Selective-area deposition of TiO<sub>2</sub> thin film using organic thin-layer and metal organic chemical vapor deposition (MOCVD)

미세접촉인쇄와 금속-유기 화학증착법을 이용한 산화티타늄 박막의 형상화

> 정덕영, 강병창, 부진효 성균관대학교 화학과

Patterned thin films of TiO<sub>2</sub> were deposited by metal organic chemical vapor deposition (MOCVD) onto Si substrates and surface modification by self-assembled monolayer. The organic thin film of self-assembled monolayer (SAM) is created by the microcontact printing method and utilized as resister film to protect the deposition of TiO<sub>2</sub>. Selective deposition of TiO<sub>2</sub> thin film with 1000A thickness has been successfully carried out at the temperature range of 300 to 350 °C.