

Supporting Information

Creating Physicochemical Gradients in Modular Microporous Annealed Particle Hydrogels via a Microfluidic Method*Shangjing Xin, Jing Dai, Carl A. Gregory, Arum Han, and Daniel L. Alge****Table 1.** Components of two microgel precursor solutions for fluorescent intensity, stiffness, and degradability gradients.

Components	Fluorescent Intensity		Stiffness		Degradability	
	A	B	A	B	A	B
	PEG-Nb ^a	PEG-Nb	PEG-Nb	PEG-Nb	PEG-Nb	PEG-Nb
Macromer	5kDa	5kDa	5kDa	20kDa	5kDa	5kDa
	18.2 mM	18.2 mM	18.2 mM	4.9 mM	18.2 mM	18.2 mM
Crosslinker	PEG-DT ^b	PEG-DT	PEG-DT	PEG-DT	PEG-DT	peptide ^a
	26.9 mM	26.9 mM	26.9 mM	6.8 mM	26.9 mM	26.9 mM
LAP	2 mM	2 mM	2 mM	2 mM	2 mM	2 mM
CGRGDS	1 mM	1 mM	1 mM	1 mM	1 mM	1 mM
SAMSA-FITC	100 μM	-	-	-	-	-

^aPEG-Nb represented PEG-norbornene^bPEG-DT represented PEG-dithiol^cPeptide sequence was KCGPQGIWGQCK

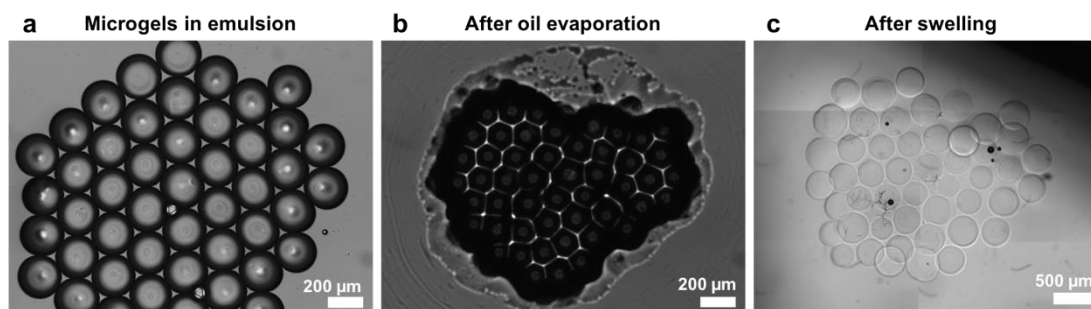


Figure S1. Microscopic images showing complete removal of the fluorinated oil after oil evaporation and microgel reswelling.

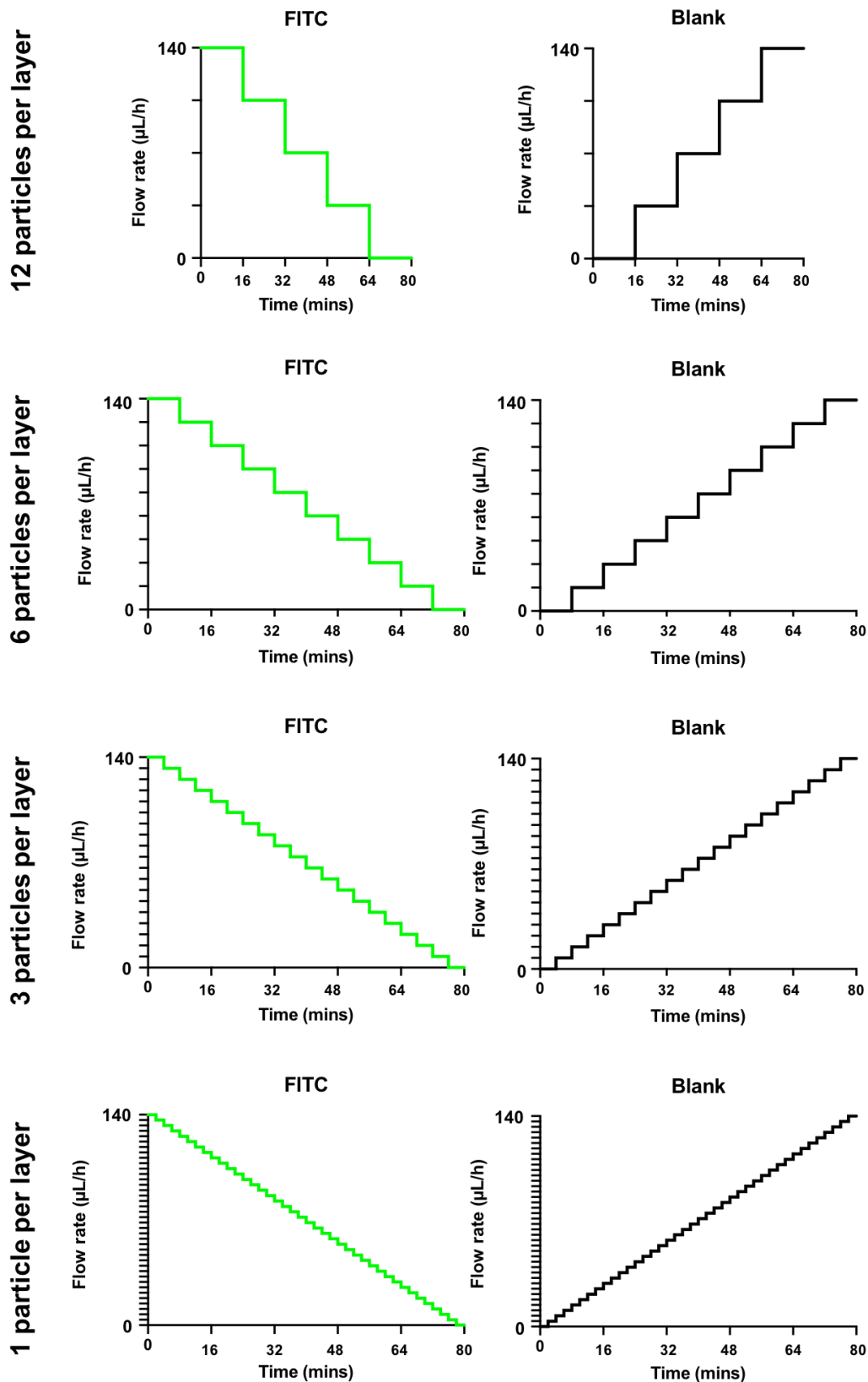


Figure S2. Flow rate profiles of the two precursor solutions for fluorescent intensity gradients with varying layer thickness.

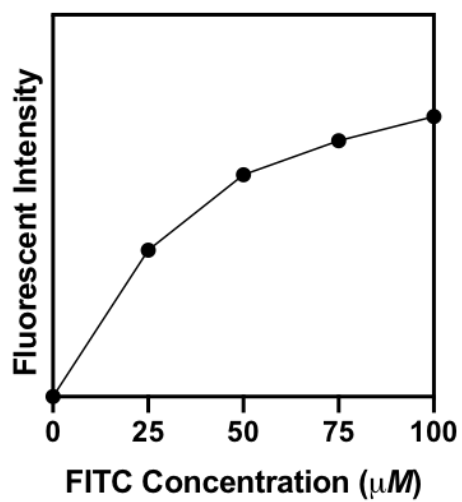


Figure S3. Standard curve of SAMSA-FITC fluorescent intensity from 0-100 μM .