



Supporting Information

for

Bolometric IR photoresponse based on a 3D micro-nano integrated CNT architecture

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Beilstein J. Nanotechnol. **2024**, *15*, 1030–1040. [doi:10.3762/bjnano.15.84](https://doi.org/10.3762/bjnano.15.84)

Additional experimental data

SEM images of further devices

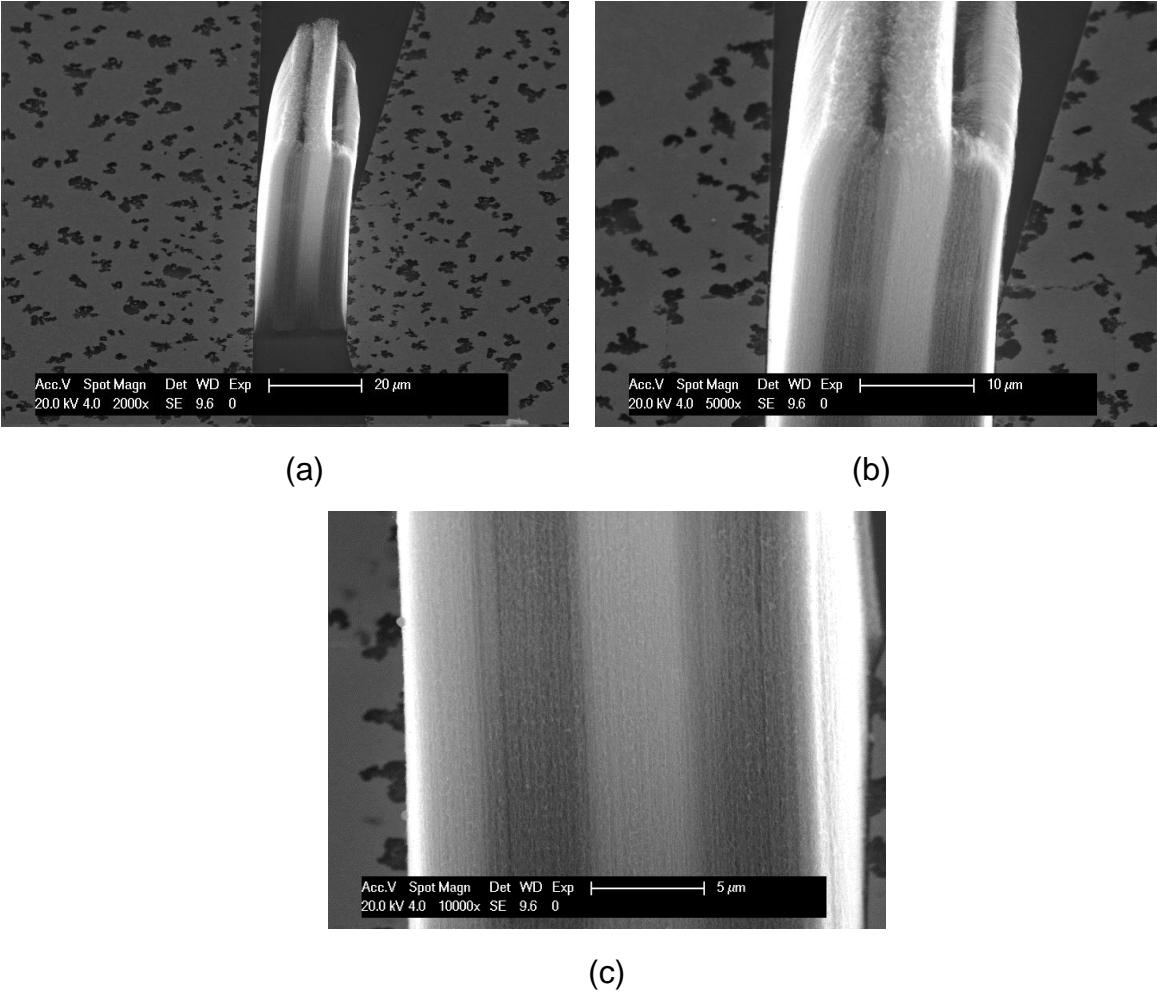


Figure S1: (a) SEM images of the additional device 3. (b,c) Device 3 with higher magnifications.

