

Supporting Information

Rod-Coating All-Solution Fabrication of Double Functional Graphene Oxide Films for Flexible Alternating Current (AC) - Driven Light-Emitting Diodes

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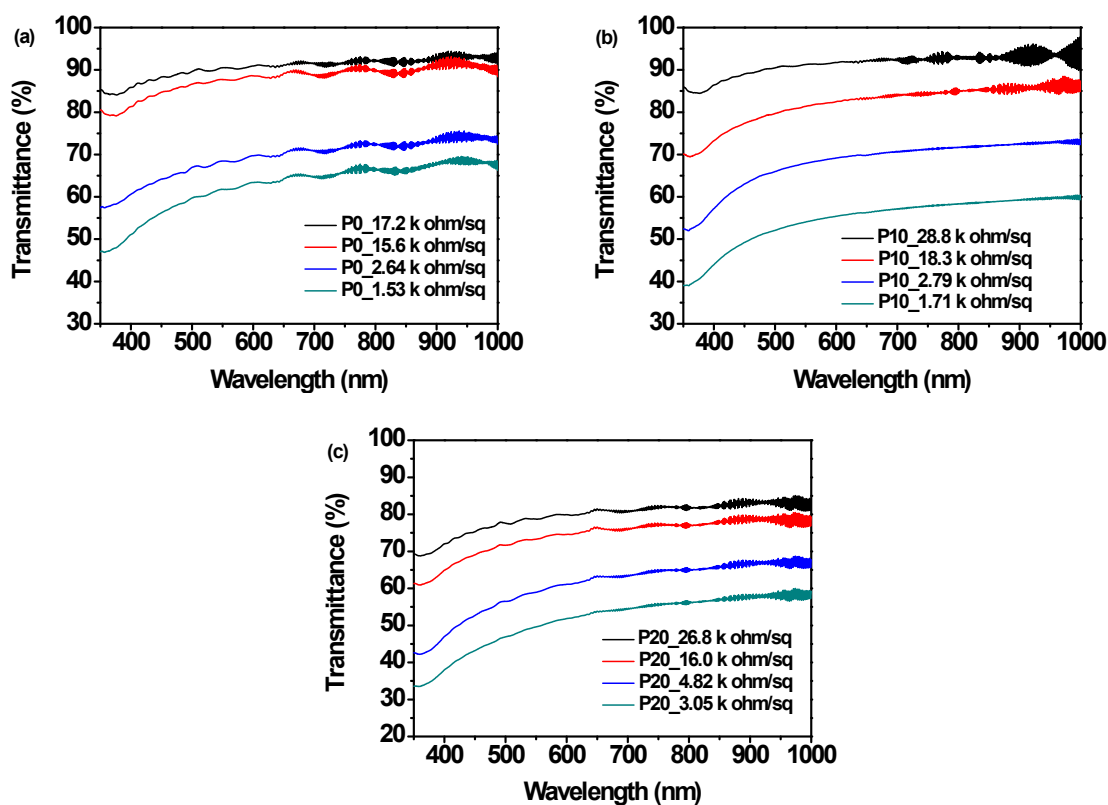


Figure S1. Sheet resistance and transmittance at 550 nm of rGO thin films with different sizes followed the different probe sonication time 0 min, 10 min, and 20 min.

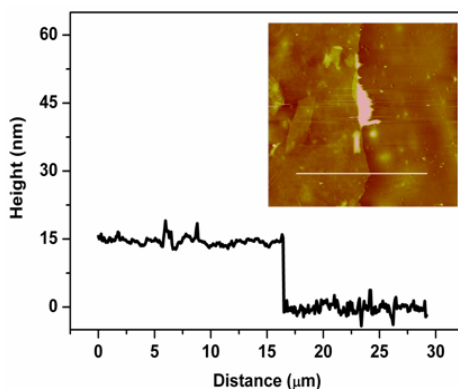


Figure S2. AFM image ($42 \times 42 \mu\text{m}^2$) and section analysis of the thick rGO film on PET. The GO used for this rGO film is with size of $1000 \sim 1200 \mu\text{m}^2$, i.e. the largest GO sheets in this work.

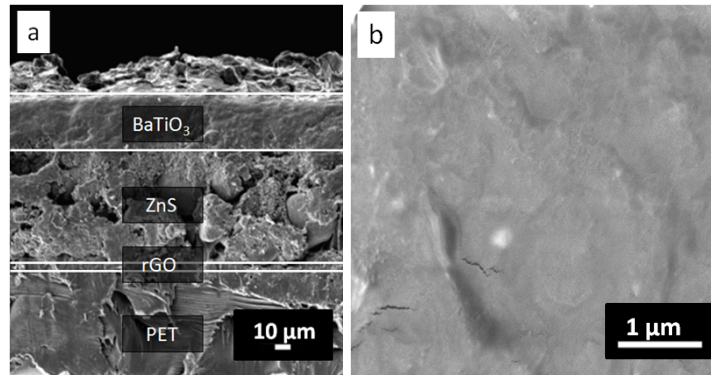


Figure S3. The SEM images of cross section of device B (a) and the magnified morphology of BaTiO₃ (b).

