Supporting Information

Tuning Pseudopeptide Supramolecular Hydrogels Mechanical Properties by Graphene Doping

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Contents

Trigger	% Graphene			
	0	0.5	1	5
GdL (1% gelator Conc.)	1	2	3	4
GdL (2% gelator Conc.)	5	6	7	8
Arg (1% gelator Conc.)	9	10	11	12
Arg (2% gelator Conc.)	13	14	15	16

Figure S1. Photographs of hydrogels **1-16.**

|		Table S1. Summary of the Rheological properties of hydrogels 1-16.	
Entry	Trigger	G' (Pa)	G'' (Pa)
1	GdL	34300-35200	1100-2900
2	GdL	30000-33300	1000-4300
3	GdL	45700-48300	1500-4100
4	GdL	75000-84200	3700-5900
5	GdL	31000-36000	3200-4200
6	GdL	46700-47700	2600-4300
7	GdL	50600-54900	2500-5100
8	GdL	64000-75900	4200-7600
9	Arg	20900-26400	3100-3500
10	Arg	39600-42300	900-4700
11	Arg	42700-49300	2400-3200
12	Arg	75800-77700	5800-7900
13	Arg	62000-72600	4400-12000
14	Arg	78200-86300	4200-6900
15	Arg	110400-110700	6400-13100
16	Arg	112000-129000	7100-12200
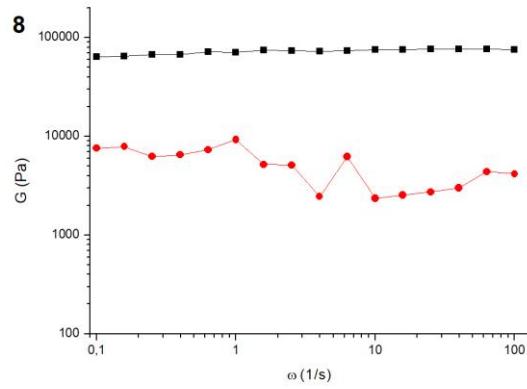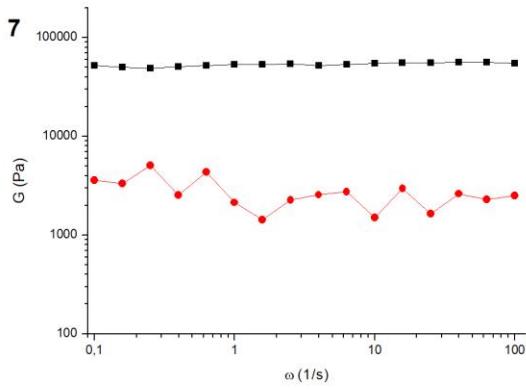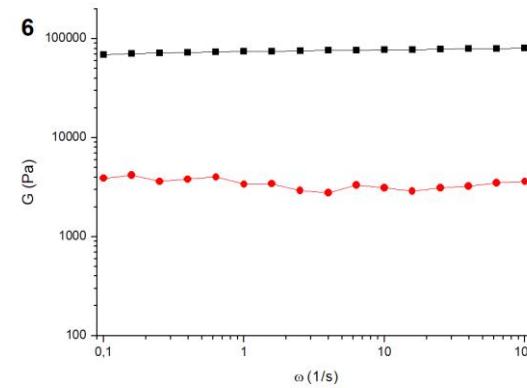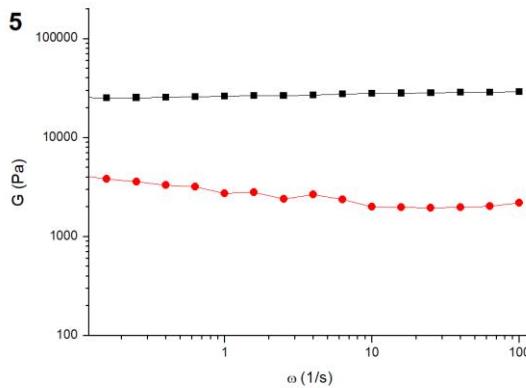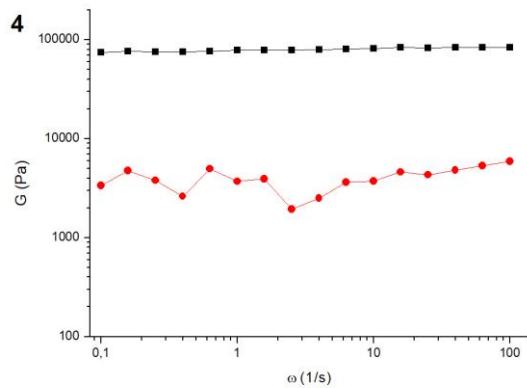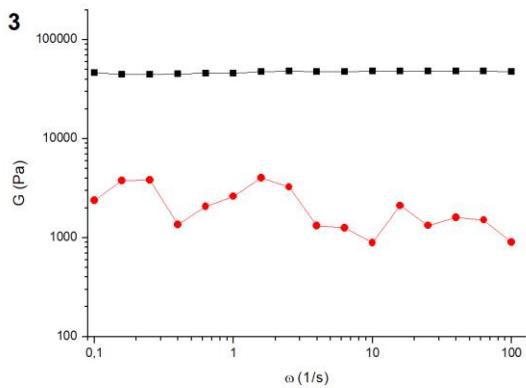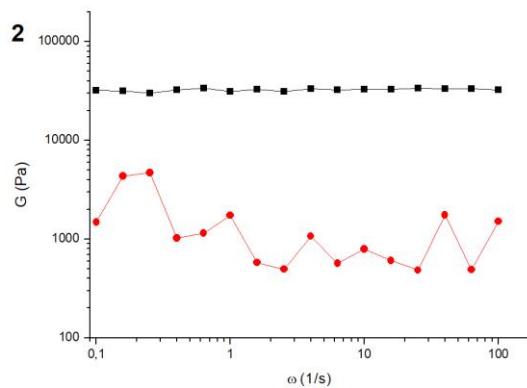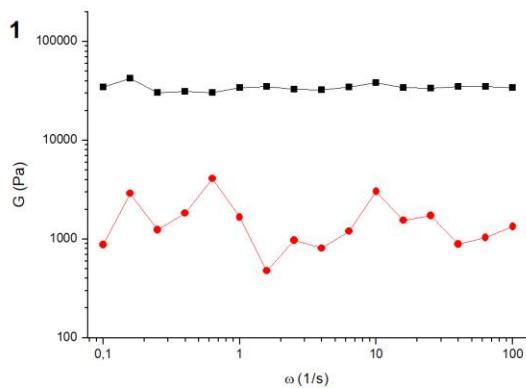
