

ADVANCED FUNCTIONAL MATERIALS

GRAPHENE

Graphene oxide sheets get anisotropically crumpled and oriented by radial and shear forces in fast-thinning electrospun jets. On page 5763, Y. Dzenis and co-workers demonstrate that a small fraction of these nanoparticles in polyacrylonitrile precursor nanofibers can produce global improvements of the graphitic order and orientation in the resulting carbon nanofilaments. Such a templating methodology utilizing low-cost constituents, efficient top-down nanomanufacturing, and relatively low carbonization temperatures may lead to inexpensive continuous carbon nanofibers with improved mechanical and transport properties. Artwork by Joel Brehm.

