Supporting Information

**Optical Microcrack Sensor Paints Inspired by Luminescent Oxygen Quenching Phenomenon**

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**FIG. S1**. Luminescence image of free-standing triple-layered coating corresponding to **FIG.3** in healthy condition.



**FIG. S2**. Luminescence image of free-standing triple-layered coating corresponding to **FIG.3** after damaged by needle.



**FIG. S3**. Result of digital image processing of **Fig. S1**./ **Fig. S2**.