Figure S2. Frequency dependence of storage modulus (black) and loss modulus (red) for hydrogels **1-8**.
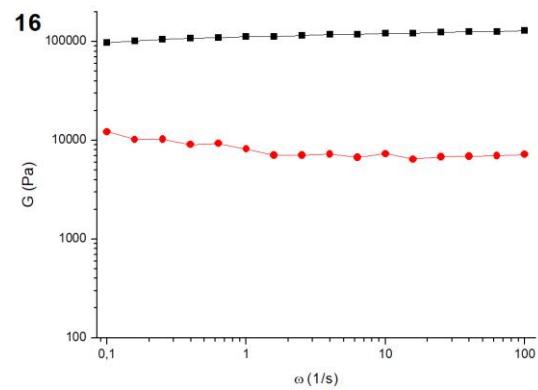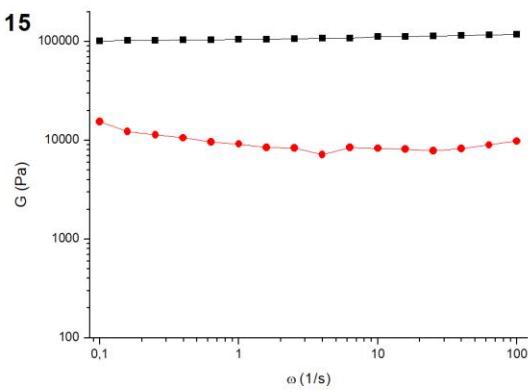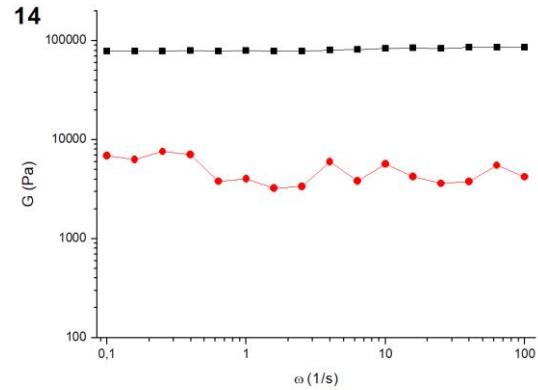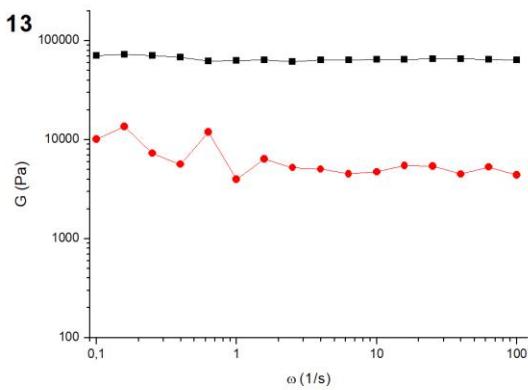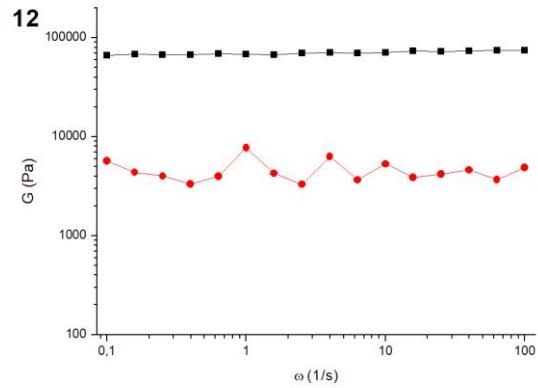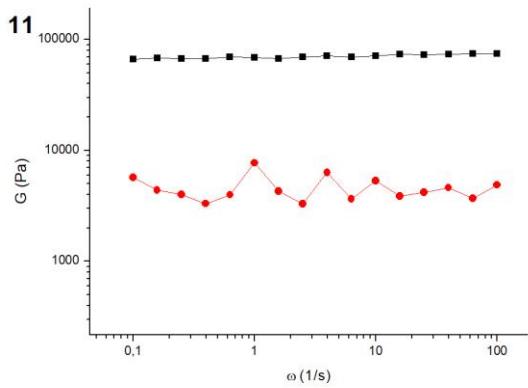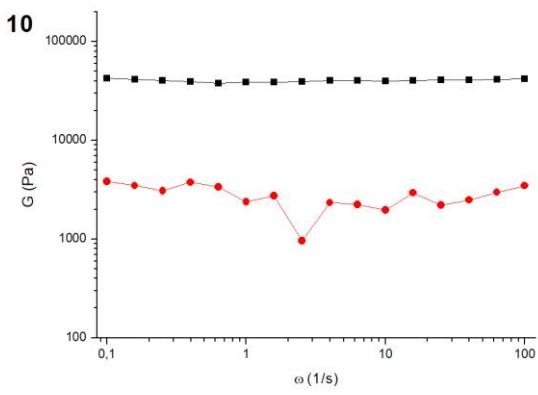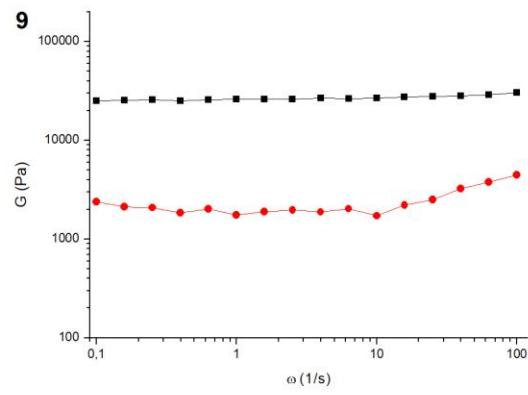
Figure S3. Frequency dependence of storage modulus (black) and loss modulus (red) for hydrogels **9-16**.
