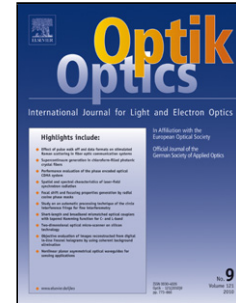


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**Recording media for polarization holography with diffraction efficiency adjusted using electric field**

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**Abstract.**

In the films of copolymer 4-((2-nitrophenyl)diazenyl)phenylmethacrylate with octylmethacrylate the holograms of the plane wave front were registered for parallel and orthogonal orientations of polarization vectors of the object and reference light beams. The diffraction efficiency of the holograms is higher when pulsed exposure during holographic recording is used instead continuous exposure. After the holograms registration, the diffraction efficiency of the reconstructed holographic image can be significantly increased by charging the film surface in the corona discharge. This effect is explained by strengthening the modulation of the surface relief of the films.

**Keywords:** azobenzene, polymeric composite, polarization holography, diffraction efficiency, corona discharge

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