

Supporting Information

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VOCs sensor based on metal oxide nanofibrous membrane/QCM system prepared by electrospinning

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Figure S1. Schematic of a VOCs sensing system

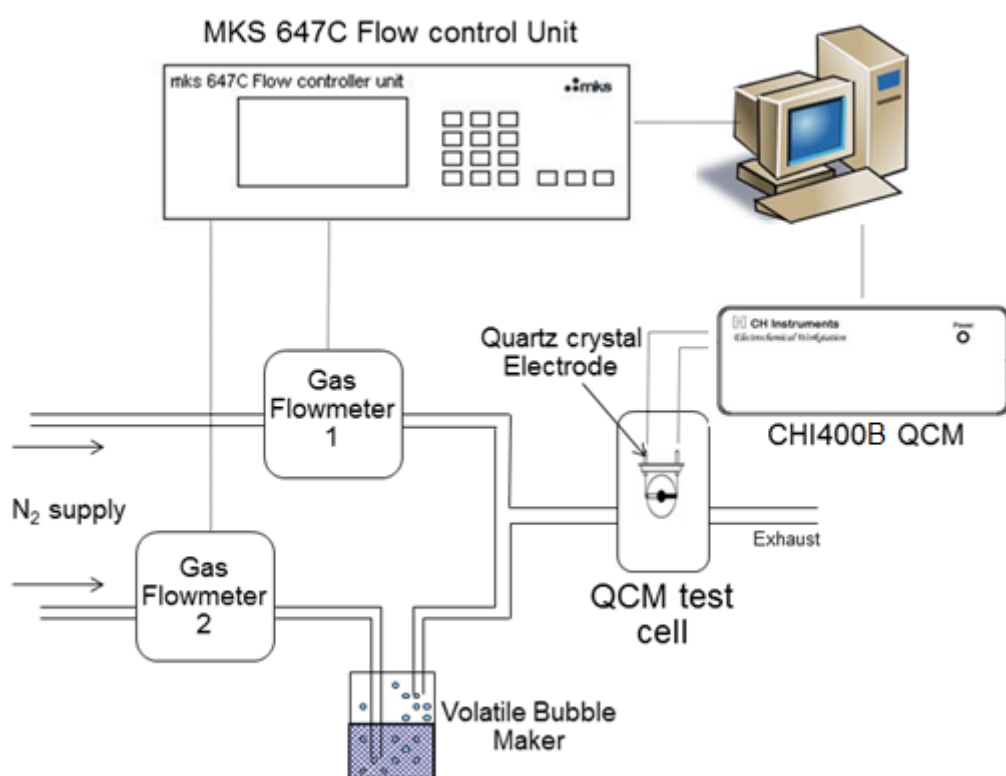


