

Supplementary Information

Solvent-free fabrication of paper based all-carbon disposable multifunctional sensors and passive electronic circuits

Srinivasulu Kanaparthi and Sushmee Badhulika*

¹Department of Electrical Engineering, Indian Institute of Technology Hyderabad, Kandi, 502285, India.

*Corresponding Author: Email: sbadh@iith.ac.in

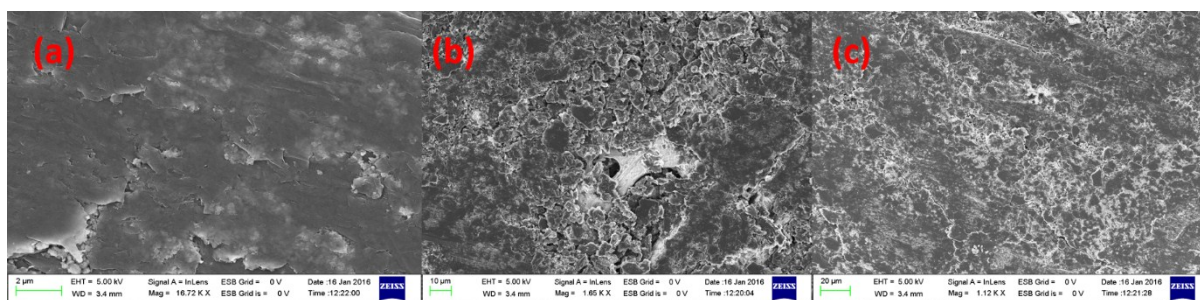


Figure S1: SEM images of graphite on paper (GoP) at different magnification levels

