Supplementary Information (SI) for Journal of Materials Chemistry B. This journal is © The Royal Society of Chemistry 2025

Supporting Information

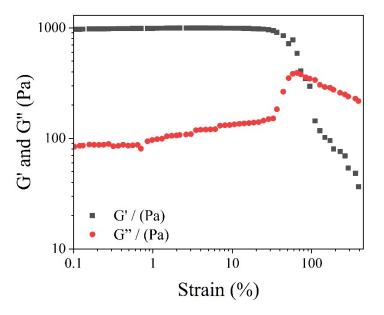


Figure S1. Strain amplitude sweep test of the EWH.

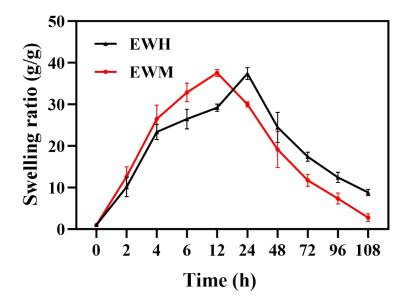


Figure S2. Swelling rate of the EWH and EWM.

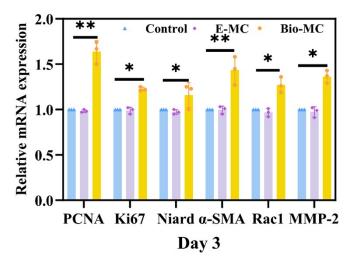


Figure S3. qRT-PCR analysis showing the transcription level of several corresponding genes on Day 3.

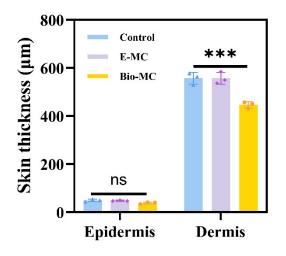


Figure S4. The quantitative analysis of epidermis and dermis.

Classification	Preparation details
EWH	Egg white/ NaOH solution/ / DMEM
E-MC	Egg white/ NaOH solution/ Dimethylsilicone oil/ CaCl ₂ (5%w/v)
	/ Tween 20 (1%v/v)
Bio-MC	Egg white/ NaOH solution/ Dimethylsilicone oil/ $CaCl_2$ (5%w/v)
	/ Tween 20 (1%v/v)/ ADSCs

Table S1. Preparation details of EWH, EWM (E-MC), and Bio-MC