substance: (transition metal)-V-VI compounds
property: crystallographic and physical data for pyrite-type derivatives

(RT values). Seebeck coefficient from [62H].

Compound	a [Å]	d_X [g cm^{-3}]	Ref.	E_g [eV]	Ref.	$10^6 \cdot \chi_m$ [cm^3 mol^{-1}]	Ref.	S [μV K^{-1}]
CoPS (tetr.)	5.414 (c = 5.430)	5.08	74N	0.4	59H			
	5.422 (h?)		63H					
CoAsS (r) (C_{2v}^5–$Pca2_1$)	5.582		65G	0.75	59H			– 50
pseudocell*)	5.578	6.35	63H	0.60	76A			
	5.572		65K					
CoSbS (p) (T^4–$P2_13$)	5.844	7.08	75H			0	75H	
CoPSe (p) (T_h^6–$Pa3$)	5.63	6.29	75H					
CoAsSe (p) (T_h^6–$Pa3$ or			75H					
T^4–$P2_13$)	5.76**)		63H					
RhPS	5.640	6.14	63H					+ 10
RhAsS	5.780	7.22	63H					+ 50
RhSbS (ordered)	6.027	7.79	63H					– 300
RhBiS (T^4–$P2_13$)	6.138	9.88	63H					– 350
RhPSe (ordered)	5.795	7.26	63H			– 15	62H	
RhAsSe	5.934	8.16	63H					+ 100
RhSbSe (ordered)	6.176	8.56	63H					+ 50
RhBiSe (ordered)	6.283	10.47	63H					– 250
RhAsTe	6.165	8.66	63H					– 100
RhSbTe	6.392	8.96	63H	> 0.15	80H	– 70	62H	– 50
RhBiTe	6.504	10.61	63H					– 30
IrPS	5.650	9.40	63H					
IrAsS	5.791	10.23	63H			– 66	62H	+ 10
IrSbS (ordered)	6.036	10.45	63H					– 1000
IrBiS (ordered)	6.143	12.41	63H			– 78	62H	– 70
IrPSe (ordered)	5.798	10.30	63H					
IrAsSe	5.940	10.97	63H					+ 10
IrSbSe (ordered)	6.184	11.04	63H					
IrBiSe (ordered)	6.290	12.82	63H					– 50
IrAsTe	6.164	11.19	63H					+ 60
IrSbTe (ordered)	6.397	11.20	63H					
IrBiTe	6.500	12.79	63H					– 50

*) (h): annealing at 550°C completely disorders As and S [65G]. Most mineral specimens are partially ordered [65G, 82B]. **) Stabilized by impurities?

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