Supporting Information

Modification of a Single Atom Affects the Physical Properties of Double Fluorinated Fmoc-Phe Derivatives

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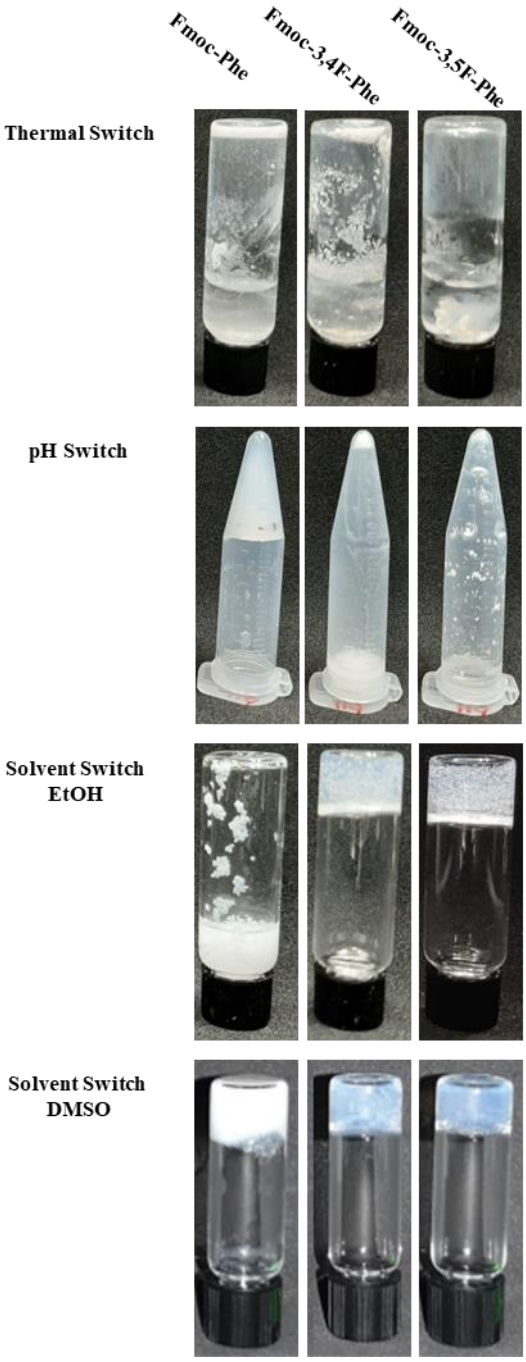

Figure S1 Fmoc-Phe derivatives (5 g L^{-1}) one-hour post preparation at different self-assembly methods.

