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The hexagonal close-packed Kikuchi map. By DAVID S. GELLES, *Central Electricity Generating Board, Berkeley Nuclear Laboratories, Berkeley, Gloucestershire, England*

A Kikuchi map for the close-packed hexagonal structure is presented. It is derived from an alloy of magnesium with 0·71 wt.% of manganese.

The application of Kikuchi maps has been discussed by Thomas (1969) who has championed their use. His description of the hexagonal map includes only the [0001] region (Okamoto & Thomas, 1968) and it is felt that a more complete map is needed.

Therefore, a complete Kikuchi map is presented for the hexagonal close-packed crystal structure taken of a sample of alloyed magnesium (Fig. 1). The sample used was a magnesium–0·71 wt.% manganese alloy and the map was prepared on a Philips EM 200 electron microscope at 100 kV using a 45° double-tilt stage.

An 0001 stereographic projection for magnesium prepared using the data of Taylor & Leber (1965) is given in Fig. 2, and indicates the portion represented by the Kikuchi map. It should be noted that by suitably mirror imaging this map across any $11\bar{2}0$, $\bar{1}010$ or 0001 band, the Kikuchi map may be enlarged to represent the whole of the stereographic projection.

Only the $[1\bar{1}00]$, $[1\bar{2}10]$ and $[0001]$ poles are indicated on the map because other intersections of Kikuchi bands do not correspond to simple poles. All major Kikuchi bands are labelled.

Fig. 2. The magnesium stereographic projection showing the location of the Kikuchi mapped region.

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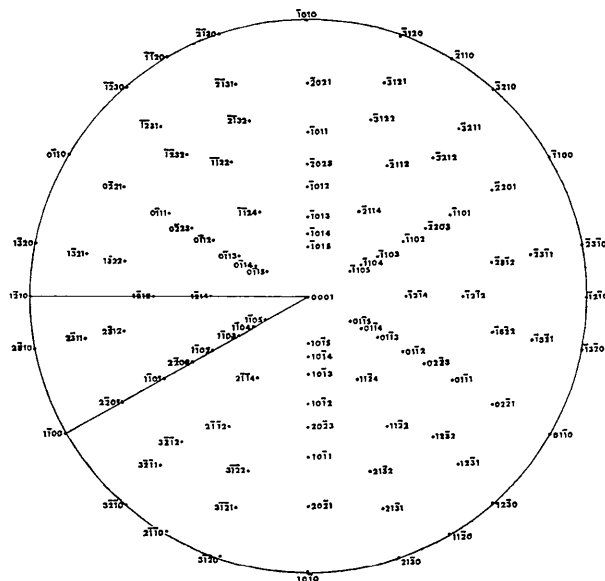

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Grain boundary parameters. Erratum. By M. A. FORTES, *Intituto de Quimica, Universidade de Lourenço Marques, Lourenço Marques, Maçambique*

A correction of a typographical error in Fortes [*Acta Cryst.* (1972), A **28**, 100] is given.

In the paper *Grain Boundary Parameters* by Fortes (1972), the second and third sentences of paragraph 3 of § 2 should read:

'The translation **t** will in general change as the lattice point P_A is replaced by another lattice point. In fact, **t** is defined except for the sum of a lattice vector of A and a lattice vector of A_r'.

Reference

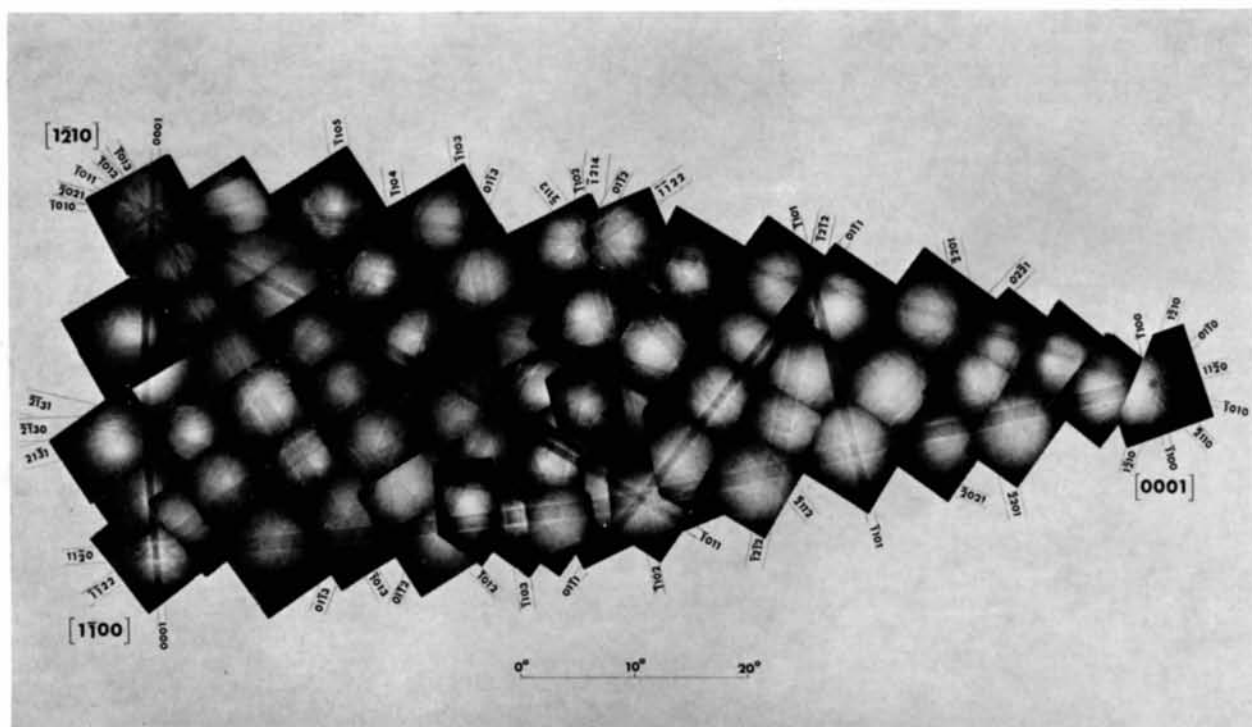FORTES, M. A. (1972). *Acta Cryst.* A **28**, 100.

Fig. 1. The hexagonal Kikuchi map as prepared from a magnesium – 0·71 wt.% manganese alloy.