

Supplemental Information for:
Microgel Film Dynamics Modulate Cell Adhesion Behavior

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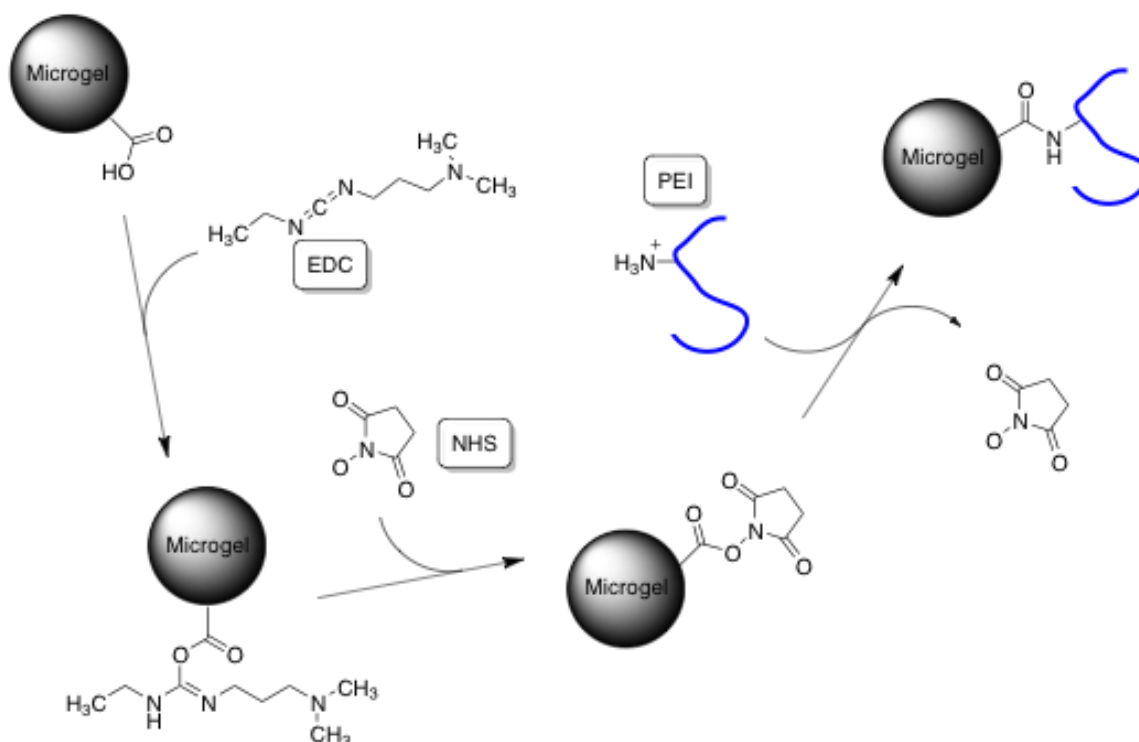


Figure S1. Reaction scheme for EDC/NHS film cross-linking treatment of PEI films.

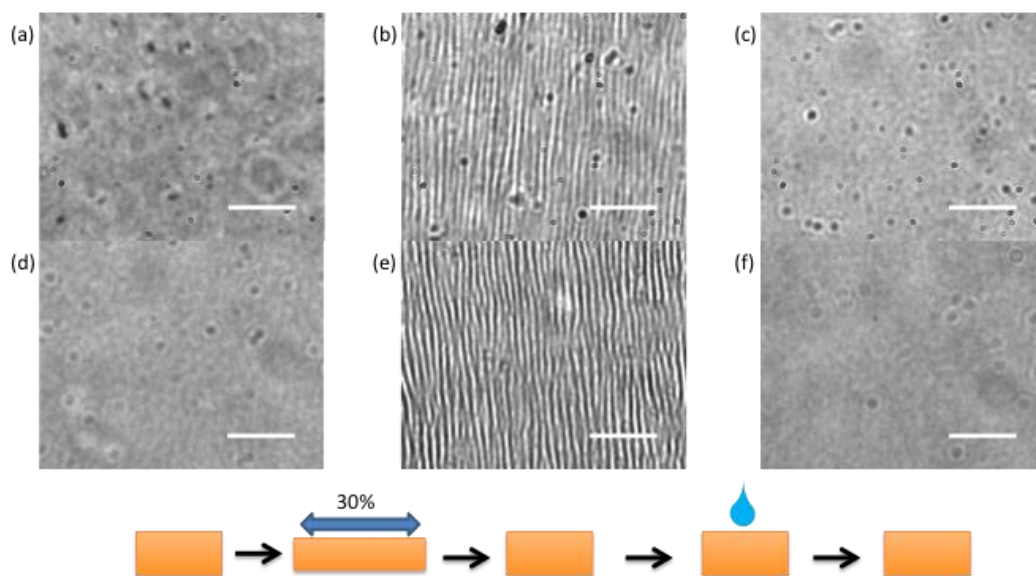


Figure S2. Brightfield microscopy images for self-healing assessment of BIS/pDADMAC 4 layer films after exposure to cell culture medium. (a-c) untreated (d-f) crosslink-treated. (a,d) before damage (b,e) after 30% linear strain applied (c,f) healed with water after damage.

