Supporting Information

Graphene Nanosheets Deposited on Polyurethane Films by Self-Assembly for Preparing Transparent, Conductive Films

Hsi-Wen Tien, Yuan-Li Huang, Shin-Yi Yang, Jen-Yu Wang, Sheng-Tsung Hsiao, Chen-Chi M. Ma*

Department of Chemical Engineering,
National Tsing-Hua University,
Hsin-Chu 30043, Taiwan.
Tel.: 886-3-5713058 Fax: 886-3-5715408;
E-mail address: ccma@che.nthu.edu.tw (Chen-Chi M. Ma)
The structure of YA-7720

Figure S1 shows the structure of YA-7720. This chemical material can be obtained by polymerization of butylene glycol, ethylene glycol and adipic acid.

![Chemical structure of YA-7720](image)

**Figure S1.** The structure of YA-7720 was a precursor of polyurethane.

The mechanical property of the WPU film

The picture shows flexible property of the WPU film, as shown in Figure S2(a). The material of substrate (WPU) in this work possesses the flexible property, which is not upon break. The mechanical property of the WPU film was shown in Figure S2(b). The results were also summarized in Table S1. The WPU film with good strength and high toughness, it is accepted and suited as a substrate for use in TCFs.
Figure S2. (a) The WPU film shows flexible property. (b) The curve shows the mechanical property of the WPU film.

Table S1. The mechanical data of the WPU film

<table>
<thead>
<tr>
<th>Material</th>
<th>Strength (MPa) at break point</th>
<th>Strain (%) at break point</th>
<th>Modulus (GPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPU</td>
<td>12.69</td>
<td>576.66</td>
<td>1.065</td>
</tr>
</tbody>
</table>