

Au-ION DOPING OF THE POROUS SILICON
INNER SURFACE

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S u m m a r y

Photoluminescent por-Si films have been obtained by the laser ablation method with deposition from the back flow of particles on the substrate displaced on the target plane. It is shown that Au-ions passivate dangling Si bonds, suppress the nonradiative canal of surface recombination, and increase oxidation of Si nanocrystals. Por-Si films doped with Au have demonstrated an increase in the photoluminescence intensity and its stability.