Selective detection of methanol vapour from a multicomponent gas mixture using a CNPs/ZnO@ZIF-8 based room temperature solid-state sensor

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Supporting information

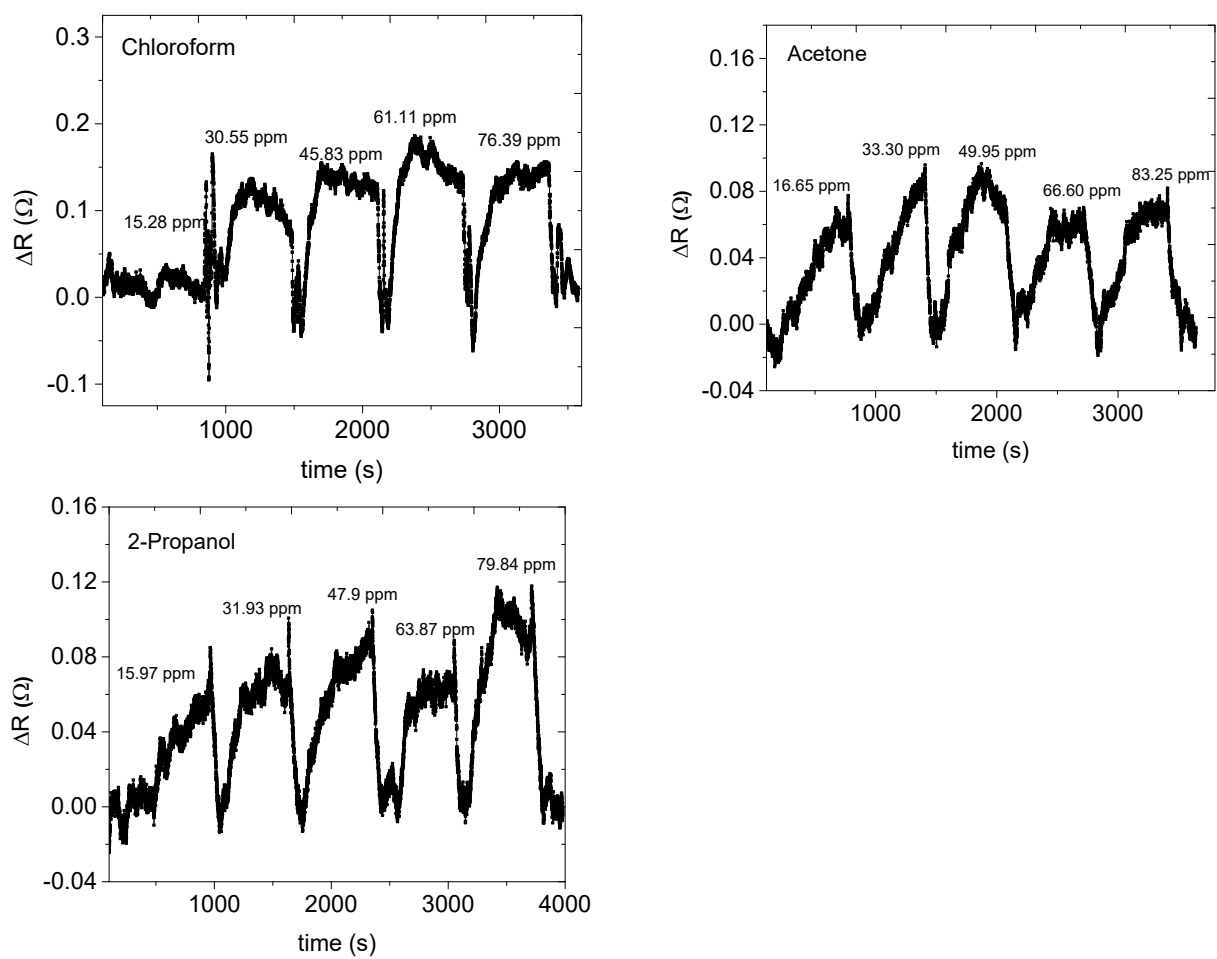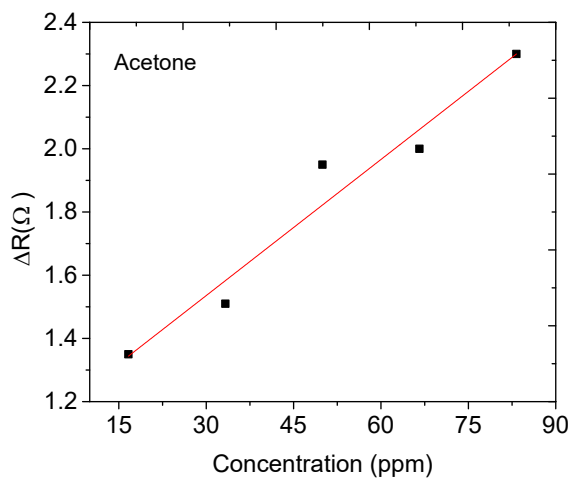