

STRUCTURAL CHANGES DURING MELTING OF QUARTZ-FELDSPAR RAW MATERIALS IN LOW-TEMPERATURE PLASMA

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A detailed x-ray analysis of a quartz-feldspar raw materials as in the initial state and after plasma exposure. An amorphous product of fusion, the resulting plasma exposure, consists mixture of amorphous phases: [O₂Si], [O₂₂Al₂₀], [O₁₉₂Si₉₆], [O₂₄₀Si₁₂₀], a significant proportion of which are based on phase SiO₂. It is established that the phase composition of the raw material consists of a mixture of ([O₂₂Al₂₀] and [O₂Si]).

Keywords: quartz-feldspar raw materials, crystal structure, quantitative phase analysis.