Figure S2. EDX spectra of electrospun (a) ZnO and (b) CeO₂/ZnO fiber

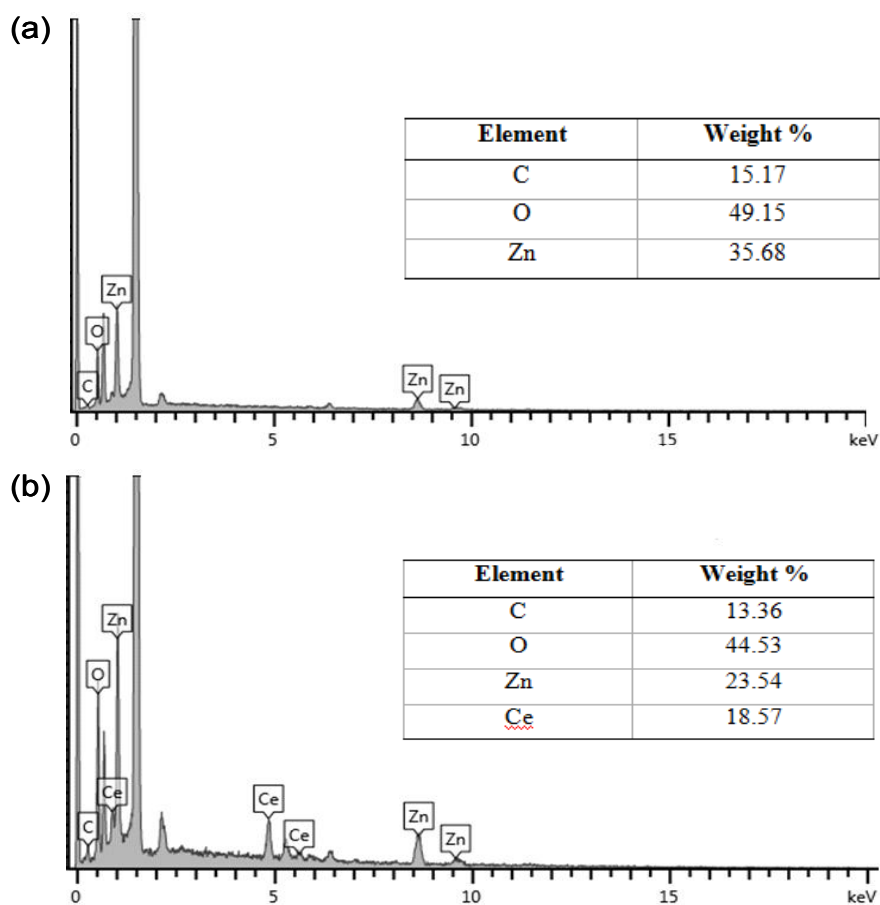
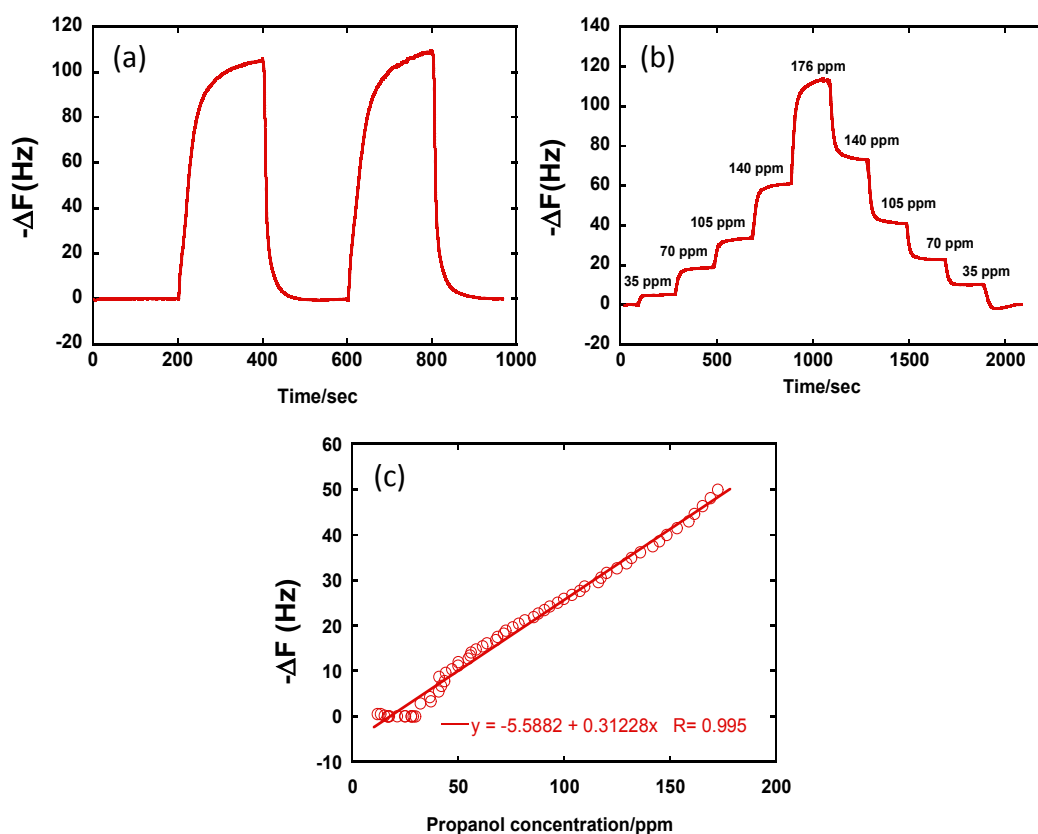
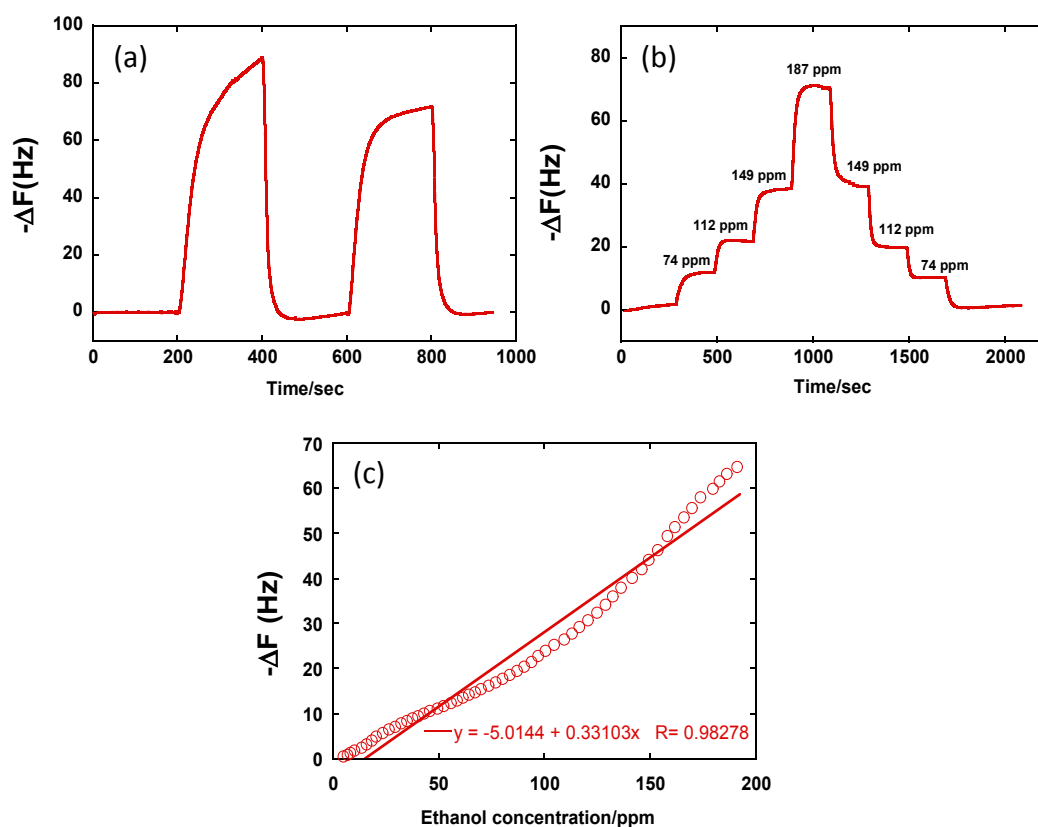