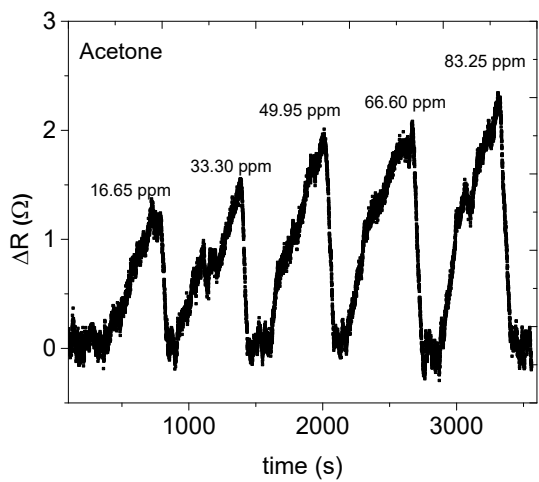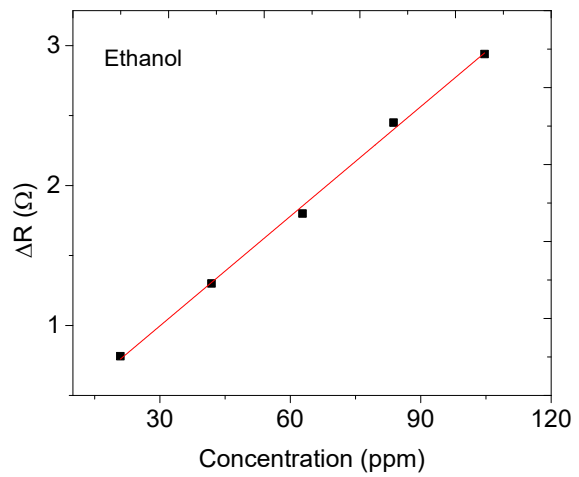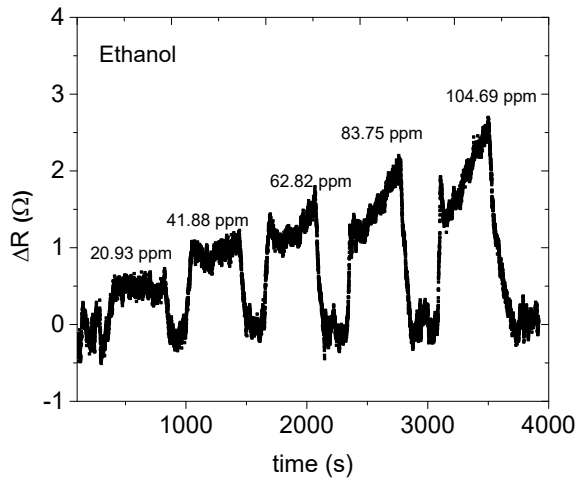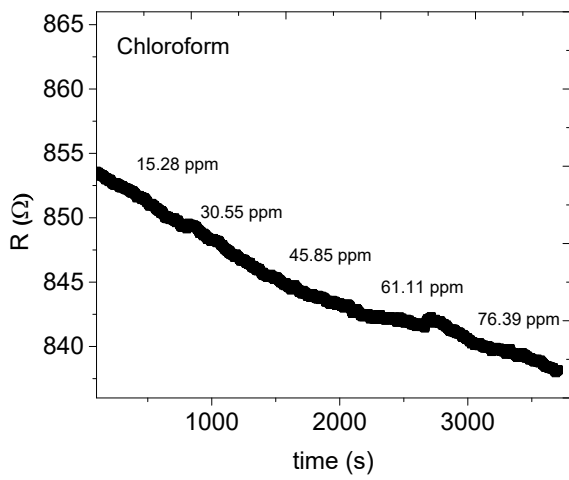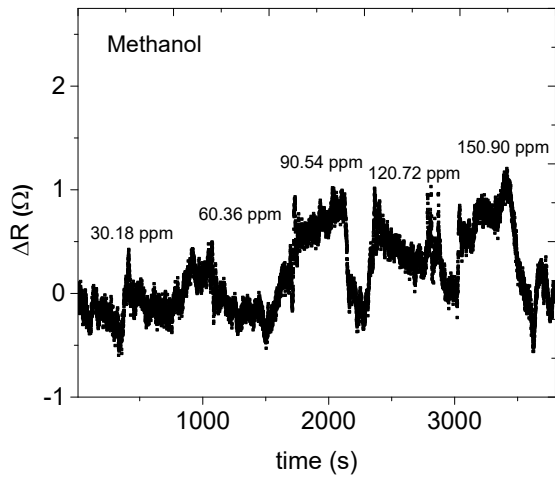 (a)   Response of sensor B (Sensor-based on only CNPs)
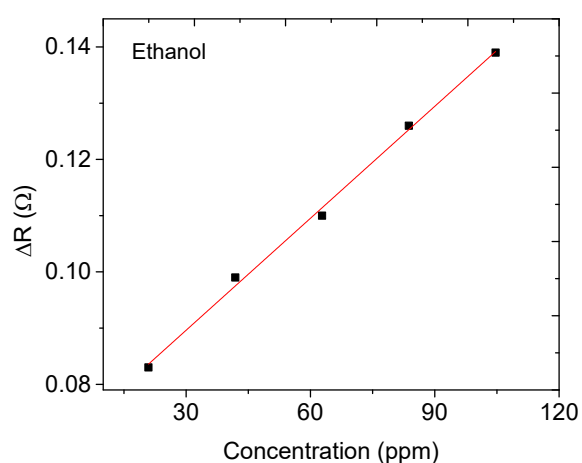