Electronic Supplementary Material (ESI) for CrystEngComm.

Support information for:

Silica mineralization on anisotropic gelatin-hydrogel scaffolds

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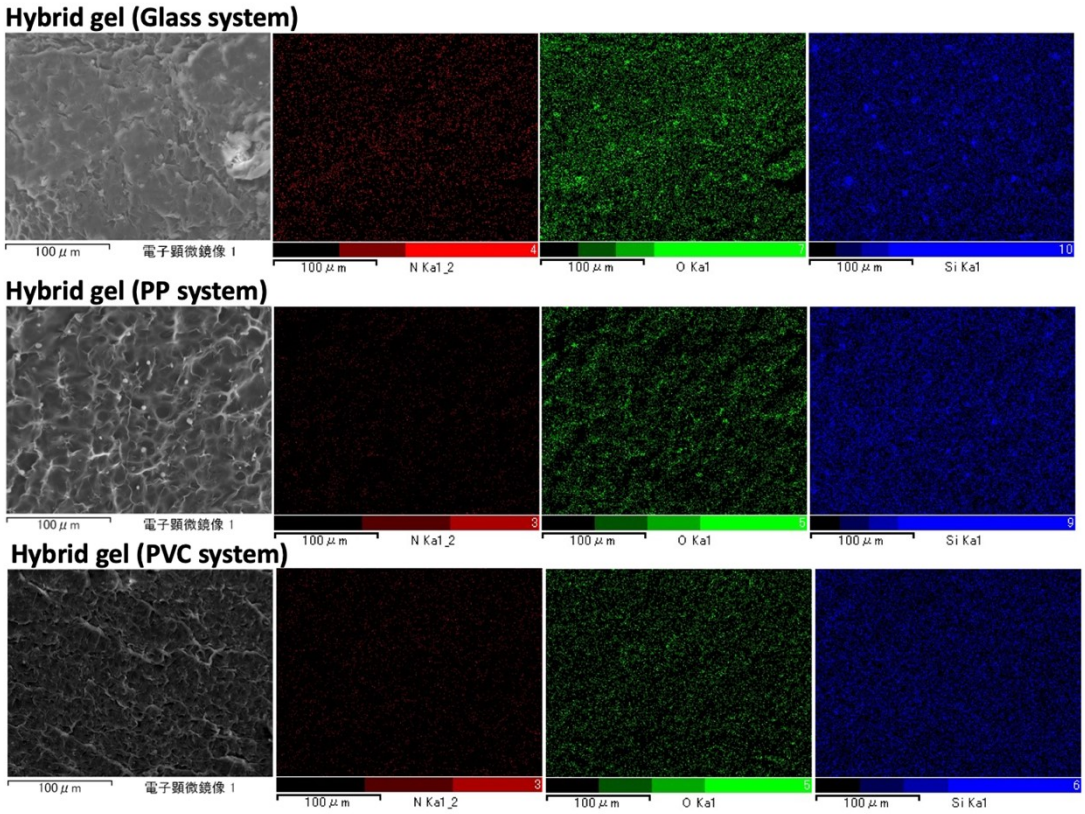


Figure S1. *EDX mapping of the hybrid gels prepared at each system.*

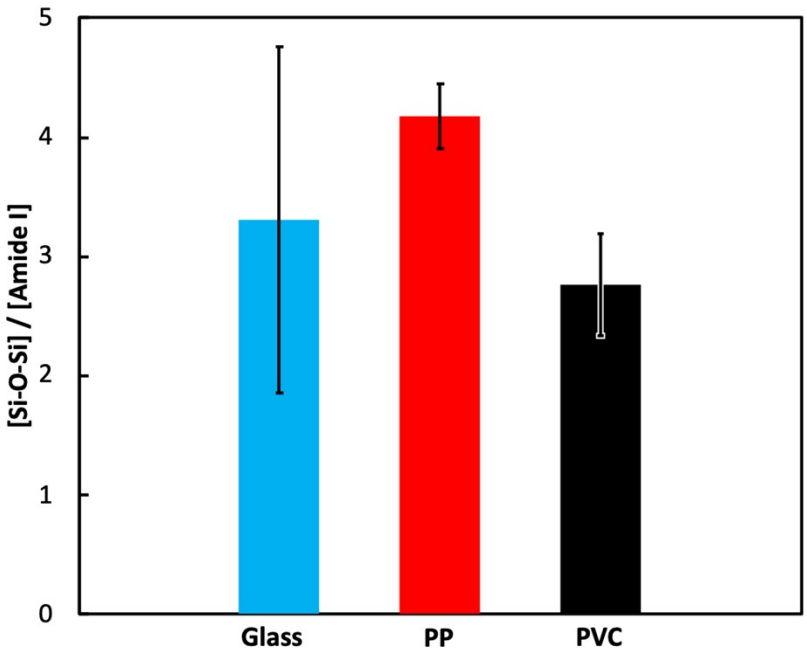


Figure S2. *Relationship between the normalized absorbances of the Si-O-Si band and the Amide I band in hybrid gel systems with glass, polypropylene (PP), and polyvinyl chloride (PVC) substrates.*

