



Supporting Information

Organic Thermoelectric Multilayers with High Stretchiness

Chungyeon Cho ^{1,*} and Jihun Son ¹

Department of Carbon Convergence Engineering, College of Engineering, Wonkwang University, Iksan 54538, Jeonbuk, Korea; sjhoon14@wku.ac.kr

* Correspondence: cncho37@wku.ac.kr; Tel.: +82-63-850-7274

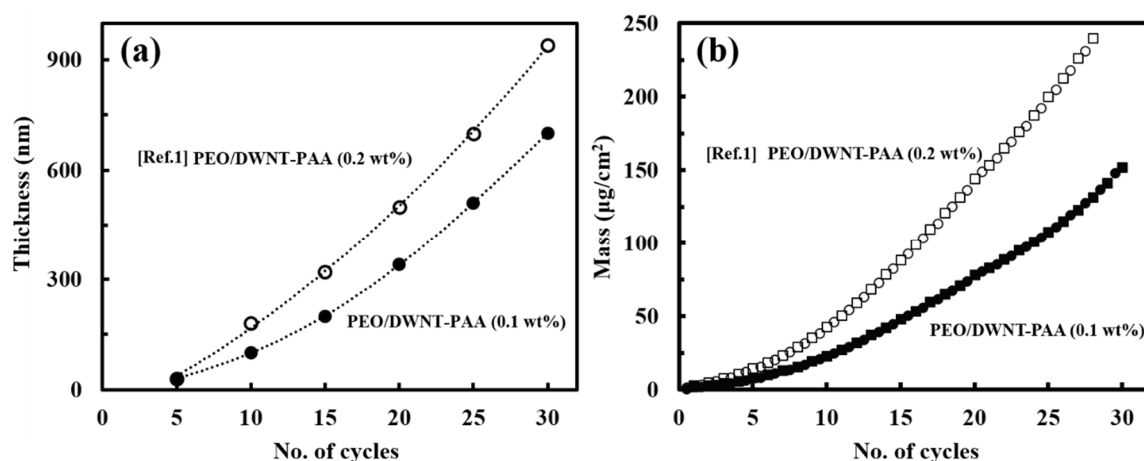


Figure S1. (a) Thickness and (b) mass of PEO/DWNT-PAA bilayer systems with different concentrations of PAA (0.1 and 0.2 wt%) as a function of deposition cycles.

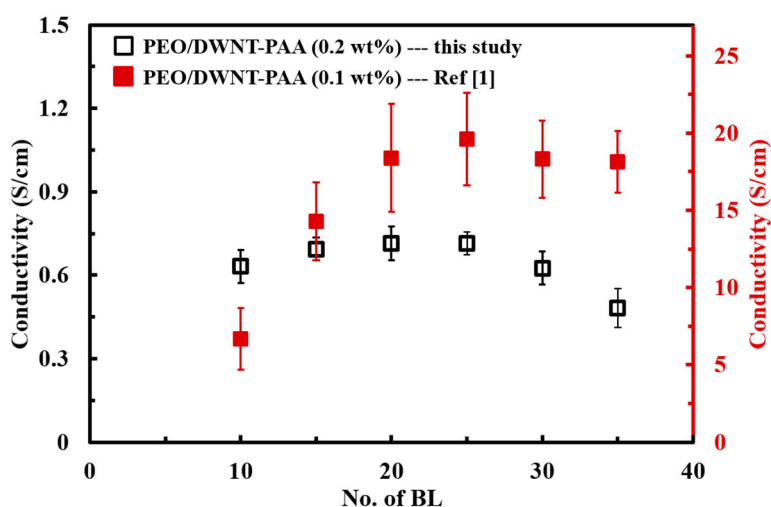


Figure S2. Electrical conductivity of PEO/DWNT-PAA assembled with 0.1 (filled square) and 0.2 (open square) wt% as a function of bilayers deposited.

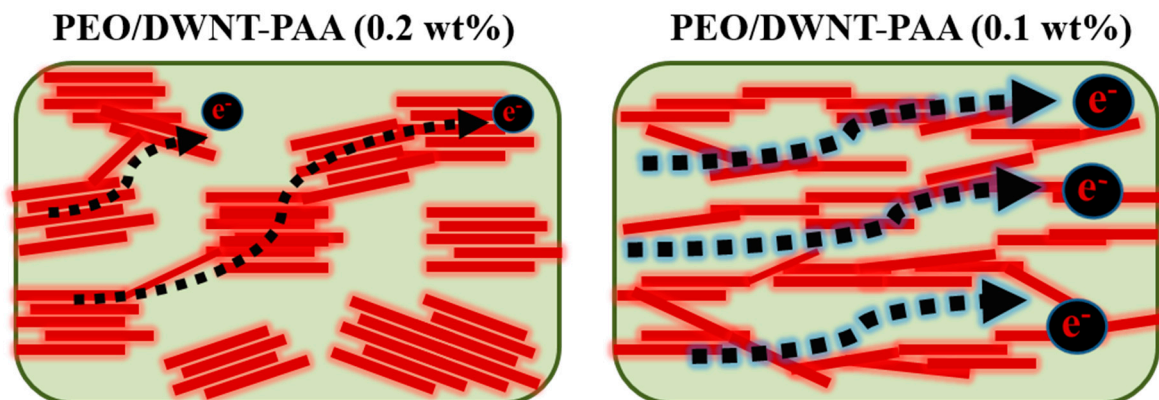


Figure S3. Schematics of carrier transport across the nanotubes in the PEO/DWNT-PAA nanocomposites where DWNT is dispersed with 0.1 and 0.2 wt% PAA, respectively.

