Literaturverzeichnis blume Periodensysteme

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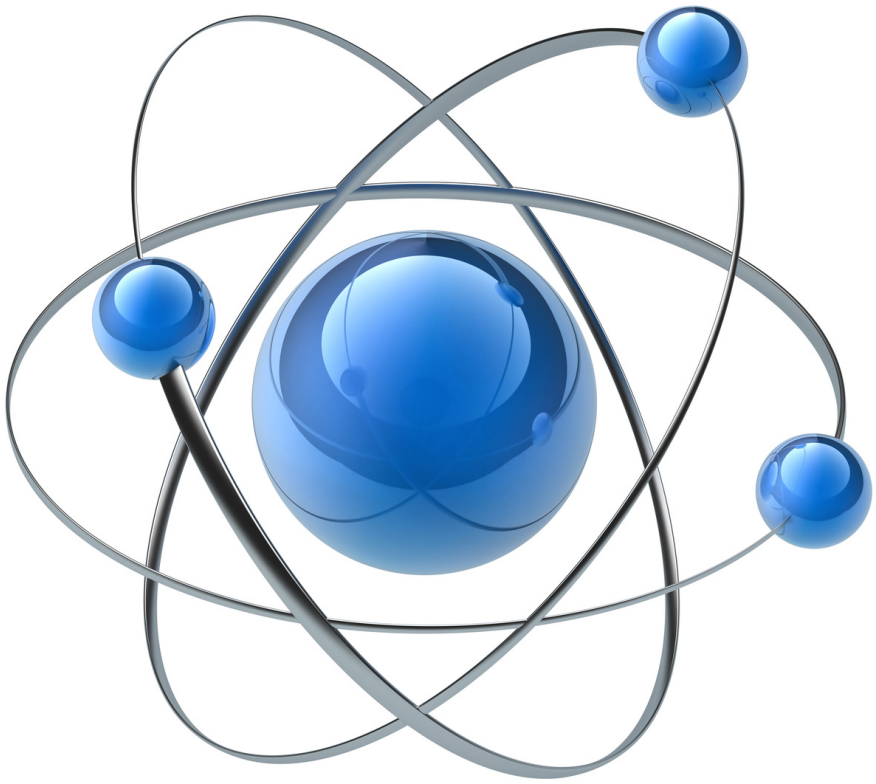

Elementname	Ordnungszahl	Elektronegativität (Allred & Rochow)	Elektronegativität (Pauling)	relative Atommassen	Schmelzpunkte	Siedepunkte
Wasserstoff	1	k.a.	[3]	[113]	[112]	[112]
Helium	2	[2]	[3]	[113]	[112]	[112]
Lithium	3	[4]	[3]	[113]	[112]	[112]
Beryllium	4	[4]	[3]	[113]	[112]	[112]
Bor	5	[4]	[3]	[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.

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