

Electronic Supplementary Information

Organic solvent assisted exfoliated MoS₂ for the optimized thermoelectric performance of flexible PEDOT:PSS thin-film

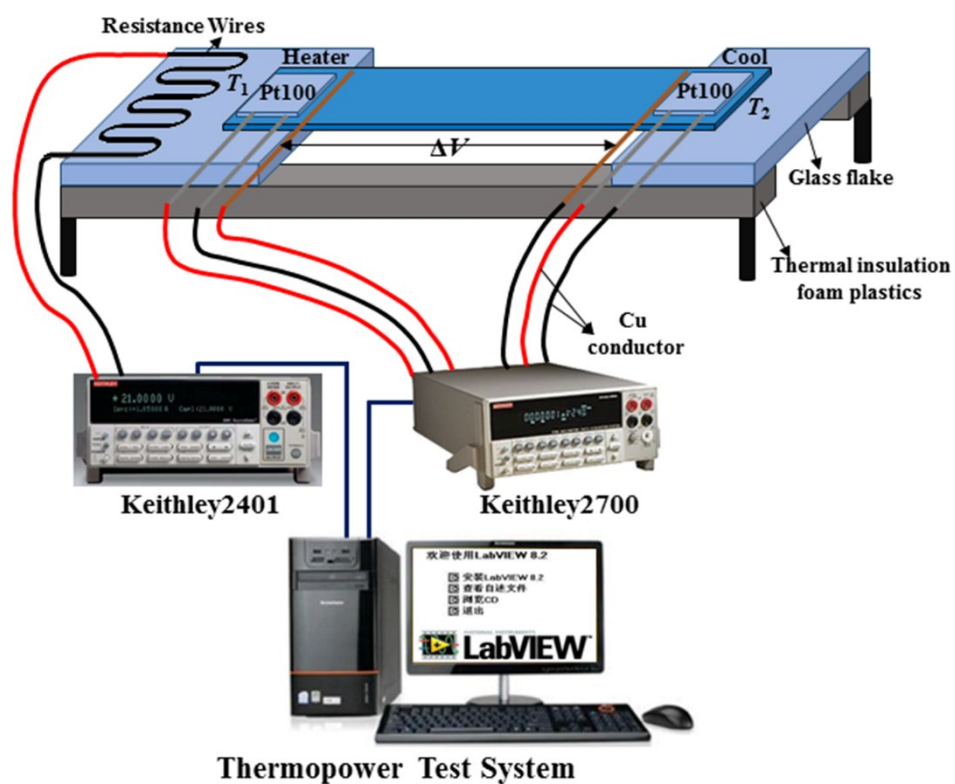
Fengxing Jiang,[‡] Jinhua Xiong,[‡] Weiqiang Zhou, Congcong Liu, Liangying Wang,
Feng Zhao, Huixuan Liu, Jingkun Xu*

Department of Physics, Jiangxi Science and Technology Normal University, Nanchang
330013, China

E-mail: xujingkun@tsinghua.org.cn

[‡] These authors contributed equally to this work.

1. Thermopower test system



Scheme S1 Schematic illustration of thermopower test system for film samples.

