Electronic Supporting Information

A graphene hybrid supramolecular hydrogel with high stretchable, self-healable and photothermally responsive for wound healing

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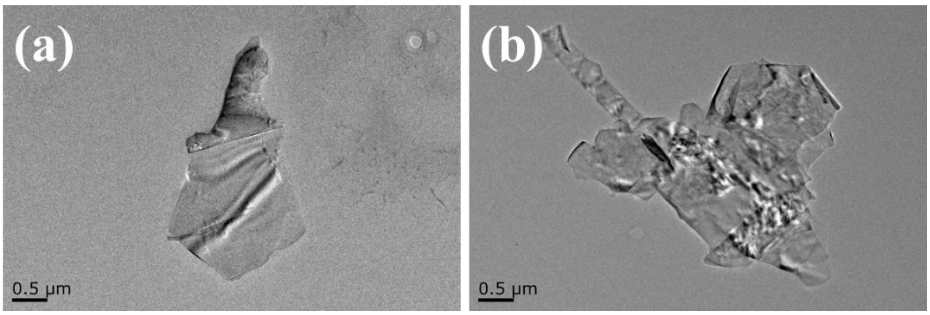

Figure S1. The TEM of graphene nanosheets.

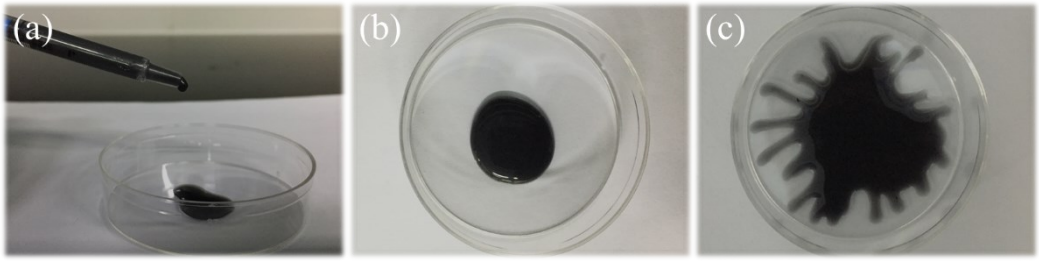

Figure S2. The images of unpolymerized GS (5). The GS (5) injectable pre-gel solution after 12 hours of UV irradiation (a); the pre-gel solution in a dish before (b) and after artificial scribbles (c).

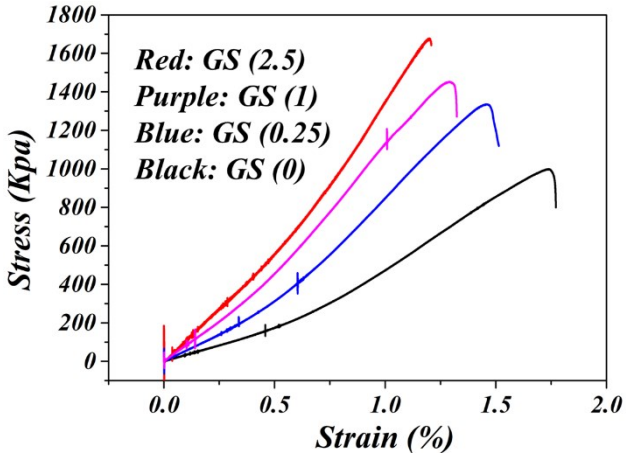

Figure S3. Tensile and stress vs strain curves of GS hydrogels.

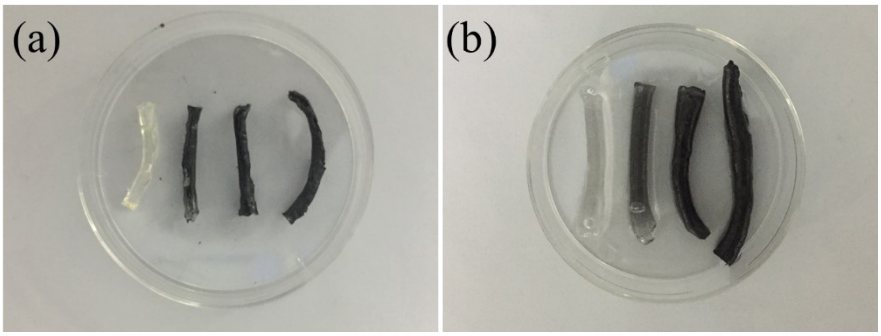

Figure S4. The images of GS hydrogels after dry and reswelling state. From left to right: GS (0), GS (0.25), GS (1), GS (2.5).

