

9.4. TYPICAL INTERATOMIC DISTANCES: INORGANIC COMPOUNDS

Table 9.4.1.11. Atomic distances in sulfides and thiometallates (cont.)

Atom pair	<i>N</i>	Mean	s.u.	d_1	Smallest 5%	First quartile	Median	Third quartile	d_2
Y ³⁺ —S ²⁻	3	275.0	6.0	0.0	268.3	269.5	275.0	280.5	500.0
Zr ⁴⁺ —S ²⁻	10	257.2	7.1	0.0	248.5	252.5	256.0	260.5	500.0
Nb—S	28	242.8	11.0	210.0	215.4	240.0	247.0	249.1	280.0
Mo—S	76	236.4	9.6	180.0	217.1	235.0	239.2	241.1	280.0
Ru—S	9	236.3	7.8	200.0	218.9	234.2	236.5	241.5	270.0
Rh—S	4	223.5	15.4	0.0	200.4	202.0	228.0	232.0	500.0
Pd—S	29	232.7	4.2	0.0	225.4	229.2	233.2	236.2	500.0
Ag ⁺ —S ²⁻	102	252.7	15.2	220.0	227.4	244.1	250.0	259.0	320.0
Cd ²⁺ —S ²⁻	37	254.4	10.6	200.0	241.7	245.6	252.6	263.5	300.0
La ³⁺ —S ²⁻	43	292.8	15.7	250.0	264.1	285.8	290.3	301.7	350.0
Hf—S	5	259.4	7.7	0.0	250.5	252.5	259.0	265.5	500.0
Ta—S	40	242.6	7.8	200.0	224.0	239.1	242.4	247.0	300.0
W—S	6	250.3	13.6	200.0	238.6	240.5	242.0	253.5	300.0
Re—S	15	233.4	12.1	0.0	199.5	233.5	237.0	238.2	500.0
Os—S	29	237.7	3.4	0.0	229.4	235.8	237.9	240.2	500.0
Pt—S	14	224.7	19.6	0.0	189.4	223.0	232.0	237.0	500.0
Au—S	7	234.1	19.5	200.0	216.7	226.8	229.0	231.2	300.0
Hg ²⁺ —S ²⁻	63	244.5	11.1	200.0	229.1	238.4	244.1	251.5	300.0
Ce—S	31	290.5	9.5	0.0	278.3	283.4	288.2	298.2	500.0
Pr—S	7	288.4	15.7	0.0	270.7	275.5	287.0	308.2	500.0
Nd—S	12	286.8	7.8	0.0	276.4	278.0	287.0	294.7	500.0
Sm—S	15	276.9	13.7	0.0	233.5	276.8	281.2	284.5	500.0
Eu—S	26	292.5	9.4	0.0	275.3	285.0	294.0	299.2	500.0
Gd—S	5	289.0	27.1	0.0	274.2	274.8	275.7	283.5	500.0
Ho—S	8	263.8	7.6	0.0	246.8	261.0	267.0	268.7	500.0
Er—S	15	261.7	28.3	0.0	193.5	258.8	266.2	272.5	500.0
Yb—S	22	271.3	9.5	0.0	258.2	265.5	270.5	273.7	500.0
Lu—S	11	267.4	4.8	0.0	260.5	264.5	266.5	270.5	500.0
Th—S	15	283.9	11.0	0.0	259.5	278.8	285.5	290.5	500.0
U—S	46	277.8	9.1	0.0	264.6	274.3	276.4	279.1	500.0
Np—S	2	277.0	19.8	0.0	262.2	263.0	264.0	291.0	500.0
Pu—S	6	293.3	10.3	0.0	276.6	289.0	293.0	301.0	500.0

Table 9.4.1.12. Contact distances between some negatively charged elements

Atom pair	<i>N</i>	Mean	s.u.	d_1	Smallest 5%	First quartile	Median	Third quartile	d_2
O ²⁻ —O ²⁻	14849	254.5	37.9	0.0	205.4	240.0	255.4	271.0	500.0
S ²⁻ —S ²⁻	1414	343.1	42.8	0.0	279.7	325.9	342.6	364.0	500.0
Se ²⁻ —Se ²⁻	314	360.5	46.3	0.0	245.4	339.6	363.2	388.2	500.0
Te ²⁻ —Te ²⁻	135	392.5	51.2	0.0	281.5	373.8	401.5	425.6	500.0
F ⁻ —F ⁻	2096	256.8	37.2	0.0	211.0	243.2	257.5	270.3	500.0
Cl ⁻ —Cl ⁻	1667	341.3	41.6	0.0	301.7	326.1	341.2	359.7	500.0
Br ⁻ —Br ⁻	534	364.3	47.5	0.0	314.4	350.5	367.5	384.9	500.0
I ⁻ —I ⁻	489	396.4	46.9	0.0	313.6	384.6	402.8	419.8	500.0
O ²⁻ —F ⁻	723	269.1	28.4	0.0	233.0	255.5	268.2	280.4	500.0
O ²⁻ —Cl ⁻	827	313.5	35.3	0.0	267.3	302.9	314.4	328.3	500.0
O ²⁻ —Br ⁻	230	332.0	32.9	0.0	293.5	319.4	331.7	344.3	500.0
O ²⁻ —I ⁻	109	353.6	44.4	0.0	288.9	345.6	359.4	374.5	500.0
S ²⁻ —F ⁻	27	294.3	61.7	0.0	160.7	259.8	299.0	334.2	500.0
S ²⁻ —Cl ⁻	53	349.3	38.8	0.0	279.3	330.6	347.7	373.5	500.0
S ²⁻ —Br ⁻	26	353.0	35.2	0.0	310.6	344.5	351.0	373.5	500.0
S ²⁻ —I ⁻	42	357.9	54.9	0.0	306.1	360.7	368.0	375.0	500.0