

Tailoring polymeric and carbon nanostructures using interfacial control under external electric field

배준원*

동덕여자대학교

(joonwonbae@gmail.com*)

The control of nanostructures using surface engineering is an interesting research topic. In addition, the use of external electric fields to tailor nanostructures has attracted a considerable interest. In this study, the fabrication and characterization of polymer and carbon nanostructures using interfacial control under electric field is presented. The microphase separation behavior of block copolymer/nanoparticle nanocomposite under electric field is observed extensively. On the other hand, the generation of unique embossed carbon nanostructures from block copolymer precursor by exposure to electric field is also demonstrated. This study can provide fundamental information for finding a promising way to tailor nanostructures.