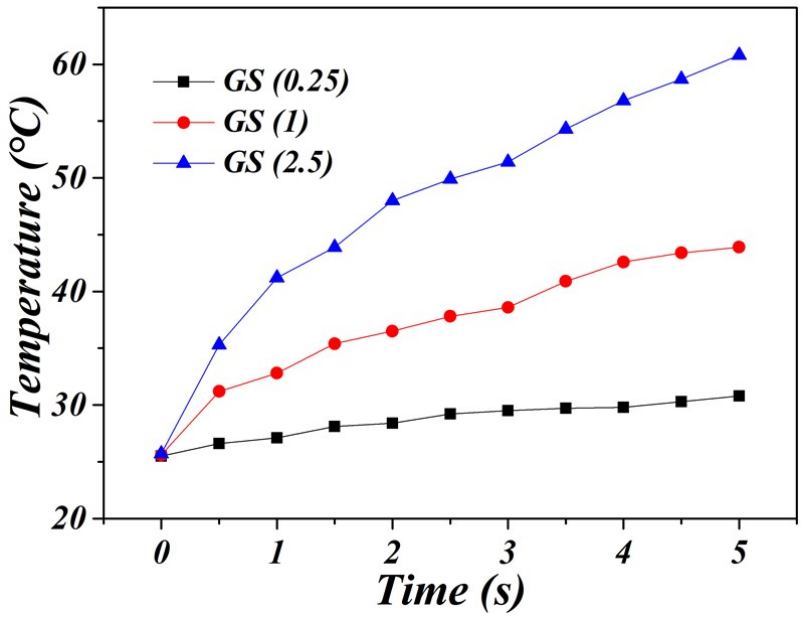

Figure S5. Photothermal heating curves of the GS (0.25) hydrogel (a), GS (1) hydrogel (b), and GS (2.5) hydrogel.

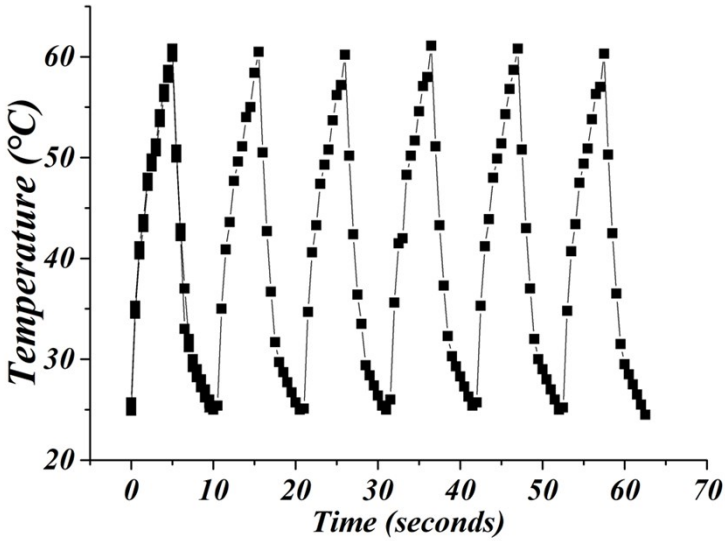

Figure S6. Temperature variation of the GS (2.5) hydrogel with repeated NIR irradiation on/off for 4 cycles.

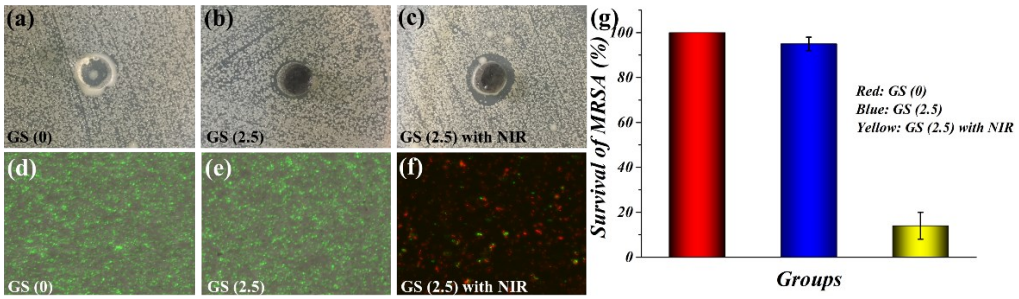

Figure S7. Antibacterial activity of GS hydrogels. Optical images of GS hydrogels the with or without NIR laser NIR laser irradiation against MRSA (a-c);