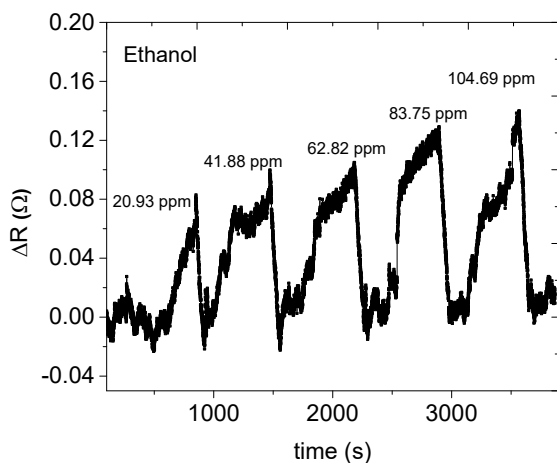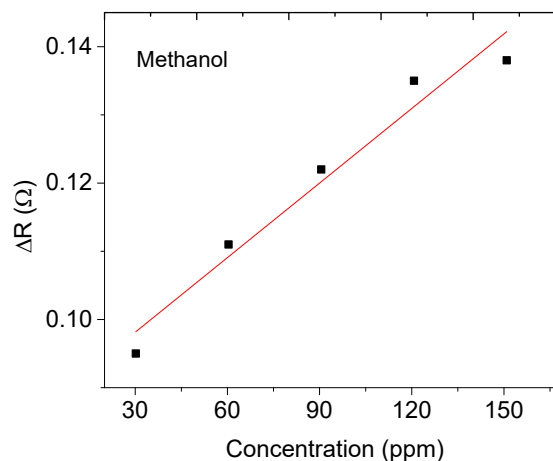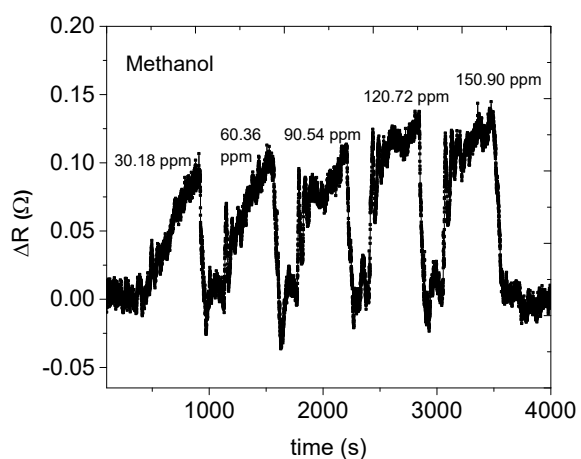
Fig. S1: Dynamic response and recovery curve of the sensor based on CNP only (Sensor B).

(b) Sensor C CNPs/ZnO@ZIF-8 (15: 15)mg

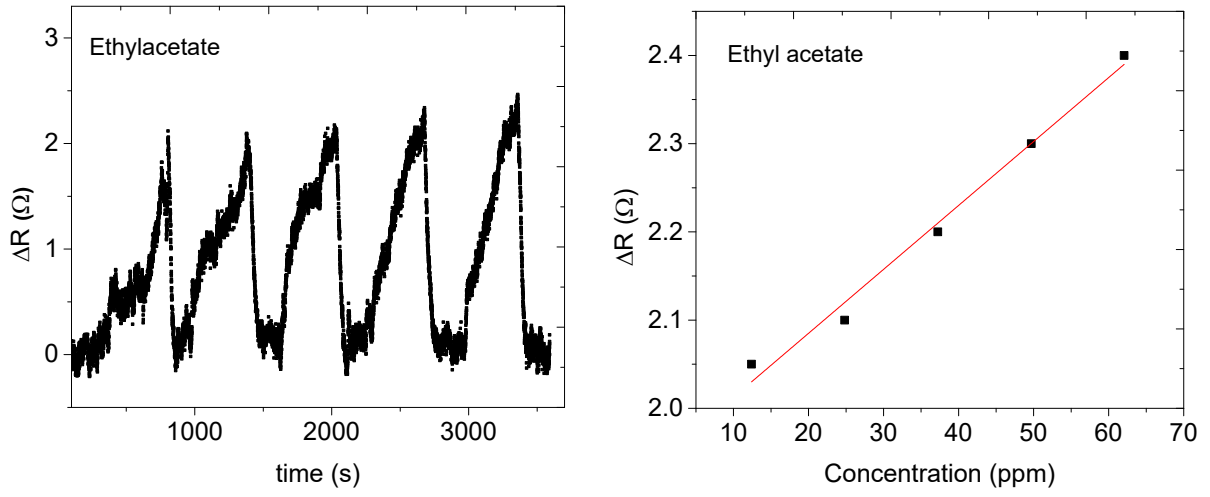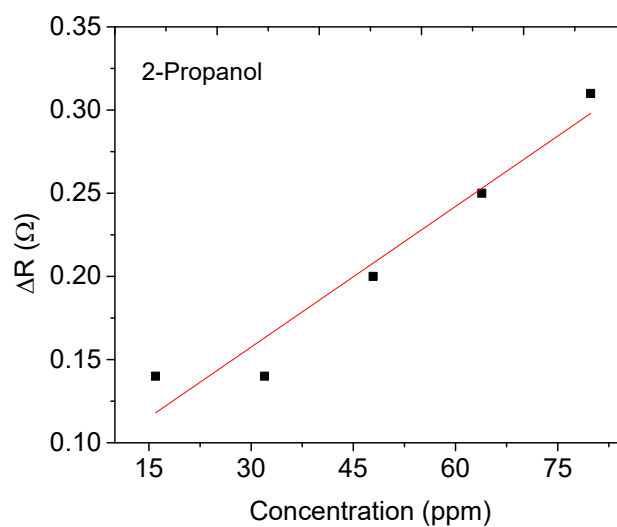