Supporting Information

Microfluidic-Mixer Assisted 3D Printing of Functionally Graded Multimaterial Hydrogels for Engineering Complex Tissue Interfaces

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	Flow rate(µl/min)	
Emulsion fibers composition GelMA:DexMA	*GelMA*	*DexMA*
100:0	14	0
80:20	11.2	2.8
50:50	7	7
20:80	2.8	11.2
0:100	0	14

Table 1. *Flow rate for each solution supplied to the micromixer for analysis of Mixing Index (MI).*

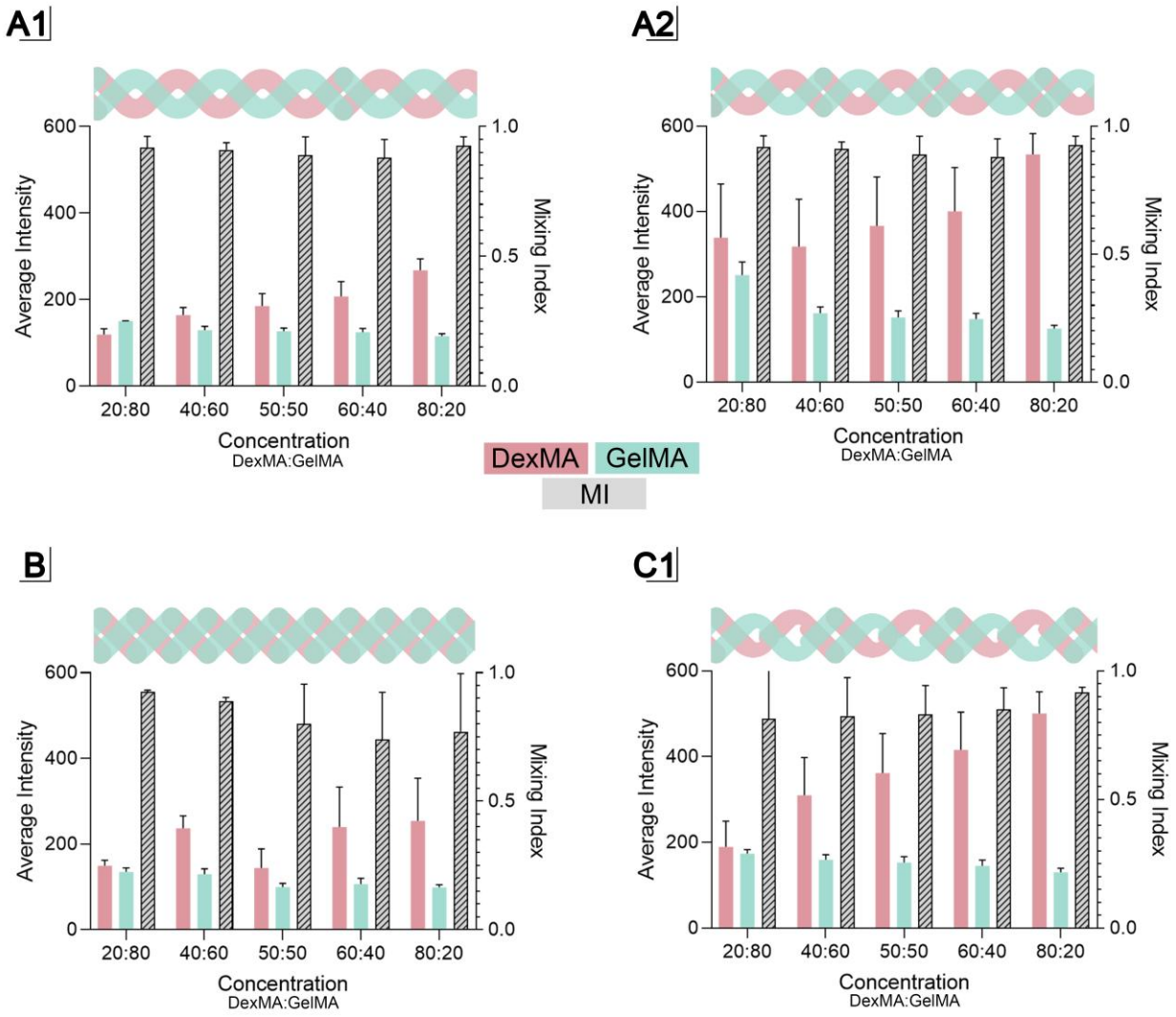

Figure S1. *Analysis of mixing index (gray column) and average Intensity (green and red column) for 4 different geometries of microfluidic micromixer. For each mixer geometry (shown on top of the graph), the graph reports the Average Intensity and Mixing Index for the two solutions injected in the micromixer DexMA (red) and GelMA (green).*

