大别山绿辉石晶体结构的再研究—兼与谢窦克等同志商榷　　　点此下载全文

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摘要：

　　　谢窦克等曾测定了大别山一个绿辉石的晶体结构，认为它具Ｐ２／ｃ空间群；四面体链分别呈ＳＡ和ＯＢ接
配位的八面体：Ａ１在所有这四种晶位另均有相当多的占有率，为绿辉石的新型结构。本文对该资料再研究后确定
构中仅有一种Ｏ旋转的四面体链；Ｍ２和Ｍ２晶位为８次配位；Ａ１全部进入Ｍ１（１）晶位，Ａ１－Ｍｇ呈完全
有序绿辉石。本文给出了重新计

关键词：　绿辉石 空间群 晶体结构 大别山

RESTUDY ON THE CRYSTAL STRUCTURE OF OMPHACITE FROM THE DABIE MOUNTAINS　　Download Ful

Guo Weidong　Luo Gufeng　Guo Yun

Fund Project:

Abstract:

　　　Xie Douke et al. (1989) determined the crystal structure of omphacite from the Dabie Mounta
this crystal has space group P2/c, and in its structure, there are two kinds of tetrahedral chain w
rotation respectively; the four symmetrically unequivalent M-sites are all 6-coordinated octahedra
them with higher occupancies. A restudy on the data of this structure was carried out by the authors
space group of the omphacite from the Dabie Mountains is P2/n rather than P2/c; and in its structur
of tetrahedral chain with O-rotation, the 03-03-03 chain angle is 170. 02% andM2 and M2(1) sites ar
distinguished from 6-one of MI and M1 (1) sites. In addition, the authors deem that, based on the M
Al should enter the smallest M1(1) site, while the site occupation between Al and Mg would be compl
structure mentioned above is a typical one of ordered omphacite with space group P2/n, rather than
for omphacite. The cause responsible for an incorrect space group is that the selection of the unit
the standard. The authors, therefore, recalculated the unit cell parameters and atom coordinates ba
Xie Douke et al., and furnish the correct ones here. Although some major errors have been found in
given by Xie Douke et al., the structural data are valuable.

Keywords: omphacite　space group　crystal structure　Dabie Mountains

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