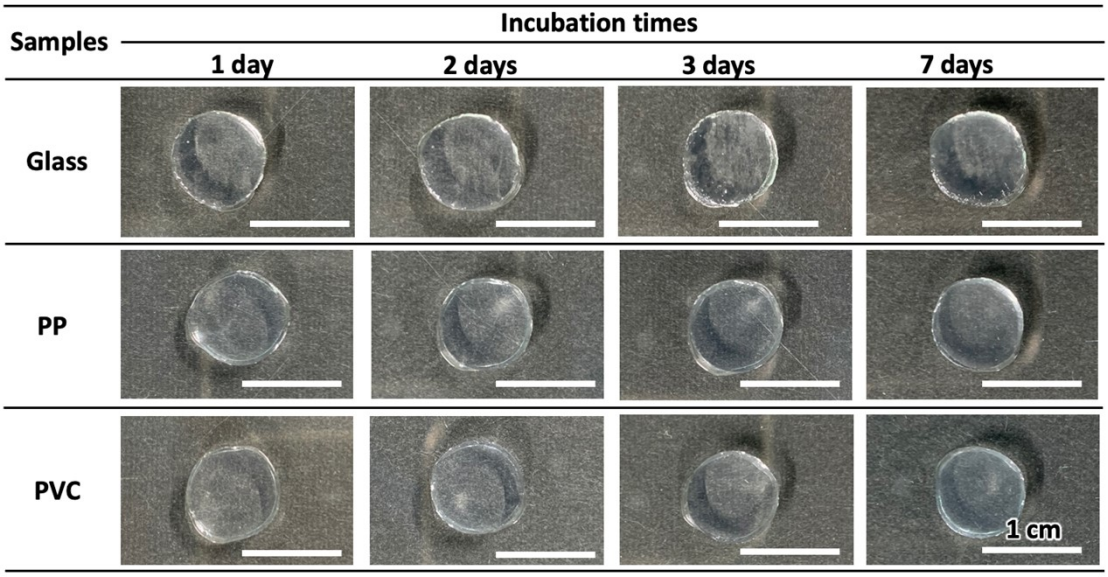


Figure S3. *Changing appearance of gelatin hydrogels with glass, polypropylene (PP), and polyvinyl chloride (PVC) substrates during silica mineralization.*

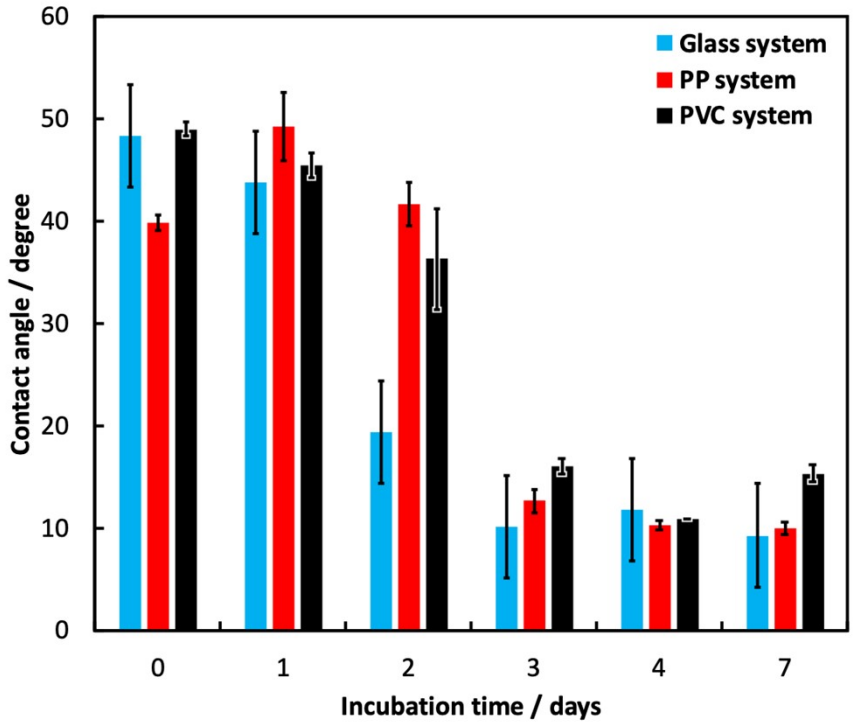
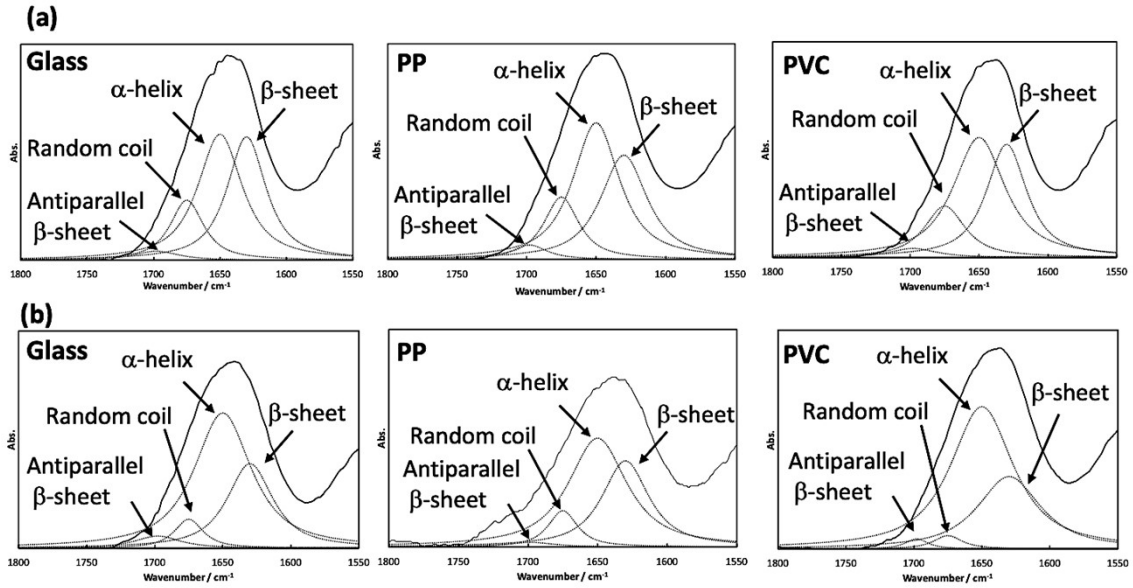


