

Electronic Supplementary Information (ESI)

Versatile composite hydrogels for drug delivery and beyond

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Table S1. Atomic distribution of various elements on the surfaces of freeze-dried gels prepared with 5% BSA, 120 mM Na₂HPO₄ and different compositions of MPMDMS and MPTMS.

Elements	atomic %		
	120 mM MPMDMS	60 mM MPTMS + 60 mM MPMDMS	120 mM MPTMS
C	63.3%	54.5%	52.4%
O	17.4%	25.7%	24.7%
N	5.44%	6.39%	6.42%
S	4.38%	2.74%	2.03%
Si	3.47%	1.98%	0.94%
Na	3.47%	5.48%	7.36%
P	2.57%	3.20%	6.10%

Table S2. ²⁹Si NMR chemical shifts and assignments for gels with different silane compositions

Silane Composition	<i>Si</i> species	ppm	%
120 mM MPMDMS	D1	-14.0	26.2
	D2	-22.2	73.8
90 mM MPMDMS + 30mM MPTMS	D1	-14.2	28.1
	D2	-21.7	48.4
	T2	-59.0	6.5
	T3	-68.1	11.3
60 mM MPMDMS + 60mM MPTMS	D1	-13.0	30.4
	D2	-21.2	30.1
	T2	-58.5	8.5
	T3	-68.2	25.8
30 mM MPMDMS + 90 mM MPTMS	D1	-13.6	15.4
	D2	-22.2	16.5
	T2	-59.3	21.8
	T3	-68.8	46.3
120 mM MPTMS	T2	-58.2	34.2
	T3	-67.5	65.8