Supporting Information

A Flexible MXene-Decorated Fabric with Interwoven Conductive Networks for Integrated Joule Heating, Electromagnetic Interference Shielding and Strain Sensing Performances

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Figure S1. Zeta potential of MXene flakes at PH 6.7.
Figure S2. Optical image (a) and SEM images (b, c) of 4% M-CF.

Figure S3. Time-temperature curves of M-C fabrics at a voltage of 4 V.

Figure S4. The thermal efficiency of the 6 wt% M-CF heater.
Figure S5. TG curves of pristine CF and 6 wt% M-CF under nitrogen atmosphere.

Figure S6. The time-dependence of the relative resistance change (a) 2 wt% and (b) 6 wt% M-CF based sensors.

Table S1 Comparison the performances of the reported heaters and ours.

<table>
<thead>
<tr>
<th>Heaters</th>
<th>R (Ω.sq-1)</th>
<th>Area (cm²)</th>
<th>Voltage (V)</th>
<th>Temperature (℃)</th>
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<tbody>
<tr>
<td>Graphene¹</td>
<td>49.7</td>
<td>10×10</td>
<td>10</td>
<td>75.2</td>
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<td>PEDOT:PSS²</td>
<td>68</td>
<td>2.5×2.5</td>
<td>10</td>
<td>94</td>
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<tr>
<td>Graphene³</td>
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<td>21</td>
<td>10</td>
<td>83.8</td>
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<tr>
<td>PEDOT⁴</td>
<td>61</td>
<td>2×4</td>
<td>6</td>
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## Supplementary References