

ADVANCED MATERIALS

Bionanotechnology

Graphene-nanoparticle hybrid structures have been developed to control the behavior of human neural stem cells (hNSCs) in a unique manner. The axons from the differentiated hNSCs, as described by Ki-Bum Lee and co-workers on page 5477, show enhanced growth and alignment. While the axonal alignment is primarily due to the presence of graphene, the underlying nanoparticle monolayer causes enhanced neuronal differentiation of the hNSCs, thus having great implications of these hybrid-nanostructures for neuro-regenerative medicine.

