

Supporting Information

Flexible Piezoresistive Pressure Sensor Comprising Microstructure Printed with Poly (3,4-Ethylenedioxythiophene): Poly (Styrenesulfonate) Copolymers@ Graphene Hybrid Ink

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1. Figures and Table

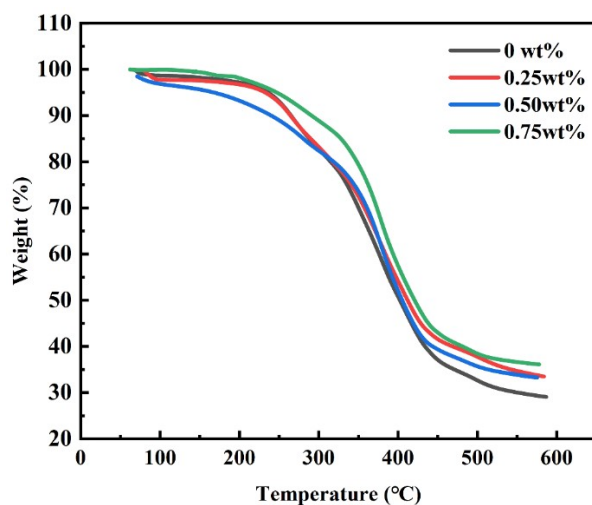


Fig. S1 The TGA of PEDOT: PSS/Gr inks with different concentration

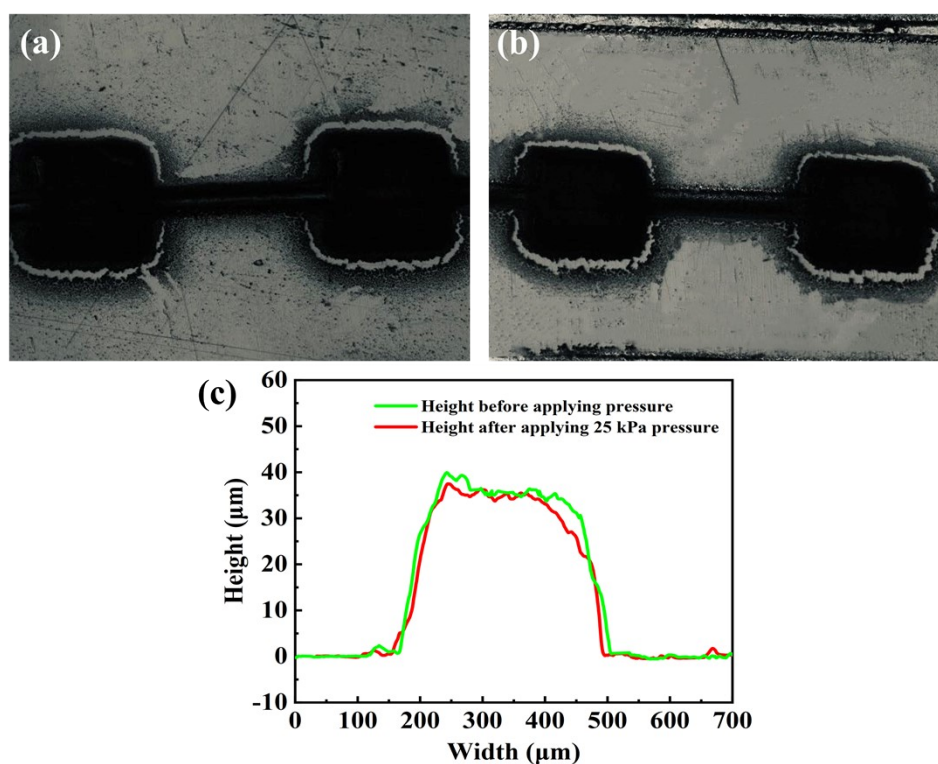


Fig. S2 Structure stability of the printed PEDOT: PSS/Gr composite microstructure.

- a) Optical images of microstructures printed by PEDOT: PSS/Gr before applying pressure; b) Optical images of microstructures printed by PEDOT: PSS/Gr after applying 25 kPa pressure; c) Heights of microstructures printed by PEDOT: PSS/Gr before applying pressure and after applying 25 kPa pressure.

Table S1 The overall performance of the pressure sensors based on different materials

No.	Materials	Sensitivity /kPa ⁻¹	Detection range /kPa	Response time /ms	Relaxation time /ms	Ref.
1	PC/PDMS	15.63	0-20	65	75	Ref.#1
2	PEDOT: PSS/PI	0.021 (0-1 kPa) 0.054 (1-7 kPa) 0.019 (7-17 kPa)	0-17	N/A	N/A	Ref.#2
3	rGO	0.82 (0-0.6 kPa)	0.007-0.8	25	N/A	Ref.#3
4	PEDOT:PSS/ITO	0.70	0-20	N/A	N/A	Ref.#4
5	PEDOT:PSS/EG	21 (0-100 Pa) 0.016 (0.1-1 kPa)	0-1	90	N/A	Ref.#5
6	PEDOT:PSS	0.59	0-20	/	3200	Ref.#6
7	PEDOT:PSS/PDMS	2.44	0-6	179	120	Ref.#7
8	PEDOT:PSS/CNT	0.0004-0.0197	0-100	170	80	Ref.#8
9	PEDOT: PSS/CNT	0.0335 (0-20 kPa) 0.0083 (20-40 kPa) 0.0018 (40-100 kPa)	0-100	134	97	Ref.#9
10	PEDOT: PSS/MXene	0.27 (0-2 kPa) 0.031 (2-11 kPa)	0-11	106	95	Ref.#10
11	PEDOT: PSS/Gr	0.49	0-25	51	42	This work

2. References

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