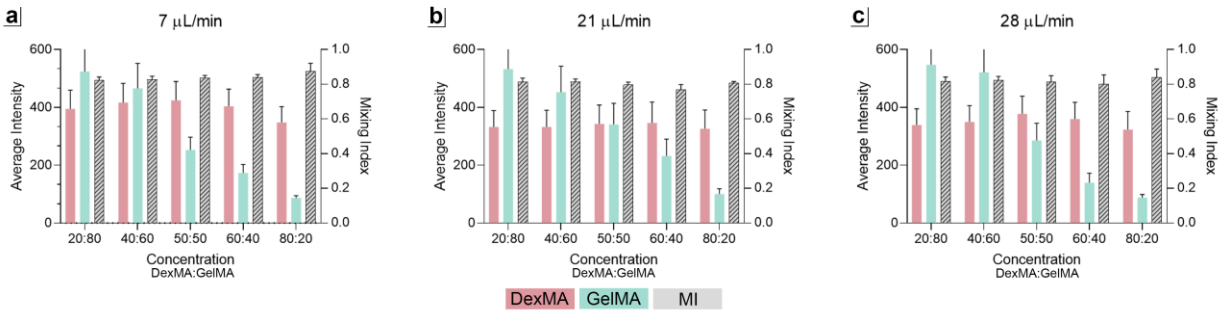

Figure S2. *Analysis of mixing index (gray column) and average Intensity (green and red column) for 3 different flow rates (7, 21, and 28 µL/min). For each flow rate, the graph reports the Average Intensity and Mixing Index for the two solutions injected in the micromixer DexMA (red) and GelMA (green).*

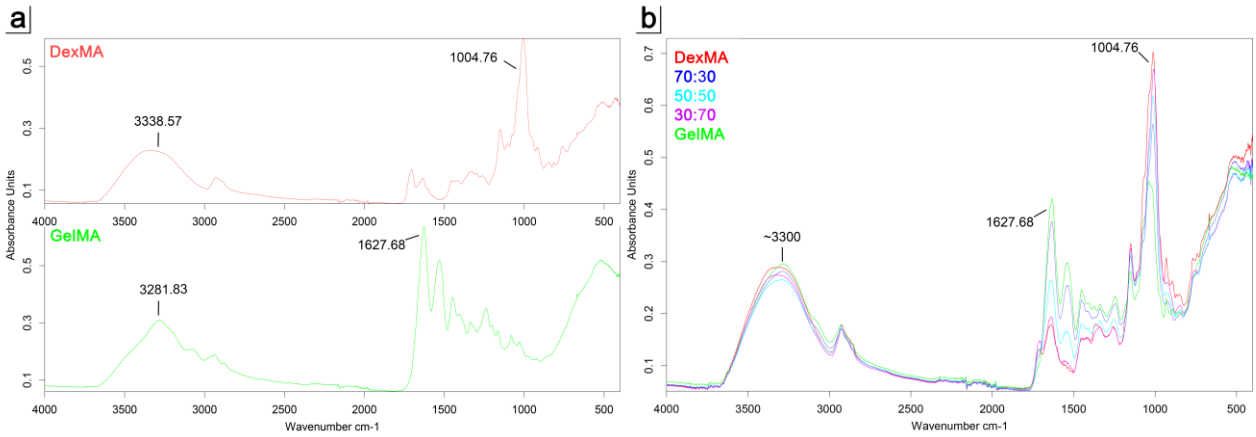

Figure S3. a) *FTIR spectra of GelMA and DexMA.* ***b)*** *FTIR spectra at specific points of DexMA:GelMA gradient samples – e.g., 70:30 means spectra recorded at the cross-section of the sample at ~25% of sample height.*