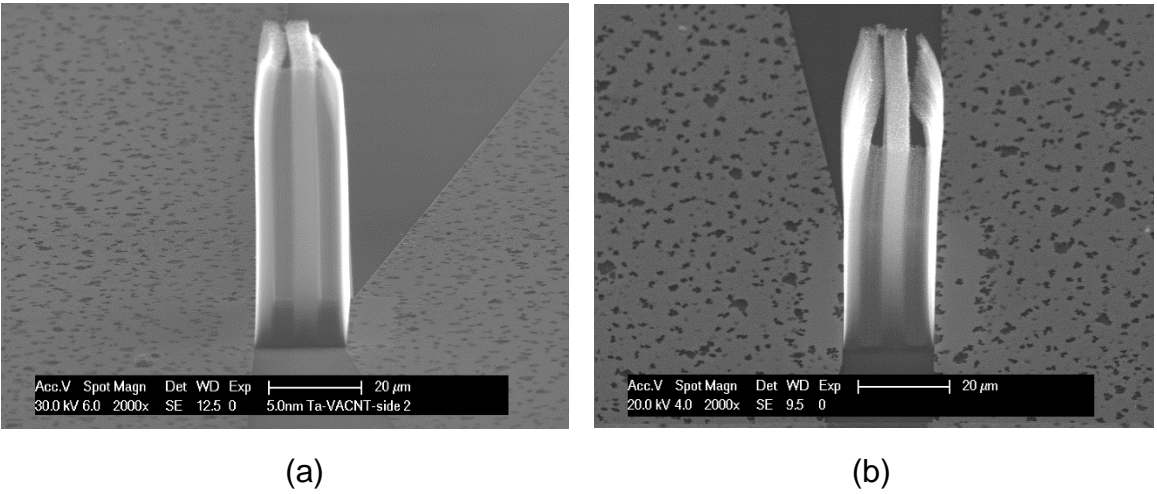


Figure S2: (a) SEM images of device 4 and (b) device 5.

Single oscilloscope measurements from device 3 using direct Au whisker contacts (configuration 2).

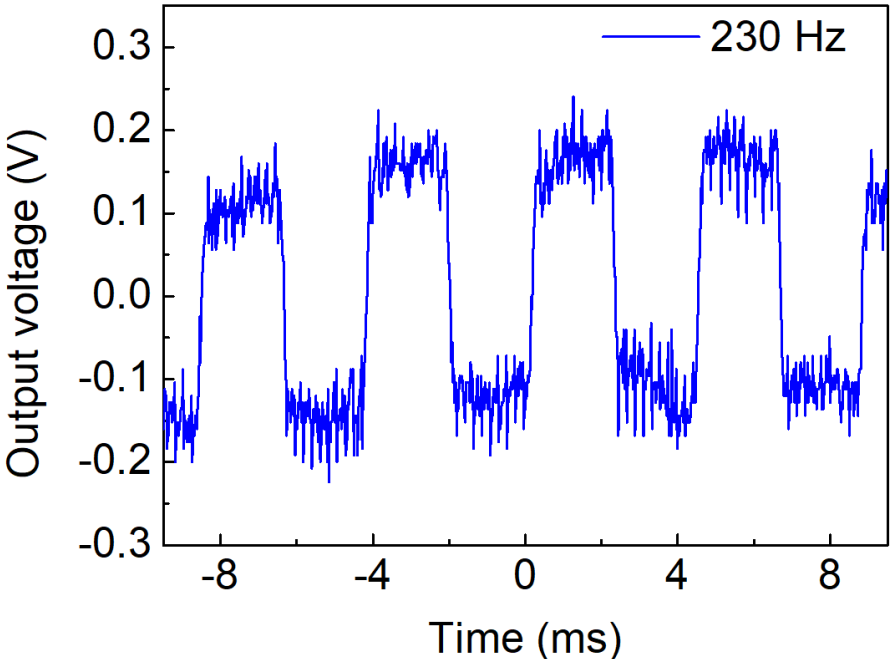


Figure S3 (a): Single response measurement of device 3 at 230 Hz chopping frequency.

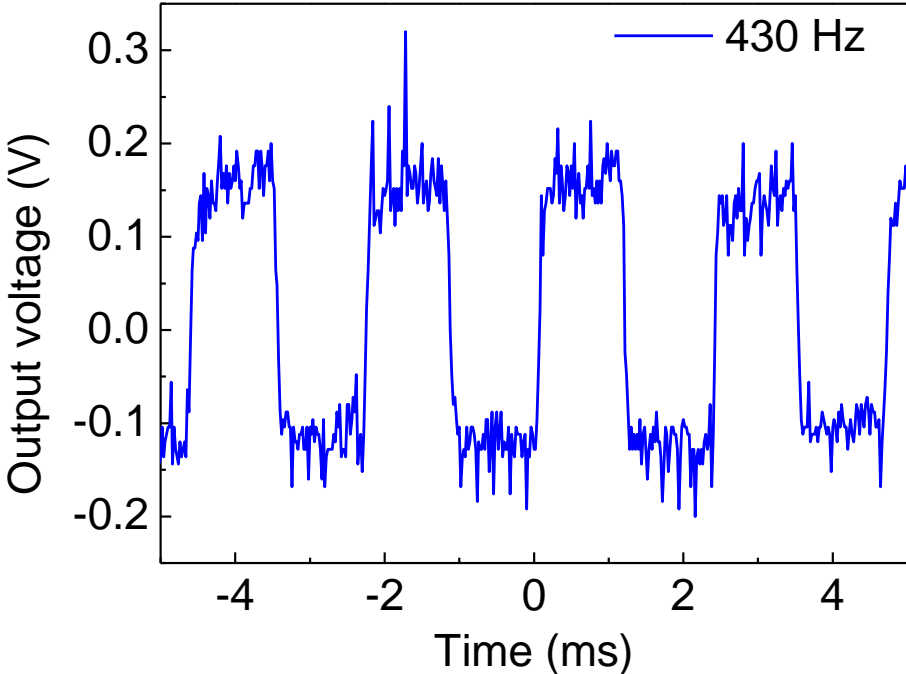


Figure S3 (b): Single response measurement of device 3 at 430 Hz chopping frequency.

