친수성 유무기 레진의 나노디바이스 몰드재료로서의 특성연구

홍난영[1,2], 김동표[1,2,*], 박상희[1]
[1]충남대학교; [2]Center for Ultramicrochemical Process Systems (CUPS), KAIST
(dpkim@cnu.ac.kr*)

Super hydrophilic materials which is novel inorganic-organic hybrid resins consisting of an ordered mesoporous structure with the multifuctional performance, including controlled wettability in the contact angle range of superhydrophilicity (7°~26°), durable antifogging properties, transparency and abrasion resistance were presented. Super hydrophilic materials which include gas permeability, low adhesion and an ordered mesoporous structure under an electric field can be applicable to nanofluidic device molds. In this study, super hydrophilic materials were demonstrated about these properties for application to nanofluidic device molds.