

9. BASIC STRUCTURAL FEATURES

9.4.1.10. Atomic distances between oxygen and actinoids

Atom pair	<i>N</i>	Mean	s.u.	d_1	Smallest 5%	First quartile	Median	Third quartile	d_2
Th ⁴⁺ —O ²⁻	90	237.7	5.8	220.0	225.0	235.5	238.8	241.4	248.0
Pa ⁵⁺ —O ²⁻	21	233.7	3.0	226.0	228.1	231.6	233.8	235.9	240.0
U ⁶⁺ —O ²⁻	290	181.3	9.6	156.0	168.3	175.4	178.8	188.8	206.0
Np ⁶⁺ —O ²⁻	2	173.0	0.0	172.0	171.6	172.1	172.8	173.4	174.0
Pu ³⁺ —O ²⁻	6	235.0	0.0	234.0	233.3	233.8	234.6	235.3	236.0
Am ³⁺ —O ²⁻	4	236.5	1.9	234.0	234.2	235.0	236.0	238.0	240.0

Table 9.4.1.11. Atomic distances in sulfides and thiometallates

Atom pair	<i>N</i>	Mean	s.u.	d_1	Smallest 5%	First quartile	Median	Third quartile	d_2
Li ⁺ —S ²⁻	19	251.0	20.7	200.0	209.9	242.5	249.0	262.2	350.0
Na ⁺ —S ²⁻	93	295.2	33.6	0.0	269.6	280.1	287.2	299.1	500.0
K ⁺ —S ²⁻	82	325.0	13.3	300.0	308.0	316.1	323.5	331.1	380.0
Rb ⁺ —S ²⁻	26	338.2	12.8	300.0	318.6	329.5	338.0	345.0	400.0
Cs ⁺ —S ²⁻	51	358.8	11.7	300.0	341.1	349.5	359.7	368.9	400.0
Mg ²⁺ —S ²⁻	9	249.4	10.0	200.0	234.9	240.5	253.0	258.5	300.0
Ca ²⁺ —S ²⁻	21	283.8	12.7	0.0	260.1	274.5	285.0	293.5	500.0
Sr ²⁺ —S ²⁻	13	300.8	6.0	270.0	292.6	296.6	300.3	305.5	350.0
Ba ²⁺ —S ²⁻	86	317.3	13.6	250.0	300.4	309.8	315.0	326.5	370.0
B—S	10	180.2	8.3	150.0	161.0	178.3	180.0	183.7	250.0
Al ³⁺ —S ²⁻	20	225.7	8.9	180.0	210.0	221.3	223.6	230.0	300.0
Ga ³⁺ —S ²⁻	61	223.3	5.6	0.0	212.1	220.8	223.7	226.2	500.0
In ³⁺ —S ²⁻	66	247.0	12.1	0.0	220.6	241.2	247.4	255.3	500.0
Tl ⁺ —S ²⁻	67	305.4	16.5	0.0	278.4	294.8	306.2	316.1	500.0
C—S	19	170.6	11.8	140.0	143.9	164.8	173.0	179.2	210.0
Si ⁴⁺ —S ²⁻	25	210.9	8.2	180.0	202.5	208.8	211.0	213.5	250.0
Ge ⁴⁺ —S ²⁻	44	215.9	9.2	0.0	208.4	214.2	218.3	219.9	500.0
Sn ²⁺ —S ²⁻	38	263.1	20.7	0.0	231.8	251.0	261.3	271.5	500.0
Sn ⁴⁺ —S ²⁻	63	248.4	18.9	0.0	231.4	235.9	243.5	256.8	500.0
Pb ²⁺ —S ²⁻	111	274.4	28.5	0.0	231.1	269.9	279.7	289.1	500.0
N—S	65	154.1	9.9	100.0	138.2	149.6	154.8	157.9	210.0
P—S	67	201.8	6.6	150.0	189.6	197.6	201.9	207.4	250.0
As ⁵⁺ —S ²⁻	16	214.6	6.9	150.0	193.6	214.0	215.0	216.0	250.0
As—S	97	221.5	16.1	150.0	191.9	217.2	222.4	225.6	310.0
Sb ³⁺ —S ²⁻	114	244.1	12.6	200.0	227.4	239.3	242.7	247.2	310.0
Sb ⁵⁺ —S ²⁻	9	233.4	4.1	200.0	226.9	232.1	233.2	235.5	280.0
Bi ³⁺ —S ²⁻	77	263.1	12.7	240.0	248.4	255.7	260.1	267.1	320.0
Sc ³⁺ —S ²⁻	18	254.9	5.9	0.0	244.9	251.5	255.3	257.8	500.0
Ti ⁴⁺ —S ²⁻	22	242.5	9.4	0.0	224.2	239.5	242.6	245.0	500.0
V ⁵⁺ —S ²⁻	9	218.3	7.6	0.0	208.9	212.5	218.5	220.8	500.0
Cr ³⁺ —S ²⁻	32	240.1	5.5	200.0	233.2	236.0	240.3	243.2	300.0
Mn ²⁺ —S ²⁻	35	246.1	11.8	0.0	227.5	237.9	243.0	256.2	500.0
Fe—S	117	230.4	13.6	180.0	212.4	220.1	229.1	239.2	280.0
Co ³⁺ —S ²⁻	8	226.0	2.4	222.0	222.4	224.0	226.0	228.0	230.0
Co ²⁺ —S ²⁻	6	234.7	2.0	232.0	230.4	232.0	234.0	236.5	238.0
Co ⁰ —S ⁰	18	214.9	2.0	210.0	211.4	213.4	214.9	216.2	220.0
Ni—S	64	229.4	13.5	190.0	213.1	218.5	228.0	238.0	280.0
Cu—S	221	226.0	8.1	190.0	211.4	222.3	226.4	230.8	270.0
Zn ²⁺ —S ²⁻	37	232.8	8.1	200.0	214.9	230.8	233.4	235.3	270.0