SHORT COMMUNICATIONS

Acta Cryst. (1971). B27, 2493

The crystal and molecular structure of π -allyl-dihydrobis-(3,5-dimethyl-1-pyrazolyl)boratodicarbonylmolybdenum, H₂B [(CH₃)₂pz]₂Mo(CO)₂C₃H₅: addendum. By C. A. KOSKY, Polymer Research Institute, Polytechnic Institute of Brooklyn, New York 11201, U.S.A. and P. GANIS and G. AVITABILE, Università di Napoli, Istituto Chimico, 80134 Napoli, Italy

(Received 20 September 1971)

The following line should be inserted between N(1') and C(1) in the table of thermal parameters (Table 3) in a recent article under the above title (Kosky, Ganis & Avitabile, Kost 1971):

Kosky, C. A., Ganis, P. & Avitabile, G. (1971). Acta Cryst. B27, 1859.

Reference

	B_{11}	B_{22}	B_{33}	B_{12}	B_{13}	B_{23}
N(2′)	2.660 (0.207)	2.632 (0.212)	2.796 (0.209)	- 0·252 (0·167)	1.020 (0.173)	0.870 (0.169)

Acta Cryst. (1971). B27, 2493

Phase transformation of thin caesium iodide layers at low temperatures. By Z. MORLIN, Research Laboratory for Chemical Structures of the Hungarian Academy of Sciences, Budapest, Hungary

(Received 22 June 1971)

A low-temperature tetragonal phase of thin caesium iodide crystalline layers detected below -140 °C by means of electron diffraction is described. The lattice parameters are a=3.88 and c=4.12 Å. The linear thermal expansion coefficient of the CsCl-type B_2 phase as determined in the temperature range between +20 °C and -140 °C was 4.96×10^{-5} .

In connexion with investigations of the structural properties of thin ionic crystals by means of electron diffraction, a phase transformation of the CsCl-type B_2 caesium iodide has been detected at approximately -140 °C.

The specimens supplied by British Drug Houses were prepared in a Balzers 350-G vacuum device at 2.0×10^{-5} torr by evaporation from a molybdenum boat, and then investigated in a cold-stage specimen holder, developed in our laboratory, with a Zeiss EF-4 electron-optical equipment between + 20 and -150 °C at 50 kV. The $L\lambda$ values, where L is the tube length and λ is the electron beam wave length, were determined with a TICI standard.

Fig. 1. represents the temperature dependence of the lattice constant of the B_2 structure. The linear thermal expansion in the temperature range between +20 °C and -140 °C was fitted by the least-squares method. Accordingly the value 4.96×10^{-5} was obtained.

It was found that the Debye-Scherrer diagrams taken at t < -140 °C showed, beside the ordinary reflexions of

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Fig. 1. Dependence of the lattice constant on temperature in B_2 -type caesium iodide.

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Debye- Scherrer ring	Ring diameter D (mm)	d(Å) measured	Intensity	hkl	d(Å) calculated
1	7.038	3.901	strong	200	3.873
2	7.510	3.650	strong	101	3.638
3	7.977	3.442	faint	210	3.464
4	13.323	2.060	faint	002	2.060
5	14.372	1.910	strong	321	1.905
6	18.109	1.516	faint	510	1.519
7	21.246	1.290	faint	203	1.294
				600 }	1.291