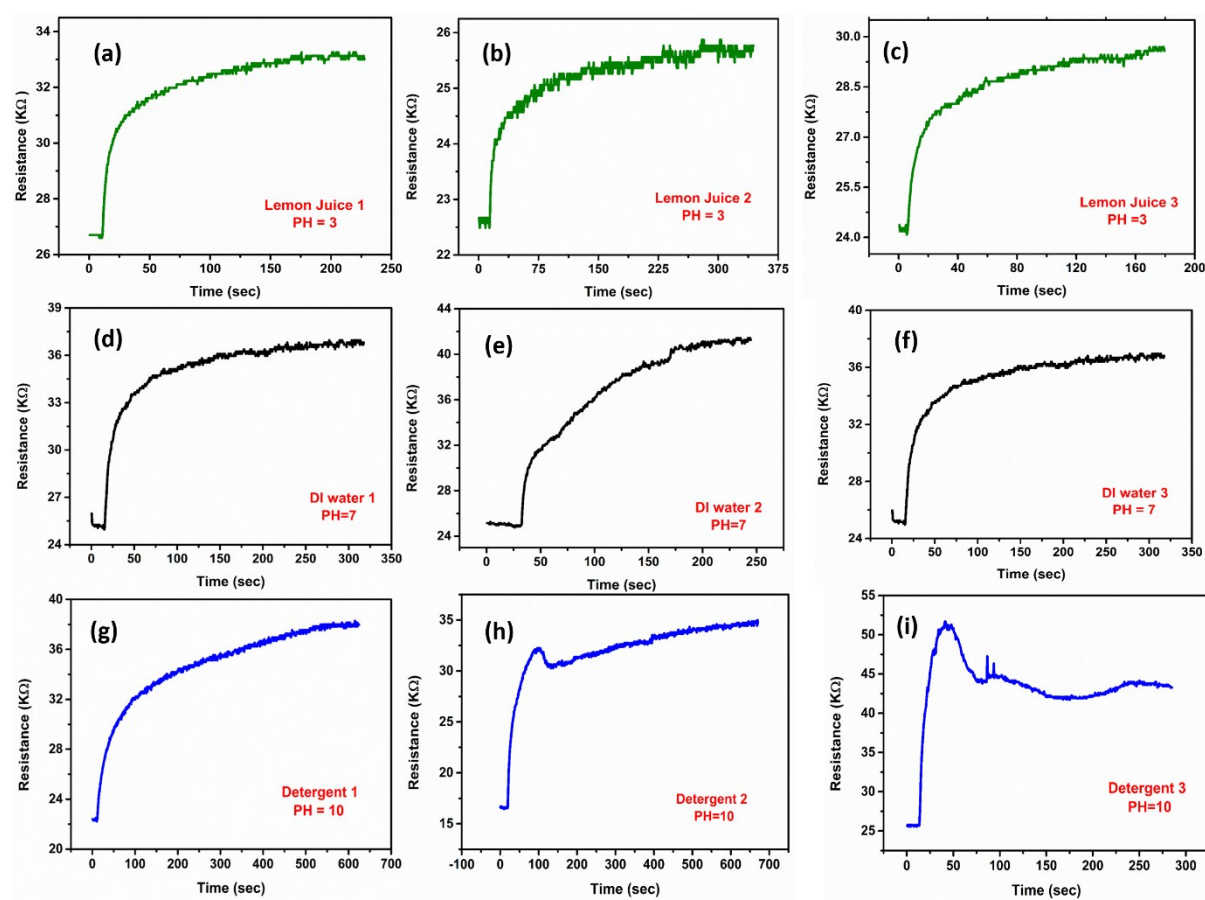


Figure S2: Response of PH sensor to (a),(b),(c) lemon juice (PH=3.5); (d),(e),(f) DI water (PH=7) and (f),(g),(h) detergent (PH=10).

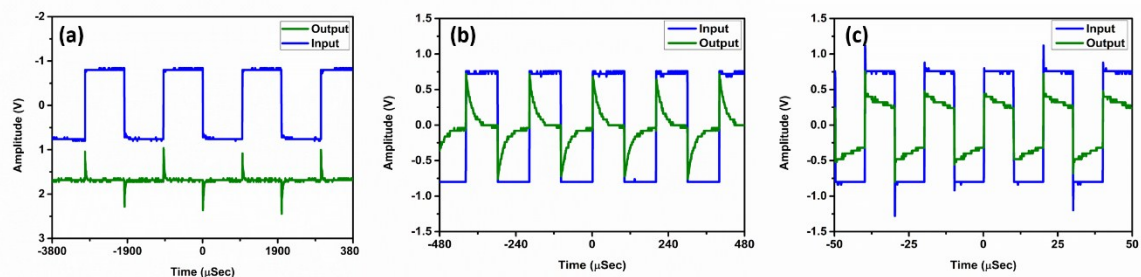


Figure S3: High pass filter (Integrator) input (blue) and output (green) at (c) 500 Hz, (d) 5 kHz and (e) 50 kHz

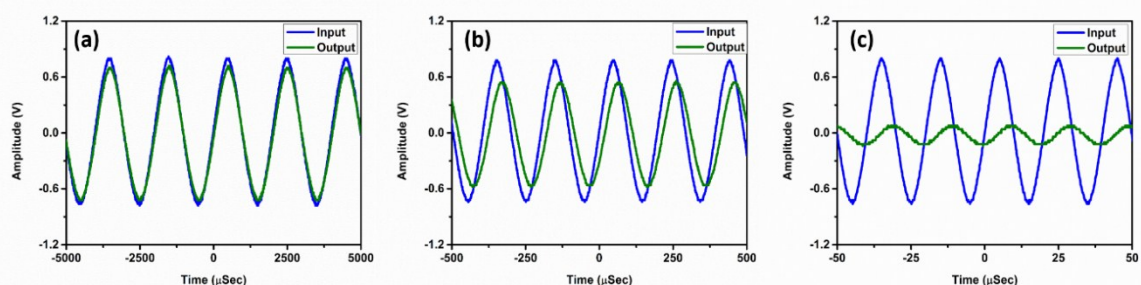


Figure S4: Frequency response of low pass filter to sinusoidal input at frequency (a) 500 Hz, (b) 5 kHz and (c) 50 kHz

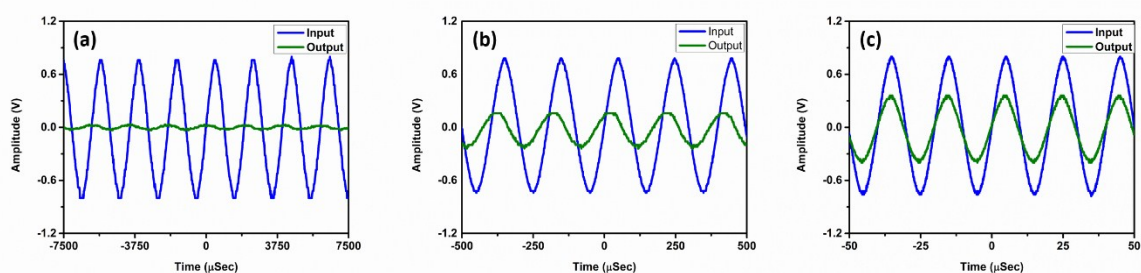


Figure S5: Frequency response of high pass filter to sinusoidal input at frequency (a) 500 Hz, (b) 5 kHz and (c) 50 kHz