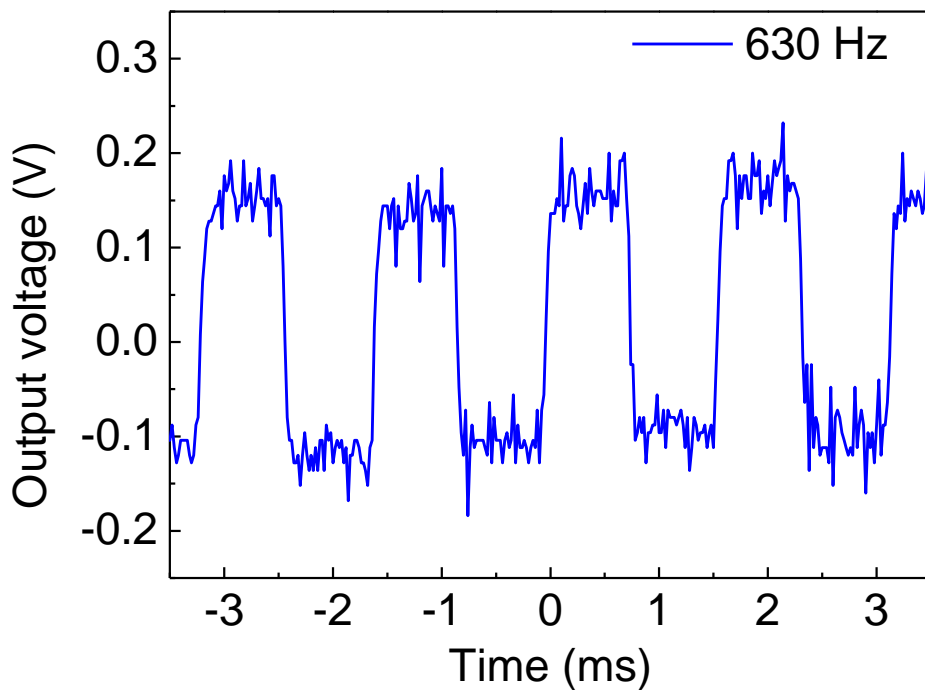


Figure S3 (c): Single response measurement of device 3 at 630 Hz chopping frequency.

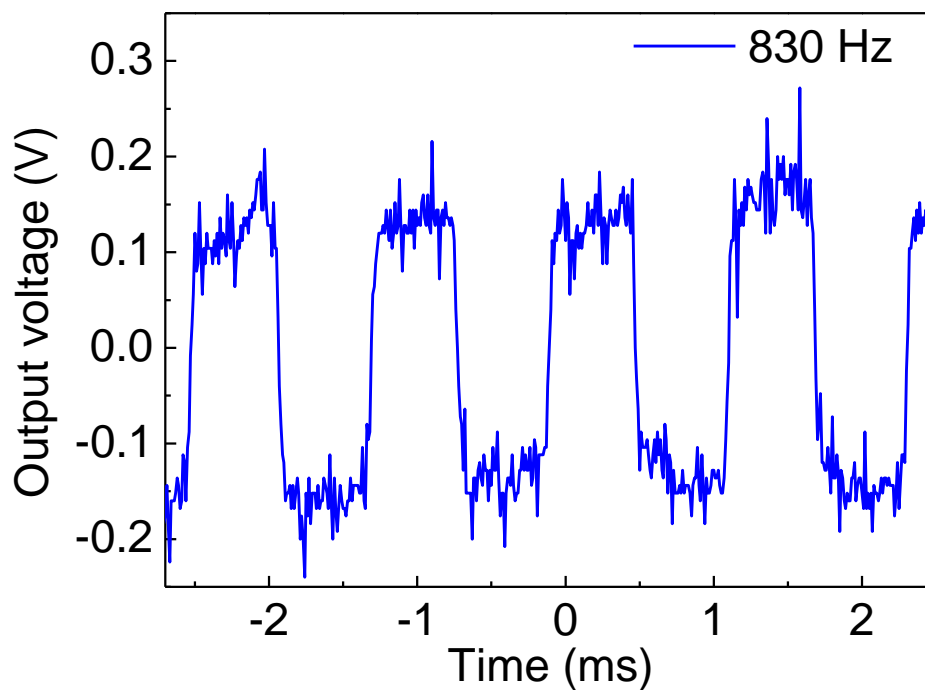


Figure S3 (d): Single response measurement of device 3 at 830 Hz chopping frequency.

