Supplementary Information

Highly sensitive and reproducible fluorescence sensor for continuously measuring hydrogen peroxide at sub-ppm level

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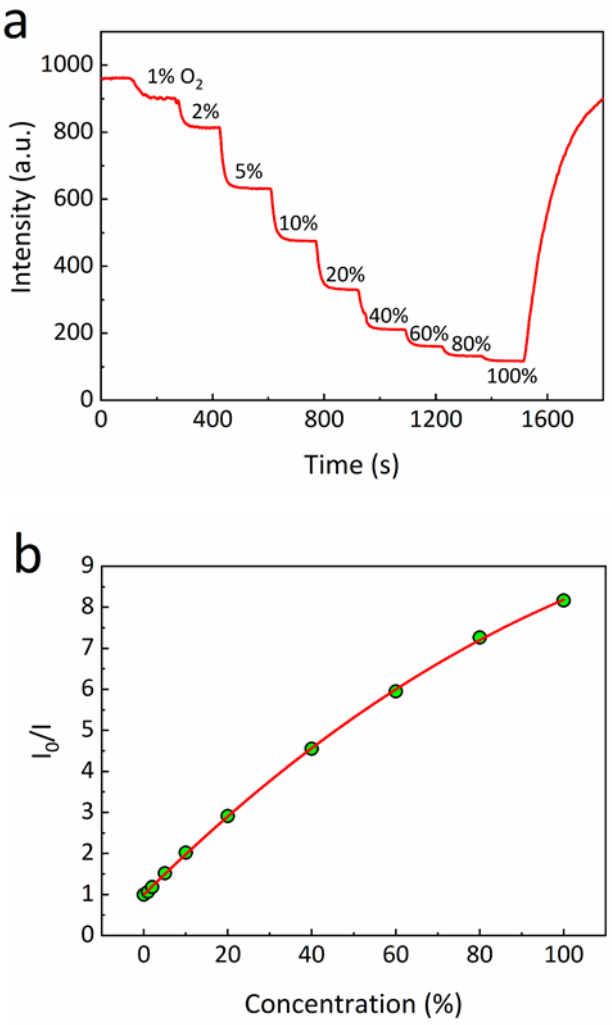

Figure S1 (a) Oxygen response of the home-built oxygen sensor (b) Calibration curve of oxygen sensor.