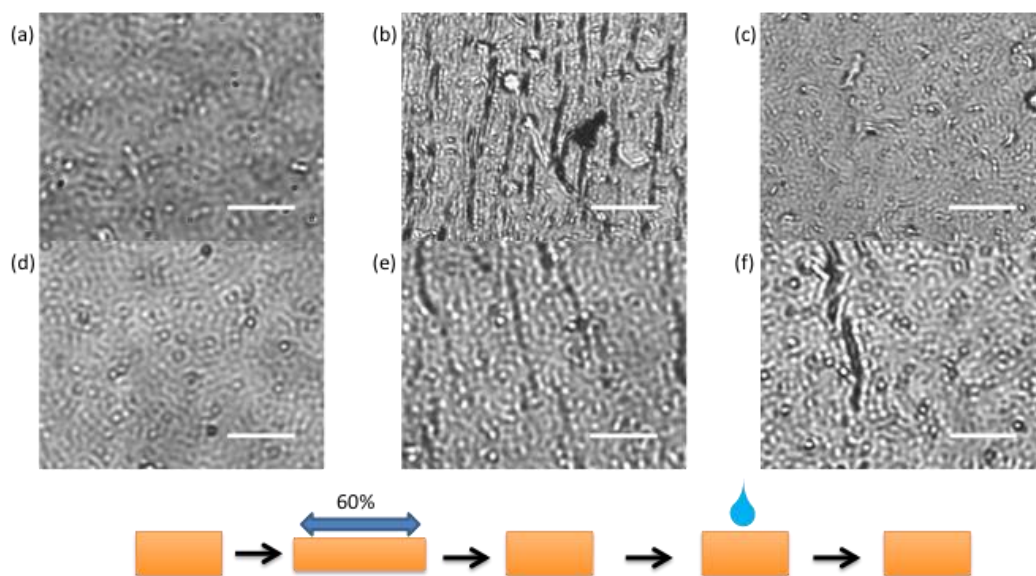


Figure S3. Brightfield microscopy images for self-healing assessment of BIS/PEI 4 layer films after exposure to cell culture medium. (a-c) untreated (d-f) crosslink-treated. (a,d) before damage (b,e) after 60% linear strain applied (c,f) healed with water after damage.

