

Short Communications

Contributions intended for publication under this heading should be expressly so marked; they should not exceed about 1000 words; they should be forwarded in the usual way to the appropriate Co-editor; they will be published as speedily as possible. Publication will be quicker if the contributions are without illustrations.

Acta Cryst. (1972). A28, 355

Ordering scheme for general positions in *International Tables*. Some corrections and additions. By E. F. BERTAUT, *Laboratoire d'Electrostatique et de Physique du M tal, CNRS, Chemin des Martyrs, Grenoble, France* and H. WONDRAUSCHEK, *Institut f r Kristallographie der Universit t, 75 Karlsruhe 1, Kaiserstrasse 12, Germany (BRD)*

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Corrigenda are given for *Acta Cryst.* (1971), A27, 298.

The following corrections and additions should be made.

- To (2) should be added
 $N_0 = I$, the unit subgroup.
- (3) and the two following lines should read
$$a_0 a_1^{v_1} \dots a_i^{v_i} \dots a_{k-1}^{v_{k-1}} a_k^{v_k} \quad (3)$$

($0 \leq v_i < n_i$, n_i order of N_i/N_{i-1} , or v_i any (positive or negative) integer, when n_i infinite) of powers of the generators a_i .
- The first sentence of the second paragraph, right column of p. 298, should read: In general there are different possible chains N_0, N_1, \dots, N_k and different possible choices for the coset representatives.
- The second sentence of the footnote, p. 298, should read: For the systematic generation of all general positions belonging to a given unit cell these fractional translations can be (and in some cases, have to be) introduced as the first generators after the integral translations.

5. In the text of Table 1 the last two formulae should read

$$2_x 3_2 a = 4_y, \quad 2_x 3_2 a = 4_y^3.$$

- On p. 299, right column, eighth line after (6) should read 'block T ' instead of 'blocks T '.
- P. 300, left column, fourth line, $4/mmm$ should read $4/mmm$.
- P. 300, left column, the last three lines should read
 $\{m3m - O_h\} = \{T\} + \{T\} (2_d|\tau) + \{T\} (\bar{1}|\tau_T) + \{T\} (m|\tau_m)$
where
 $(m|\tau_m) = (2_d|\tau) (\bar{1}|\tau_T)$.
- P. 300, the end of the first line of the right column should read
 $\{T\} + \{T\}(2_d|\tau)$.

We would like to thank Dr J. Neub ser, Aachen, Germany and Dr J. D. H. Donnay, Montreal, Canada for their helpful critical remarks on the above-mentioned paper.

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Traps responsible for 360 and 390 K glow peaks in X-irradiated NaCl:TI crystals. By R. V. JOSHI and T. R. JOSHI, *Physics Department, M. S. University of Baroda, Baroda, India*

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Correlated measurements on the thermoluminescence and optical absorption of X-irradiated NaCl:TI indicate that the glow peaks observed at 360 and 390 K may be due respectively to electrons released from F' and some species of higher aggregate centres.

The study of the correlation of the filling and emptying of the thermoluminescence traps with the formation and destruction of some colour centres has been reported by Fischer (1961). The present work is an extension of the earlier study reported from this laboratory, the results of which suggested that the 340 K glow peak in NaCl:TI could be correlated with the F -band absorption (Joshi & Joshi, 1971). The purpose of the present investigation has been to seek correlation between colour centre absorptions and the glow peaks at 360 and 390 K in NaCl:TI.

Thallium in the form of TlCl (reagent grade) was thermally diffused in the plates cleaved from a Harshaw NaCl single crystal. The specimens so obtained were examined either in an untreated condition or after thermal pretreatment. The latter involved the annealing of the specimen at 750 C in open air for three hours and rapid quenching to room temperature. The thermal glow curves were recorded by warming the specimen at a uniform rate of 10°min^{-1} . The absorption measurements, which always preceded the

thermoluminescence measurements, were made at room temperature. The concentration of thallium in all the specimens studied was of the order of 10^{-3} mol fraction. It was observed that the experimental results for the specimens with the same history were in general identical. The results obtained for two specimens differing in thermal history are presented for discussion.

Fig. 1 represents the absorption and thermoluminescence data for an untreated specimen. In the Figure curves 1 and 3 indicate the absorption and thermoluminescence of the specimen after 30 minutes X-irradiation at room temperature, whereas curves 2 and 4 exhibit the corresponding data after 30 minutes X-irradiation followed by 30 minutes F -light illumination. It is obvious from the figure that illumination of the specimen with F -light suppresses the F -band absorption and to a certain extent enhances absorption in the F' and R -band regions. In the corresponding thermal glow curve, peaks at 360 and 390 K are discernible. Fig. 2 represents the results on the optical absorption and ther-