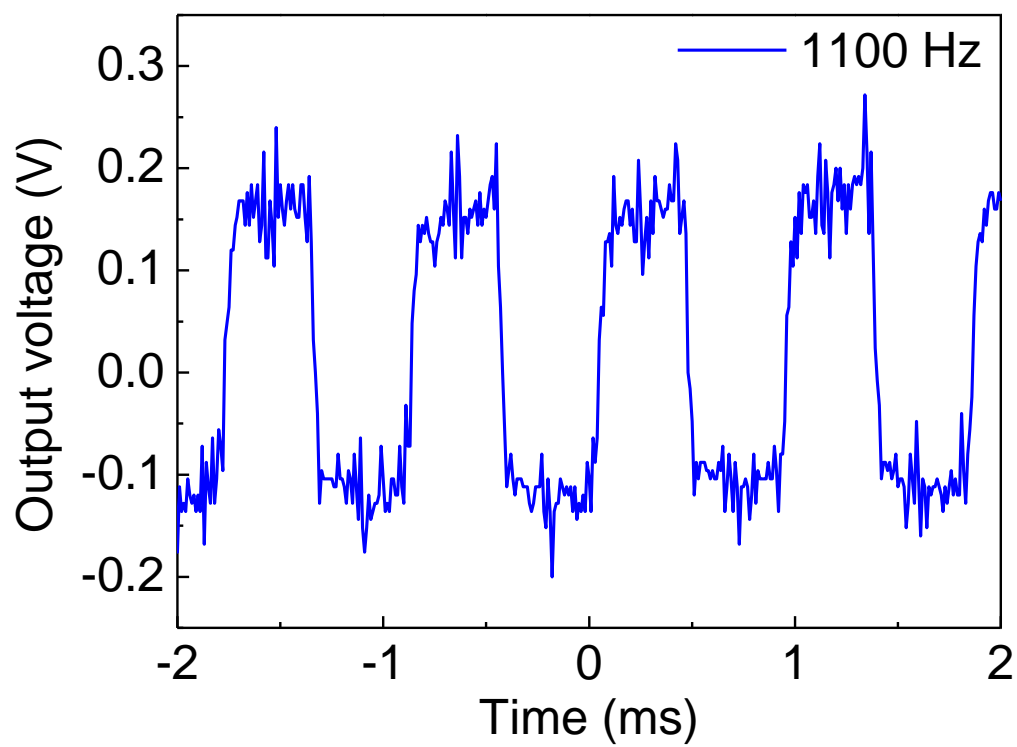


Figure S3 (e): Single response measurement of device 3 at 1100 Hz chopping frequency.

Single oscilloscope measurements from device 4 using direct Au whisker contacts (configuration 2).

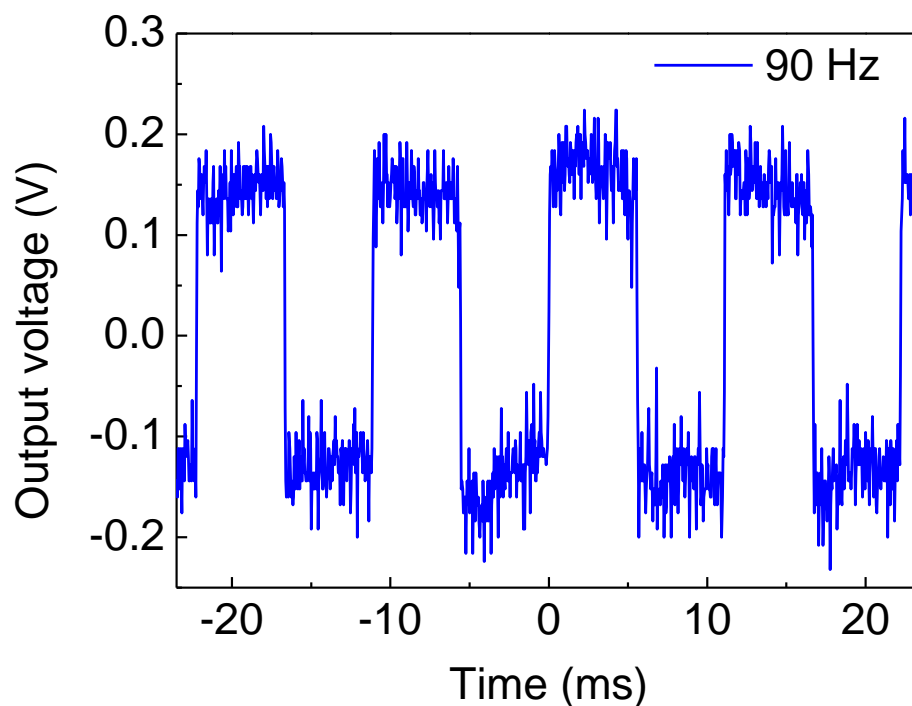


Figure S4 (a): Single response measurement of device 4 at 90 Hz chopping frequency.

