

Supporting Information

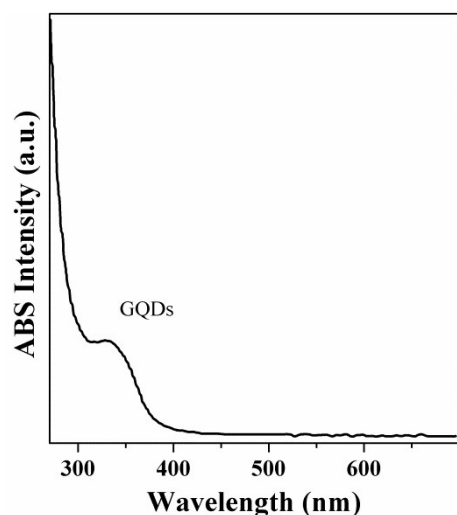


Fig. S1 UV-vis spectrum of GQDs.

Table S1: The band gap energy for different samples

Sample	Band gap energy(eV)
Pt-TiO ₂ film	3.1
PGT-PS-E1	2.68
PGT-PS-E2	2.64
PGT-PS-E3	2.59
PGT-PS-E4	2.70

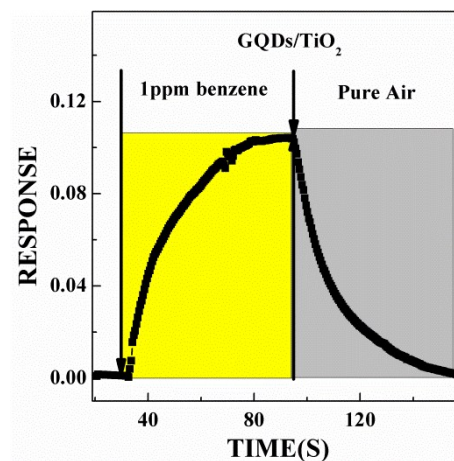


Fig. S3 Typical response and recovery curves of the 3 minutes oxygen-plasma treated GQDs/TiO₂ sensor to benzene gas at 1 ppm.

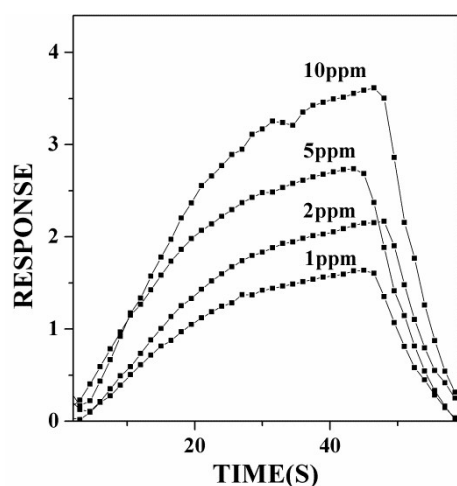


Fig. S2 Response-recovery curves of PGT-PS-E3 to different isopropanol concentrations at room temperature without illumination.