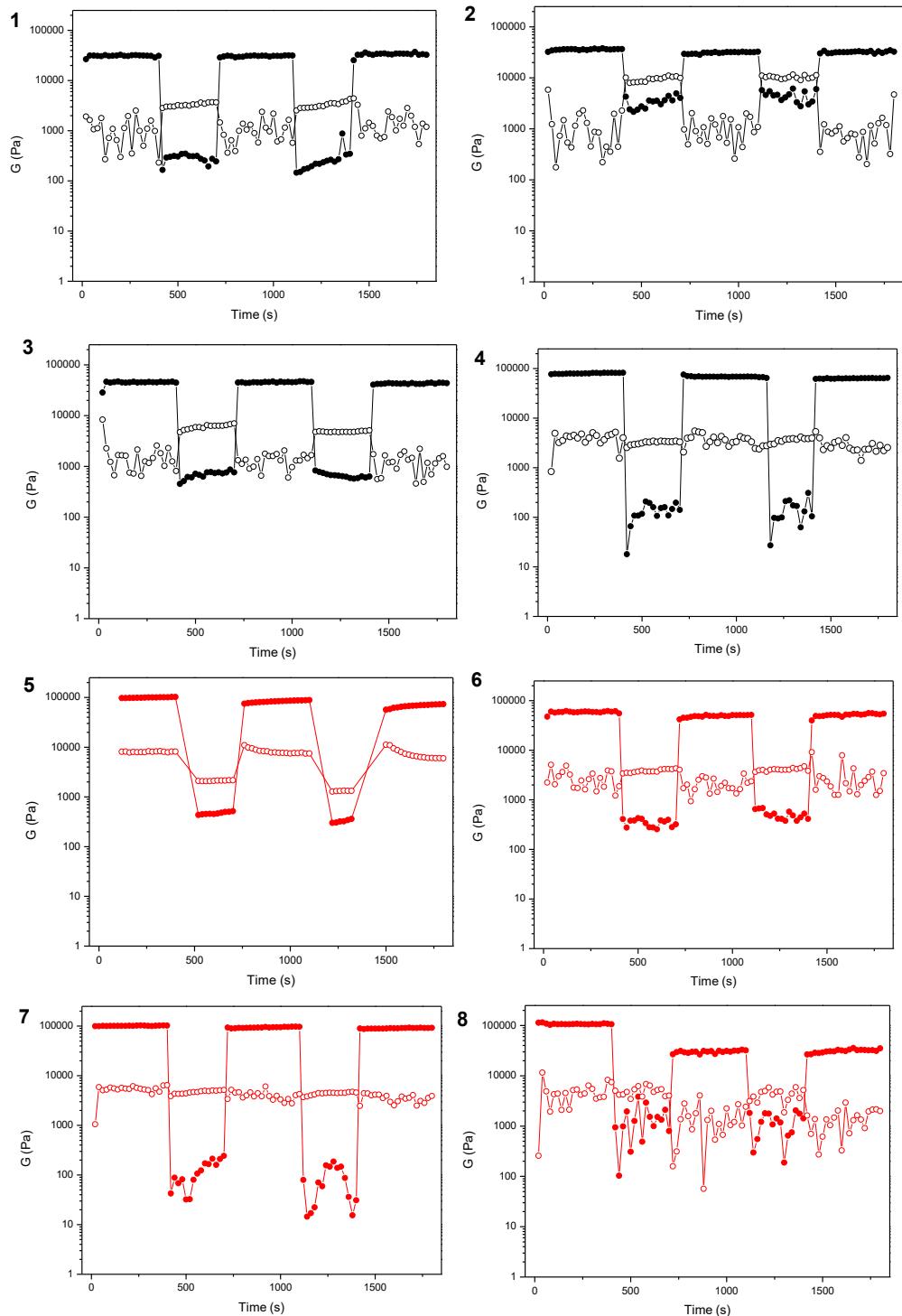
Figure S4. Values of storage moduli (solid circles) and loss moduli (empty circles) during a step strain experiment performed on hydrogels **1-8**.
