



FUNDAMENTAL PERSPECTIVE OF THE OXIDE GLASS MATERIAL: Mo³⁺ DOPED PHOSPHATE BASED OPTICAL GLASSES FOR PHOTONIC APPLICATIONS

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Today's advanced electronic-based technologies have begun to provide incredible convenience in the daily life of the individual person. For this purpose, the potential for the use of optical glass materials is rapidly increasing in areas such as intercontinental communication, intercity information exchange and data transmission, modern developments in the health sector and energy sources for space technologies [1,3]. For this reason, new applications are emerging in research on the structural, optical and thermal properties of oxidized glass materials, which have an important place among optical glass materials. Thermal and optical properties are usually determined by considering the Kissinger approximation and Judd-Ofelt theory [4,5]. Therefore, thermal parameters, production costs, optical and structural properties of oxidized glass materials attract attention, depending on the industrial requirements in their usage areas. In this research, the production, optical and photoluminescence properties of Mo³⁺ doped phosphate glass materials from a set of oxidized glass materials were investigated [6,7].

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