

CCP - Cubic Close-Packed Structure

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Table 1: CCP - Cubic Close-Packed Structure
(uses R/2 for atomic radius)

El.	Bond Length (A)	Covalent Radius (A)	R = Half Bond Len. (A)	Face Hole (A)	Tetrahedral Space (A)
Ge	2.4498	1.22	1.2249	0.1895	0.5074
Pt	2.7750	1.30	1.3875	0.2146	0.5747
Ni	2.4916	1.15	1.2458	0.1927	0.5160
Cu	2.5560	1.17	1.2780	0.1977	0.5293
Pd	2.7511	1.28	1.3756	0.2128	0.5698
Au	2.8841	1.34	1.4421	0.2231	0.5973
Ag	2.8894	1.34	1.4447	0.2235	0.5984
Al	2.8630	1.25	1.4315	0.2215	0.5929
Ce	3.6500	1.65	1.8250	0.2823	0.7559
Yb	3.8800	1.74	1.9400	0.3001	0.8035
Ca	3.9470	1.74	1.9735	0.3053	0.8174
Pb	3.5003	1.47	1.7502	0.2707	0.7249
Sr	4.3020	1.91	2.1510	0.3328	0.8909

Confirming source for bond lengths is webelements.com. Covalent radius provided only for comparison to R. Compare to the original table (Table 2 below) from:
<<http://mtaonline.net/~hheffner/AtomicExpansion.pdf>>

Table 2: FCC - Face Centered Cubic
(Uses Covalent radius for atomic radius)

Elem.	Bond Length (A)	Covalent Radius (A)	Atomic Radius (A)	Face Hole Radius (A)	Tetrahedral Space Radius (A)
Ge	2.4498	1.22	1.52	0.1944	0.5123
Pt	2.7460	1.30	1.83	0.2854	0.6417
Ni	2.4916	1.15	1.62	0.2885	0.6118
Cu	2.5560	1.17	1.57	0.3057	0.6373
Pd	2.7511	1.28	1.79	0.3083	0.6653
Au	2.8841	1.34	1.79	0.3251	0.6993
Ag	2.8894	1.34	1.75	0.3282	0.7031
Al	2.8630	1.25	1.82	0.4030	0.7744
Ce	3.6500	1.65	2.70	0.4573	0.9309
Yb	3.8800	1.74	2.40	0.5001	1.0035
Ca	3.9470	1.74	2.23	0.5388	1.0509
Pb	3.5003	1.47	1.81	0.5509	1.0051
Sr	4.3020	1.91	2.45	0.5738	1.1319