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SUPPORTING INFORMATION

Skin-interfaced microfluidic sweat collection devices for personalized hydration management through thermal feedback

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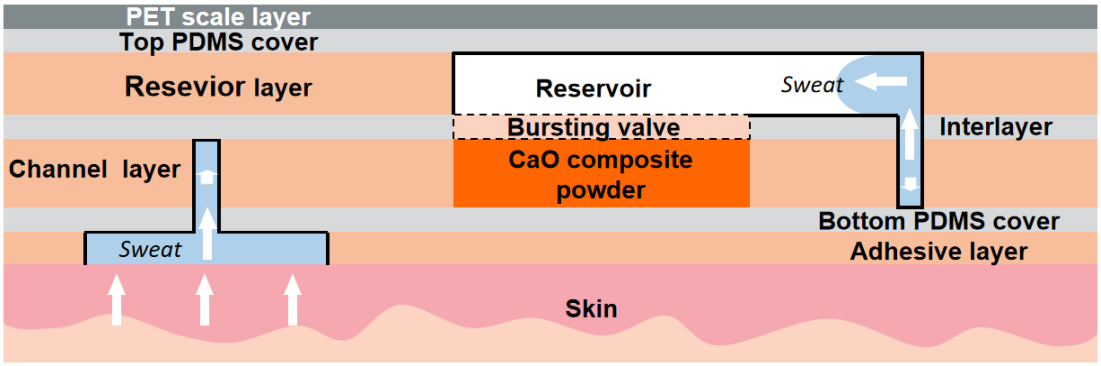

Figure S1 Schematic diagram of sweat flow path in the device.

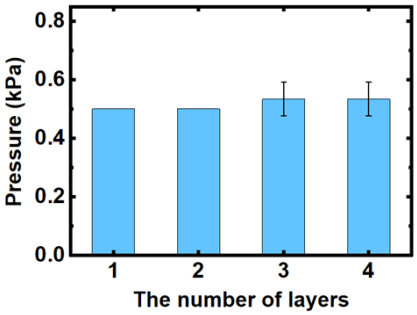

Figure S2 Pressure required for liquid flow in the microchannel with different number of tape layers.

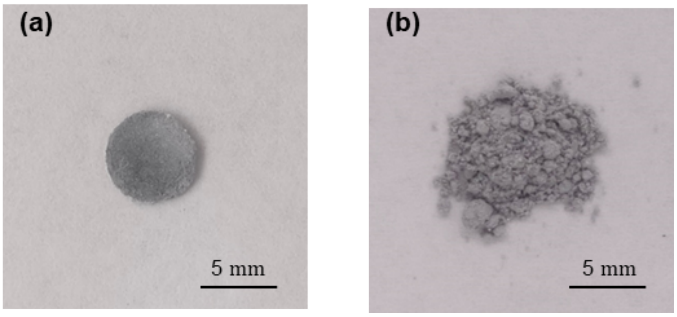

Figure S3 Different forms of CaO composite with the same weight: (a) Compacting into a tablet-like shape. (b) Without compacting.

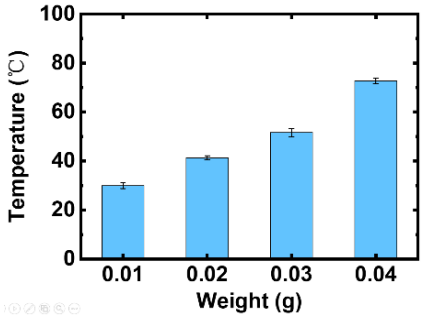

Figure S4 The highest heating temperature of CaO composite powder with different weights (Ambient temperature = 30℃).

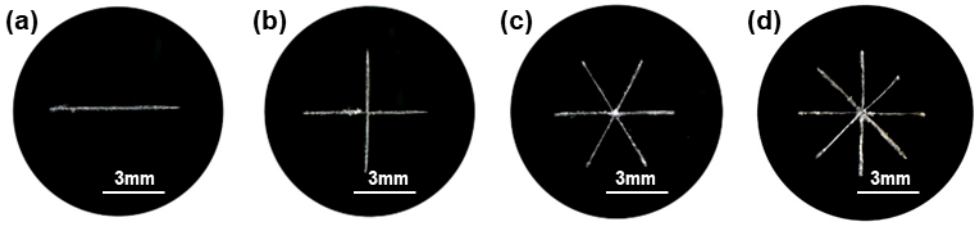

Figure S5 The bursting valve with different number of petals (NP): (a) NP=2. (b) NP=4. (c) NP=6. (d) NP=8.

