

The values of Table 3 show the covalent radii from the two recent original determinations by Cordero et al.[1], and Pyykkö and Atsumi [2]. The differences between the two single-bond values are often explained by the different coordination numbers in the two data bases used. When the effective radii do not follow the natural order single > double > triple, it means that the changes in the radii of the ligands are even larger than those for the considered element.

Atomic Number	Element	Covalent radii			
		Single Bonds [1]	Single Bonds [2]	Double Bonds [2]	Triple Bonds [2]
1	H	31	32		
2	He	28	46		
3	Li	128	133	124	
4	Be	96	102	90	85
5	B	84	85	78	73
6	C	76	75	67	60
7	N	71	71	60	54
8	O	66	63	57	53
9	F	57	64	59	53
10	Ne	58	67	96	
11	Na	166	155	160	
12	Mg	141	139	132	127
13	Al	121	126	113	111
14	Si	111	116	107	102
15	P	107	111	102	94
16	S	105	103	94	95
17	Cl	102	99	95	93
18	Ar	106	96	107	96
19	K	203	196	193	
20	Ca	176	171	147	133

Atomic Number	Element	Covalent radii			
21	Sc	170	148	116	114
22	Ti	160	136	117	108
23	v	153	134	112	106
24	Cr	139	122	111	103
25	Mn	150	119	105	103
26	Fe	142	116	109	102
27	Co	138	111	103	96
28	Ni	124	110	101	101
29	Cu	132	112	115	120
30	Zn	122	118	120	
31	Ga	122	124	117	121
32	Ge	120	121	111	114
33	As	119	121	114	106
34	Se	120	116	107	107
35	Br	120	114	109	110
36	Kr	116	117	121	108
37	Rb	220	210	202	
38	Sr	195	185	157	139
39	Y	190	163	130	124
40	Zr	175	154	127	121
41	Nb	164	147	125	116
42	Mo	154	138	121	113
43	Tc	147	128	120	110
44	Ru	146	125	114	103
45	Rh	142	125	110	106

Atomic Number	Element	Covalent radii			
46	Pd	139	120	117	112
47	Ag	145	128	139	137
48	Cd	144	136	144	
49	In	142	142	136	146
50	Sn	139	140	130	132
51	Sb	139	140	133	127
52	Te	138	136	128	121
53	I	139	133	129	125
54	Xe	140	131	135	122
55	Cs	244	232	209	
56	Ba	215	196	161	149
57	La	207	180	139	139
58	Ce	204	163	137	131
59	Pr	203	176	138	128
60	Nd	201	174	137	
61	Pm	199	173	135	
62	Sm	198	172	134	
63	Eu	198	168	134	
64	Gd	196	169	135	132
65	Tb	194	168	135	
66	Dy	192	167	133	
67	Ho	192	166	133	
68	Er	189	165	133	
69	Tm	190	164	131	
70	Yb	187	170	129	

Atomic Number	Element	Covalent radii			
71	Lu	187	162	131	131
72	Hf	175	152	128	122
73	Ta	170	146	126	119
74	W	162	137	120	115
75	Re	151	131	119	110
76	Os	144	129	116	109
77	Ir	141	122	115	107
78	Pt	136	123	112	110
79	Au	136	124	121	123
80	Hg	132	133	142	
81	Tl	145	144	142	150
82	Pb	146	144	135	137
83	Bi	148	151	141	135
84	Po	140	145	135	129
85	At	150	147	138	138
86	Rn	150	142	145	133
87	Fr	260	223	218	
88	Ra	221	201	173	159
89	Ac	215	186	153	140
90	Th	206	175	143	136
91	Pa	200	169	138	129
92	U	196	170	134	118
93	Np	190	171	136	116
94	Pu	187	172	135	
95	Am	180	166	135	

Atomic Number	Element	Covalent radii			
96	Cm	169	166	136	
97	Bk		168	139	
98	Cf		168	140	
99	Es		165	140	
100	Fm		167		
101	Md		173	139	
102	No		176	159	
103	Lr		161	141	
104	Rf		157	140	131
105	Db		149	136	126
106	Sg		143	128	121
107	Bh		141	128	119
108	Hs		134	125	118
109	Mt		129	125	113
110	Ds		128	116	112
111	Rg		121	116	118
112	Cn		122	137	130
113	Uut		136		
114	Uuq		143		
115	Uup		162		
116	Uuh		175		
117	Uus		165		
118	Uuo		157		

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## References

1. Beatriz Cordero, Verónica Gómez, Ana E. Platero-Prats, Marc Revés, Jorge Echeverría, Eduard Cremades, Flavia Barragán and Santiago Alvarez (2008). "Covalent radii revisited". *Dalton Trans.* (21): 2832–2838 <http://dx.doi.org/10.1039/b801115j>
2. Pekka Pyykkö, Michiko Atsumi (2009). "Molecular Double-Bond Covalent Radii for Elements Li–E112". *Chemistry: A European Journal* **15** (46): 12770–12779. <http://dx.doi.org/10.1002/chem.200901472>