Supporting Information for

ROS-Responsive Antioxidant Hydrogel with Immunomodulatory Activity for Promoting Diabetic Wound Healing

Yurao Liu[a], Qianqian Yang[a], Ling Zhang[a], Qiyue Lu[b], Yuhang Li[b], Haisong Zhang[c], Chunfang Zhang[a], Pingli Wu[b]**

[a] College of Chemistry and Materials Science, Hebei University, Baoding 071002, China

[b] Key Laboratory of Flexible Optoelectronic Materials and Technology (Ministry of Education), School of Optoelectronic Materials & Technology, Jianghan University, Wuhan 430056, China

[c] Hebei Provincial Key Laboratory of Skeletal Metabolic Physiology of Chronic Kidney Disease, Affiliated Hospital of Hebei University, Baoding 071000, China

*Correspondence address. E-mail: Pingli Wu, Email: wupl0520@jhun.edu.cn; Chunfang Zhang, Email: zhangcf@hbu.edu.cn

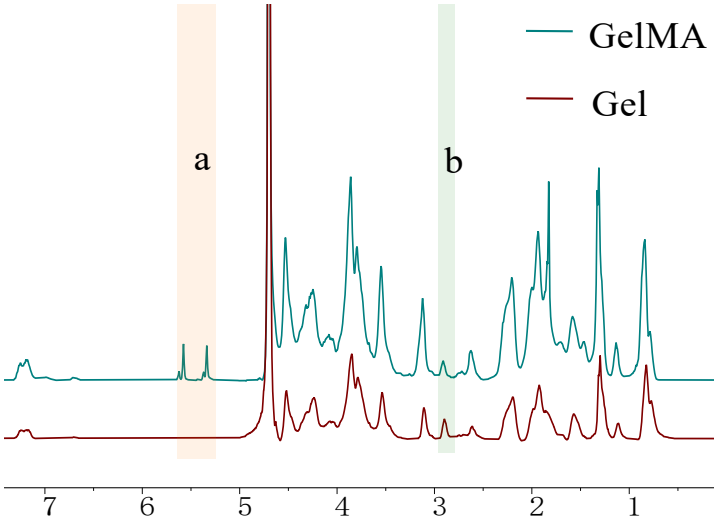

Figure S1. ^{1}H NMR spectrum of MA on gelatin.

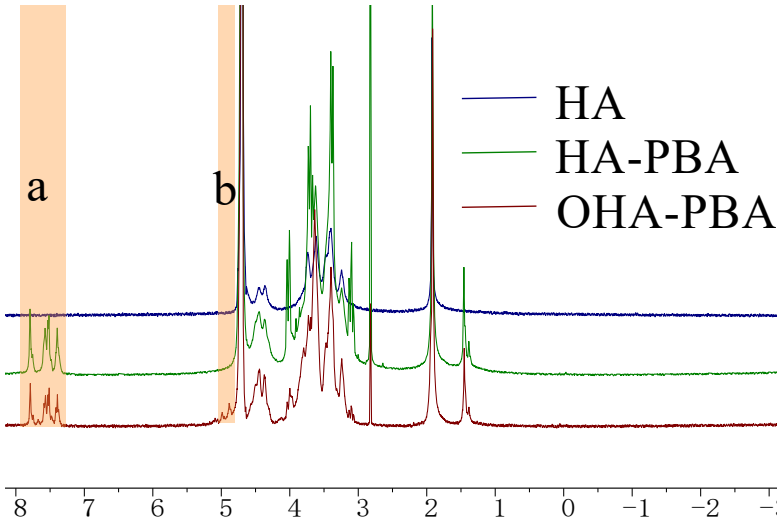

Figure S2. ^{1}H NMR spectrum of OHA-PBA.