Figure S3. (a) The two cycles of QCM responses of ZnO nanofiber against the volatile vapor as a function of time. (b) The step responses for adsorption and desorption of the volatile with ZnO nanofiber coated QCM. (c) The linear adsorption response of ZnO nanofiber as a function of volatile concentration.

For 2-propanol;



For ethanol;



For dichloromethane;

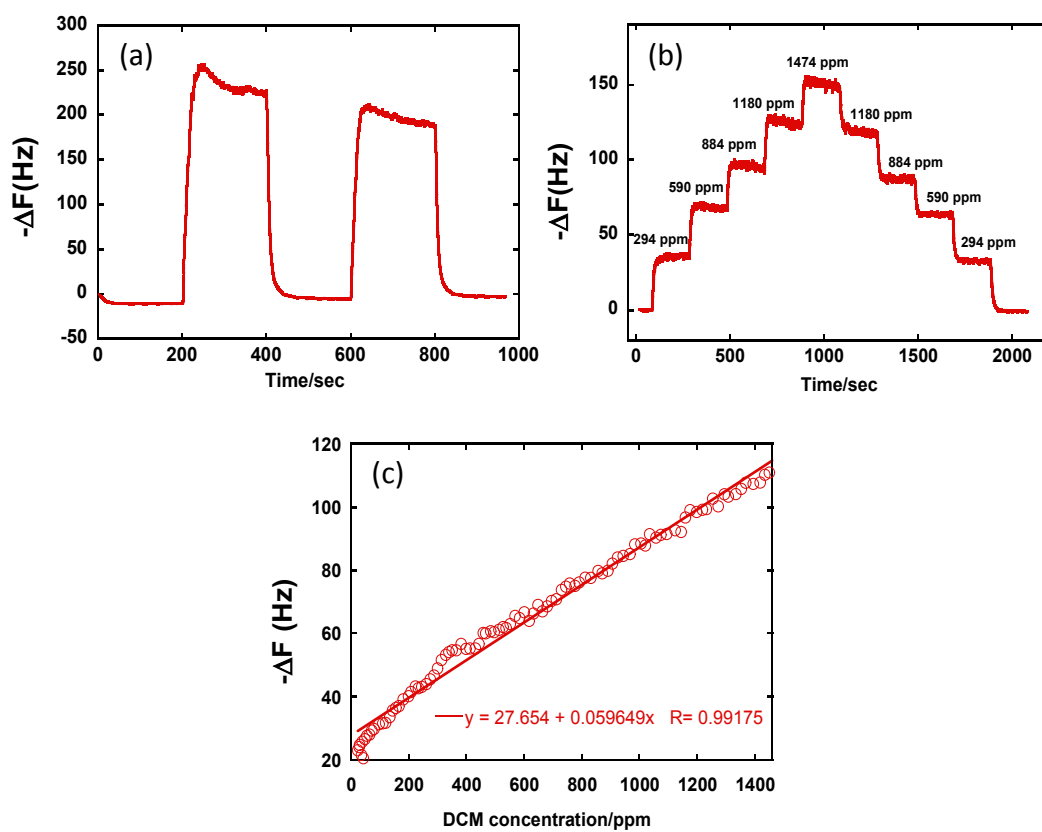
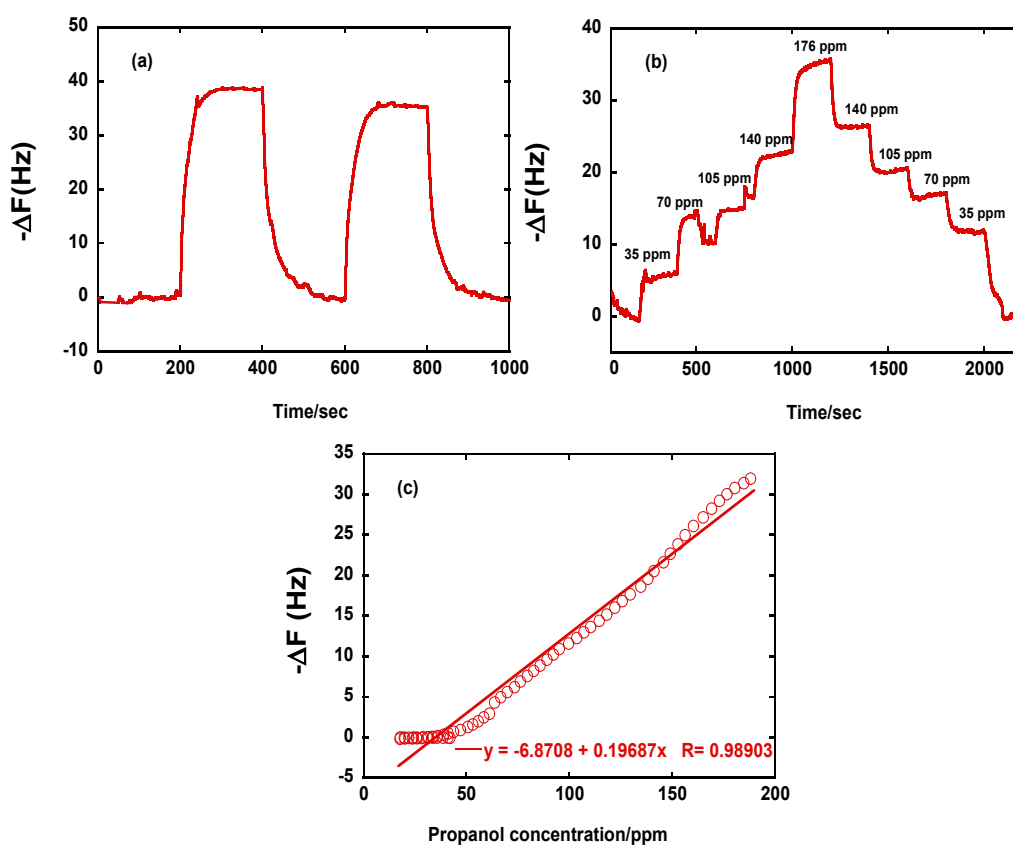