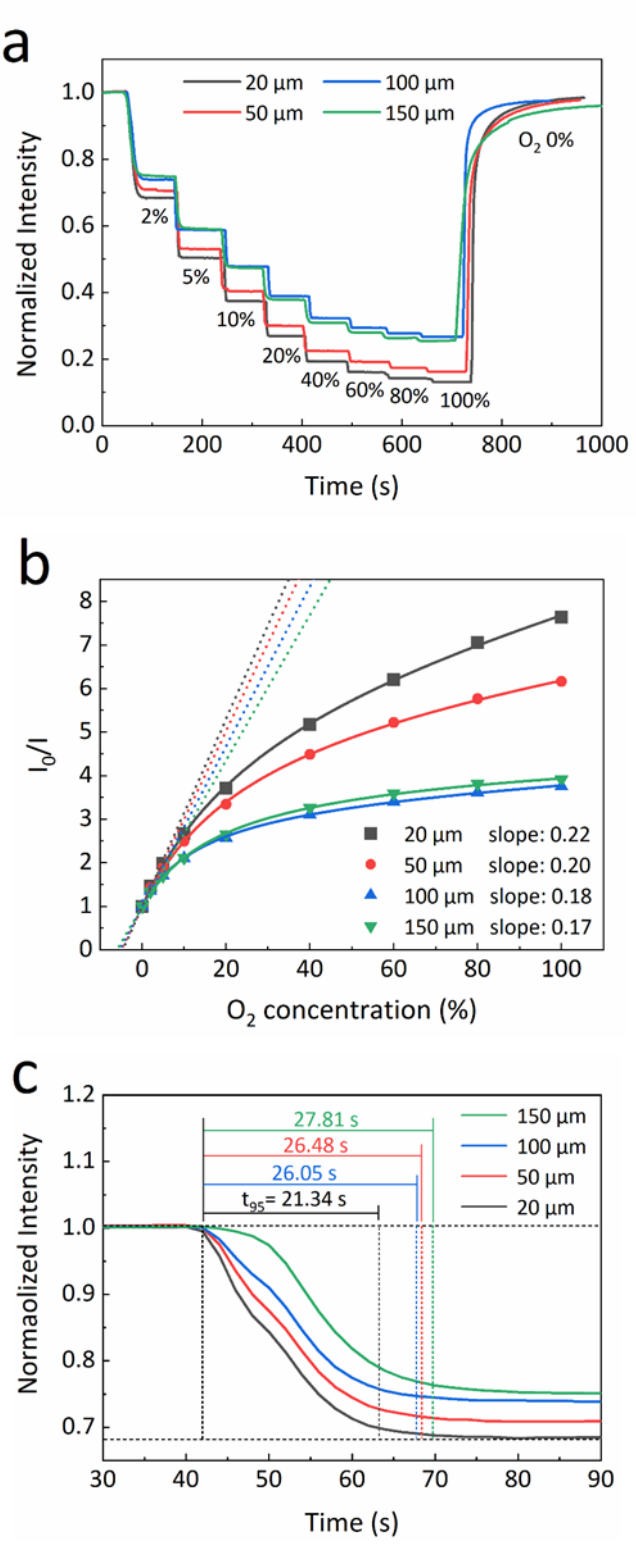

Figure S2 The performance of oxygen sensor film in measuring oxygen with different light scattering layer thicknesses. (a) Response of the sensor at different concentrations of oxygen. (b) Calibration curve of the sensor response. (c) Typical response time of the sensor to 0-2% O_2.

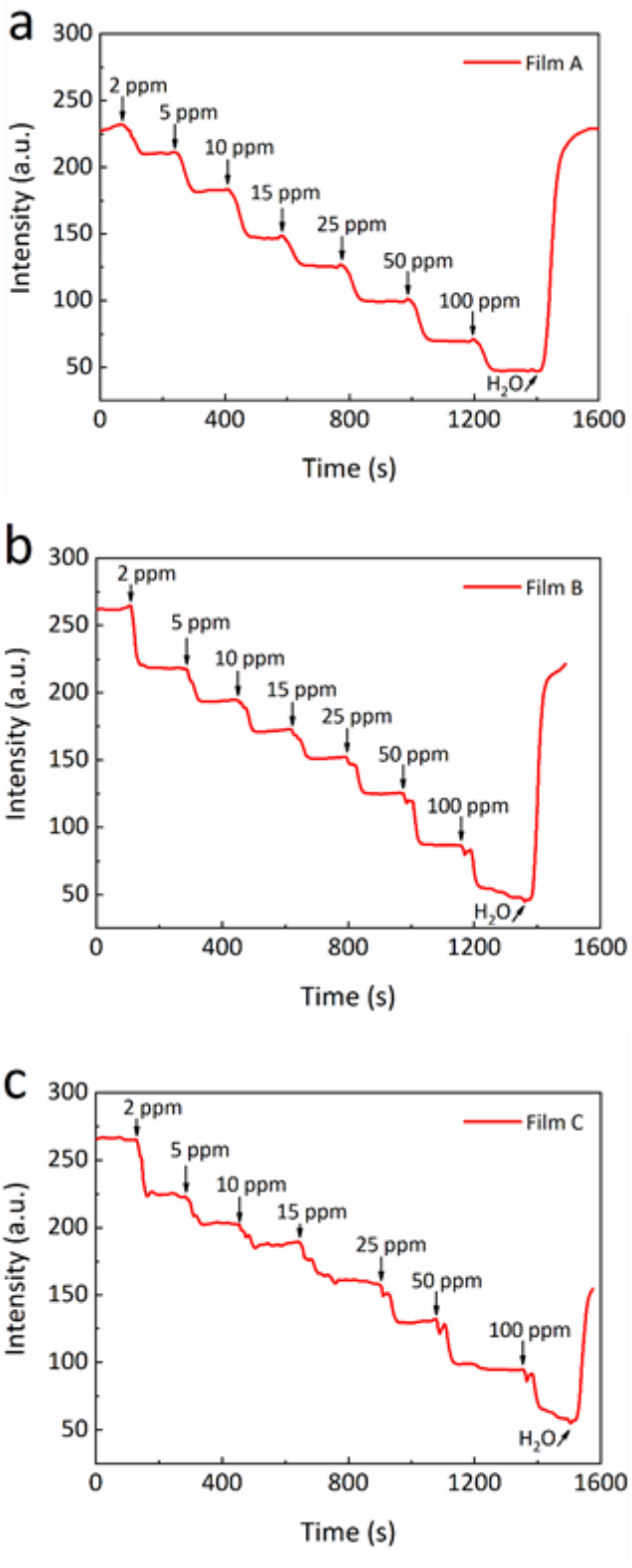

Figure S3 Response curves of HP sensors prepared in three different batches. The weight ratio of Pd/C catalyst and EC was kept at 0.8.

