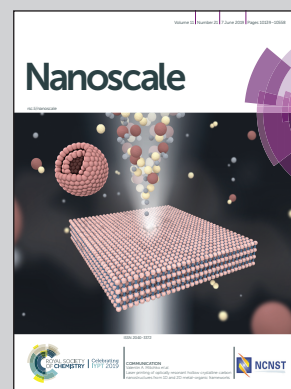


Showcasing research from the Key Laboratory of Organosilicon Chemistry and Material Technology of the Ministry of Education, Hangzhou Normal University, Hangzhou, China.

Construction of sandwich-like porous structure of graphene-coated foam composites for ultrasensitive and flexible pressure sensors

This illustration depicts ultrasensitive and flexible pressure sensors via constructing a graphene-based porous conductive/insulating/conductive sandwich-like structure. An efficient transition from a non-conductive to a conductive state via interpenetration of the conductive graphene network throughout the porous insulating interlayer can be achieved. The optimized sensors display extreme resistance-switching behaviour and demonstrate high sensitivity, fast response time, and outstanding mechanical stability. The proposed strategy provides a new concept and methodology for device design for wearable electronic applications.

As featured in:



See Long-Cheng Tang et al.,
Nanoscale, 2019, 11, 10229.