Supporting Information

Skin-Inspired Pressure Sensor with MXene/P(VDF-TrFE-CFE) as Active Layer for Wearable Electronics

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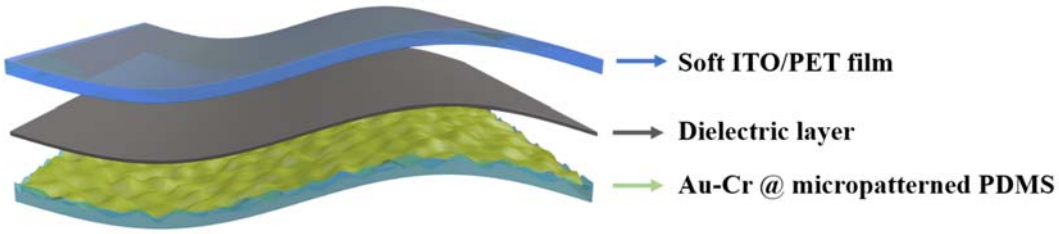

Figure S1. Schematic illustration describing the formation of the pressure sensor.

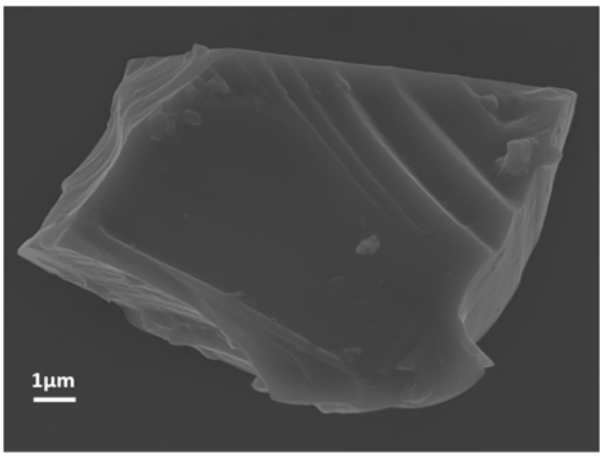

Figure S2. SEM image of Ti_3AlC_2 (MAX phase).

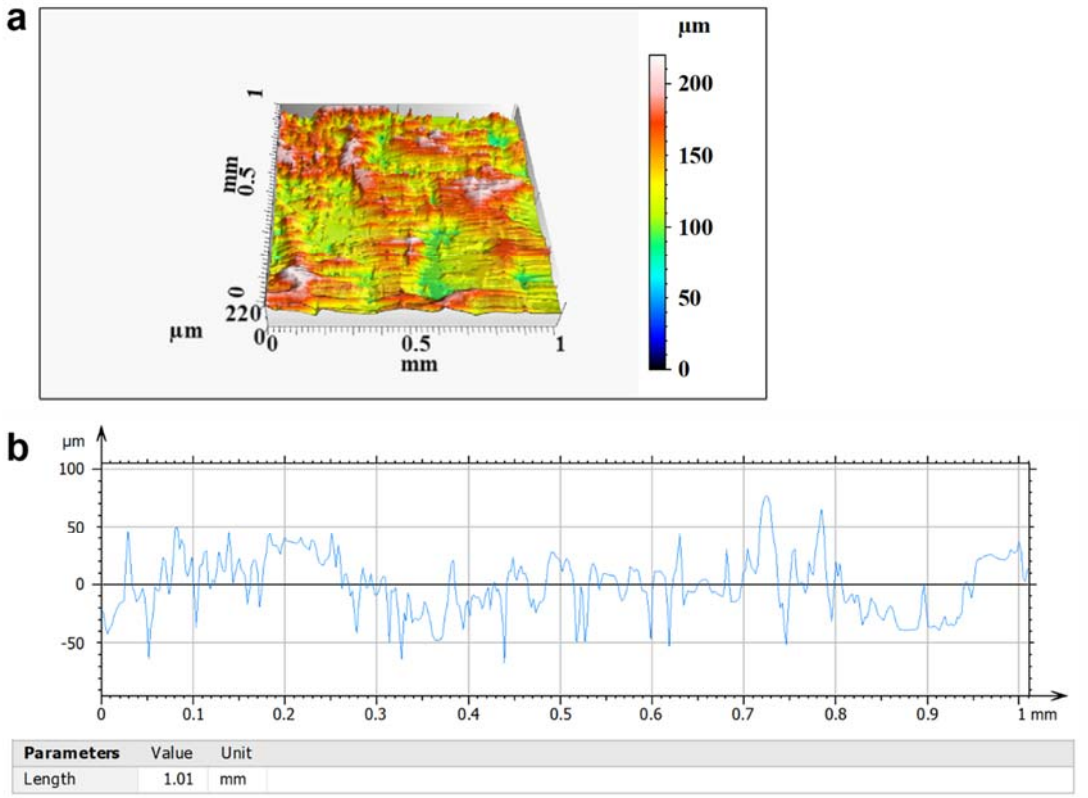

Figure S3. (a) 3D morphology of the micropatterned PDMS in an area of 1×1 mm^2. (b) Height profile of cross section of the micropatterned PDMS.

Table S1. 3D roughness parameters of the micropatterned PDMS.

ISO 25178		
Height Parameters		
Sq	28.8	µm
Ssk	0.134	
Sku	2.93	
Sp	80.9	µm
Sv	139	µm
Sz	220	µm
Sa	23.4	µm

ISO 4287			
Amplitude parameters - Roughness profile			
Rp	65.2	µm	*Gaussian filter, 0.25 mm*
Rv	53.6	µm	*Gaussian filter, 0.25 mm*
Rz	119	µm	*Gaussian filter, 0.25 mm*
Rc	58.0	µm	*Gaussian filter, 0.25 mm*
Rt	119	µm	*Gaussian filter, 0.25 mm*
Ra	13.3	µm	*Gaussian filter, 0.25 mm*
Rq	17.7	µm	*Gaussian filter, 0.25 mm*
Rsk	0.364		*Gaussian filter, 0.25 mm*
Rku	4.63		*Gaussian filter, 0.25 mm*
Material Ratio parameters - Roughness profile			
Rmr	0.294	%	*c = 1 µm under the highest peak, Gaussian filter, 0. ...*
Rdc	26.4	µm	*p = 20%, q = 80%, Gaussian filter, 0.25 mm*

Table S2. Calculation results in Finite-element simulation at an external load pressure of 5 kPa.

	Maximum contact stress/kPa	**Ratio of change in height/%**
Non-micropatterned	41.2	0.05
Micropatterned	17180.4	28.26