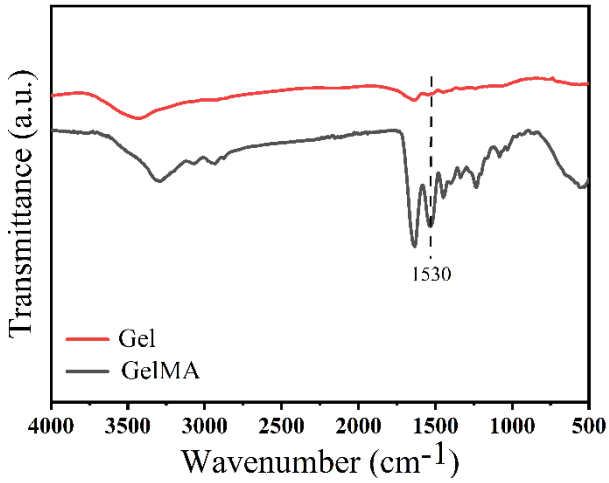

Figure S3. FTIR spectrum of GelMA.

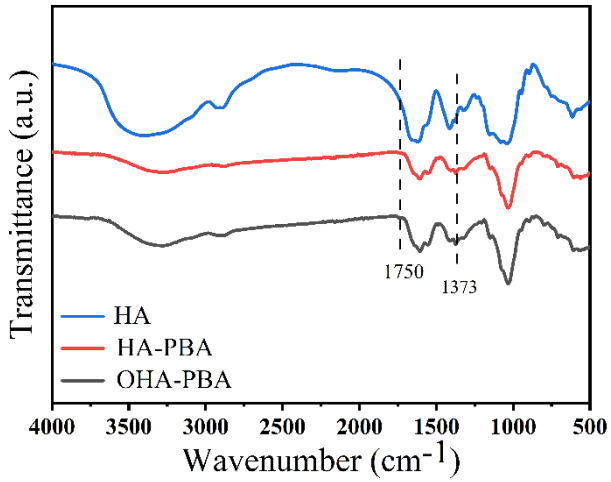

Figure S4. FTIR spectrum of OHA-PBA.

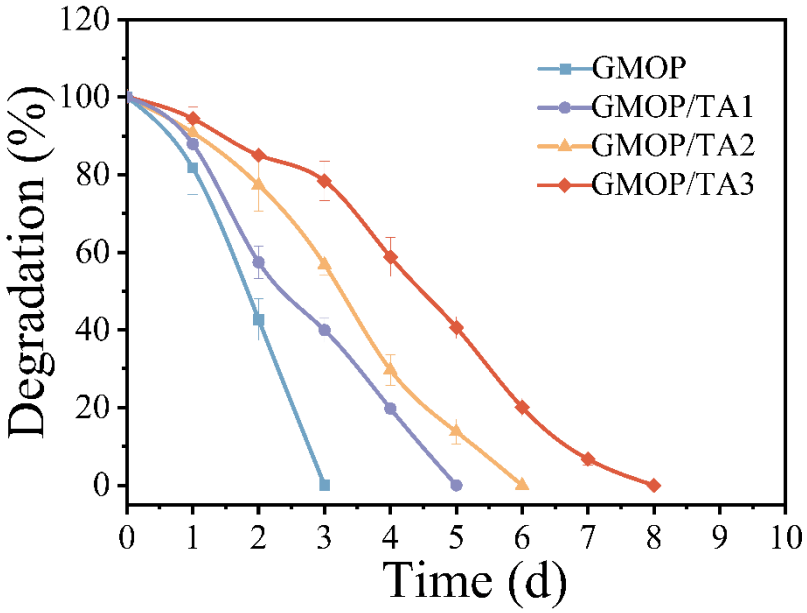

Figure S5. Degradation of GMOP Hydrogels.

