SiOC 박막의 접촉각과 화학적 특성의 상관성

오데레사, 김홍배 청주대학교 전자정보공학부 반도체설계공학과

Chemical Properteis and Contact Angle on SiOC Teresa Oh*, Hong Bae Kim

School of Electronic and Information Engineering, Cheongju University, 36 Naedok-dong Sangdang-gu, Cheongju, Chungbuk 360-764, Republic of Korea

Abstract

The SiOC film of carbon centered system was prepared using bistrimethylsilylmethane and oxygen mixed precursor by the chemical vapor deposition. The chemical properties of the SiOC film were analyzed by the I-V measurement and FTIR spectra. The main bond of 950~1200 cm-1 was composed of the Si-C, Si-O-C and Si-O bonds. The leakage current of the SiOC film increased with the increasing of the carbon content, and the drift of the current was similar to the Si-O-C bond content.

Key Words: Contact angle, Si-O-C bond, Si-C bond, Si-O bond, leakage current.