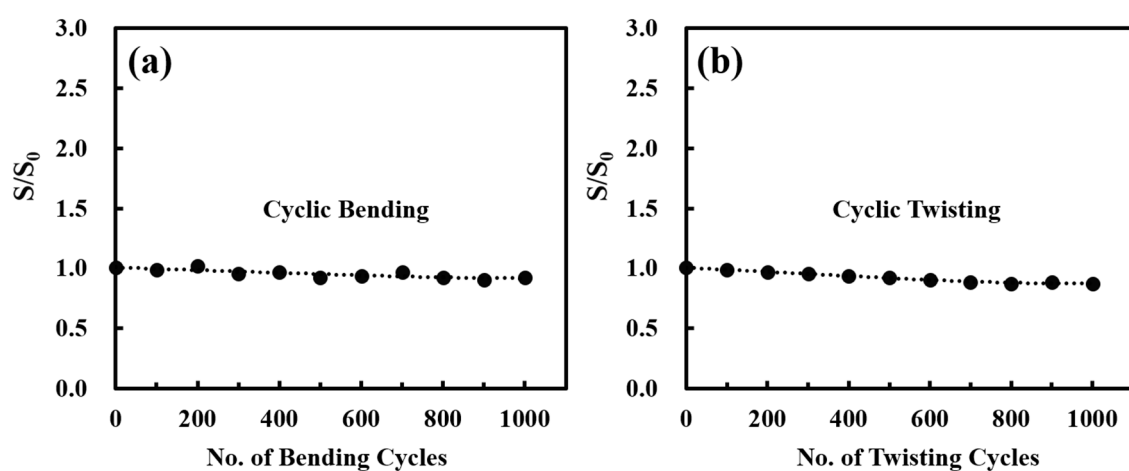


Figure S4. Normalized Seebeck coefficient of ~ 500 nm thick 25 bilayer of PEO/DWNT-PAA in cyclic (a) bending and (b) twisting tests.

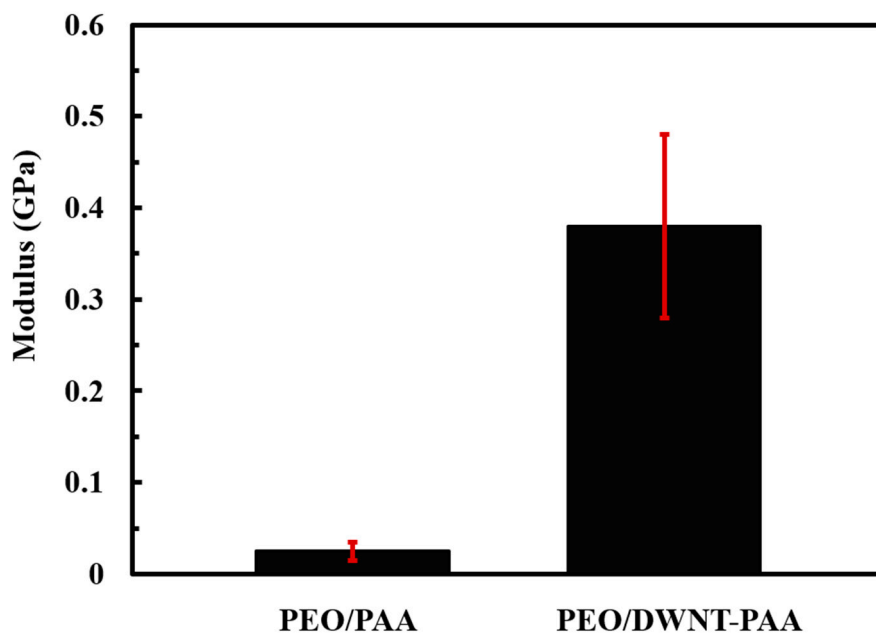


Figure S5. Elastic modulus of 25 bilayer PEO/PAA BL and PEO/DWNT-PAA films deposited on a Si-wafer.

References

1. C. Cho, Y. Song, R. Allen, K.L. Wallace, J.C. Grunlan, Stretchable electrically conductive and high gas barrier nanocomposites, *Journal of Materials Chemistry C* 6(8) (2018) 2095-2104.