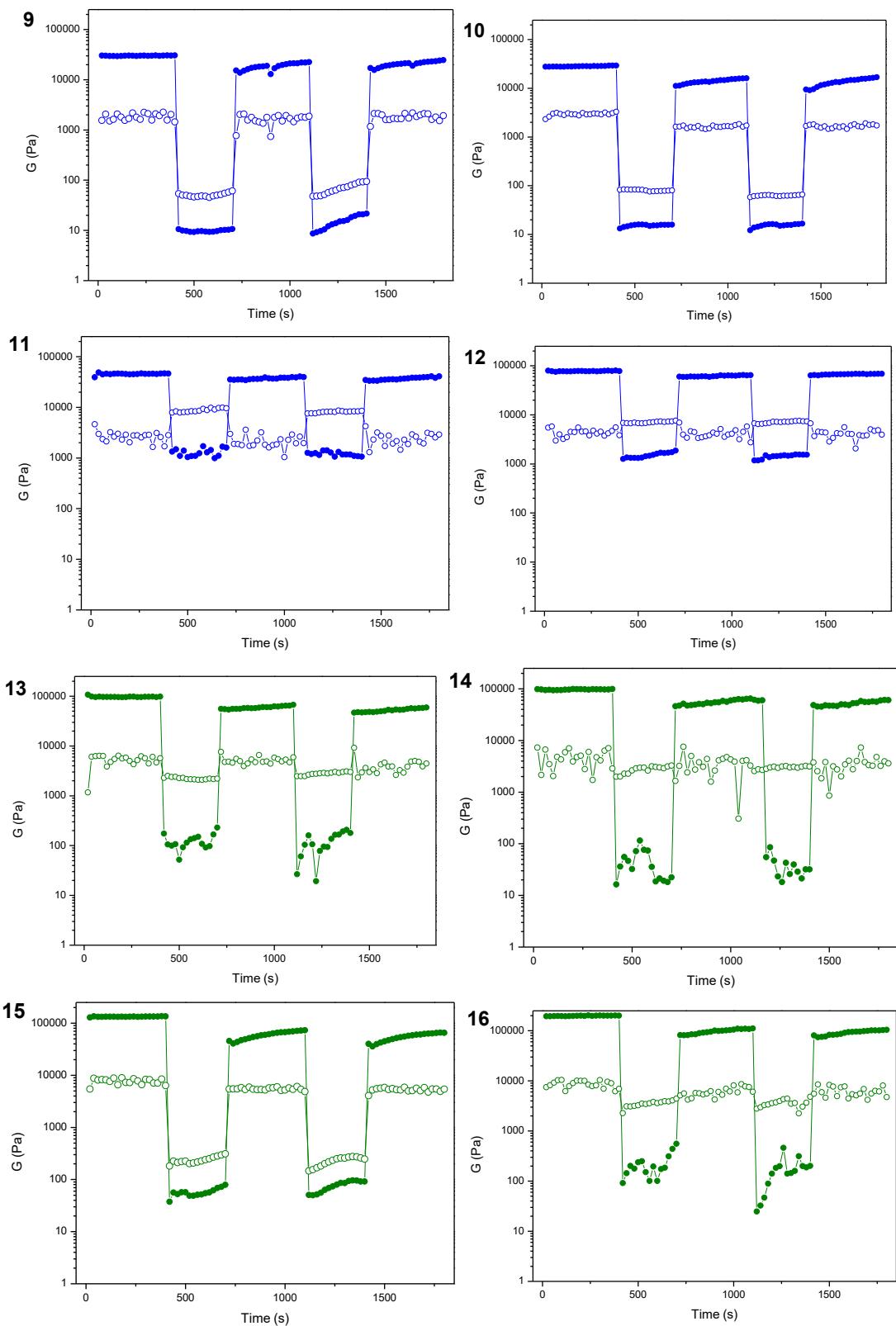
Figure S5. Values of storage moduli (solid circles) and loss moduli (empty circles) during a step strain experiment performed on hydrogels **9-16**.