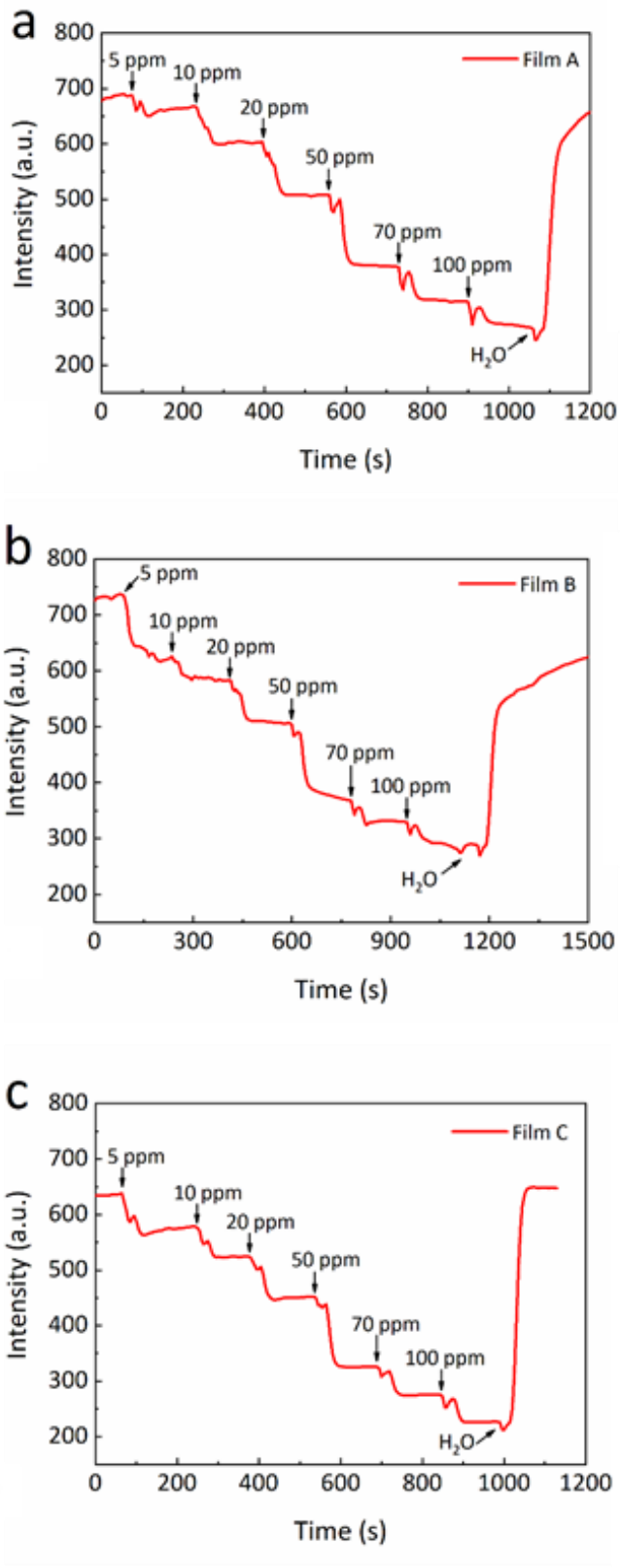

Figure S4 Response curves of HP sensors prepared in three different batches. The weight ratio of Pt/C catalyst and EC was kept at 0.8.

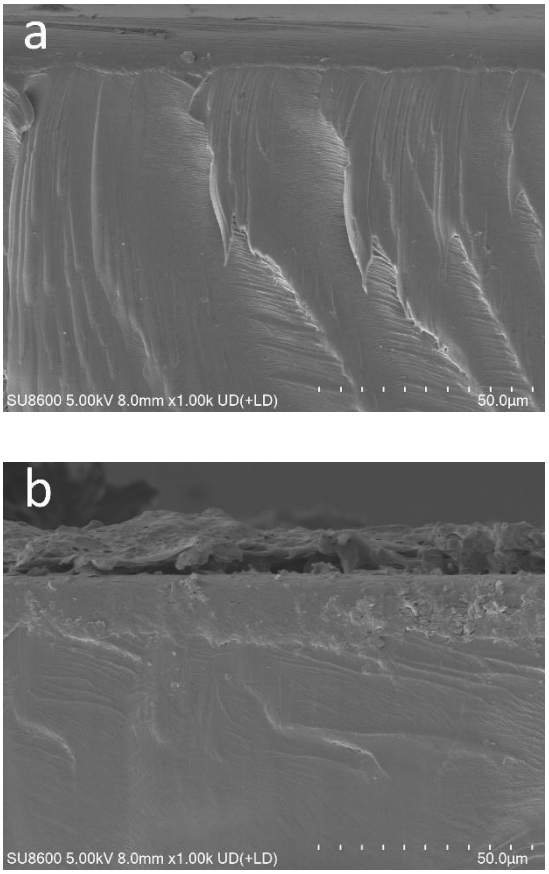

Figure S5 Scanning electron micrograph of HP sensor film. (a) Section of oxygen-sensitive layer. (b) Section of light scattering layer and catalytic layer. The total dried thickness of HP sensor film is around 30 µm.