

RESEARCH ARTICLE

Methacrylic anhydride-assisted one-step *in situ* extrusion
3D bioprinting of collagen hydrogels for enhanced
full-thickness skin regeneration

Supplementary File

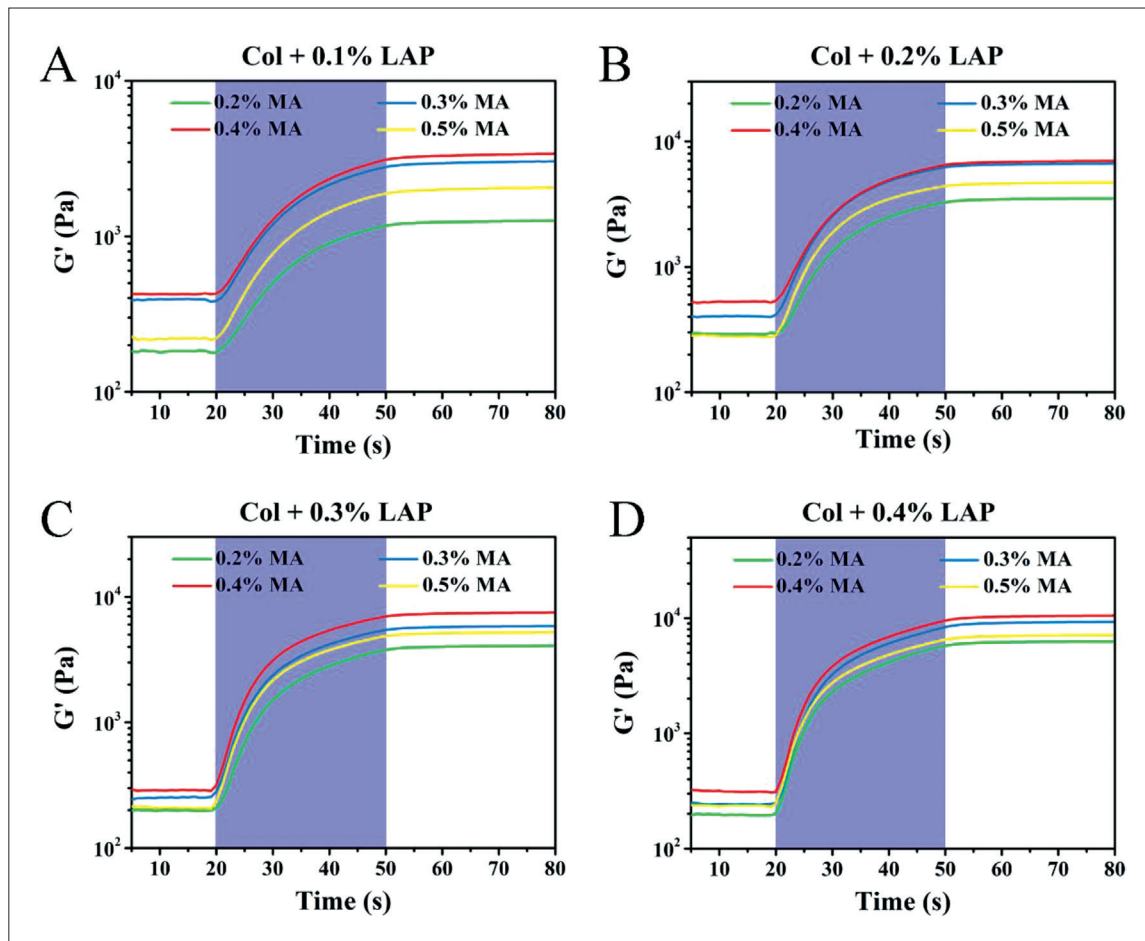


Figure S1. Effect of different concentrations of LAP, i.e., at 0.1% (A), 0.2% (B), 0.3% (C), and 0.4% LAP (D), and MA on the optical crosslinking strength of CML-inks. The purple area in the figure represents the 405 nm light duration. Abbreviations: LAP: Lithium phenyl-2,4,6-trimethylbenzoylphosphinate; Col: Collagen; MA: Methacrylic anhydride; G' : Storage modulus; CML-inks: Collagen-based biomaterial inks.

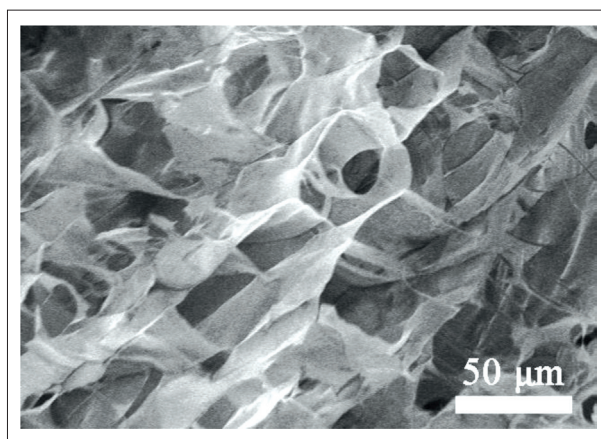


Figure S2. Scanning electron microscope (SEM) image of the collagen-based biomaterial ink (CML-Ink) after polymerization with ultraviolet light (UV) exposure.

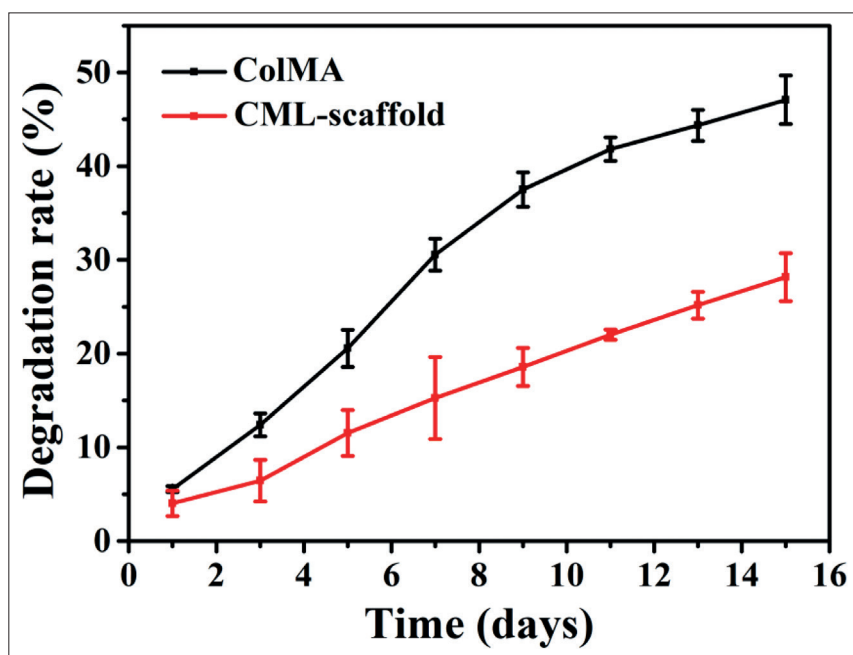


Figure S3. The degradation of ColMA and CML-scaffold hydrogels ($n = 3$). Abbreviations: CML: Collagen-based biomaterial; ColMA: Collagen-methacrylic anhydride.