

Electronic Supplementary Information for:

Piezoelectric energy harvesting from a PMN-PT single nanowire

Brindha Moorthy^{a, ‡}, Changyeon Baek^{a, ‡}, Ji Eun Wang^a, Chang Kyu Jeong^{a, b}, San Moon^a,
Kwi-Il Park^{c, *}, and Do Kyung Kim^{a, *}

^a Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (KAIST), 291 Daehak-ro, Yuseong-gu, Daejeon, 34141, Republic of Korea

^b KAIST Institute for the NanoCentury (KINC), 291 Daehak-ro, Yuseong-gu, Daejeon, 34141, Republic of Korea.

^c Department of Energy Engineering, Gyeongnam National University of Science and Technology (GNTECH), 33 Dongjin-ro, Jinju-si, Gyeongsangnam-do, 52725, Republic of Korea

[‡]Equal contributors

*CORRESPONDING AUTHORS

Kwi-Il Park*

E-mail: kipark@gntech.ac.kr, (Phone) +82-55-751-3884, (Fax) +82-55-751-3889

Do Kyung Kim*

E-mail: dkkim@kaist.ac.kr, (Phone) +82-42-350-4118, (Fax) +82-42-350-3310

This PDF file includes:

Figures S1

1. Output performance of an energy harvester based on PMN-PT nanowires – PDMS composite

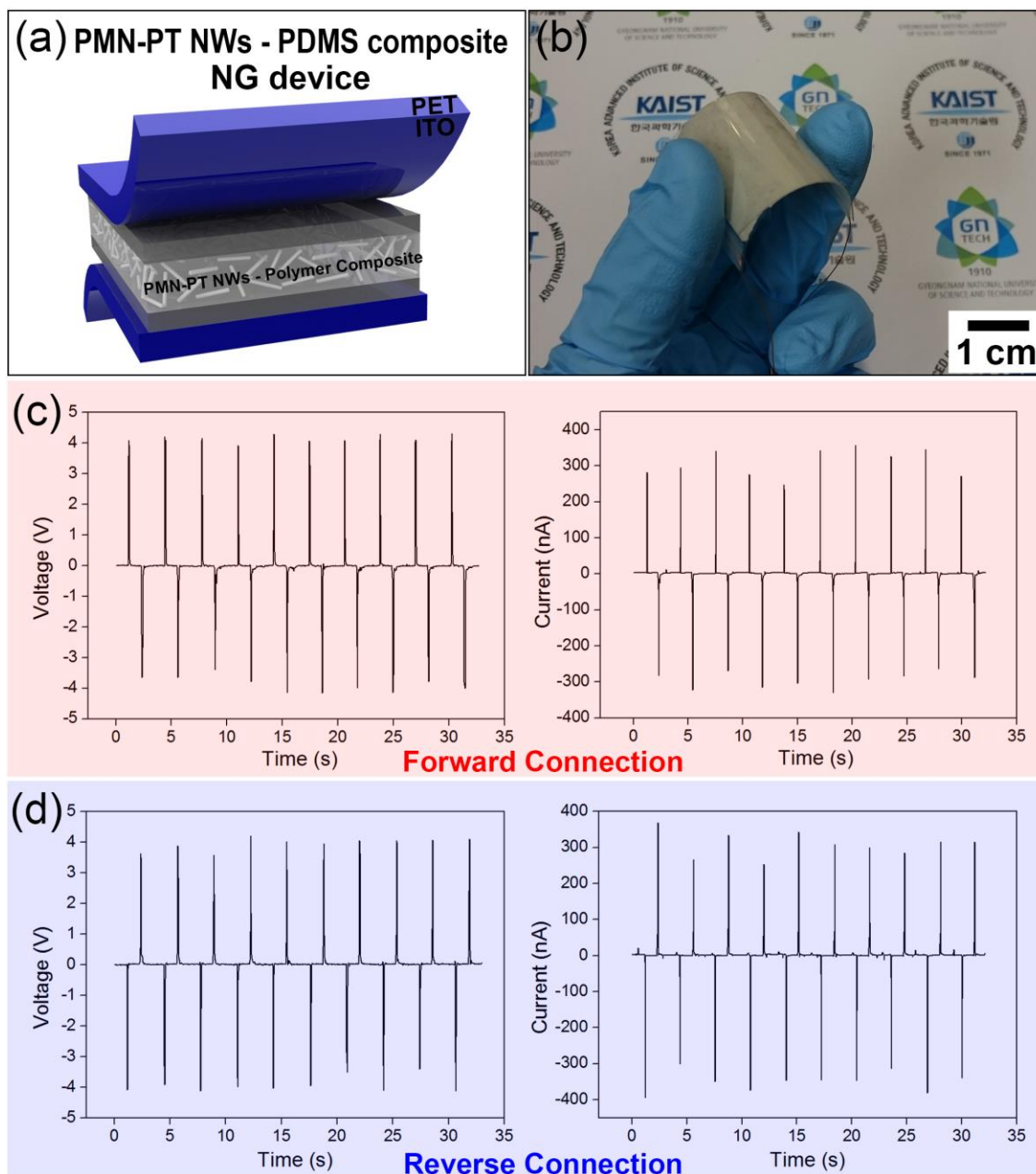


Fig. S1 (a) Schematic diagram of the NCG device based on PMN-PT NWs. (b) Photograph of the NCG device (3 x 3 cm²) completely bent by a human finger, which demonstrates its flexibility. Electrical output performance of the NCG device when subjected to repeated bending/unbending motions. Open-circuit voltage and short-circuit current under forward connection (c) and reverse connection (d).