



Solution-Processed Organic/Inorganic Nanocomposites for High-Performance Human-Interactive Sensors

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Careful and promising approaches with regard to the solution-processed nanocomposition based on organic and inorganic materials have been intensively investigated to realize next-generation nanoelectronics which require superb electrical and electronic performance, compared to the conventional materials. Recently, we observed that conducting nanoparticles incorporated into the random networks of carbon nanotubes (CNT) exhibited improved strain/pressure sensing performance on flexible/stretchable substrates. In this presentation, we discuss the material synthesis of solution-processed organic/inorganic nanocomposites and the improved sensing mechanism for highly sensitive and robust human-interactive sensors. By optimizing the material composition and deposition process for solution-processed organic/inorganic nanocomposites, a rapid and accurate sensing performance can be achieved on flexible/stretchable substrates which can be directly attached to the human body without a buffer layer.

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