

# ADVANCED HEALTHCARE MATERIALS

## CARTILAGE SUBSTITUTES

In article number 2001434 by Leonardo Ricotti, Gina Lisignoli, Diego Trucco, and co-workers, a bilayered hydrogel made of gellan gum and poly(ethylene glycol)diacrylate fills chondral defects of articular knee cartilage, mimicking the superficial and the deep zones in terms of mechanical and lubrication features. Graphene oxide dopant improves the superficial layer's lubrication. Such a nanocomposite hydrogel could be used as an injectable filler or a surgically implantable substitute in defects, showing no cytotoxicity, and guaranteeing suitable resistance to wear.