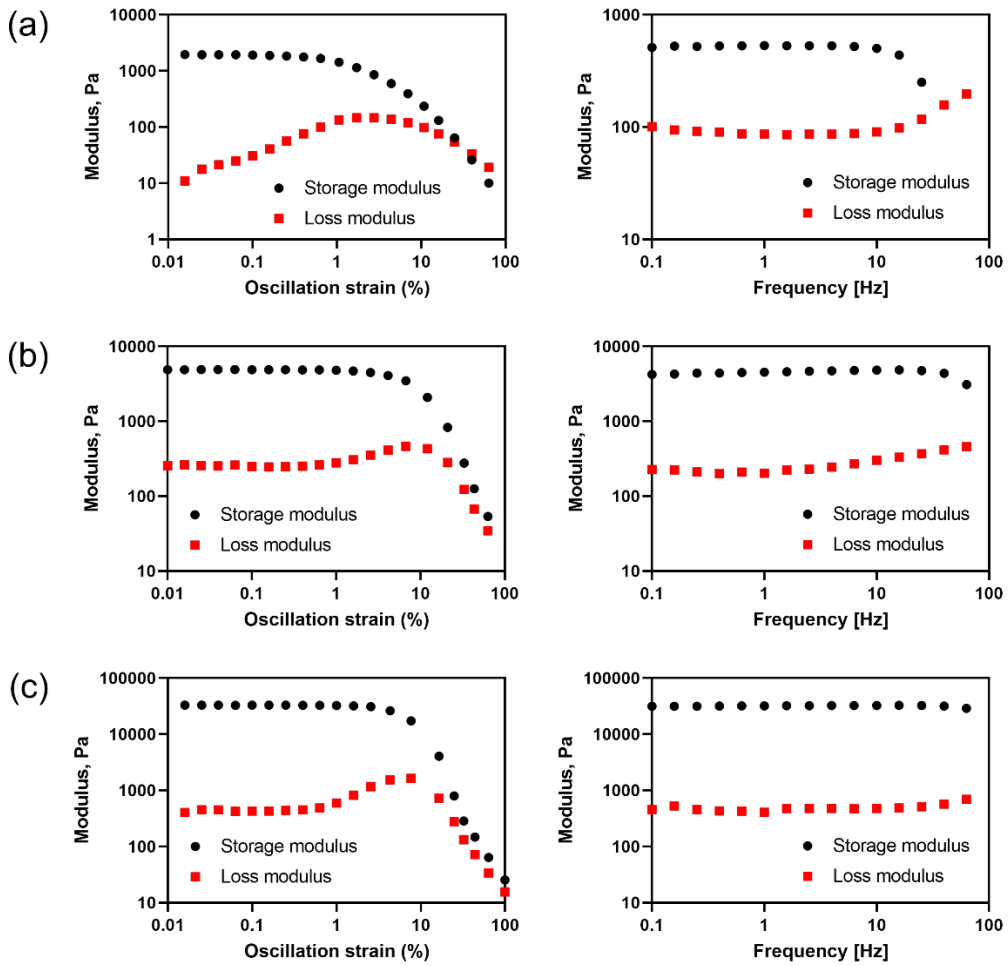

Figure S2 Rheological characterization of strain sweep at 5 Hz (Left) and frequency sweep at 0.5% strain (Right) of (a) Fmoc-Phe (b) Fmoc-3,4F-Phe (c) Fmoc-3,5F-Phe.

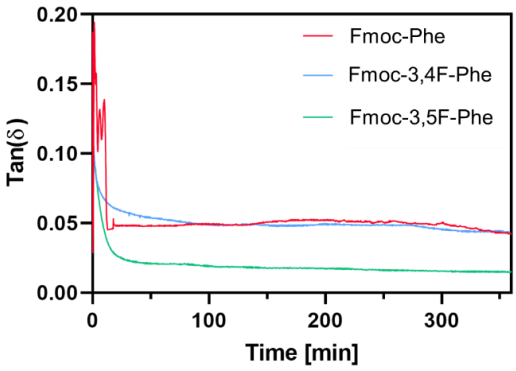

Figure S3 Tan (δ) values of Fmoc-Phe and double fluorinated Fmoc-Phe hydrogels.

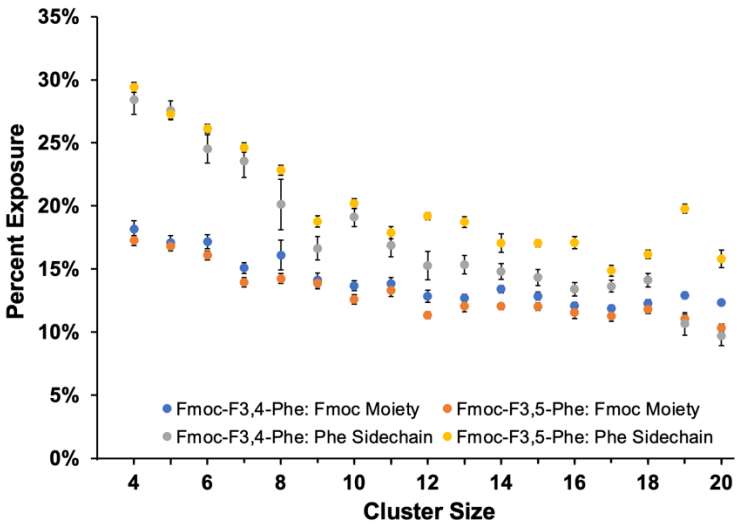

Figure S4 Percent solvent exposures of the Fmoc moiety (blue and orange) and Phe sidechain (grey and yellow) of Fmoc-F3,4-Phe (blue and grey) and Fmoc-F3,5-Phe (orange and yellow). The plotted values are average percent exposures of the Fmoc moiety or Phe sidechain for all detected clusters of a given cluster size (number of building block-monomers per cluster). The error bars correspond to the standard error.

Table S1 Crystallographic data of Fmoc-3,4F-Phe.

Complex	**Fmoc-3,4F-Phe**
CCDC Deposition #	2043733
Formula	C_{26} H_{25} F2 N O_5 S
Crystal description	colourless needle
Crystal size, [mm^3]	0.2 x 0.01 x 0.01
FW, [g.mol^{-1}]	501.53
Space group	$P2_12_12_1$
Crystal system	Orthorhombic
a, [Å] **b, [Å]** **c, [Å]** **α, [°]** **β, [°]** **γ, [°]**	4.9826(1) 13.0717(2) 36.5189(5) 90 90 90
Cell volume, [Å^3]	2378.51(7)
Z	4
ρ_{cacld}, [g.cm^{-3}]	1.401
μ, [mm^{-1}]	1.684
No. of reflections	11429
No. of unique reflections	4854
2Θ_{max}, [°]; completeness %	79.703; 97.7
R_{int}	0.0319
No. of parameters (restraints)	342 (20)
Final R[a] , wR2	0.0550, 0.1517
Final R[b], wR2	0.0568, 0.1533
GooF	1.057

[a] for data with $I > 2\sigma(I)$. [b] for all data.