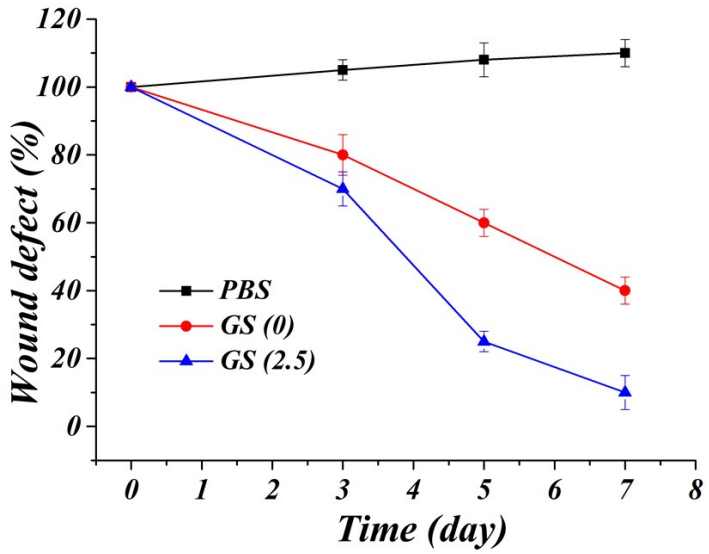

Figure S8. The changes of mean wound area in groups of PBS, GS (0), and GS (2.5) during the experiment.

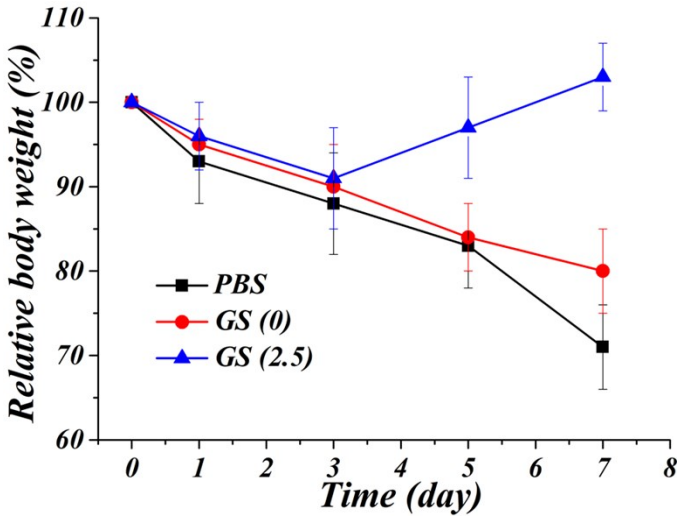

Figure S9. Quantitative analysis of the relative body weight in groups of PBS, GS (0), and GS (2.5) during the experiment.

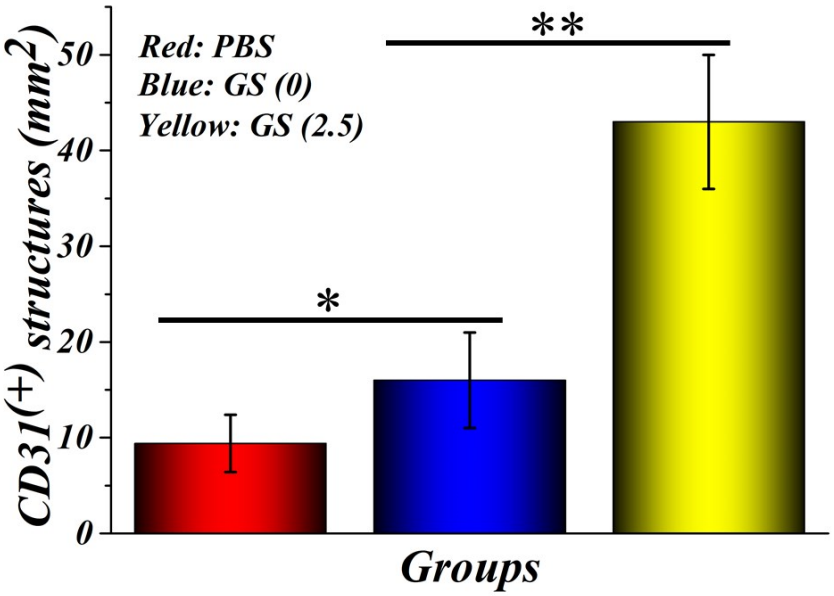

Figure S10. Quantification of the CD31 and α-SMA co-labeled structures in groups of PBS, GS (0), and GS (2.5). *P < 0.05, **P < 0.01.