

*Yu. L. GULBIN, A. I. GLAZOV.* MORPHOLOGICAL EVIDENCE OF THE INTERGRANULAR DIFFUSION-CONTROLLED GROWTH OF METAPELITE GARNET

The surface microtopography of garnet crystals from the metamorphic schist of Northern Ladoga area was investigated. It is shown that the peculiar features of garnet morphology are rough step patterns on dodecahedral  $\{110\}$  faces and the absence of sharp edges on crystals. Based on data of experiments on the growth of crystals under hydrothermal conditions, it is concluded that defined elements of the microtopography are indicative of the high supersaturation of the intergranular medium and the important role of diffusion as a factor controlling the growth of garnet.

*Key words:* garnet, morphology, surface microtopography, growth steps, supersaturation, diffusion, metapelite, Northern Ladoga area.