New method of porous Ge layer fabrication: structure and optical properties

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Porous germanium films were produced by selective removal of the GeO₂ matrix from the GeO₂ (Ge-NCs) heterolayer in deionized water or HF. On the basis of Raman and infrared spectroscopy data it was suppose (Ge-NCs) heterolayers. The kinetics of air oxidation of amorphous porous Ge layers was investigated by scanning ellipsometry. Spectral ellipsometry allowed estimating the porosity of amorphous and crystalline porous Ge layers, which was ~ 70% and ~ 80%, respectively.

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