SYNTHESIS, X-RAY ANALYSIS AND PROTONIC CONDUCTIVITY OF THE HALOGEN-DEFICIENTAPATITE CERAMICS $Pb_5GeO_4(VO_4)_2$ AND $Pb_5SiO_4(VO_4)_2$

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S u m m a r y

The results of study of the synthesis conditions and X-ray diffraction patterns of $Pb_5GeO_4(VO_4)_2$ and $Pb_5SiO_4(VO_4)_2$ ceramics with the halogen deficient structure are reported. They belong to a hexagonal system with space group $C6_3/m$. In atmosphere of wet nitrogen, conductivity of ceramics is higher than in atmosphere of dry nitrogen. It may be the evidence of a possibility of proton conductivity of the synthesized materials.