Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

[1]Supporting Information

Room temperature NO_2 sensing: What advantage does the rGO-NiO nanocomposite have over the pristine NiO?

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Fig. S1

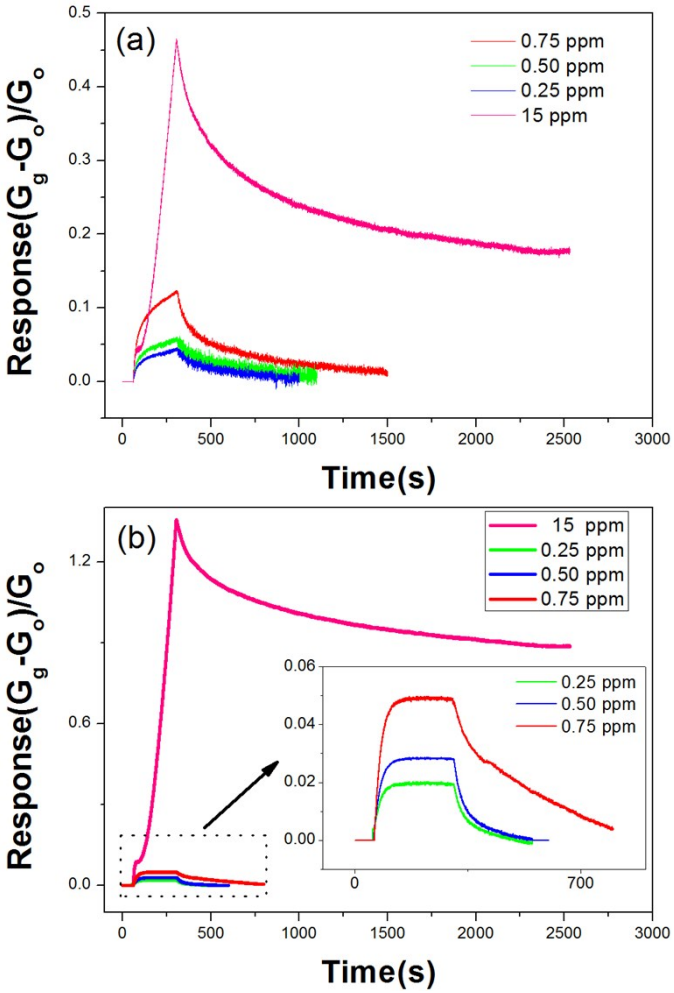

Fig. S1 Dynamic response-recovery curves of the pristine NiO (a) and the rGO-NiO (b) at different NO_2 concentration of 0.25 ppm, 0.50 ppm, 0.75 ppm and 15 ppm of 0.25 ppm, 0.50 ppm, 0.75 ppm and 15 ppm. The insert of (b) shows the magnified time-response curves of the rGO-NiO at the concentration of 0.25 ppm, 0.50 ppm and 0.75 ppm.

Fig. S2

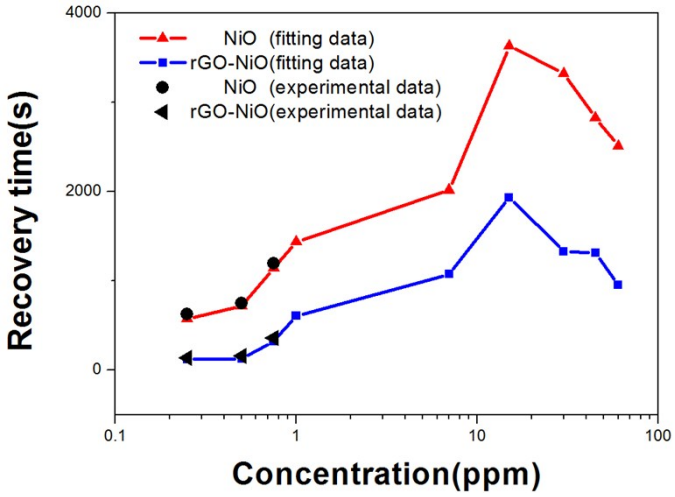

Fig. S2 The real recovery times of the NiO and the rGO-NiO nanocomposite obtained from the fitting data and the experimental data in Fig. S1.