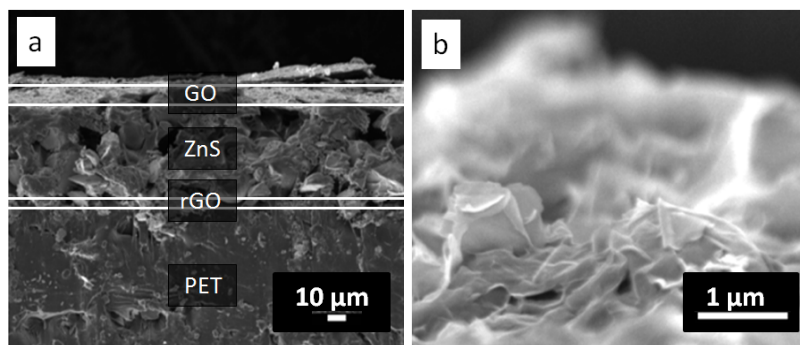


Figure S4. The SEM images of cross section of device C (a) and the magnified morphology of GO (b).

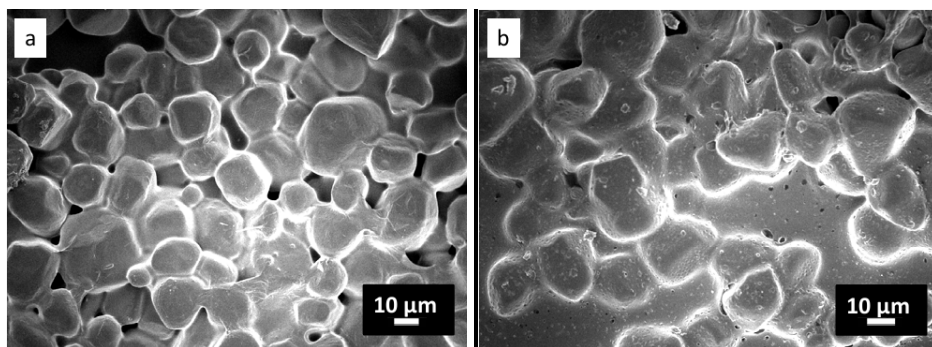
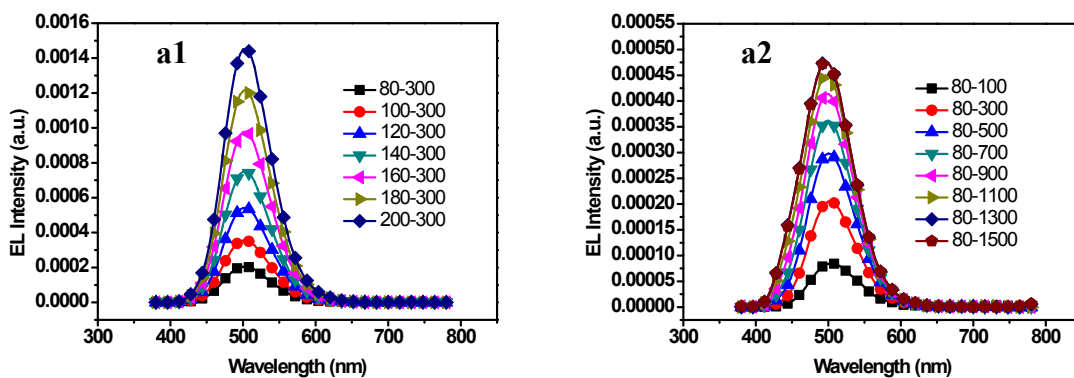


Figure S5 SEM image of commercial ZnS (a) and BaTiO₃ particles (b)