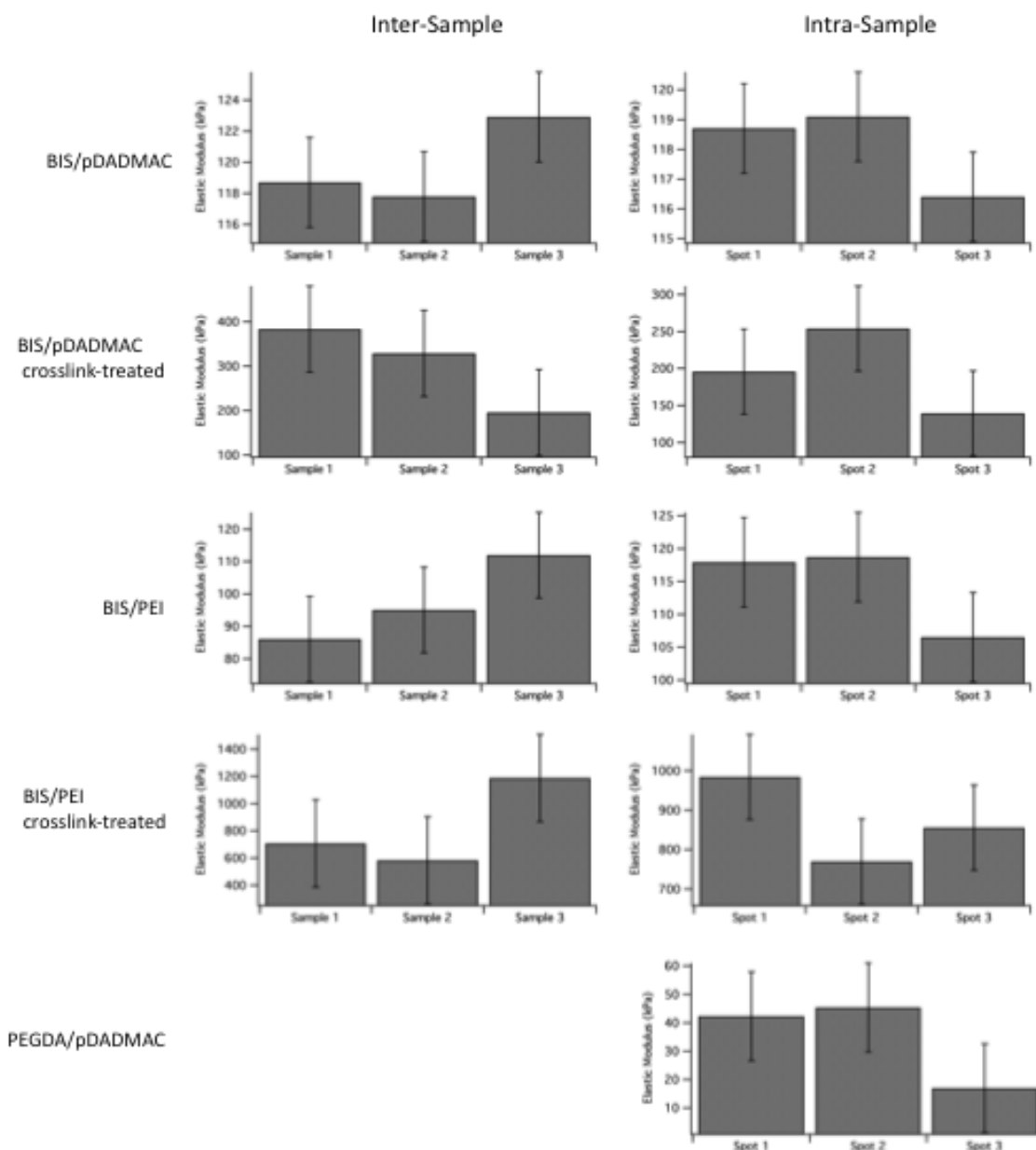


Figure S4. Intra- and inter-sample variability for AFM force maps for each type of film. Each column represents one force map with error bars representing the standard deviation of moduli within the map.

Table S1. Dynamic light scattering results for microgels used in this study. All data were collected at 25 °C in either PBS (pH 7.4) or Formate buffer (pH 3.0).

Microgel	R_{Hr} nm (pH 3.0)	R_{Hr} nm (pH 7.4)
pNIPAm, BIS, Aac	239 ± 77	524 ± 104
pNIPAm, PEGDA, Aac	277 ± 25	510 ± 31

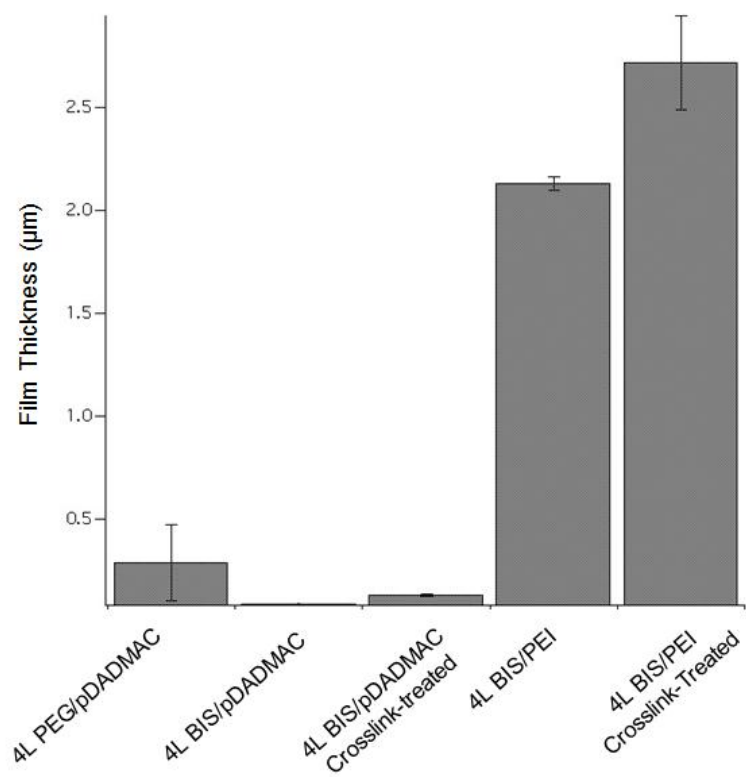


Figure S5. Film thickness as determined via atomic force microscopy in air.