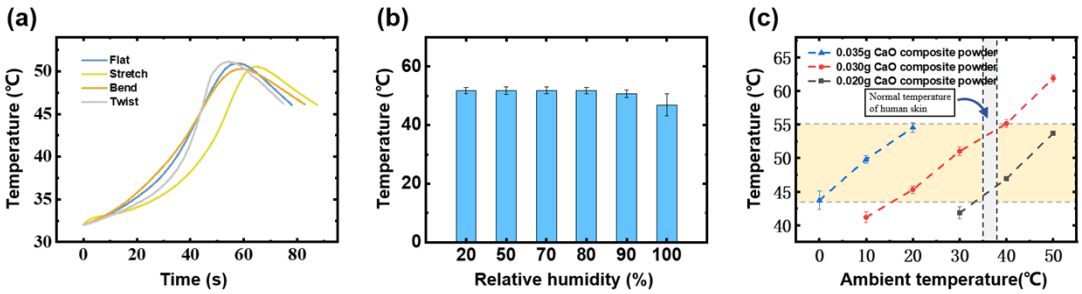

Figure S6 Performance of devices: (a) under different mechanical deformations, (b) under varying humidity conditions, (c) within a temperature range.

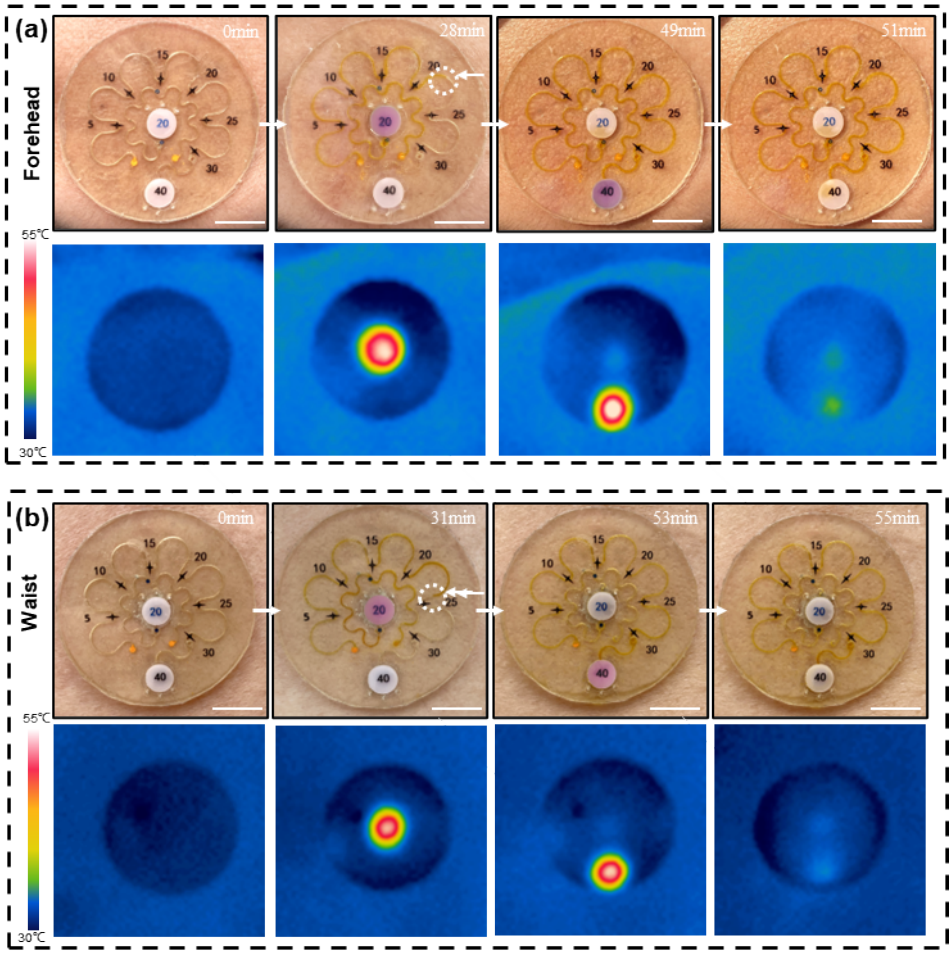

Figure S7 Infrared imaging of the highest heating temperature and optical image of the sweat collection process from (a) forehead and (b) waist. Scale bar: 1 cm.