

# **Morphology and chemical composition microanalysis of 2D and 3D ordered structures on porous InP**

**Langa S., Sirbu L., Monaico E., Carstensen J.,  
Föll H., Tiginyanu I. M.**

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## **Abstract**

Porous InP proves to be promising for use in nanotechnologies due to the possibility to fabricate ordered structures like two-dimensional (2D) single crystals of nanopores. The main goal of this paper is to demonstrate that, along with 2D structures, one can fabricate 3D ordered porous structures on InP using alternative anodic current superimposed to a constant current or by pulsing the current. The dependence of the efficiency of pore diameter modulation upon the current frequency was explored. The stoichiometric composition of 2D and 3D porous InP structures was evidenced by chemical composition microanalysis.