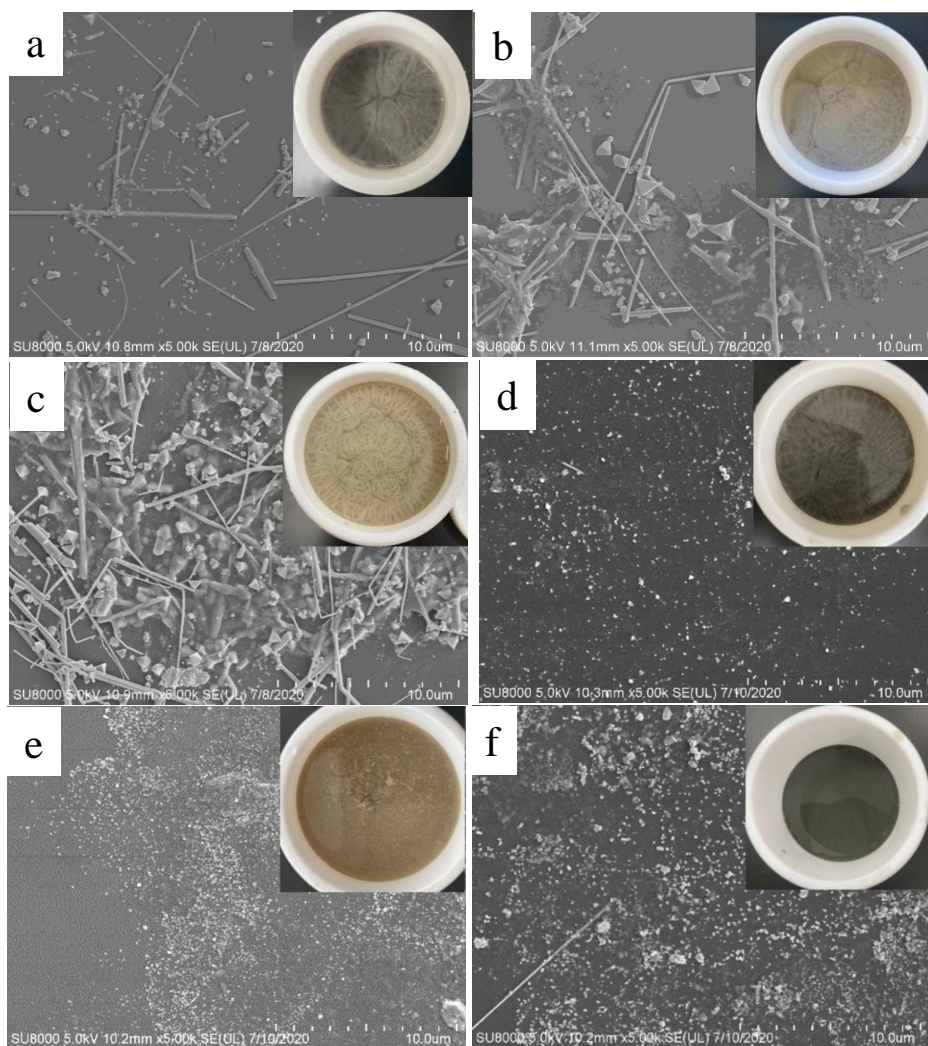


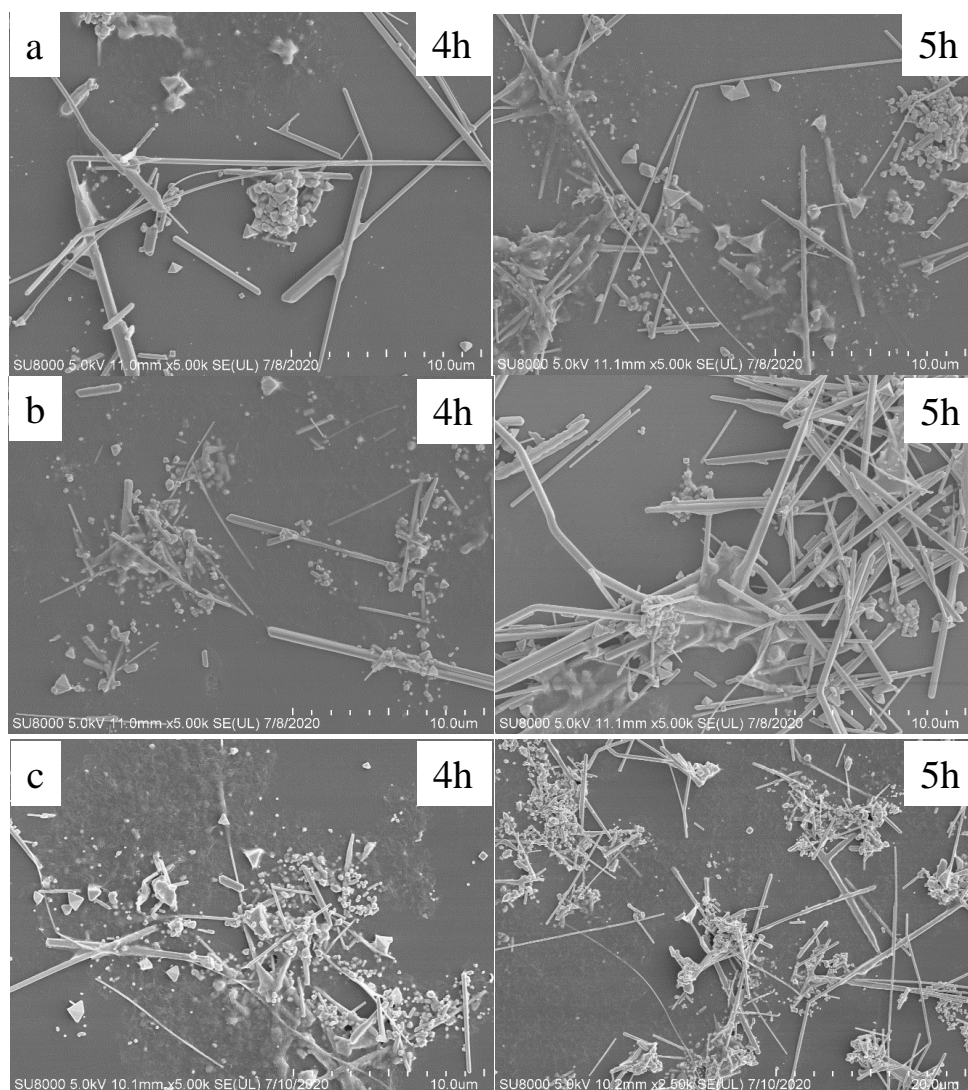
# Self-Healing Silver Nanowires and Reduced Graphene Oxide/Polyurethane Composite Film Based on the Diels–Alder Reaction under Infrared Radiation

