

Showcasing research from Dr. Jun Maruyama's project at Osaka Research Institute of Industrial Science and Technology, carried out with co-workers in Japan.

Helically aligned fused carbon hollow nanospheres with chiral discrimination ability

Heat treatment of self-assembled Fe $_3O_4$ nanoparticles with a carbon precursor and a chiral inducer along multiwalled carbon nanotubes, followed by acid treatment, produces helically aligned fused carbon hollow nanospheres. The helical alignment changes according to the spatial arrangement of the chiral inducer. Preferential electrochemical reactions of chiral molecules occur based on a new mechanism of chiral discrimination attributed to chiral spaces generated between the nanotube and nanospheres.



