

Synthesis and structural characterizations of metallic shell particles

진우민, 김혜나, 강지윤, 강지환, 문준혁*

서강대학교

(junhyuk@sogang.ac.kr*)

Metal-coated colloids are of interest in various applications, including nanoelectronic devices, photonic crystals and sensors. Specifically, combining polymer core with a metallic shell endows low density, high electrical conductivity and magnetic properties. Here, we prepare the metallic shell particles by the coating of polymeric or inorganic spheres via electrochemical bath deposition. The core spheres can be selectively etched by calcinations or solvent extraction, resulting in the hollow metallic particles. We're currently investigating the deposition of metals on the clustered colloids.