## a 2003 0081

The invention relates to the optoelectronics, namely to processes for photon crystal obtaining.

The process for photon crystal obtaining includes the deposition of a mask onto one of the faces of the semiconductor or dielectric crystal, at the same time the mask is made in the form of a lattice with orifices, arranged in rows with equal steps, then it is carried out the implantation of the high-energy ions into each orifice of the mask in four directions and the electrochemical pickling. Novelty of the invention consists in that during implantation each direction of the ions form an angle of  $45^{\circ}$  about the normal to the crystal surface and the angles between the ions directions are equal to  $90^{\circ}$ .

Claims: 1 Fig.: 1