Figure S4. *Time dependence of surficial-property changes in pristine hydrogels and hybrid gels with glass, polypropylene (PP), and polyvinyl chloride (PVC) substrates.*



Sample	Conformation / %		
	α-helix	β-sheet	Random coil
Pristine gel-Glass	45	39	16
Pristine gel-PP	48	36	16
Pristine gel-PVC	48	36	16
Hybrid gel-Glass	62	31	7
Hybrid gel-PP	64	33	3
Hybrid gel-PVC	64	33	3

Figure S5. *ATR-FTIR spectral analysis of the (a) pristine hydrogel systems and (b) hybrid gel systems. Dotted lines show the peak deconvolution of the amide I band from antiparallel β-sheet, β-sheet, α-helix, and random coil conformations.*

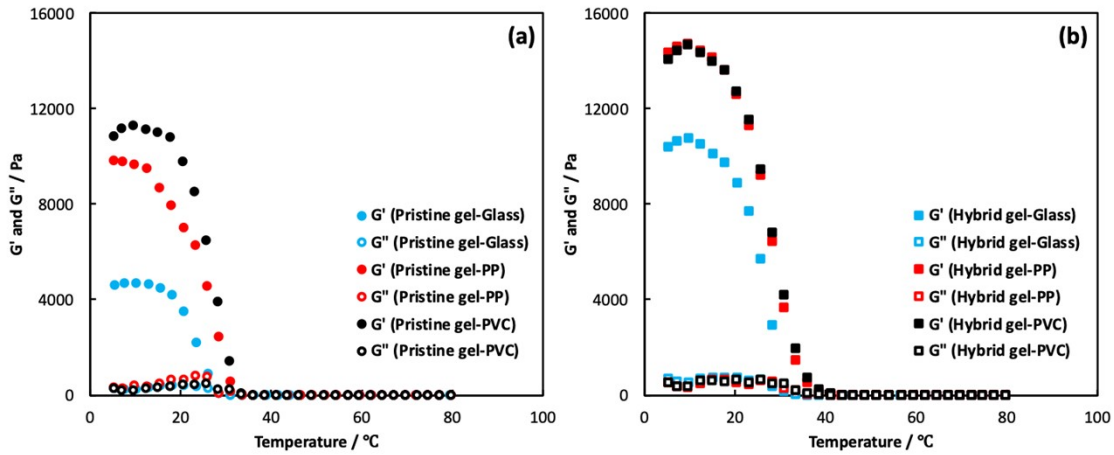


Figure S6. *Changes in storage elastic modulus G' and loss elastic modulus G" with temperature for (a) pristine hydrogels and (b) hybrid gels with glass, polypropylene (PP), and polyvinyl chloride (PVC) substrates.*