

**S1-P.37****Nanomultilayer As₂S₃:Mn-Se Systems: Properties and Use as the Recording Media**

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Properties of nanomultilayer As₂S₃:Mn systems and peculiarities of holographic gratings recording with their use are considered in this report. Optical constants were obtained from transmission data, spectral dependencies were analyzed within the frames of single oscillator model. Holographic gratings with spatial frequencies 1600 mm⁻¹ were directly recorded using such nanomultilayer structures. Kinetic of gratings recording depended on polarization of recording beams. Such systems are perspective for the recording of planar optical elements.