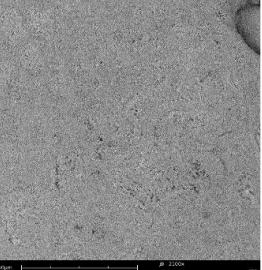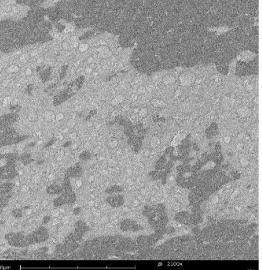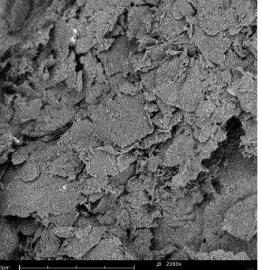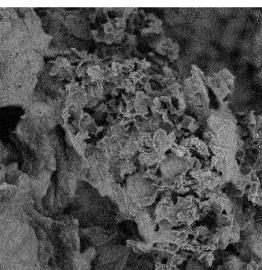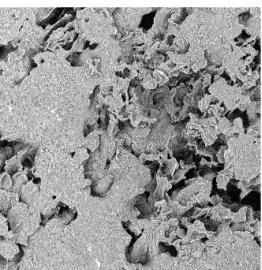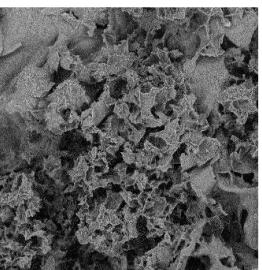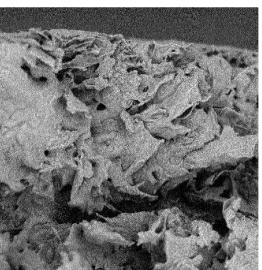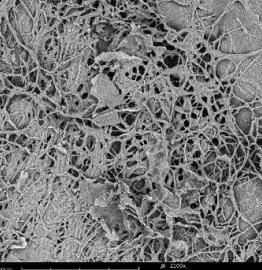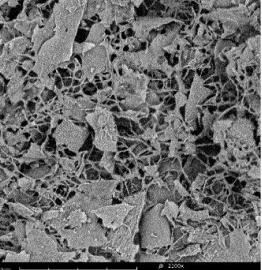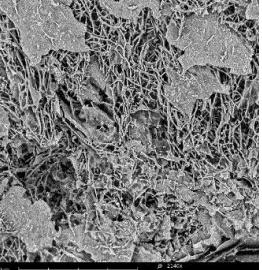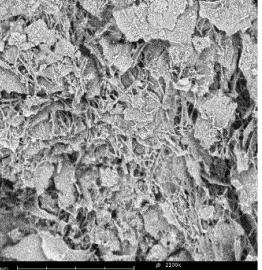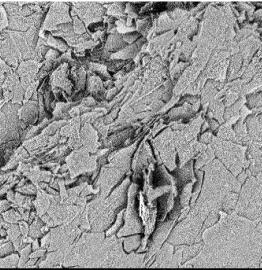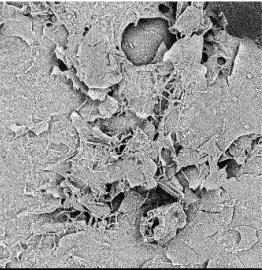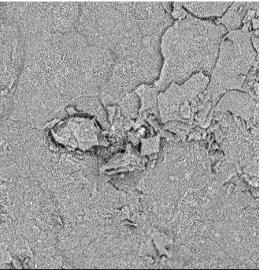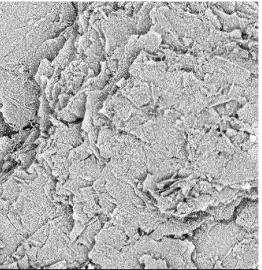