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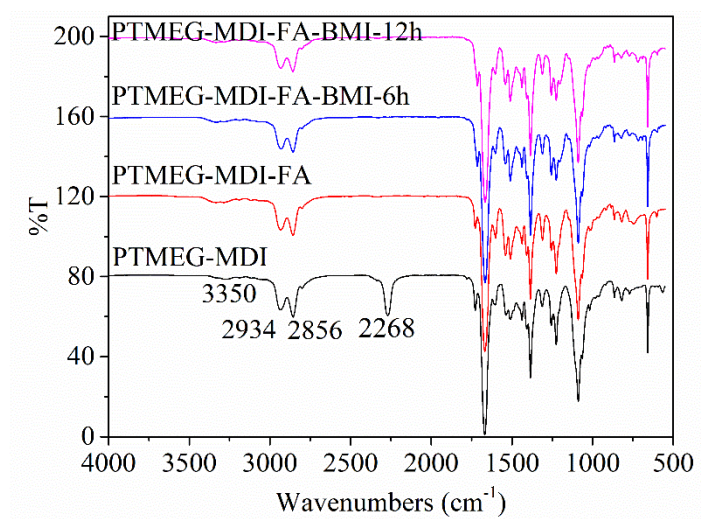
Materials and Food Department, Zhongshan Institute, University of Electronic Science and Technology of China, Zhongshan 528402, Guangdong, China; wangyi@zsc.edu.cn (Y.W.); zzmzsedu@126.com (Z.Z.); chejiali0104@126.com (J.C.); 2019040801083@stu.zsc.edu.cn (S.L.); 2019040801059@stu.zsc.edu.cn (H.Z.); 2019040802023@stu.zsc.edu.cn (J.L.); 2019040802028@stu.zsc.edu.cn (S.W.); zjhzsedu@126.com (J.Z.); kevinlin1990@163.com (K.L.); wkzsedu@126.com (K.W.)  
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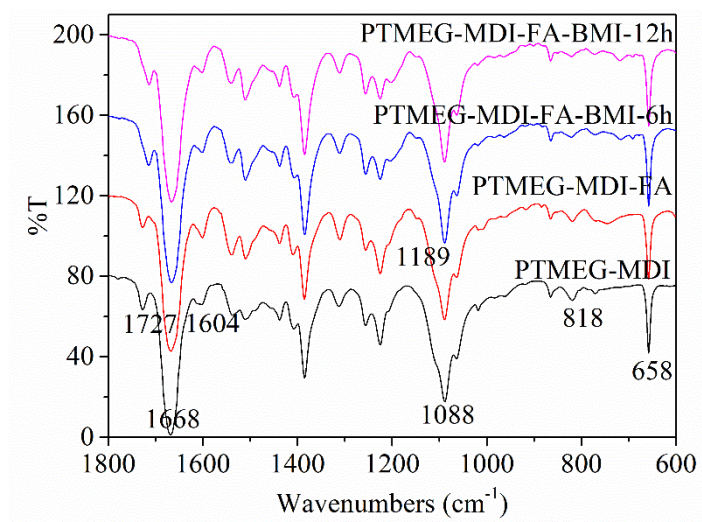
**Figure S1.** SEM images of products of the reaction solutions of the ratio of mass content of GO:AgNO<sub>3</sub> of 1:98.5 (a) , 1:48.9 (b) , 1:32.4 (c) , 1:15.7 (d) , 1:10.1 (e) and 1:7.3 (f) at 150 °C for 3 h, respectively. The inserts are photos of the solution after the reaction.



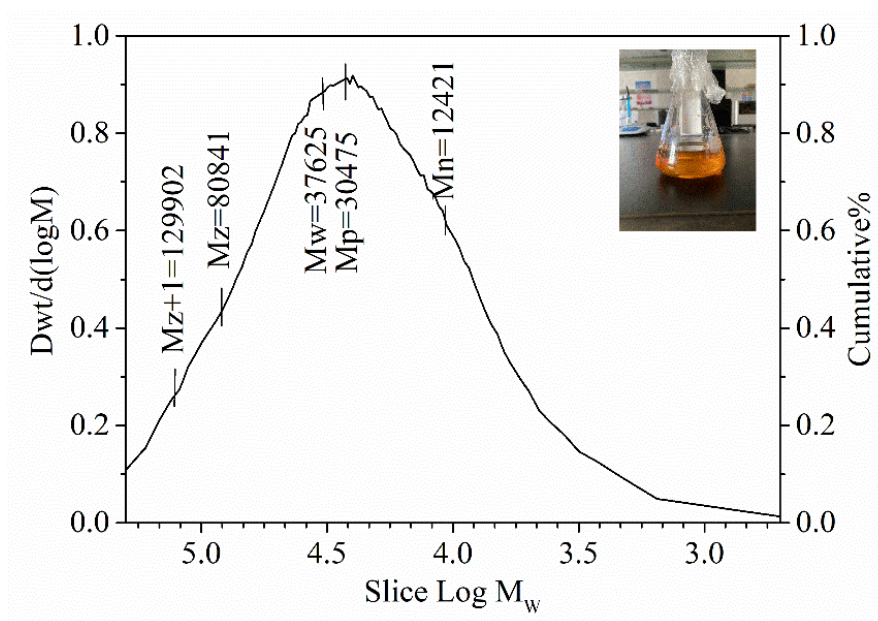
**Figure S2.** SEM images of products of the reaction solutions of the ratio of mass content of GO:AgNO<sub>3</sub> of 1:32.3 at 150 °C (a)、160 °C (b), and 170 °C(c) for 4 h and 5 h, respectively.



**Figure S3.** IR-spectroscopy monitored during the reaction progress.



**Figure S4.** Local magnification of Figure S3.



**Figure S5.** Gel permeation chromatogram of DA-PU. The insert is sample photo.