Fig. S3

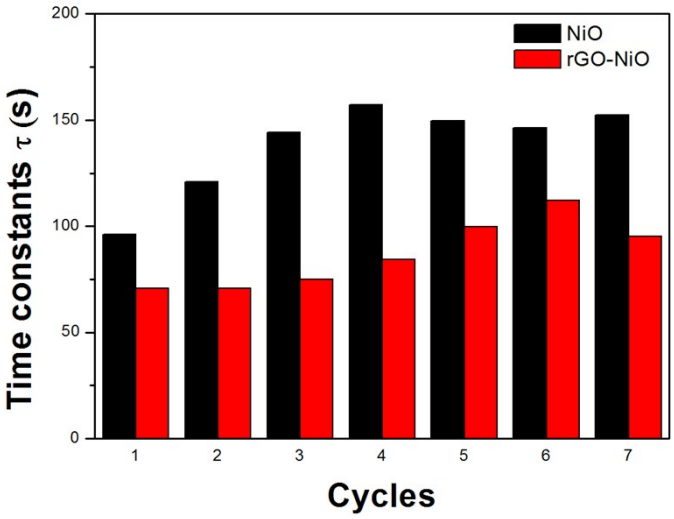

Fig. S3 The fitted time constants for each cycling response curves of the pristine NiO and the rGO-NiO in Fig. 10.

Fig. S4

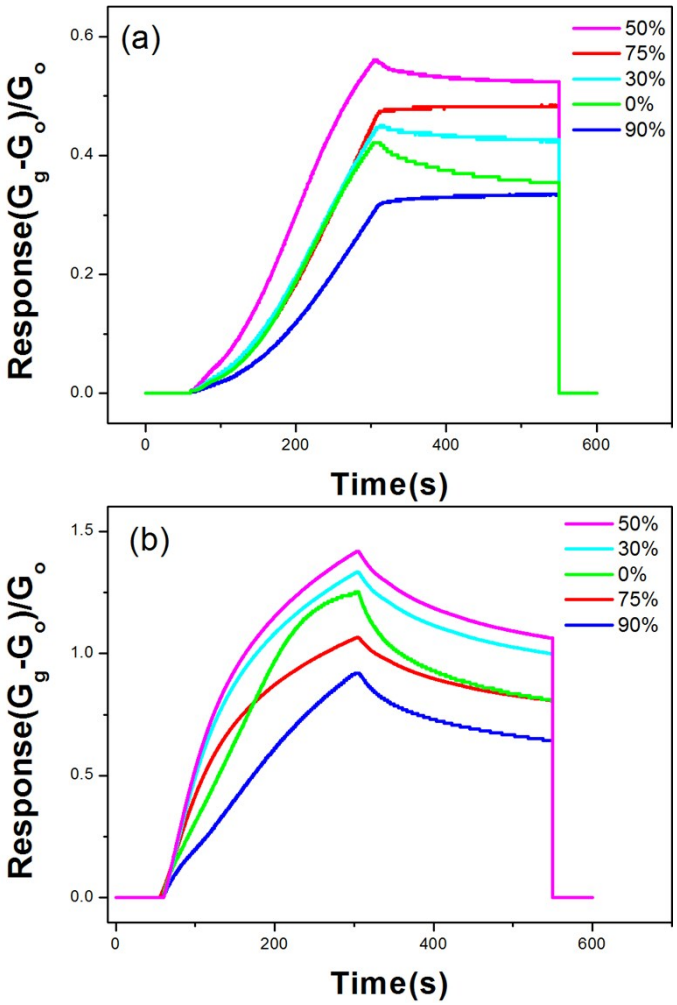

Fig. S4 The dynamic response-recovery curves of (a) the pristine NiO and (b) the rGO-NiO nanocomposite to 15 ppm NO_2 at different humidity.