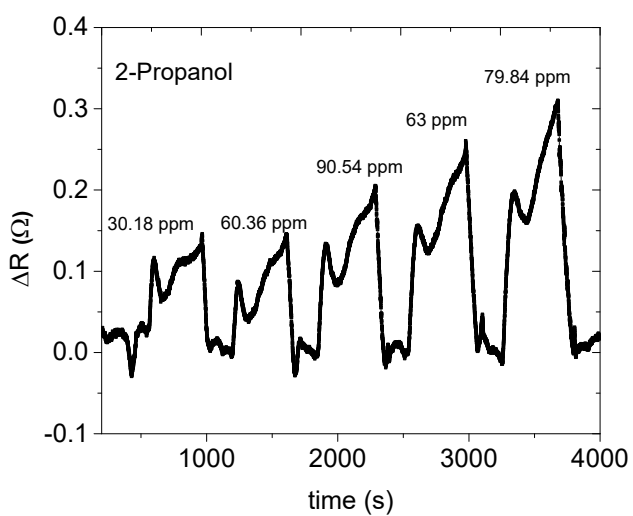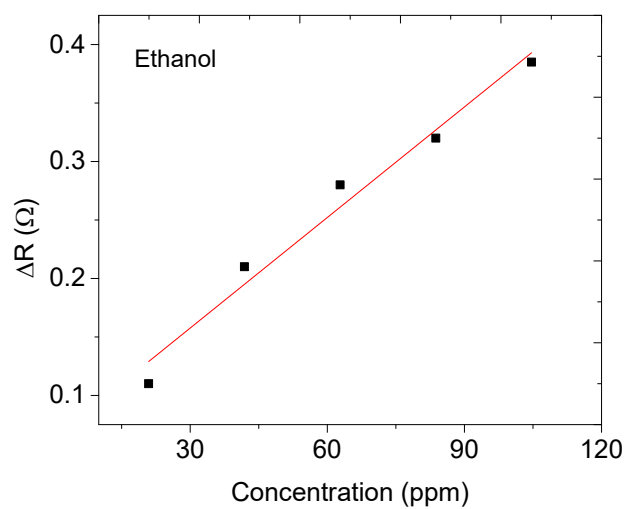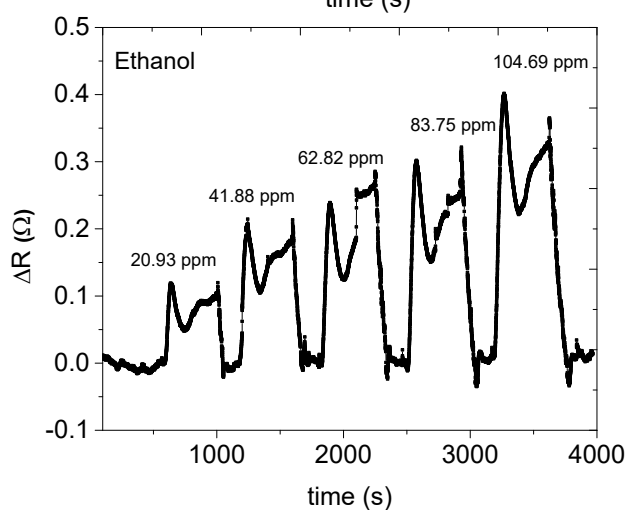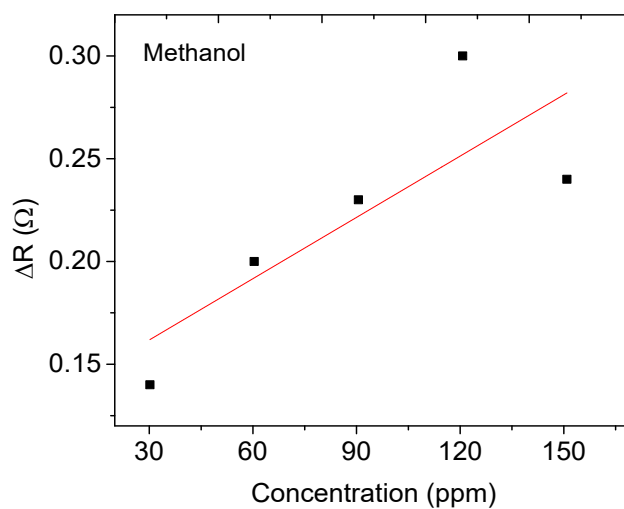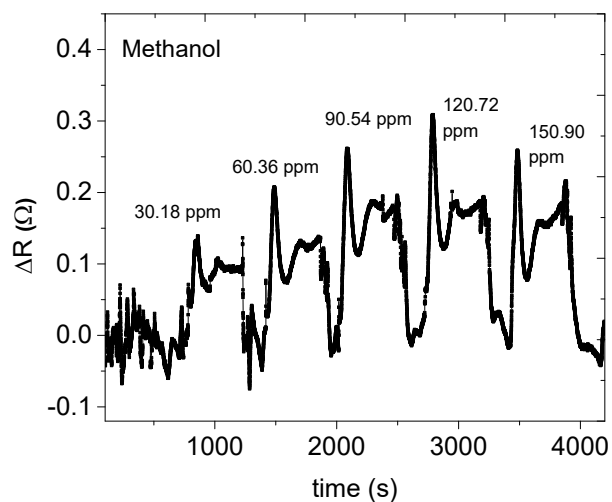**Fig. S2**: Dynamic response and recovery curve of the sensor based on CNPs/ZnO@ZIF-8 (15:15) mg sensor (sensor C)
