

Support information for:

Selective mineralization at hydrogel interface induced by fusion between peptide hydrogels

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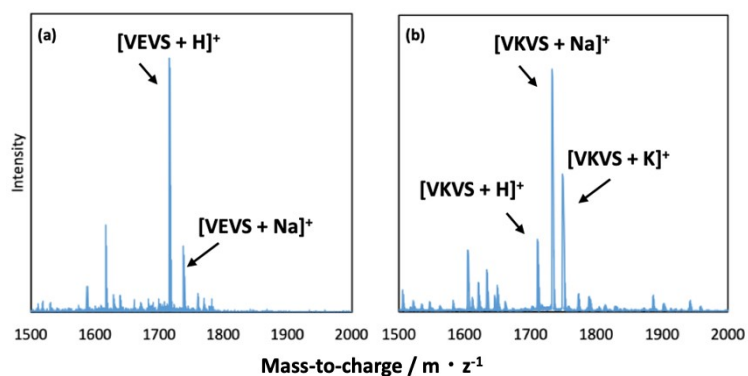


Fig. S1. MALDI-TOF-MS spectra of (a) the VEVS and (b) VKVS peptides. Reprinted with permission from Ref. [15]. Copyright 2024, American Chemical Society.

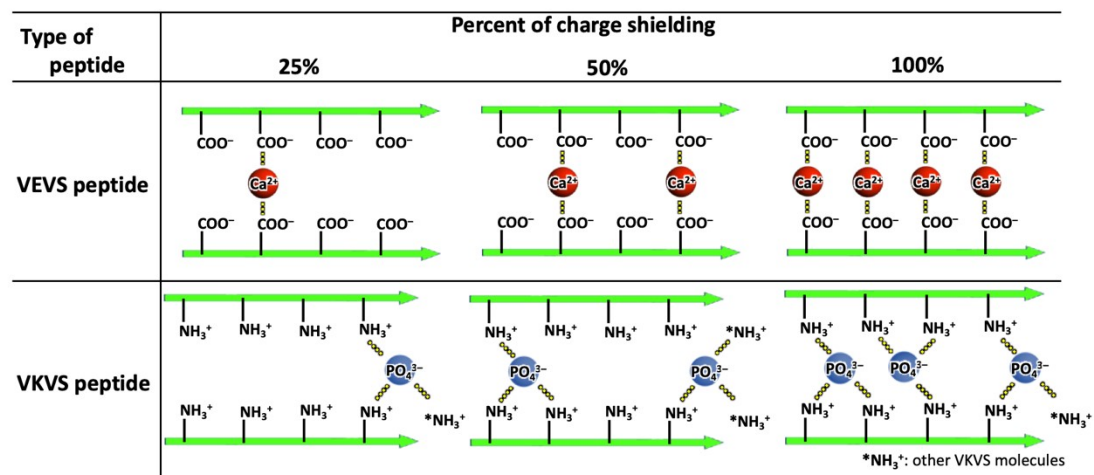


Fig. S2. Schematic of the concentration of the added mineral source ions for each peptide hydrogel.