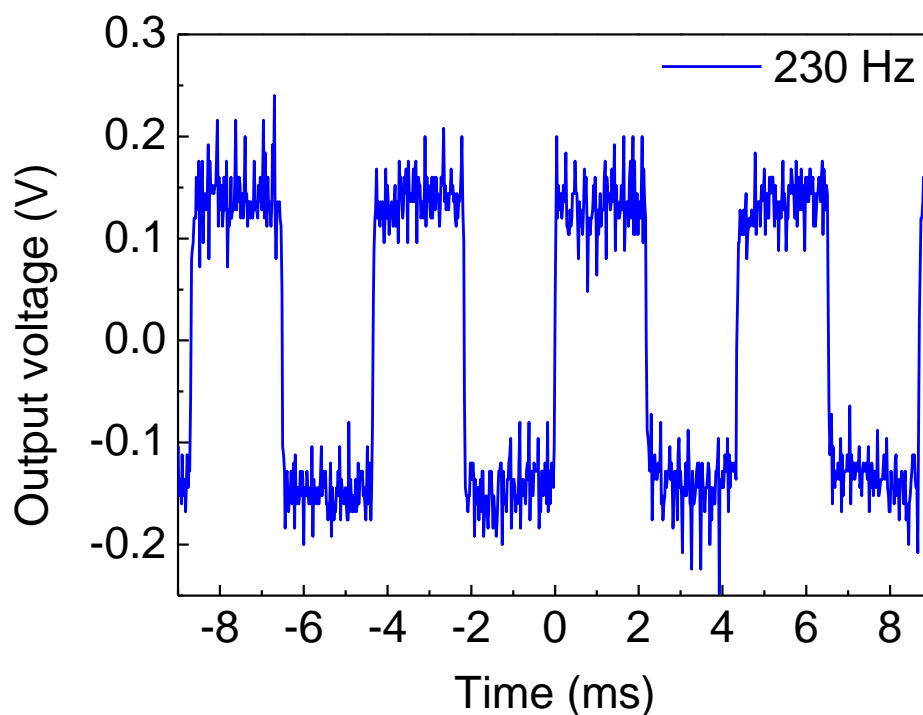


Figure S4 (b): Single response measurement of device 4 at 230 Hz chopping frequency.

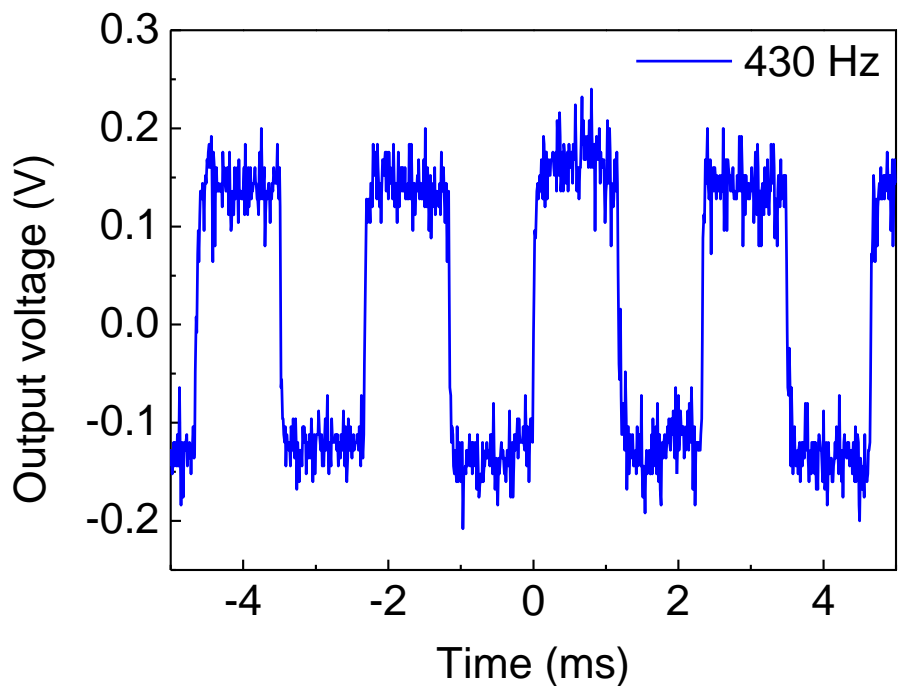


Figure S4 (c): Single response measurement of device 4 at 430 Hz chopping frequency.

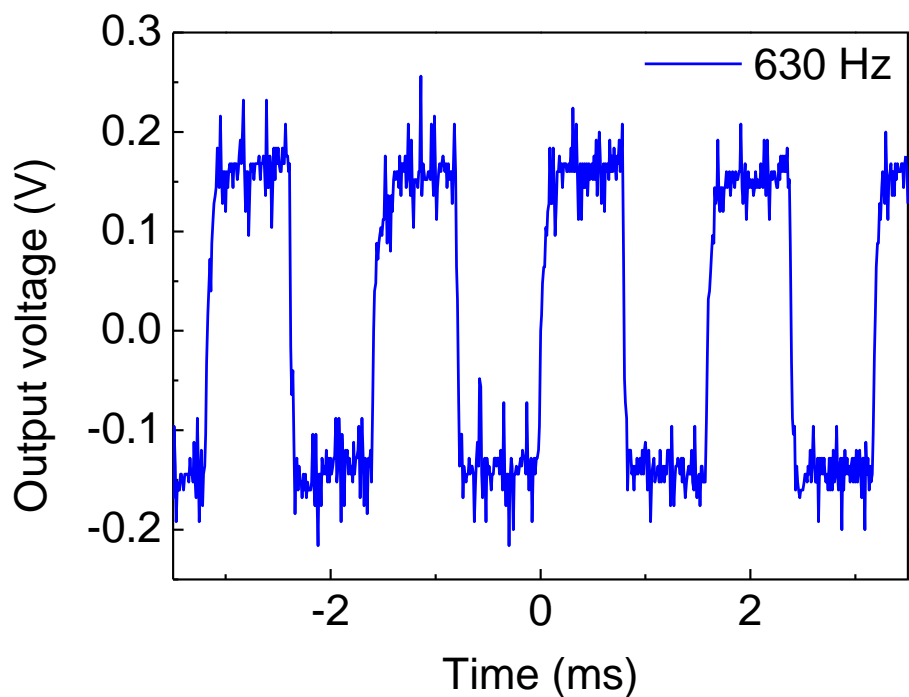


Figure S4 (d): Single response measurement of device 4 at 630 Hz chopping frequency.

