

Supporting Information for

Anisotropic architecture and electrical stimulation enhanced neuron cell function on a tough Graphene embedded PVA: alginate fibrous scaffold

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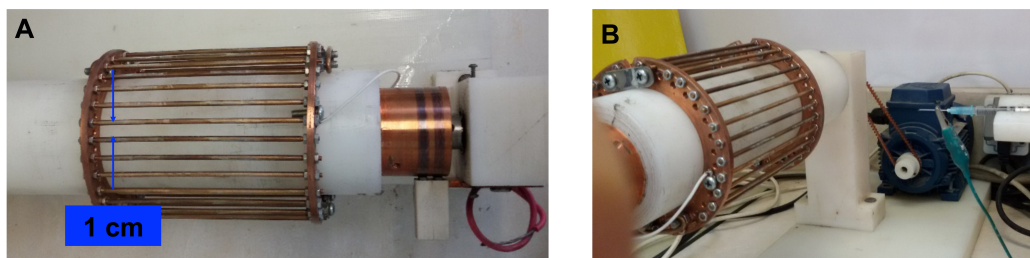


Fig. S1) The specific design of custom-made electrospinning apparatus: high-speed rotating wire drum of electrospinning device for collection of aligned fibrous scaffold. The distance between two copper wires was considered 10 mm as proper distance for collection of aligned fibers.

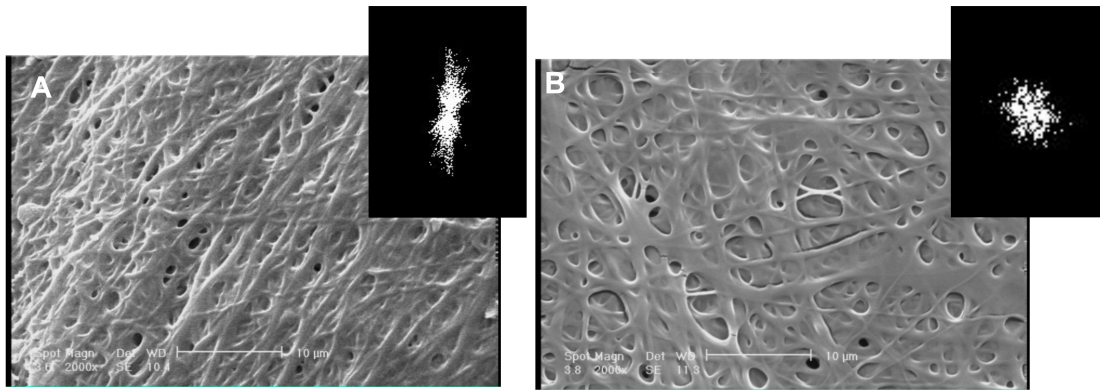


Fig. S2) SEM and FFT images of aligned and random fibrous scaffolds after crosslinking process.

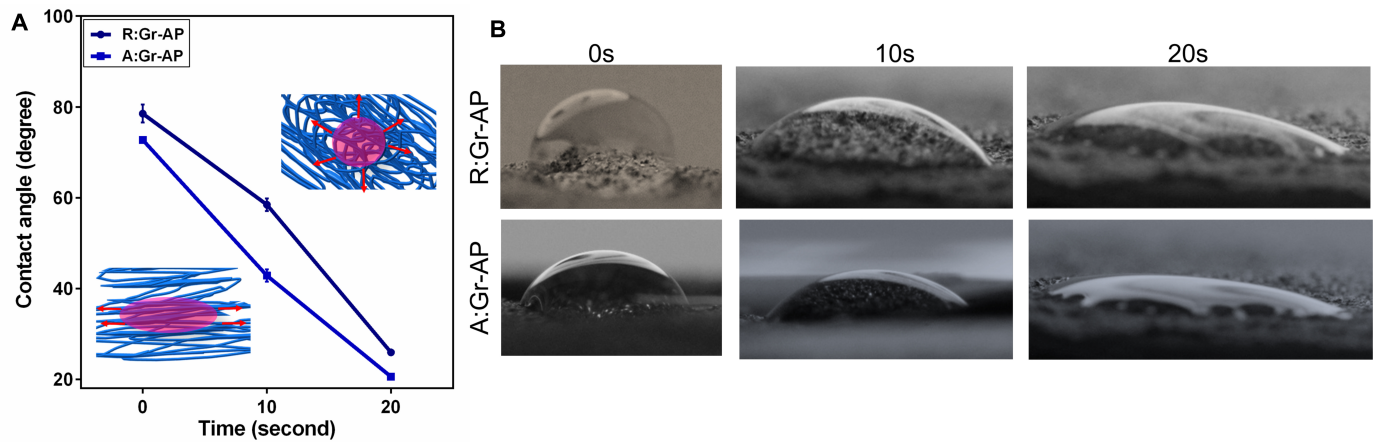


Fig. S3) The effect of Gr-AP fibrous scaffold architecture on the water contact angle: (A) The average water contact angle on the random and aligned Gr-AP fibrous scaffolds as a function of time. Inset: the schematics represent the role of scaffold architecture on the hydrophilicity. The representative images of water droplet on the random and aligned Gr-AP fibrous scaffold in various times.