Supplementary Information (SI) for Materials Advances.

Supporting Information

Engineering 3D-printed standalone conductive nerve guides using soft bioinks for peripheral nerve injuries

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Tables

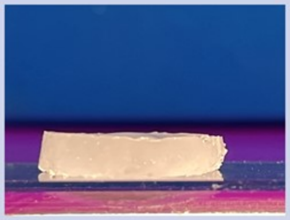
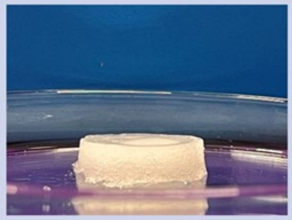
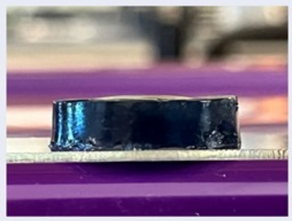
	16% PVA	20% PVA	24% PVA
No PEDOT:PSS			
With PEDOT:PSS			

Table S1. Crosslinked conductive bioinks. Bioinks underwent gelation using a freeze-thaw cycle consisting of a twelve-hour freeze at −20°C and a six-hour thaw at room temperature. The presence of PEDOT: PSS resulted in dark color while no gross change in morphology was detected for PVA at various concentrations.

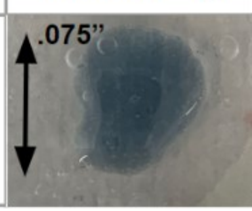
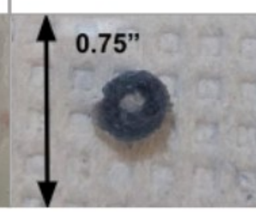
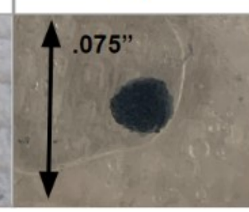
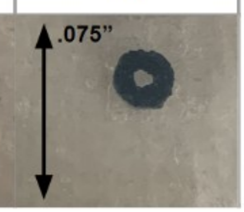
	Immediate after making solution (t freeze = 0, thaw time = 0)	1 hour freeze 1 hour thaw 2x	After freezing for 12 hours, 1 hour thaw 2x	After freezing for 24 hours, 1 hour thaw 2x
Dimensions: 4 mm in 6 mm out 5 mm height				

Table S2. The effect of freeze-thaw process on 3D-printed CNGs. A visual comparison highlighted the structural differences of bioinks at varying freeze-thawing periods. All bioinks consisting of 20% PVA with PEDOT: PSS experienced a fixed one-hour thawing time with variable freeze time from immediately after the solution was made (left: control) up to 24 hours of freezing (right).