

Table 2. Comparison of the results of equation (5) with those of Sayre's equation

h (reciprocal lattice)	$F(h)$	At $\sin(\theta)/\lambda = 0.72 \text{ \AA}^{-1}$ terminated right-hand side of equation:				v (direct lattice)
		(1)	(5, I)	(5, II)	(5, III)	
(001)	54	98	50	55	55	[001]
			67		63	[100]
(110)	-29	-43	-26	-31	-30	[110]
			-24		-26	[001]
(011)	4	7	1	9	7	[011]
			2		1	[100]
(200)	3	40	20	15	17	[100]
			4		5	[001]
(202)	68	73	80	70	75	[101]
			75		70	[010]
(132)	41	55	43	42	43	[010]
			53		49	[110]
(330)	61	61	71	64	63	[110]
			65		66	[001]

No solution exists for case II if h is orthogonal to v because \tanh is antisymmetric and therefore $F[h, \Gamma_2(\varrho)]$ is zero and no function $A(h, m)$ can be derived.

The examples show that for practical purposes appropriate functions $G(m)$ and hence generating mappings Γ can be found which keep the errors in applying equation (5) sufficiently low.

Acta Cryst. (1976). A32, 170

Internal strain of GaAs. I. Longitudinal case: erratum. By C. N. KOUMELIS and E. K. ROZIS, *Department of Physics, University of Athens, Athens 144, Greece*

(Received 18 July 1975; accepted 21 July 1975)

The results for ζ and α/β of Koumelis & Rozis [*Acta Cryst.* (1975). A31, 84-88] should read: $\zeta = 0.77 \pm 0.04$, $\alpha/\beta = 1.20 \pm 0.04$.

In the paper by Koumelis & Rozis (1975), the value $s_{44} = 18.6 \cdot 10^{-12} \text{ cm}^2/\text{dyne}$ of GaAs given by Huntington (1958) is incorrect by an order of magnitude. With $s_{44} = 1.692 \times 10^{-12} \text{ cm}^2/\text{dyne}$ (Cottam & Saunder, 1973), the values of ζ and α/β are: $\zeta = 0.77 \pm 0.04$, $\alpha/\beta = 1.20 \pm 0.04$. Hence, in GaAs there exists strong internal strain.

Acta Cryst. (1976). A32, 170

Analysis of orientationally disordered structures. II. Examples: erratum. By WERNER PRESS, *Institut für Festkörperforschung der Kernforschungsanlage Jülich, 517 Jülich, Germany (BRD)*

(Received 16 July 1975; accepted 16 July 1975)

Corrections are given to Press [*Acta Cryst.* (1973). A29, 257-263]. Two misprints in Table 2 should be corrected to $c_{61}^T = \sqrt{26} \cdot \frac{1}{3}$ and $c_{71}^T = -\sqrt{455}/9$. In the 3rd line of equation (2.1) $j_3(Q\varrho)$ should be changed to $j_6(Q\varrho)$.

All information is given in the abstract.

The errors are caused by termination of the series and by using functions $G(m)$ which do not exactly fulfil the suppositions, e.g. $G_{21}(m)$, of cases II and III.

In practice, these two sources of error cannot be clearly separated because many functions can be fitted very well by allowed functions $G(m)$ in the range of reciprocal space which can be reached by measurement (Rothbauer, 1975, p. 133).

The problem of finding functions $G(m)$ which are adapted to the scatterers of a structure and to the termination of the series in order to minimize the errors must be the content of further investigations.

From the example given above we may conclude that equation (5) contains important constraints for the determination of the phases.

The author wants to thank Professors M. M. Woolfson and H. R. Wenk for helpful comments. The work was supported by the Bundesministerium für Forschung und Technologie.

References

- ROTHBAUER, R. (1975). *Neues Jahrb. Miner. Monatsh.* **3**, 121-134.
 ROTHBAUER, R., ZIGAN, F. & O'DANIEL, H. (1967). *Z. Kristallogr.* **125**, 317-331.
 SAYRE, D. (1952). *Acta Cryst.* **5**, 60-65.
 WOOLFSON, M. M. (1958). *Acta Cryst.* **11**, 277-283.

References

- COTTAM, R. I. & SAUNDER, G. A. (1973). *J. Phys.* **C6**, 2105-2118.
 HUNTINGTON, H. B. (1958). *Solid State Phys.* **7**, 213-351.
 KOUMELIS, C. N. & ROZIS, E. K. (1975). *Acta Cryst.* **A31**, 84-88.