

Supplementary Figures

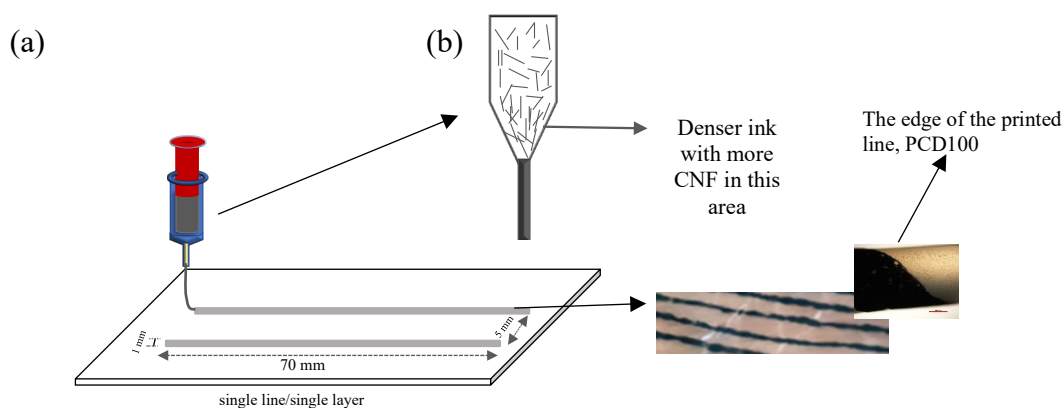


Fig. S1. Schematic of the (a) printing paths (b) printing nozzle

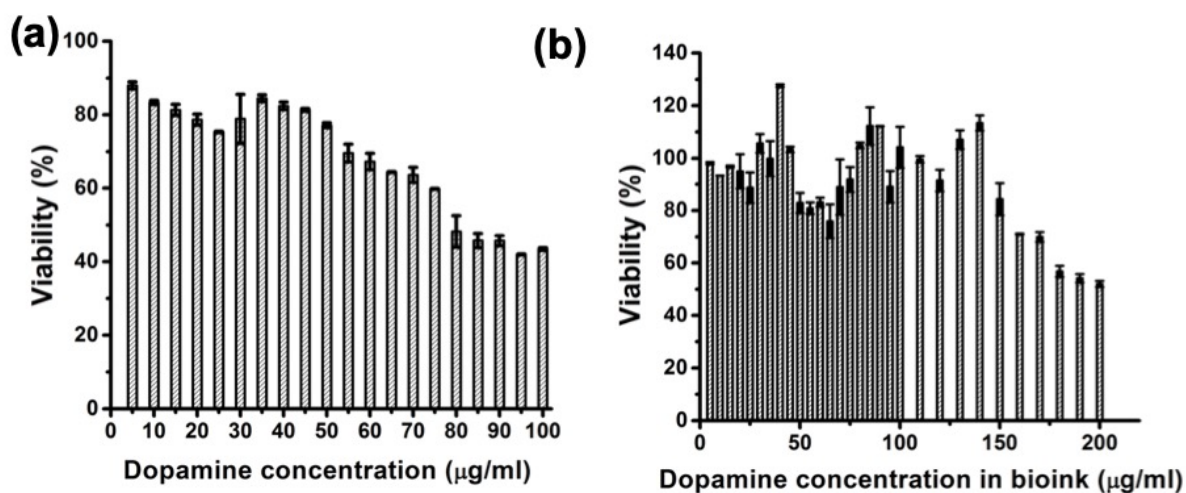


Fig. S2. Dopamine concentration versus cell viability after 48h; (a) pure dopamine, (b) dopamine in biomaterial ink, biomaterial ink consists of various dopamine concentration with 10% CNF (concentration of dopamine in $\mu\text{g/ml}$)

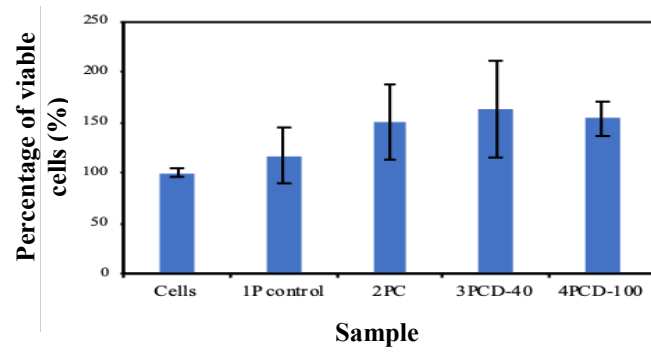


Fig. S3: MTT assay for developed samples (PCL film printed with biomaterial ink (consist of 40 $\mu\text{g/ml}$ and 100 $\mu\text{g/ml}$ dopamine and 10 %CNF in PCL) using U87MG cells (human glioma cells)