

INFLUENCE OF INTERFACE ON SELF-ORGANIZATION PROCESS INDUCED BY NANOSECOND IR LASER IRRADIATION OF CHROMIUM FILM ON FUSED SILICA

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The laser-induced self-organized processes are suitable for the fabrication of sub-micron and nano-patterns at large areas. During laser irradiation thin metal film starts to dewet due to Plateau-Rayleigh instability. Nowadays the impact of interface to the dewetting process is not completely researched. For this purposes carbon atoms were locally implanted in 3 inch wafer of fused silica. After that sample was sputtered by 15 nm chromium and irradiated by IR fibre laser with wavelength of 1064 nm.