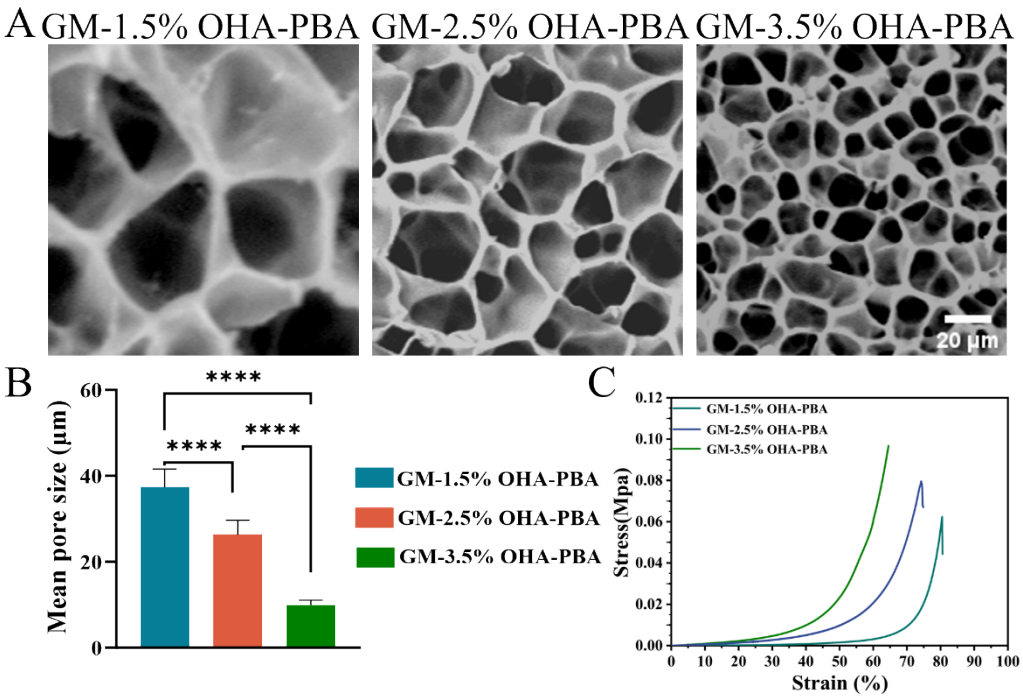

Figure S6. Performance of hydrogels with different ratios. (A) SEM images of OHP after lyophilization at different ratios; (B) pore size analysis of each group; (C) Compressive properties of hydrogels.

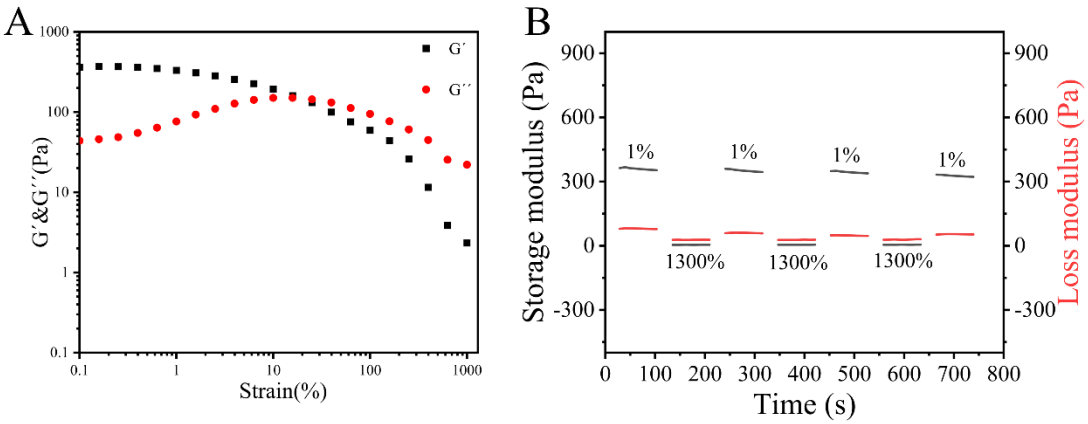

Figure S7. Rheological properties of GMOP/TA hydrogels. (A) Oscillatory strain amplitude sweep; (B)Time sweep tests. The viscoelastic properties of the material were measured using a TA/Waters HR-3 rheometer at 25 °C with a parallel-plate geometry in oscillation mode. Dynamic strain amplitude sweeps were performed from 0.1% to 1000% strain at a frequency of 10 rad/s and a temperature of 25 °C. Time-sweep tests were carried out at 25 °C under alternating strain conditions: each cycle consisted of 80 s at low strain (1%) followed by 80 s at high strain (1300%), and this cycle was repeated three times.