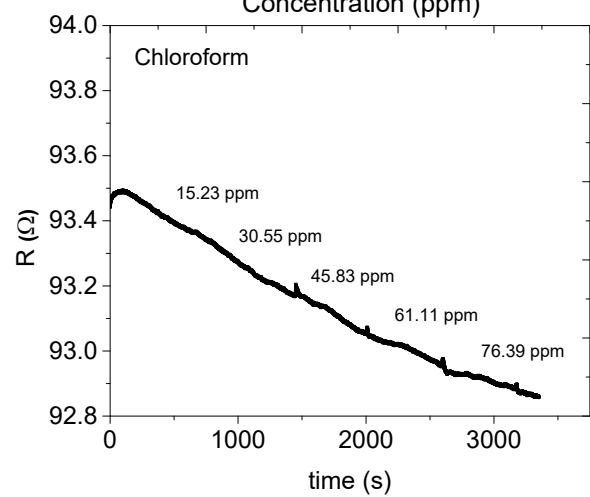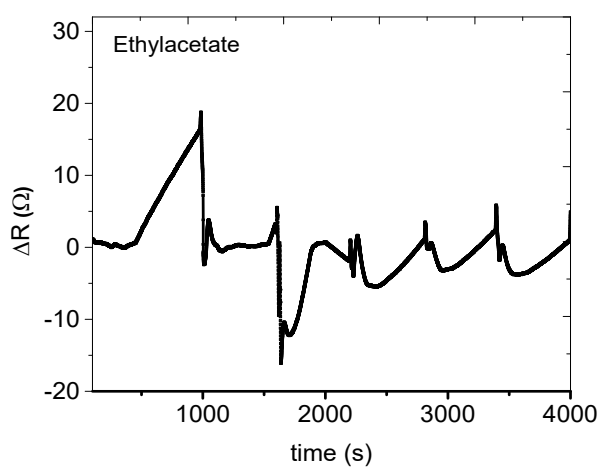
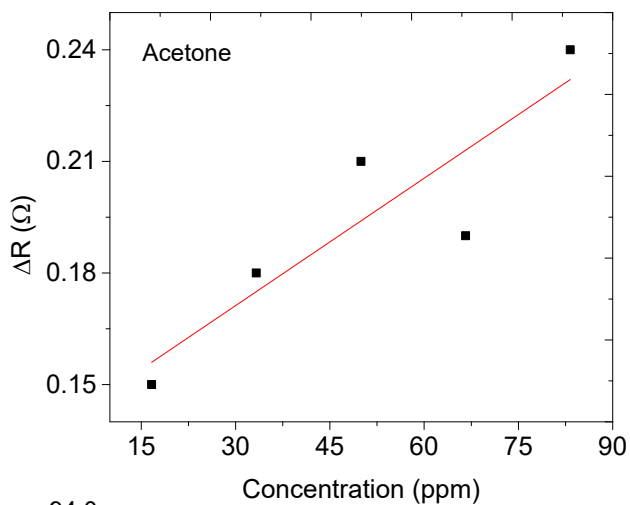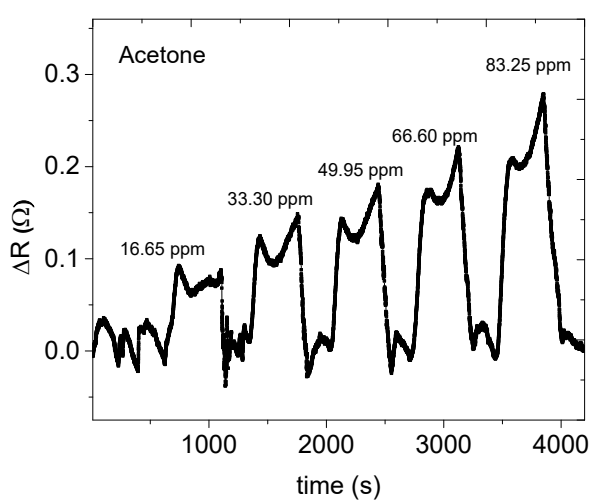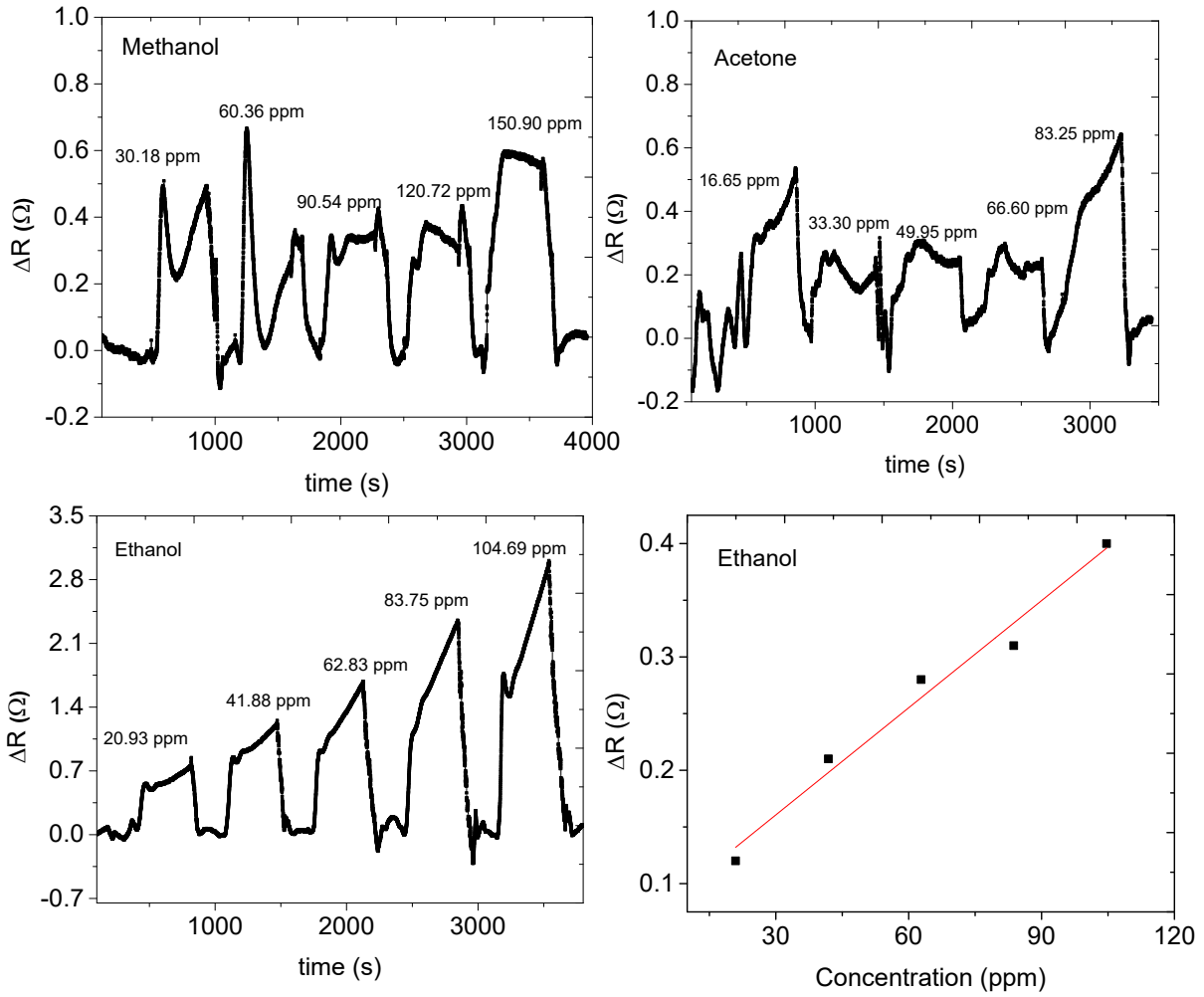(c) Sensor D CNPs/ZnO@ZIF-8 (15:25) mg

