

INVESTIGATION OF THE INFLUENCE
OF IMPURITY MOLYBDENUM IONS
ON THE LUMINESCENCE PROPERTIES
OF LEAD TUNGSTATE CRYSTALS

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S u m m a r y

Absorption, X-ray and photoluminescence, excitation and Raman spectra of lead tungstate single crystals synthesized with adding the MoO₃ oxide impurity to the bench are carried out. The additional green emission of these crystals is shown to be caused by radiation transitions in MoO₄²⁻ molecular anions formed on the place of tungstate groups of lead tungstate crystals. The conclusion is made that the green emission of 'pure' lead tungstate crystals is not concerned with the presence of uncontrolled impurities of molybdate molecular groups.