

Supplementary

All-Fabric-Based Flexible Capacitive Sensors with Pressure Detection and Non-Contact Instruction Capability

Xiaorui Ye ¹, Mingwei Tian ^{1,2,*}, Ming Li ¹, Hang Wang ^{1,2,*} and Yangcheng Shi ³

¹ Research Center for Intelligent and Wearable Technology, College of Textiles & Clothing, Qingdao University, Qingdao, Shandong 266071, P.R. China; yexiaorui19@126.com (X.Y.); lm9609@163.com (M.L.)

² State Key Laboratory of Bio-Fibers and Eco-Textiles, Collaborative Innovation Center for Eco-textiles of Shan-dong Province and the Ministry of Education, Intelligent Wearable Engineering Research Center of Qingdao, Qingdao University, Qingdao, Shandong 266071, P.R. China

³ Anhui Disheng weaving & finishing Co., Ltd., Bozhou, Anhui 233600, P.R. China; shiyangcheng@163.com

* Correspondence: mwitian@qdu.edu.cn (M.T.); wanghang@qdu.edu.cn (H.W.)

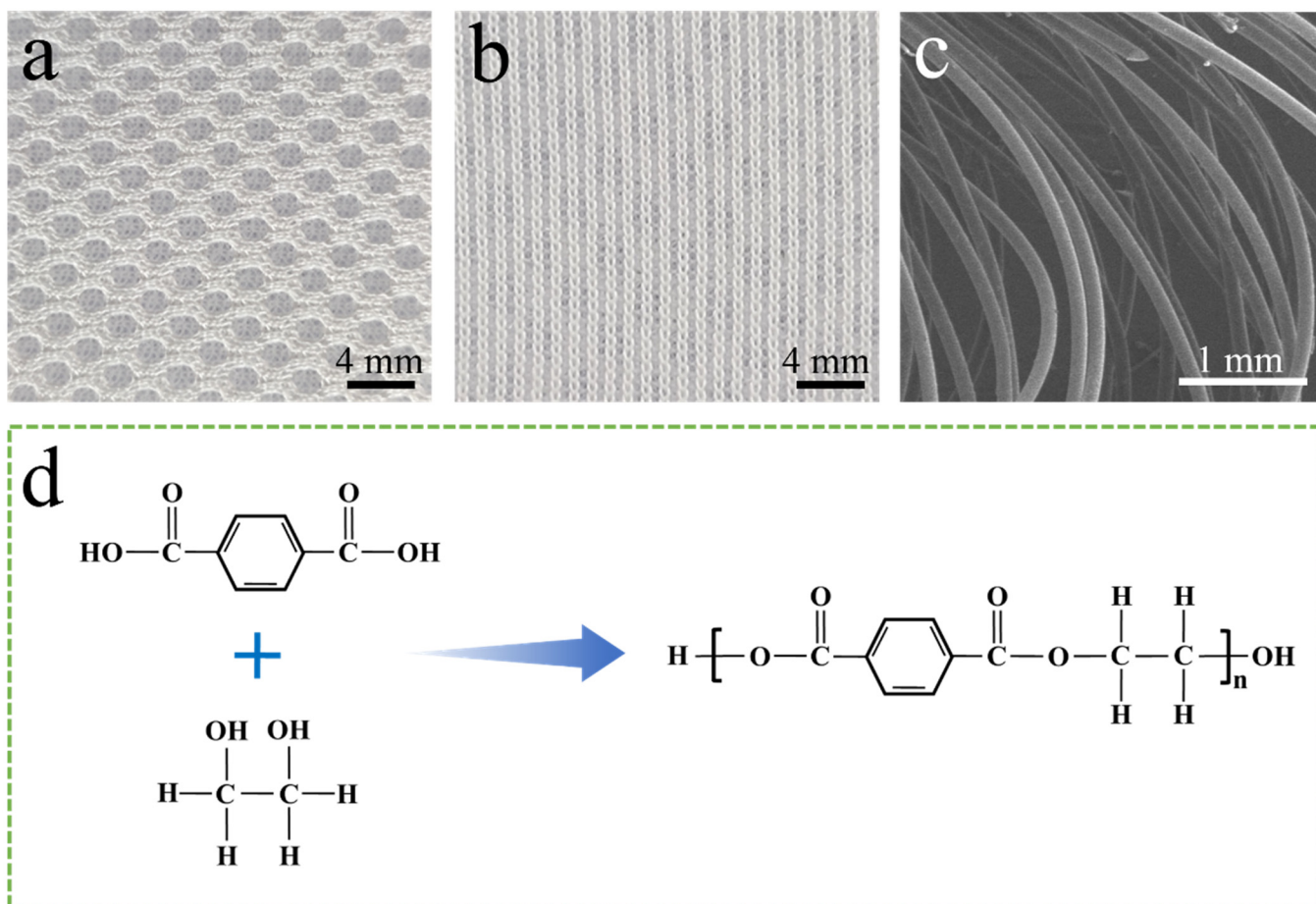


Figure S1. (a) Upper honeycomb structure, (b) lower knitted structure and (c) support yarns FESEM images of the HF.

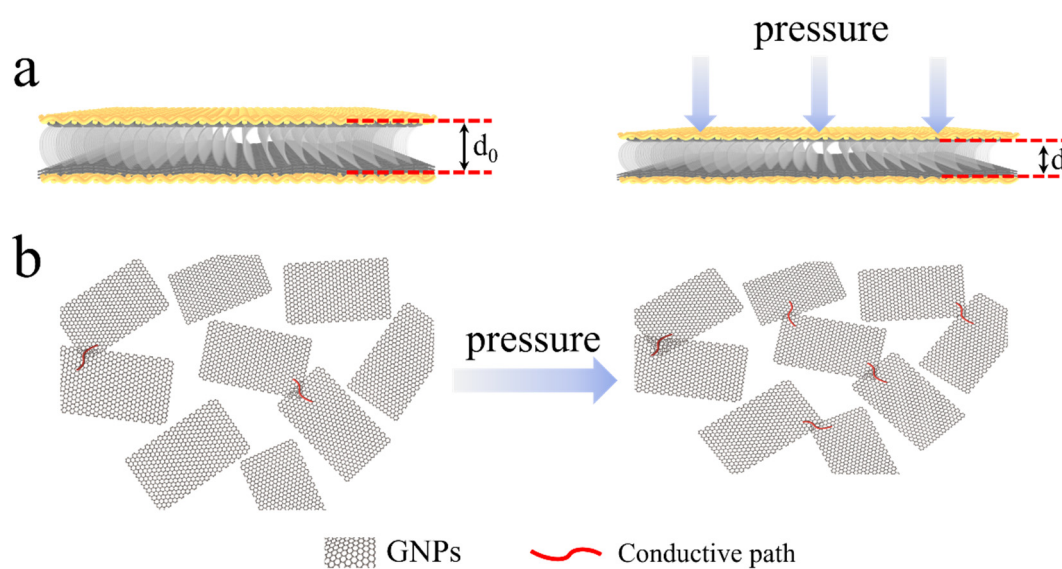


Figure S2. The mechanism diagram of pressure sensing. (a) The variation of electrode distance (d) under external pressure. (b) Schematic illustration of the hybrid conductive network constructed by GNPs.

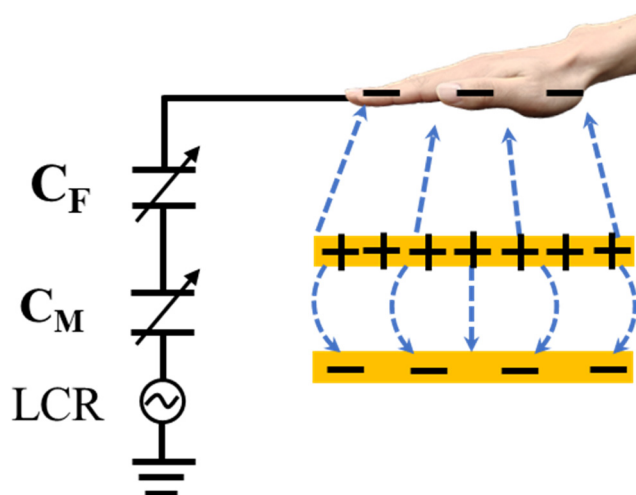


Figure S3. The mechanism diagram of non-contact sensing.