Fig. S3: Dynamic response and recovery curve of the sensor based on CNPs/ZnO@ZIF-8 (15:25) mg sensor (sensor D).
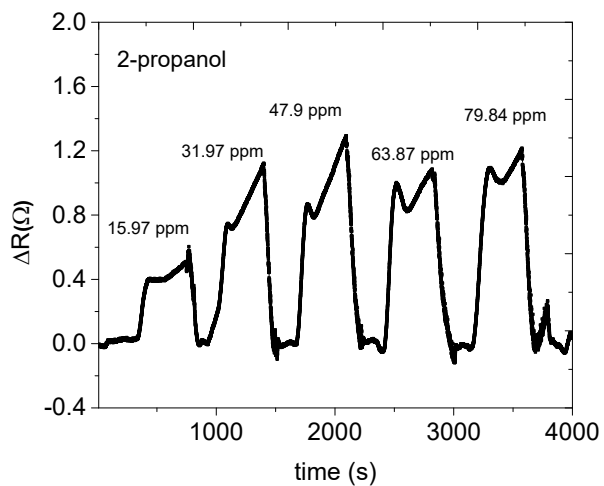
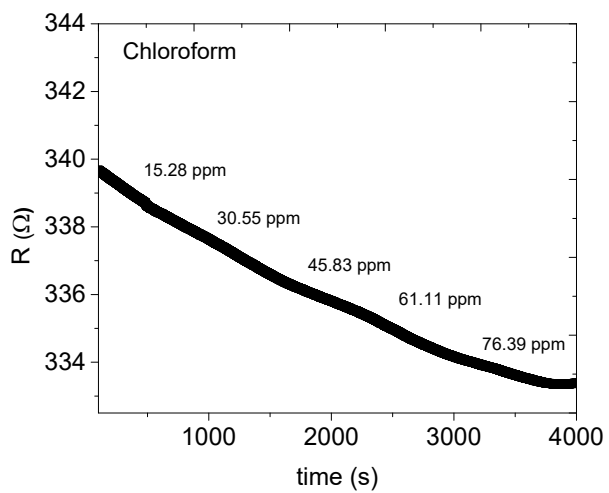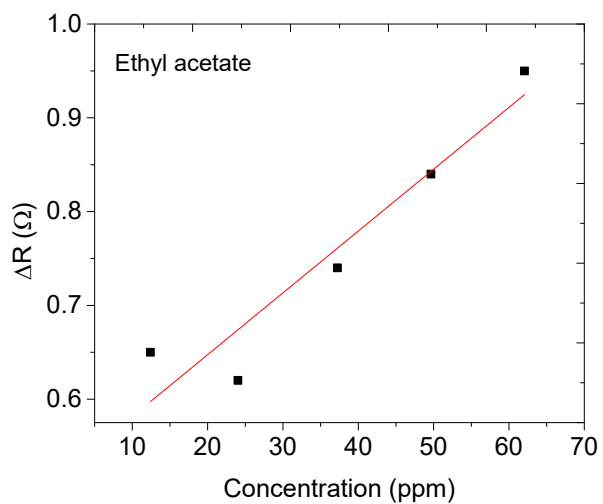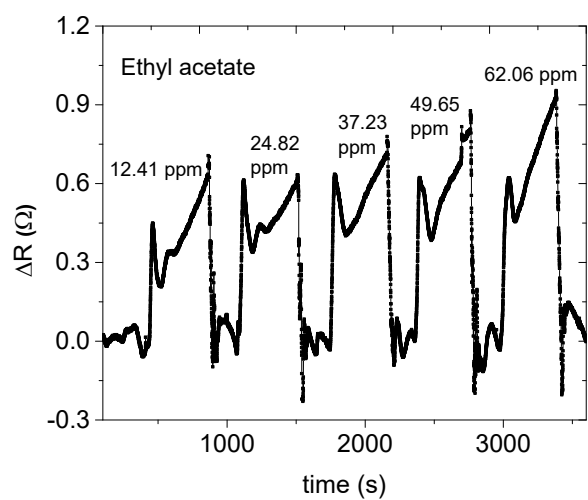(d) Sensor E CNPs/ZnO@ZIF-8 (35:15) mg