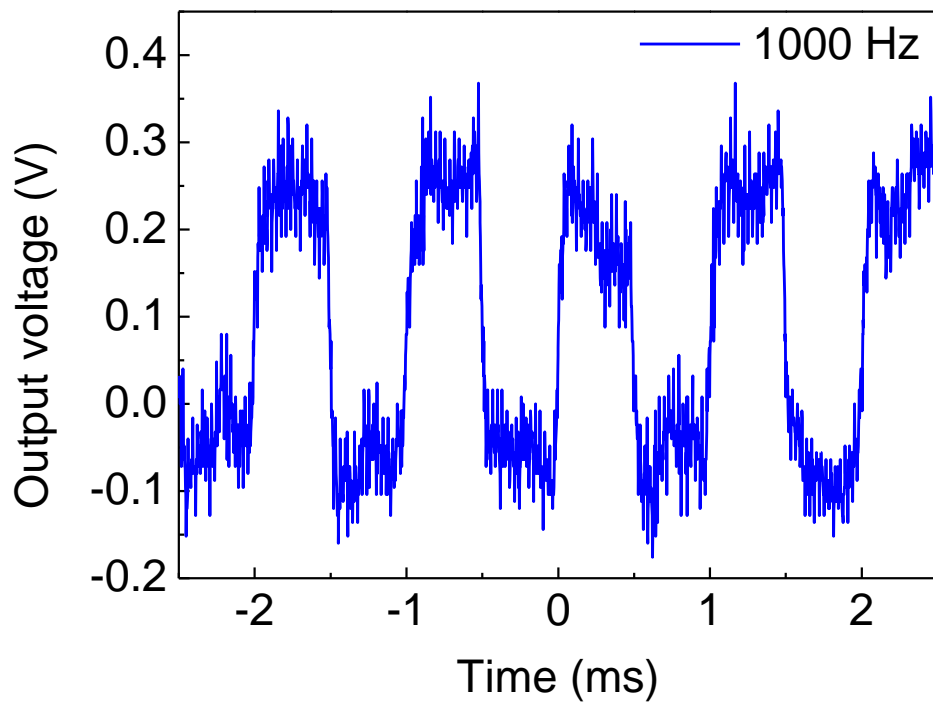


Figure S4 (e): Single response measurement of device 4 at 1000 Hz chopping frequency.

Single oscilloscope measurements from device 5 using direct Au whisker contacts (configuration 2).

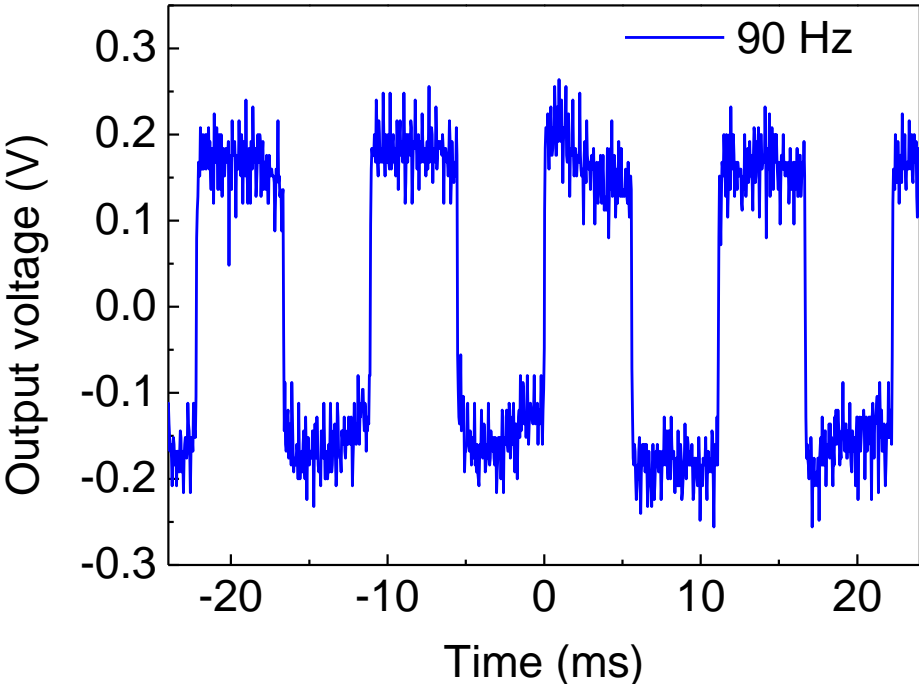


Figure S5 (a): Single response measurement of device 5 at 90 Hz chopping frequency.

