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Direct hologram recording on metal surface 18

***Abstract***

***The results on flat metals was studied and described for a series of experiments with steel that produce most stable structure with high diffraction efficiency. Experimental setup was based on 1064 nm high-frequency pulsed laser. Beam-shaping device looked necessary due to a threshold character of the interaction. The gratings obtained have 275 lines/mm and nearly sine profile. We expect the technique to increase security level of holographic images on spare parts, steel components, etc.***

***Keywords: holography, direct engraving, beam shaping, pi-shaper, IR laser.***

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