

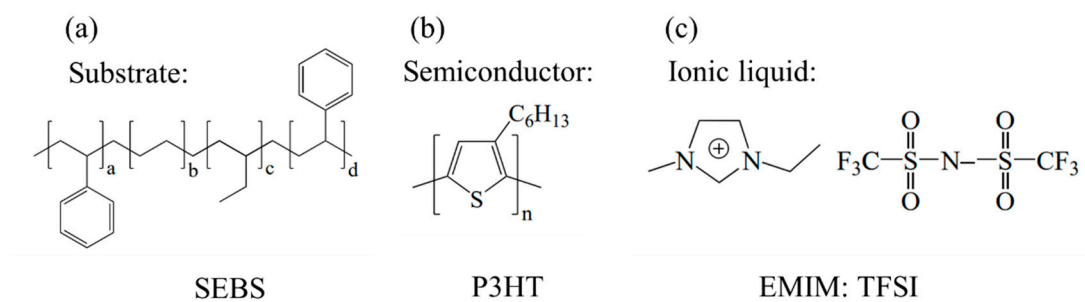
## **Supporting Information**

# **Breathable and stretchable organic electrochemical transistors with laminated porous structures for glucose sensing**

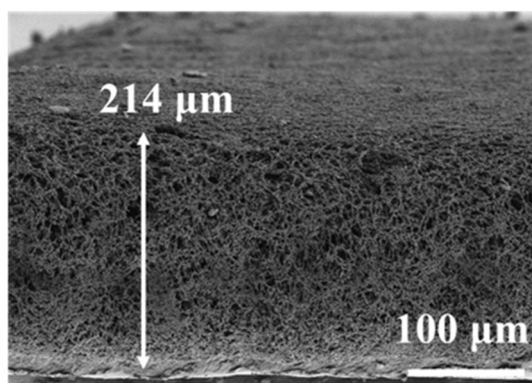
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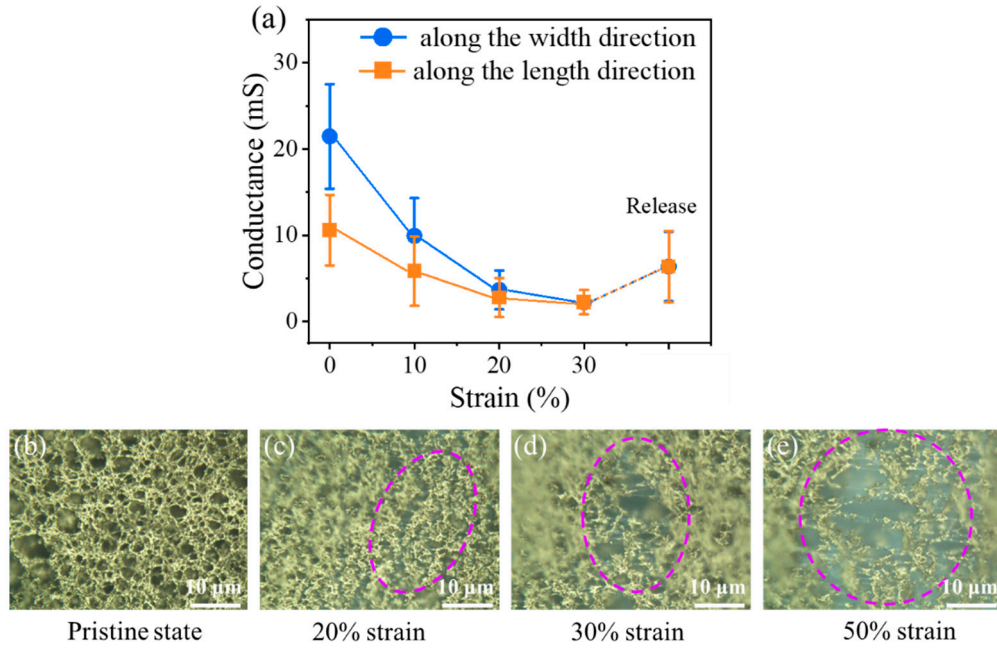
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**Figure S1.** The molecular structures of P3HT, SEBS and EMIM: TFSI.



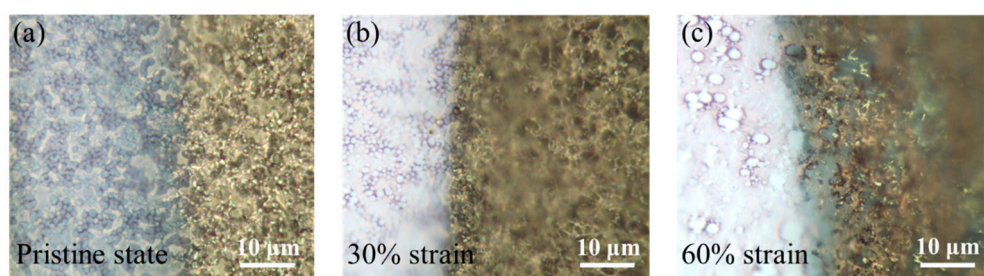
**Figure S2.** The Cross-sectional SEM image of SEBS substrate.



**Figure S3.** Mechanical characteristics of Au electrodes. (a) Conductance of porous network Au electrodes under different strains (10%, 20%, 30% strain and release) along the channel length and width directions; (b-e) the optical images of porous network Au electrodes under different strains (0%, 20%, 30% and 50% strain).

**Table S1.** Conductance of porous network Au electrodes under different strains.

Direction of strain	Tensile strength (%)	Conductance (mS)
Length direction	0	10.61±4.1
	10	5.85±4.02
	20	2.79±2.26
	30	2.26±1.43
	Release	6.38±4.15
Width direction	0	21.47±6.05
	10	9.95±4.37
	20	3.67±2.26
	30	2.23±0.41
	release	6.39±4.03



**Figure S4.** The optical images of the interface between P3HT/SEBS film and Au electrode under 0%, 30% and 60% strain.