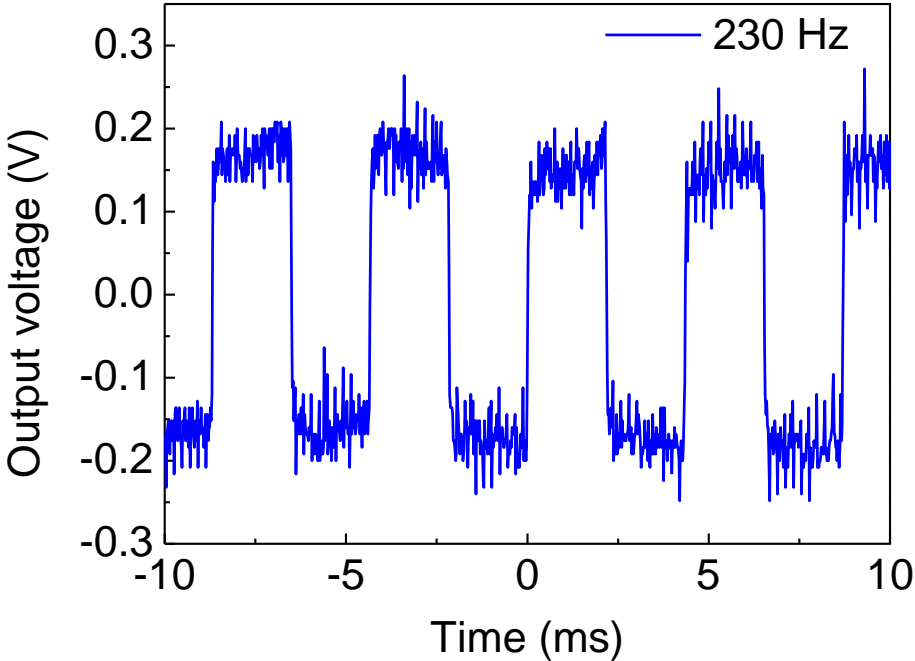


Figure S5 (b): Single response measurement of device 5 at 230 Hz chopping frequency.

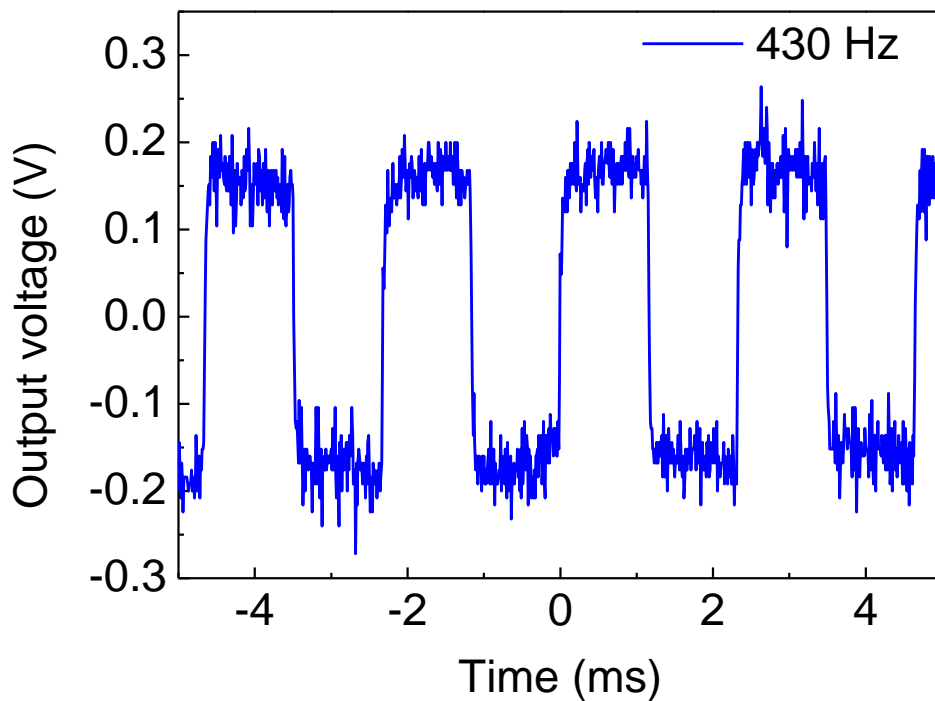


Figure S5 (c): Single response measurement of device 5 at 430 Hz chopping frequency.

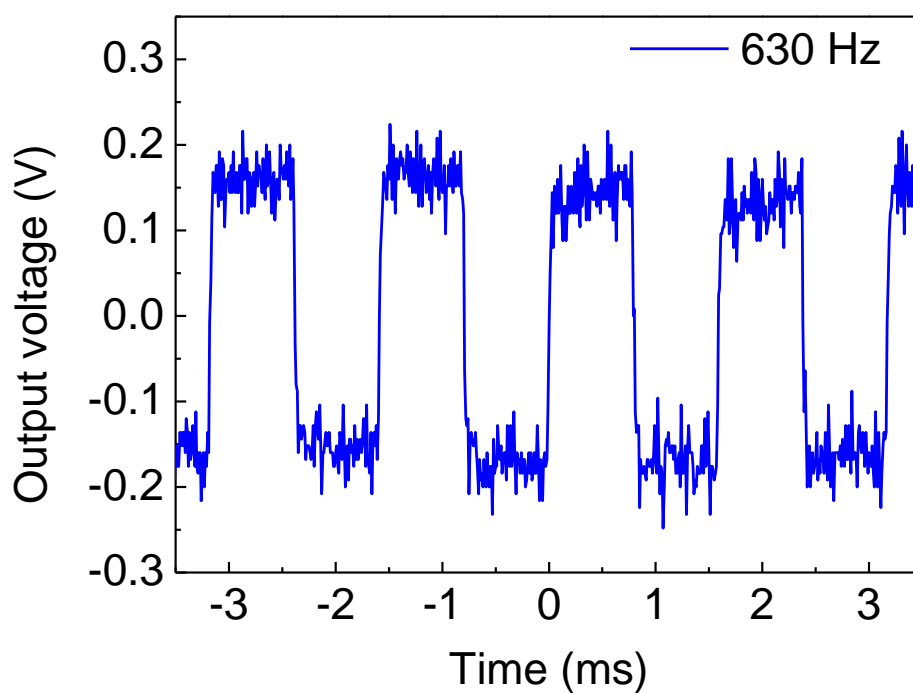


Figure S5 (d): Single response measurement of device 5 at 630 Hz chopping frequency.

