

IR PHOTOLUMINESCENCE
IN $\text{Ag}_{0.05}\text{Ga}_{0.05}\text{Ge}_{0.95}\text{S}_2\text{-Er}_2\text{S}_3$ GLASSES

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S u m m a r y

The photoluminescence (PL) spectra of $\text{Ag}_{0.05}\text{Ga}_{0.05}\text{Ge}_{0.95}\text{S}_2\text{-Er}_2\text{S}_3$ glasses excited by a laser diode operating at 980 nm have been investigated. The broadening of the PL band of the glasses with increase in the Er content has been found, by calculating a full-width at half-maximum (FWHM) and the effective width $\Delta\lambda_{\text{ef}}$. Inhomogeneities with dimensions of 6–7 μm have been disclosed in the glassy alloys; their concentration increases with the erbium content and influence the width of the PL spectra.