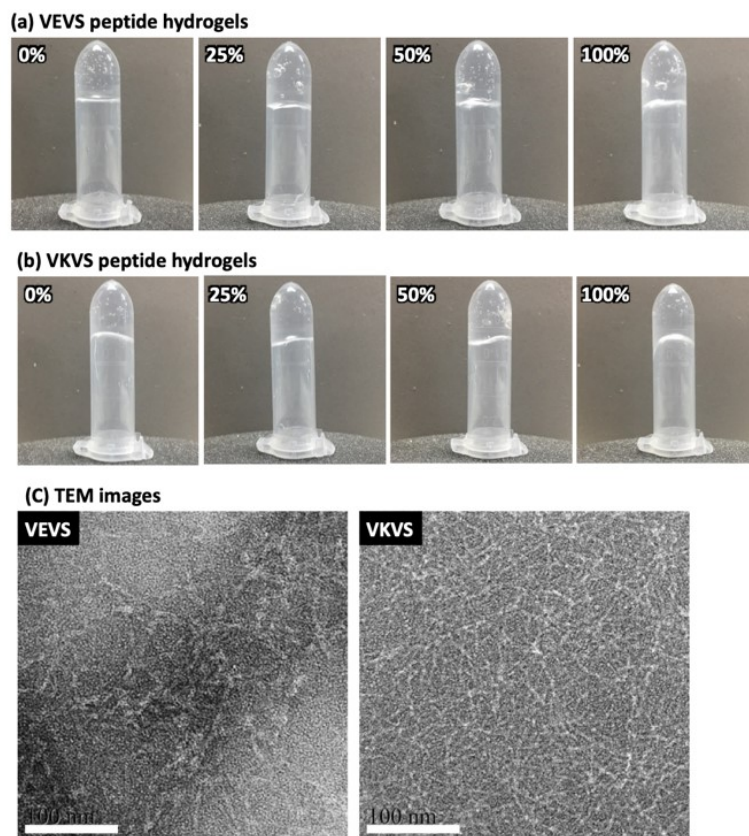
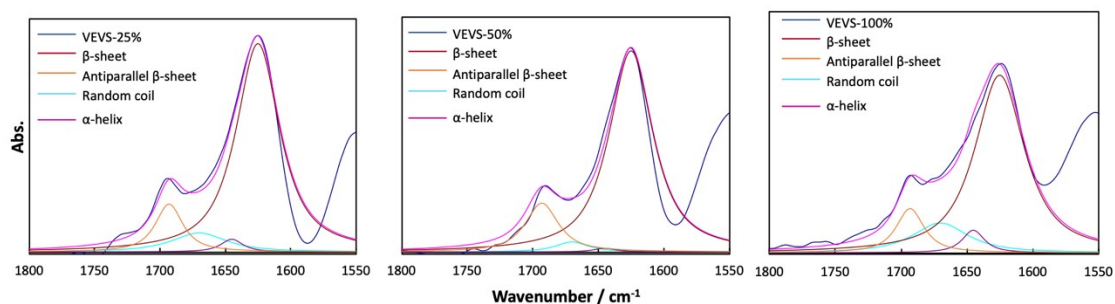
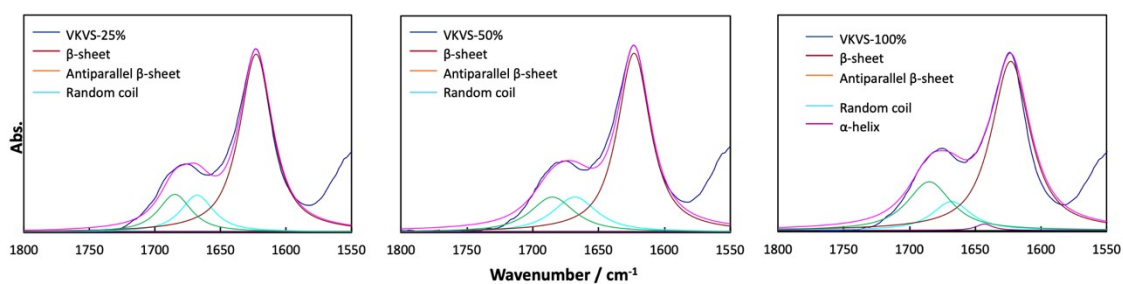


Fig. S3. Appearance of (a) VEVS and (b) VKVS peptide hydrogels, including (c) TEM images of the VEVS and VKVS peptide networks in hydrogels containing 100% mineral source concentration. Scale bars = 100 nm.



Concentration of the mineral source	Content/ %		
	α -helix	β -sheet	Random coil
25%	3	87	10
50%	1	95	4
100%	5	80	15



Concentration of the mineral source	Content/ %		
	α -helix	β -sheet	Random coil
25%	0	83	17
50%	0	79	21
100%	2	84	14

Fig. S4. FT-IR spectra of VEVS peptide systems (upper part) and the VKVS (lower part) peptide systems.