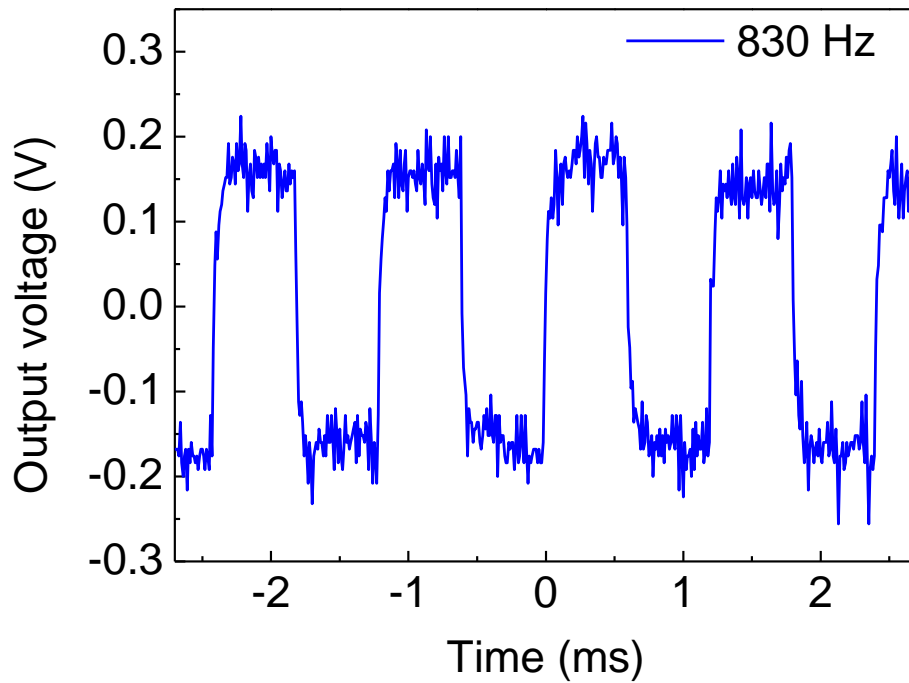


Figure S5 (e): Single response measurement of device 5 at 830 Hz chopping frequency.

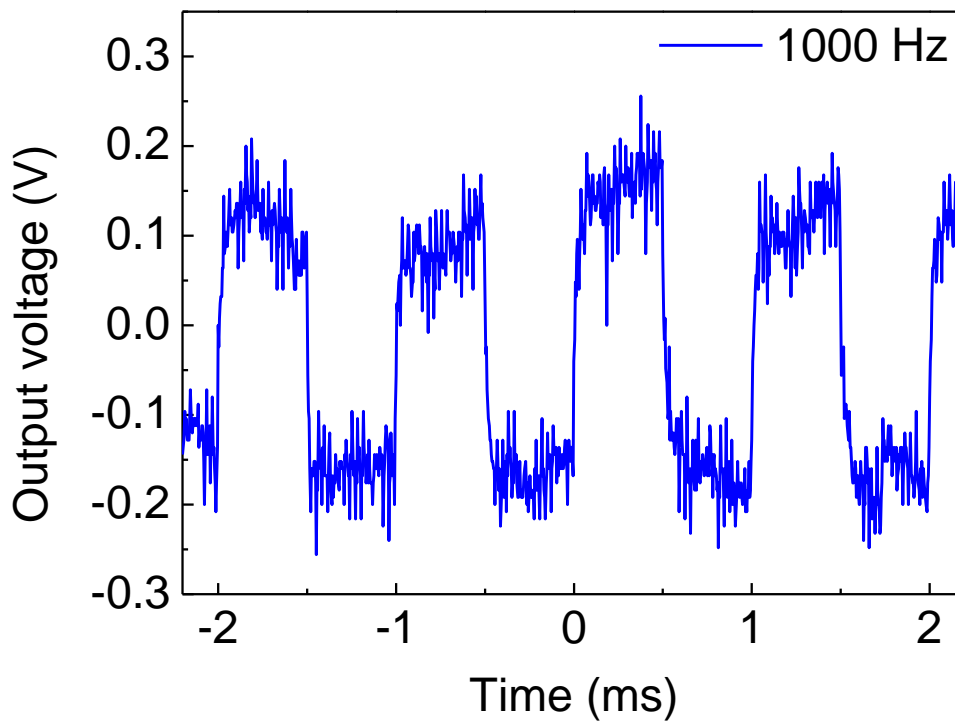


Figure S5 (f): Single response measurement of device 5 at 1000 Hz chopping frequency.