Fig. S4: Dynamic response and recovery curve of the sensor based on CNPs/ZnO@ZIF-8 (15:35) mg sensor (sensor E).

(e) Sensor F CNPs/ZnO@ZIF-8 (15:60)mg

Fig. S5: Dynamic response and recovery curve of the sensor based on CNPs/ZnO@ZIF-8 (15:60) mg sensor (sensor F)
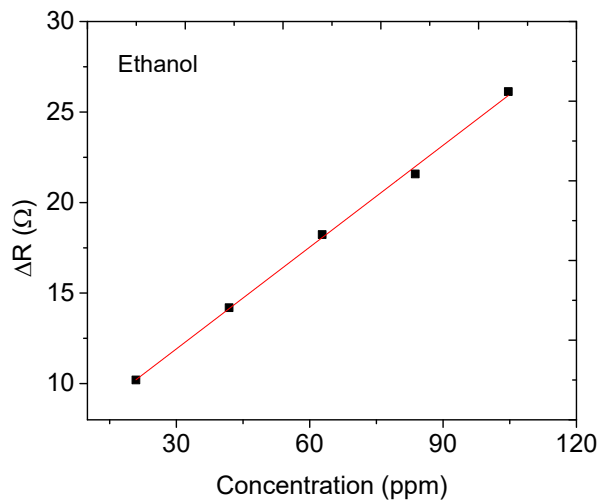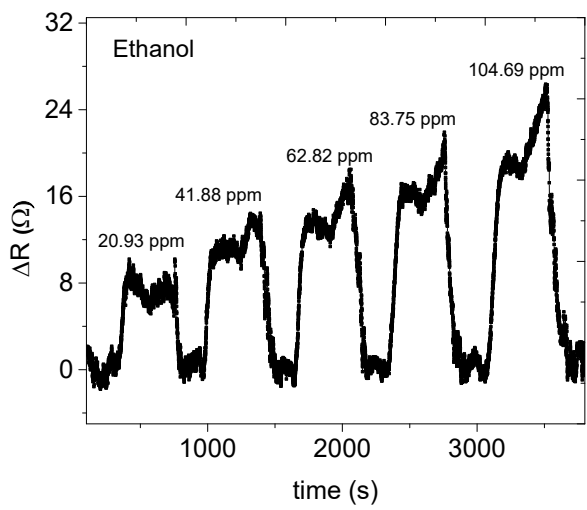