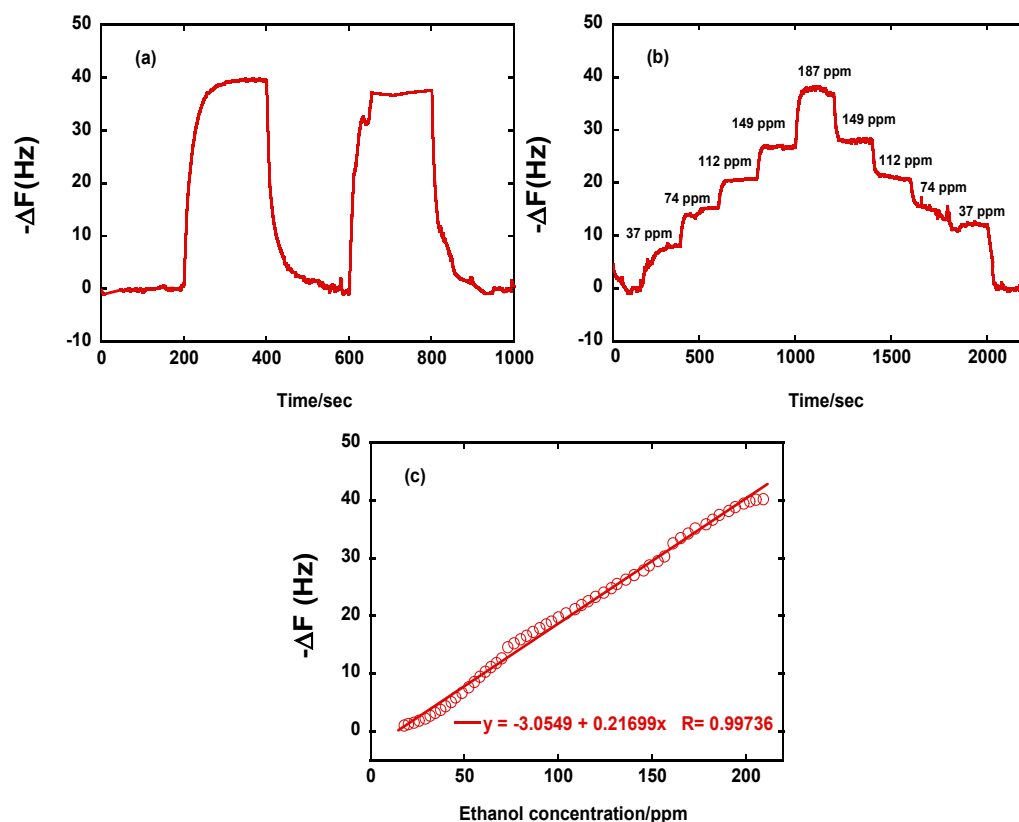


Figure S4. (a) The two cycles of QCM responses of CeO₂/ZnO nanofiber against the volatile vapor as a function of time. (b) The step responses for adsorption and desorption of the volatile with CeO₂/ZnO nanofiber coated QCM. (c) The linear adsorption response of CeO₂/ZnO nanofiber as a function of volatile concentration.

For 2-propanol;



For ethanol;



For dichloromethane;