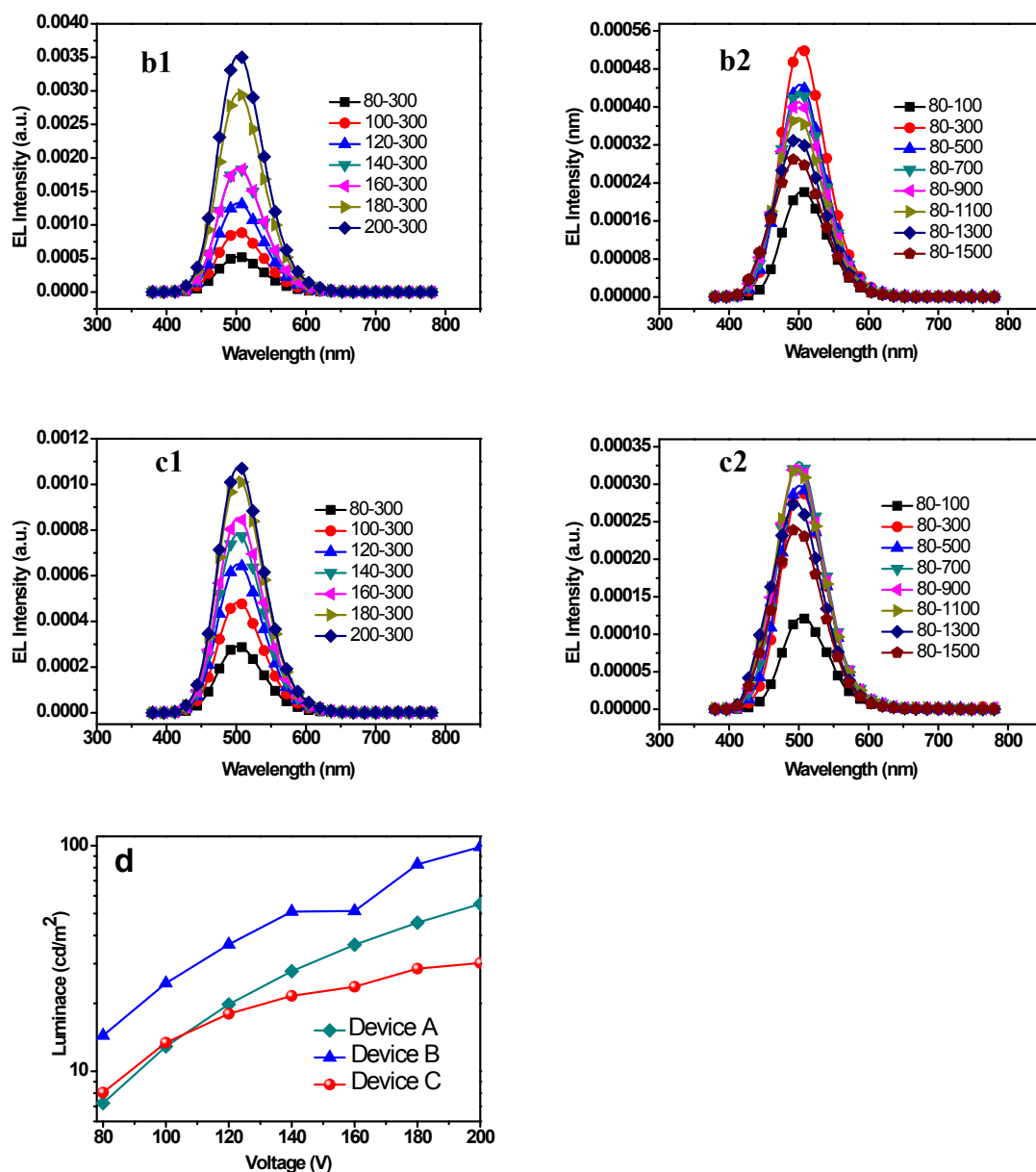


Figure S6. The AC-EL spectra of AC LED devices A, B and C at different voltages with the same frequency of 300 Hz (a1, b1, c1), and at different frequency with the same voltages of 80 V (a2, b2, c2). The extracted brightness change vs the applied voltages for devices A, B and C under the same frequency of 300 Hz (c).

Table S1. The relative peak area of GO and rGO.

Peak area (%)			
Sample	C-C	C-O	C=O
GO	42.72	49.96	7.31
rGO	81.55	13.97	4.48

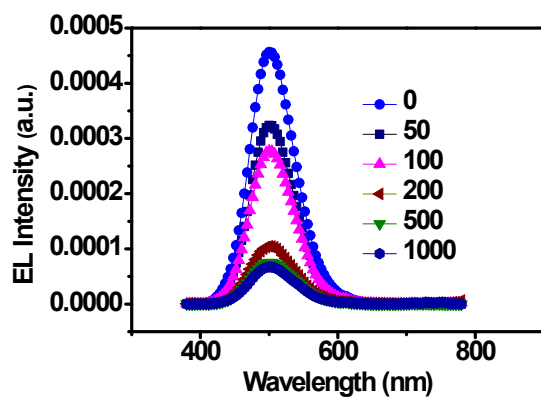


Figure S7. Electroluminescence (EL) spectra of GO dielectric layer based devices after different cycles of bending and releasing (0, 50, 100, 200, 500, 1000).