Supporting Information

PANI/graphene nanocomposite films with high thermoelectric properties by the enhanced molecular ordering

Liming Wang,ac Qin Yao,ac Hui Bi,a Fuqiang Huang,a Qun Wang,a and Lidong Chenbd*

aCAS Key Laboratory of Materials for Energy Conversion, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China

bState Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China

cUniversity of Chinese Academy of Sciences, Beijing 100049, China

dShanghai Institute of Materials Genome, Shanghai, China

* Email: yaoqin@mail.sic.ac.cn and cld@mail.sic.ac.cn
Table S1  TE properties of PANI/GP-P composite film containing 62 wt% graphene.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Electrical Conductivity (S cm⁻¹)</th>
<th>Seebeck Coefficient (μV K⁻¹)</th>
<th>Power Factor (μW m⁻¹ K⁻²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>62 wt% PANI/GP-P</td>
<td>614</td>
<td>22</td>
<td>30</td>
</tr>
</tbody>
</table>

Fig. S1  SEM images of freezed-fractured across sections for PANI/GP-P composite film containing 62 wt% graphene. The distribution of graphene in the PANI/GP-P composite film became disorganized.