Effect of Structure of Polymers Grafted from Graphene Oxide on the Compatibility of Particles with a Silicone-Based Environment and the Stimuli-Responsive Capabilities of Their Composites

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SUPPORTING INFORMATION

Fig. S1: Optical images of the prepared PDMS composites containing 0.1 vol.% of neat GO (a), GO-PMMA (b), GO-PBMA(c), GO-PGMA(d) and GO-PHEMATMS (e).

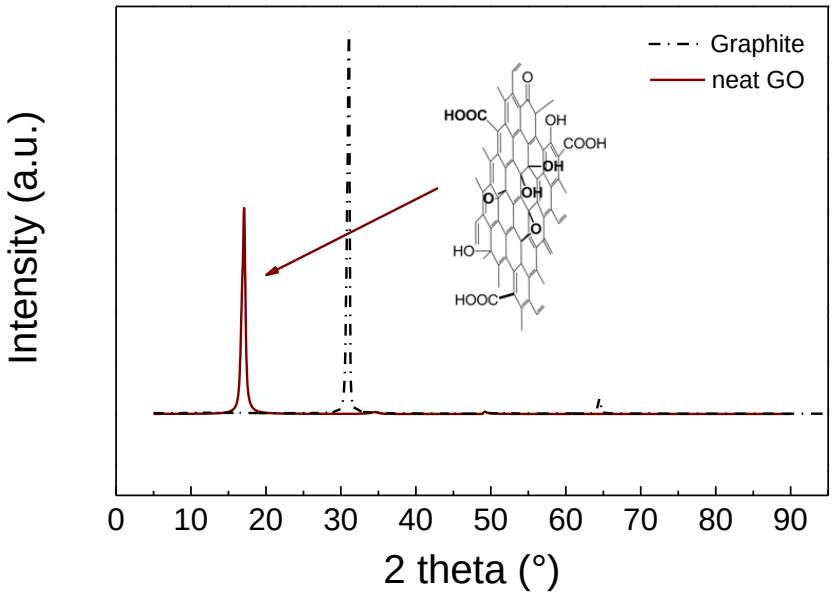


Fig. S2: XRD pattern for graphite and corresponding neat GO.