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Figure S6. SEM images of aerogel obtained by freeze drying hydrogels samples **1**-**16**.
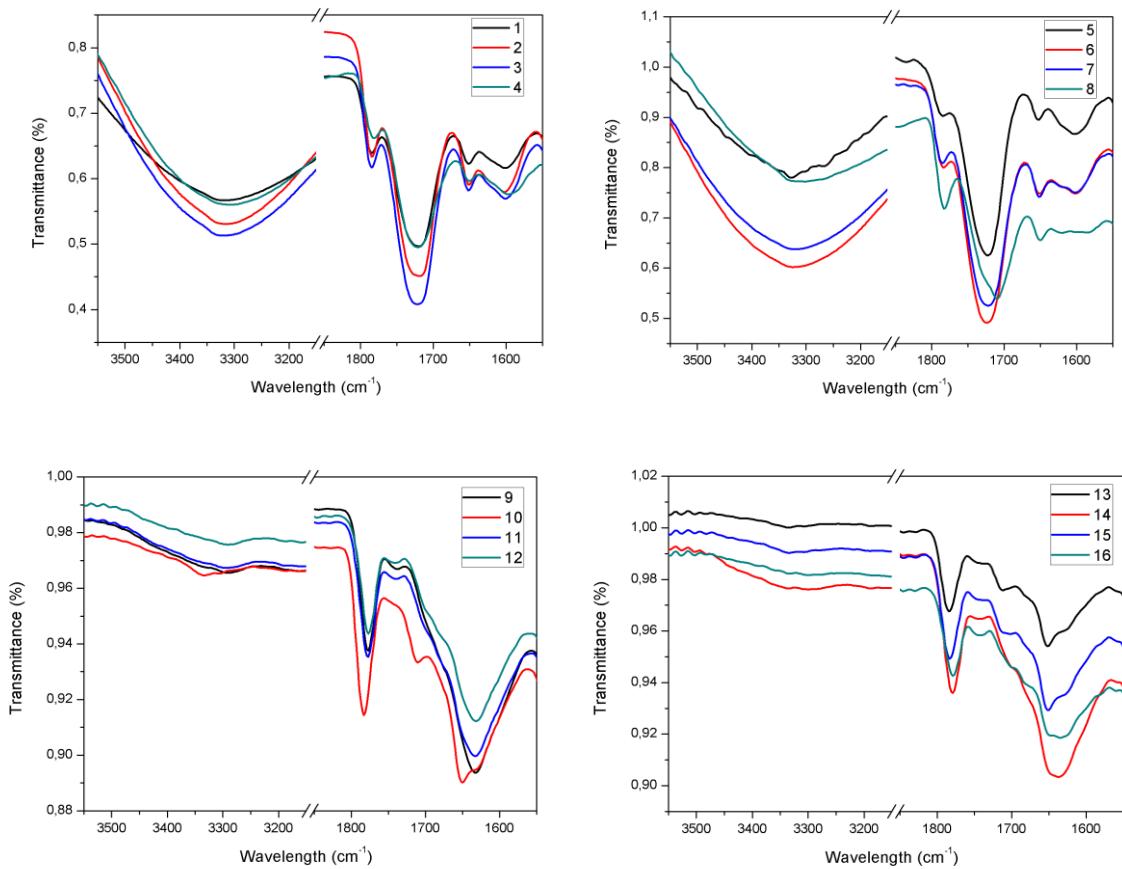
Figure S7. Selected regions of ATR-IR spectra of aerogels **1**-**16**.
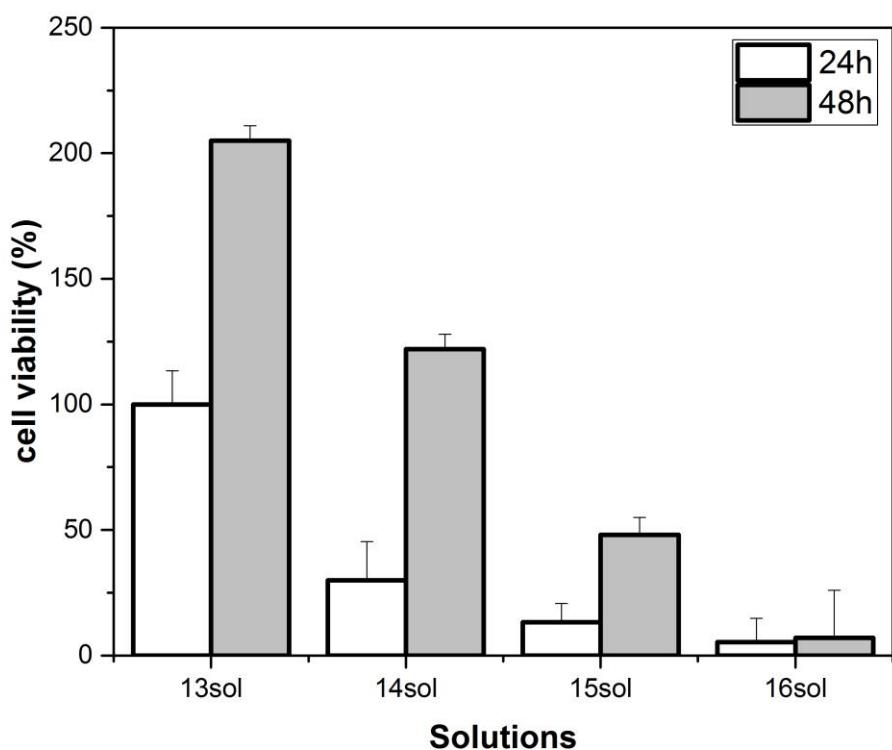
Figure S8. Cell viability of NIH-3T3 in cellular medium solution. We tested (from left to right): **13:** cellular medium added with gelator (2%); **14:** cellular medium added with graphene (0.5 mg), **15:** cellular medium added with graphene (1 mg), **16:** cellular medium added with graphene (5 mg). Data represent the mean ± standard deviation.