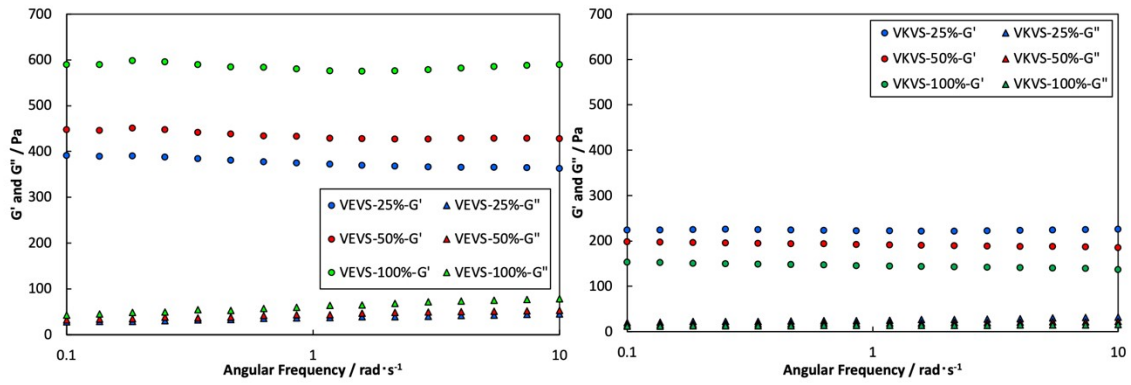


Fig. S5. Changes in the storage elastic modulus (G') and loss elastic modulus (G'') with an angular frequency for VEVS (left) and VKVS (right) peptide hydrogel systems containing each mineral source concentration.

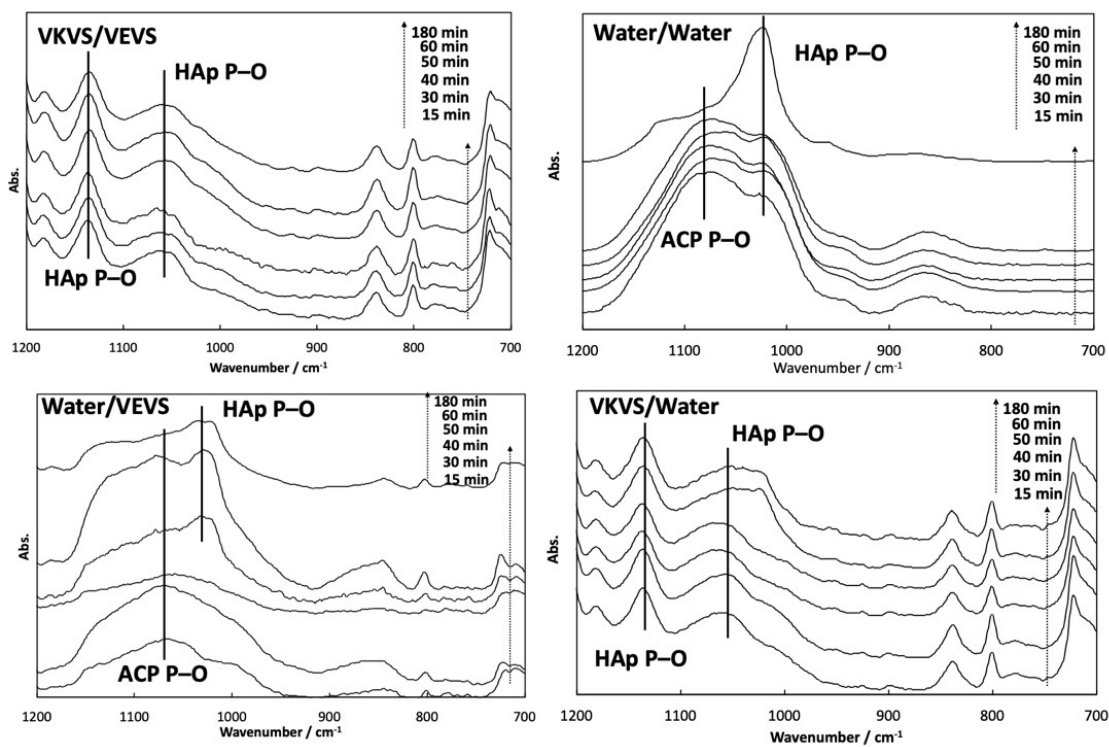


Fig. S6. FT-IR spectra of the mineralized CaP at the fusion interface in VKVS/VEVS, Water/VEVS, VKVS/Water, and Water/Water systems containing 100% mineral source concentration at several mineralization times.