2. AFM image

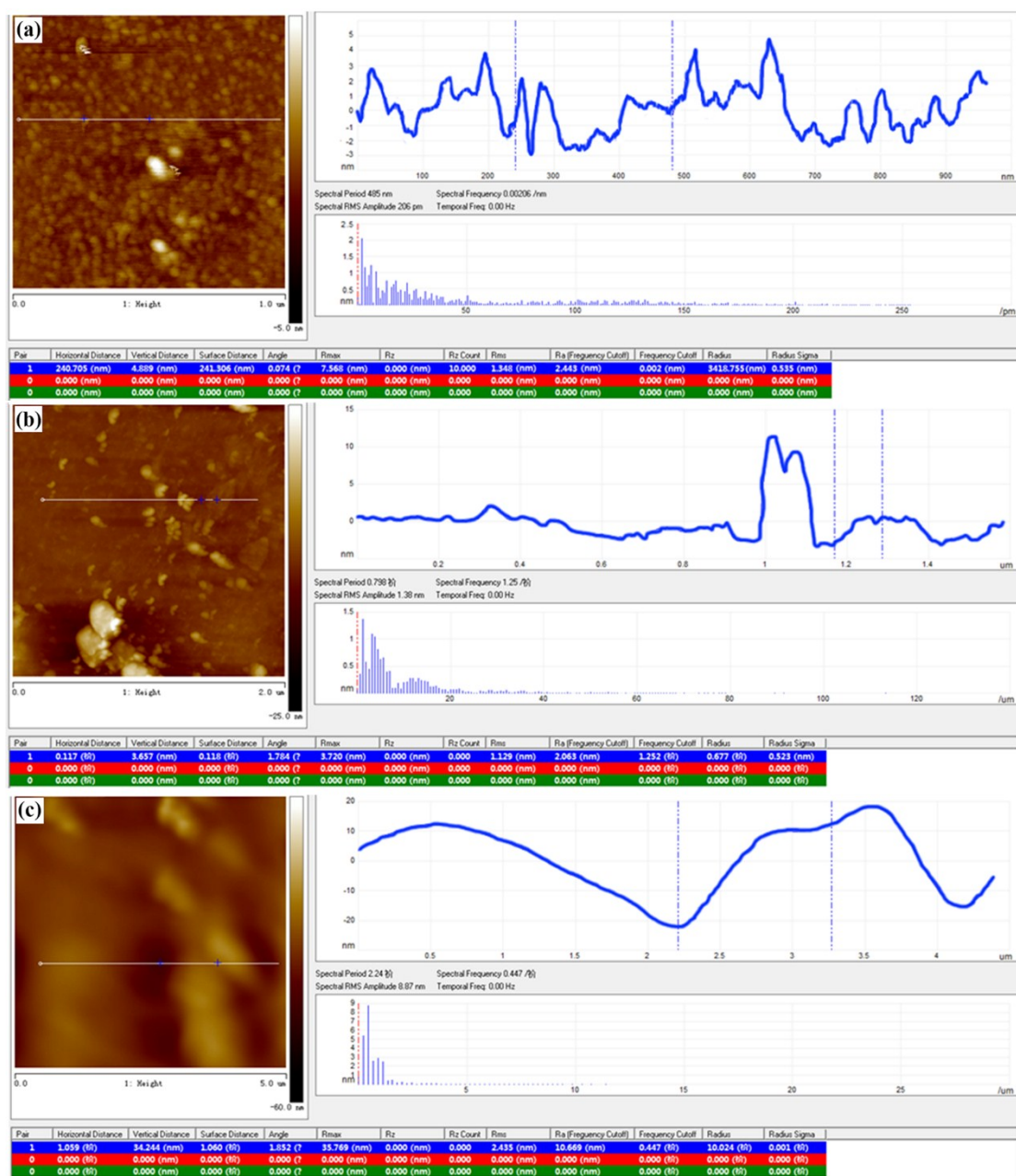


Fig. S1 AFM image (left) and height profile (right) of exfoliated MoS₂ nanosheets in NMP (a), H₂O (b) and PM₄-D thin-film (c).

3. UV-vis

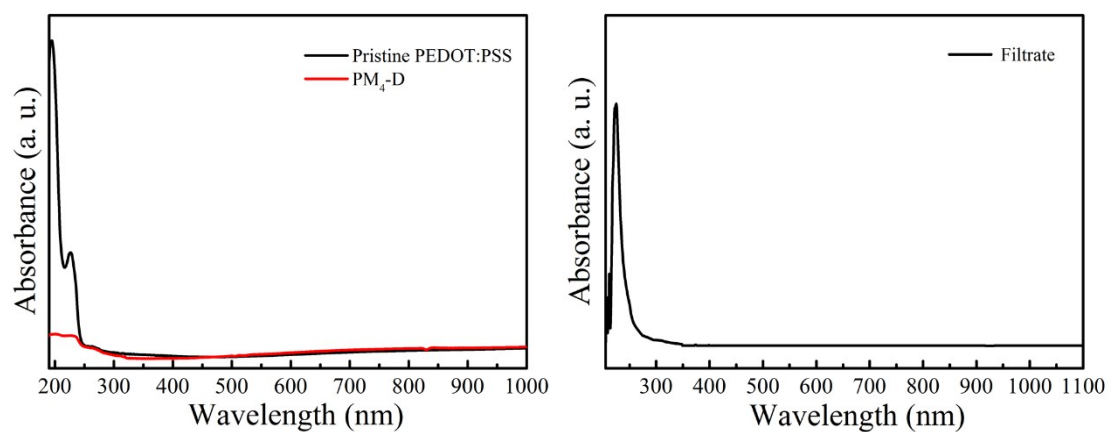


Fig. S2 UV-vis absorption spectra of (a) pristine PEDOT:PSS , PM₄-D thin-film and (b) filtrate of PM₄-D dispersions after the vacuum filtration.

Table S1 The ratio of PSS:PEDOT in the PM_x-D thin-film.

samples	PSS:PEDOT ratio/%
Pristine PEDOT:PSS	2.55:1
P-D	1.29:1
PM ₂ -D	1.32:1
PM ₄ -D	1.33:1
PM ₆ -D	1.35:1
PM ₈ -D	1.38:1