

Features of nanotemplates manufacturing on the II-VI compound substrates

Colibaba G., Monaico E., Goncareenco E., Inculet I., Tiginyanu I.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Springer Science+Business Media Singapore 2016. Application of ZnSe, ZnS, ZnSSe, CdS, ZnCdS and ZnO single crystal substrates for the preparation of nanoporous matrices by electrochemical etching using various electrolytes is analyzed. We demonstrate prospects of using ZnSe and ZnCdS compounds for the fabrication of nanopore arrays with pore diameter down to 30 nm, as well as of ZnO substrates for the preparation of nanohills or nanopits arrays. The limitations for producing similar structures on the basis of ZnS and ZnSSe substrates are evidenced.

http://dx.doi.org/10.1007/978-981-287-736-9_47

Keywords

Anodic etching, II-VI semiconductor compounds, Nanotemplates