241 (1948), August, Nr. 832, S. 297–322

[95] Simard, Benoit ; Kowalczyk, Pawel ; James, Andrew M.: First ionization potential of tantalum by mass-selected double-resonance field-ionization spectroscopy. In: Phys. Rev. A 50 (1994), Jul, S. 846–849. – URL http://link.aps.org/doi/10.1103/PhysRevA.50.846

[96] Slater, J. C.: Atomic Radii in Chrystals. In: J. Chem. Phys. 41 (1964), Nr. 10, S. 3199–3204

[97] Sohl, J. E. ; Zhu, Yang ; Knight, R. D.: Two-color laser photoionization spectroscopy of Ti I: multichannel quantum defect theory analysis and a new ionization potential. In: J. Opt. Soc. Am. B 7 (1990), January, Nr. 1, S. 9–14. – URL http://www.opticsinfobase.org/josab/abstract.cfm?URI=josab-7-1-9

[98] Sugar, J.: Revised ionization energies of the neutral actinides. In: J. Chem. Phys. 60 (1974), Nr. 10, S. 4103

[99] Sugar, J. ; Corliss, C.: Energy levels of chromium, Cr I through Cr XXIV. In: J. Phys. Chem. Ref. Data 6 (1977), Nr. 2, S. 317–383

[100] Sugar, J. ; Musgrove, A.: Energy Levels of Krypton, Kr I through Kr XXXVI. In: J. Phys. Chem. Ref. Data 20 (1991), Nr. 5, S. 859–906

[101] Sugar, J. ; Musgrove, A.: Energy Levels of Germanium, Ge I trough Ge XXXII. In: J. Phys. Chem. Ref. Data 22 (1993), Nr. 5, S. 1213–1278

[102] Sugar, Jack ; Corliss, Charles: Energy levels of Calcium, Ca I through Ca XX. In: J. Phys. Chem. Ref. Data 8 (1979), Nr. 3, S. 865–916

[103] Sugar, Jack ; Corliss, Charles: Energy levels of Scandium, Sc I through Sc XXI. In: J. Phys. Chem. Ref. Data 9 (1980), S. 473–511

[104] Svendenius, Nils: The Spectrum and Term Analysis of Neutral Phosphorus, P I. In: Phys. Scr. 22 (1980), Nr. 3, S. 240–287

[105] Tech, J. L. ; Corliss, C. H.: Wavelengths and Intensities in First Spectrum of Bromine, 2000 to 13000 Å. In: J. Res. Nat. Bur. Stand. 65A (1961), S. 159–166

[106] Trautmann, N.: Accurate determination of the first ionization potential of actinides by laser spectroscopy. In: Journal of Alloys and Compounds 213-214 (1994), October, S. 28–32

[107] Trucano, Peter ; Chen, Ruey: Structure of graphite by neutron diffraction. In: Nature 258 (1975), November, S. 136–137

[108] Tursunov, A. T. ; Eshkobilov, N. B.: Excitation of the Rydberg States of the Gallium Atom by Dye-Laser Emission and Their Ionization by an Electric Field. In: Opt. Spektrosk. 58 (1985), May, Nr. 5, S. 607–609

[109] Velchev, I. ; Hogevorst, W. ; Ubachs, W.: Precision VUV spectroscopy of Ar I at 105 nm. In: J. Phys. B 32 (1999), September, Nr. 17, S. L511–L516

[110] Waldek, Achim ; Erdmann, Nicole ; Grüning, Carsten ; Huber, Gerhard ; Kunz, Peter ; Kratz, Jens V. ; Lassen, Jens ; Passler, Gerd ; Trautmann, Norbert: RIMS measurements for the determination of the first ionization potential of the actinides actinium up to einsteinium. In: AIP Conf. Proc 584 (2001), S. 219–224

[111] Weber, K.-H. ; Sansonetti, Craig J.: Accurate energies of nS, nP, nD, nF, and nG levels of neutral cesium. In: Phys. Rev. A 35 (1987), Jun, S. 4650–4660. – URL http://link.aps.org/doi/10.1103/PhysRevA.35.4650

[112] Wiberg, Nils ; Wiberg, Egon ; Hollemann, Arnold F.: Lehrbuch der Anorganischen Chemie. 102. Auflage. de Gruyter, März 2007

[113] Wieser, Michael E. ; Coplen, Tyler B.: Atomic weights of the elements 2009 (IUPAC Technical Report). In: Pure Appl. Chem. 83 (2011), S. 359–396

[114] Worden, E. F. ; Solarz, R. W. ; Paisner, J. A. ; Conway, J. G.: First ionization potentials of lanthanides by laser spectroscopy. In: J. Opt. Soc. Am. 68 (1978), January, Nr. 1, S. 52–61. – URL http://www.opticsinfobase.org/josa/abstract.cfm?URI=josa-68-1-52

[115] Worden, Earl F. ; Conway, John G.: Laser spectroscopy of neptunium; first ionization potential, lifetimes and new high-lying energy levels of Np I. In: J. Opt. Soc. Am. 69 (1979), Nr. 5, S. 733–738. – URL http://www.opticsinfobase.org/abstract.cfm?URI=josa-69-5-733

[116] Yang, Y. W. ; Coppens, P.: The electron density and bonding in beryllium metal as studied by Fourier methods. In: Acta Cryst. A34 (1978), S. 61–65