Micro-current conductive network

Here, we present a biomass-derived conductive elastomer featuring a rationally engineered dynamic crosslinked network integrated with a tunable microporous architecture.

Jute fibers (JFs) coated with multiwall carbon nanotubes (MWCNTs) have been introduced in a natural rubber (NR) matrix creating a three-dimensional (3D) electrically conductive percolated network.

Perfection of local microcurrent network with a-c) orientation control strategy and d-f) content control strategy.

To ensure optimal electrical performance, an analytical model for the resistance-strain relationship of conductive fabrics with multilevel structure is established.

In this work, for the first time to the authors" knowledge, a fully integrated wearable closed-loop system (IWCS) based on mini-invasive microneedle platform is developed for in situ ...

As an illustration, conductive polymers like polypyrrole (PPy) forge a microcurrent environment among nerve conduits. This boosts nerve cell progress and axonal extension.

In this work, we adopted a coarse-grained molecular dynamics simulation to investigate the effect of the nanorod (NR) functionalization on the conductive probability of PNCs under the quiescent state or ...

This paper presents a modeling approach for establishing the multi-scale 3-D conductive network to study the current conduction behavior of the braided composites.

Here, we report a simple and efficient method to synthesize a nanostructured conductive hydrogel to meet such criteria.

In this study, carbon nanotubes (CNTs) and graphene oxide (GO) were incorporated into double-network

hydrogels synthesized from gelatin and polyacrylamide (PAAm) to render the ...

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