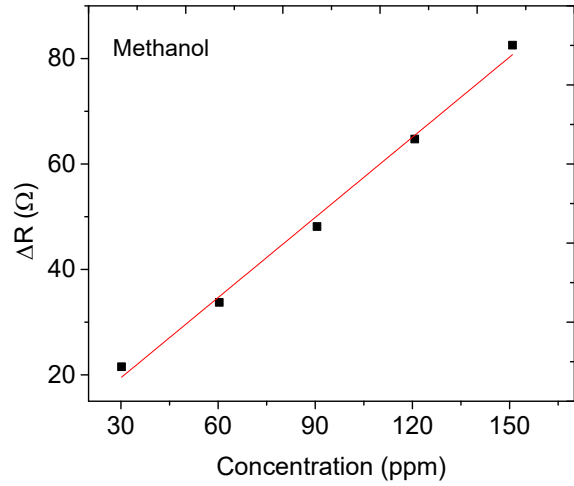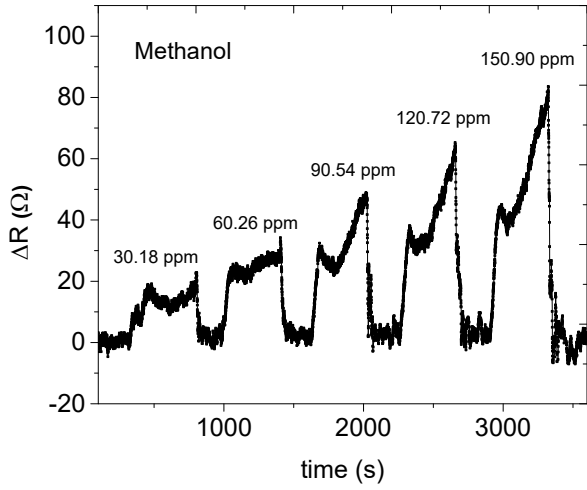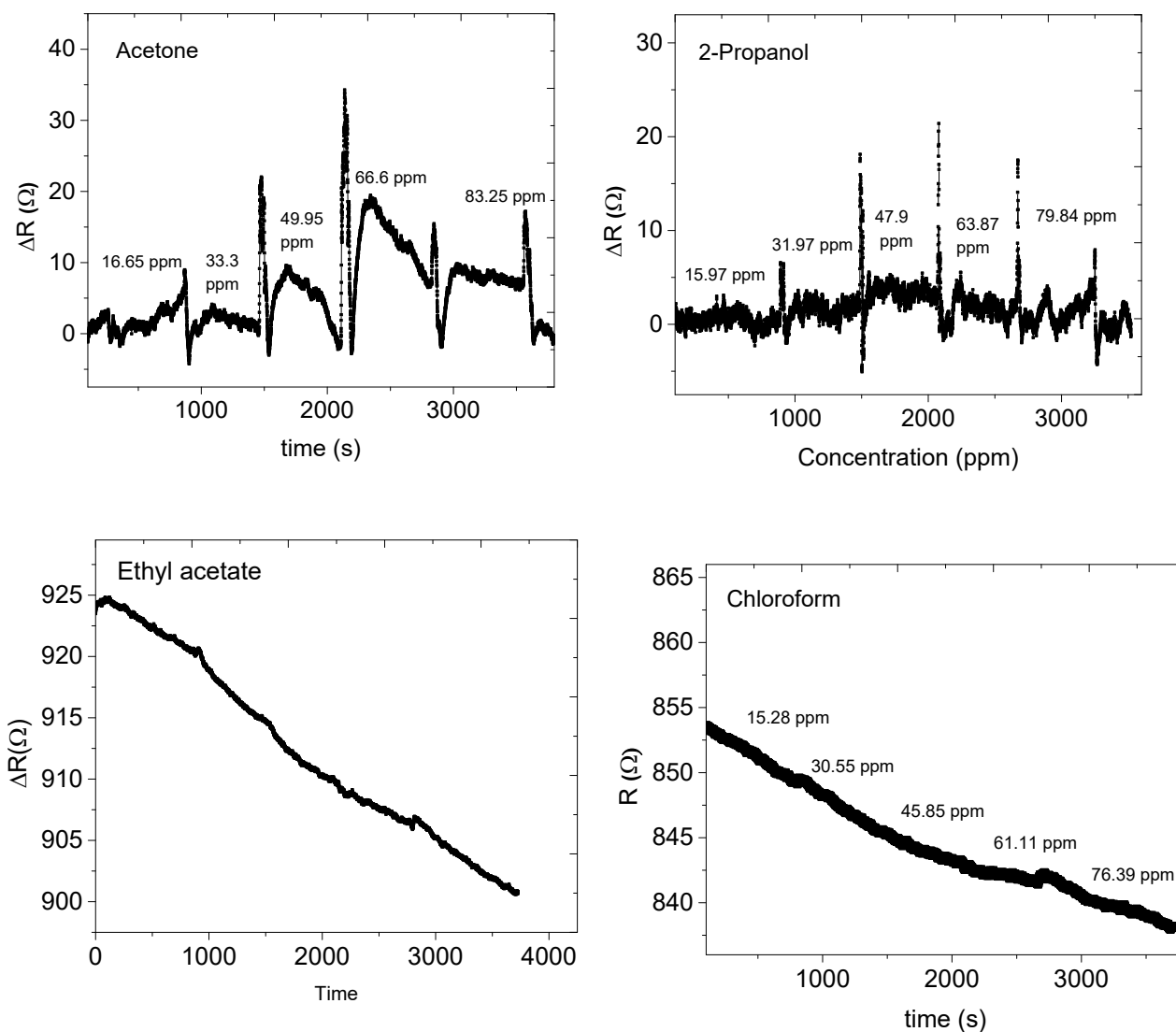
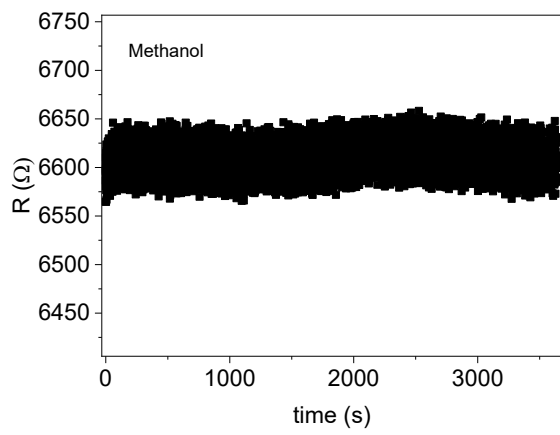(f) the sensor based on ZnO@ZIF-8 towards methanol

Fig. S6: Dynamic response and recovery curve of the sensor based on ZnO@ZIF-8