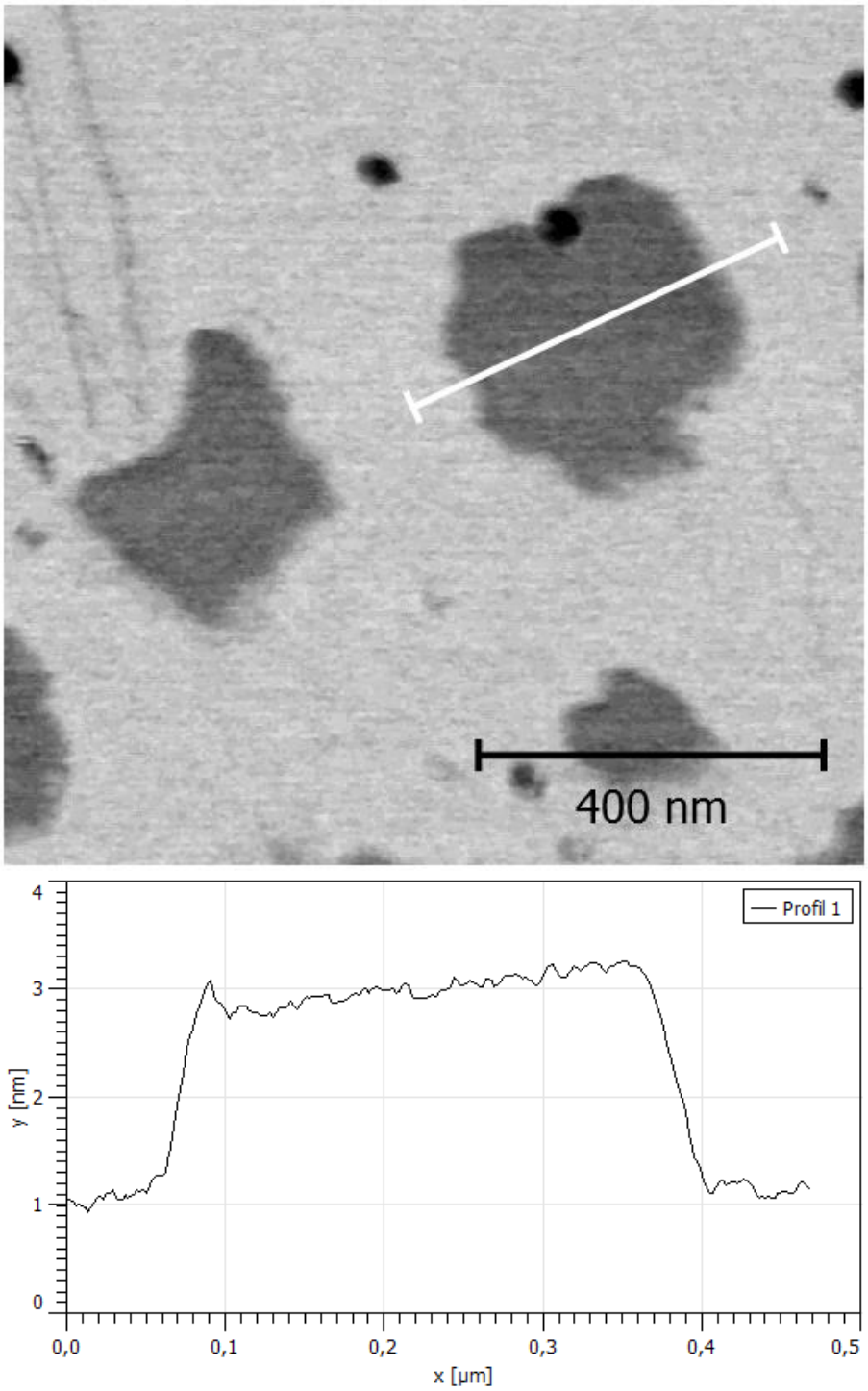
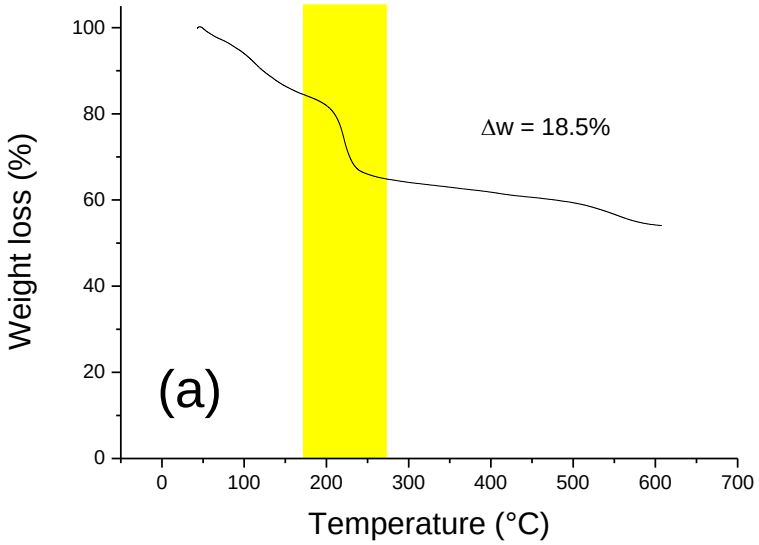
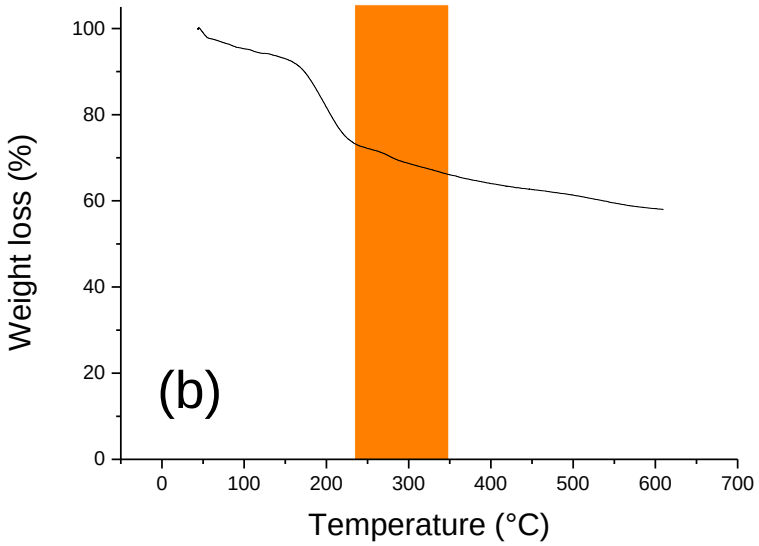
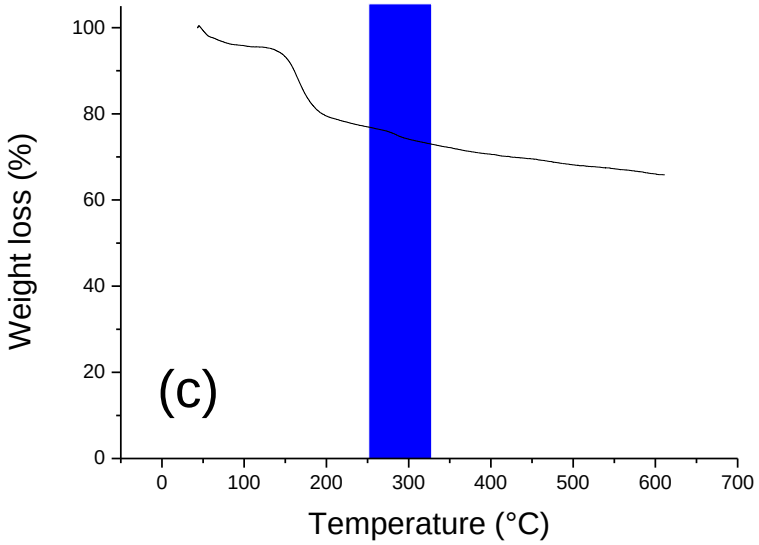
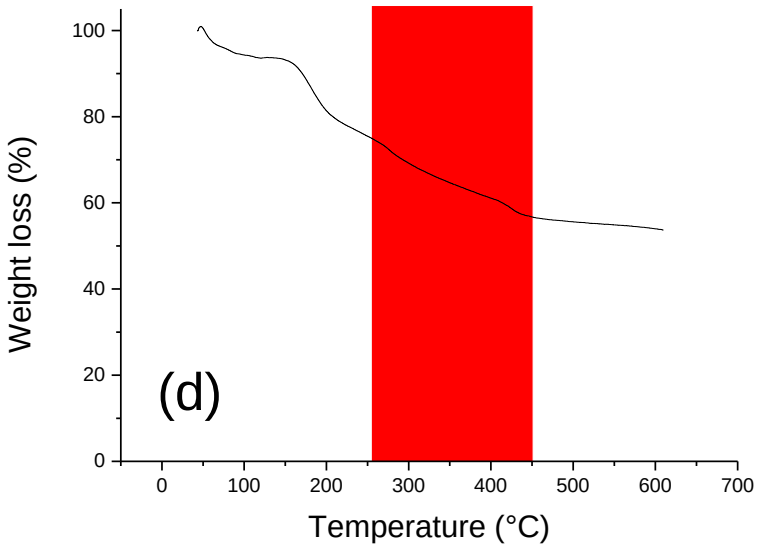


