

에어로졸 공정에 의한 그래핀 기반 에너지 소재
제조 연구

조은희[†]
(주)폴리피아
(jeh1198@nate.com[†])

Electrochemical energy conversion and storage constitute essential elements in the development of sustainable energy technologies. Solar cell, fuel cells, Li-ion batteries and supercapacitors are the most important energy devices and have drawn enormous attention in research due to their superior and unique electrochemical properties. Carbon materials are promising materials in energy applications owing to their high conductivity, high specific surface area, thermal and chemical stability, flexibility, controllable structure and low price. Among the carbon materials, two-dimensional (2D), one layered graphene (GR) has had a special focus on the basis of its unique physical properties and has been used in the areas of electronics, catalysts, biotechnological application, and energy storage system etc. However, most previous synthetic methods suffer from the precise control of the size, shape, layer of graphene sheets. In this study, two-dimensional (2D) and three-dimensional (3D) Graphene based materials were synthesized by aerosol spray process (ASP).