

Optical Absorption Study of Electrochemical Etching Porous Silicon

M. Godinez, A. Florido-Cuellar, R.A. Muño Hernández, E. Marín, and A. Calderón^{C,S}
Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada Unidad Legaria del IPN, México DF,
México
jcalderona@ipn.mx

The evolution of optical absorption spectra of electrochemical etching porous silicon as a function of the etching time and microstructure of the samples was studied. The absorption spectra were carried out using photoacoustic spectroscopy. Moreover, we carried out photoluminescence measurements of these samples, and we obtained comparisons between the photoacoustic and the photoluminescence spectra. We show that the etching time and the microstructure have important roles in the optical absorption of this material.