Fig. S3: AFM image of neat GO.


Weight loss (%)
100
80
60
40
20
0
Δw = 18.5%
(a)
0
100
200
300
400
500
600
700
Temperature (°C)


Weight loss (%)
100
80
60
40
20
0
(b)
0
100
200
300
400
500
600
700
Temperature (°C)


Weight loss (%)
100
80
60
40
20
0
(c)
0
100
200
300
400
500
600
700
Temperature (°C)


Weight loss (%)
100
80
60
40
20
0
(d)
0
100
200
300
400
500
600
700
Temperature (°C)

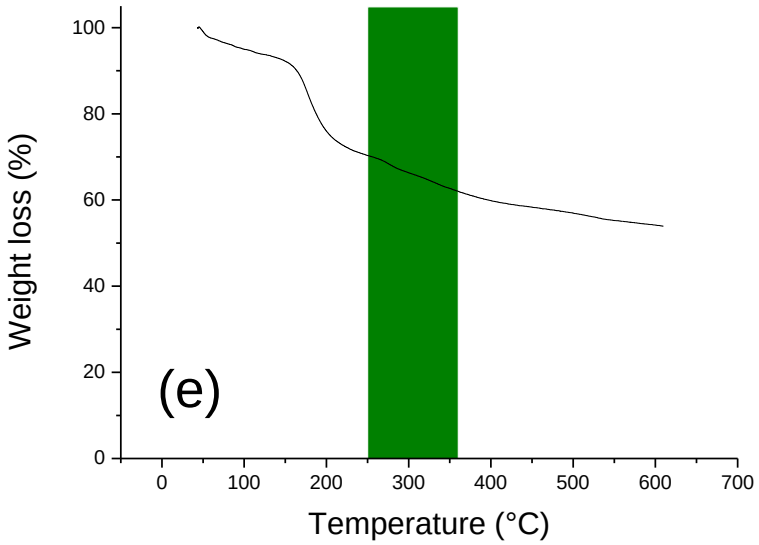


Fig. S4: TGA spectra of the neat GO and GO hybrid particles. Color strip corresponds to the color strip in the manuscript and reflecting the decomposition of the oxygen containing groups (Fig. S4a) and individual polymer grafts (Figs. S4b-S4e).