

Supporting Information

Carbon dots-polyurethane composites with anisotropic enhanced fluorescence for strain sensing

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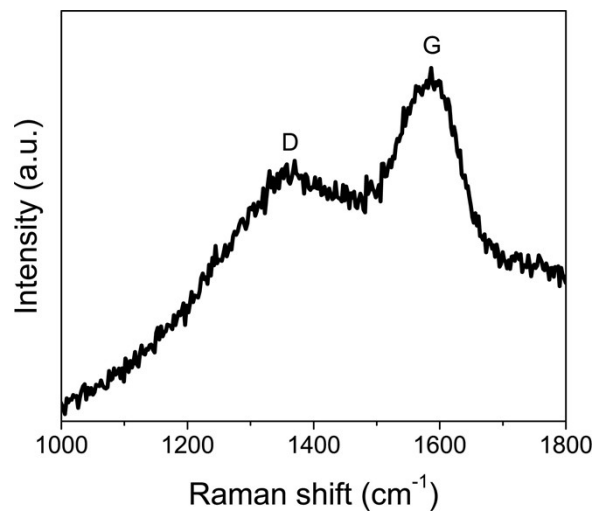


Figure S1. Raman spectrum of carbon nanodots.

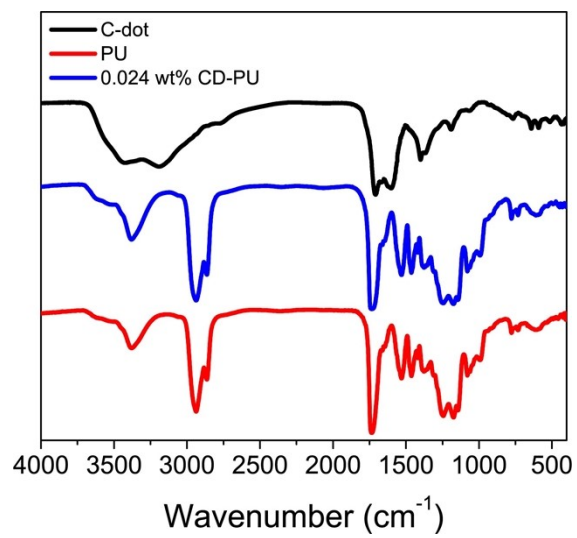


Figure S2. FTIR spectra of CD, PU, and CD-PU composite (0.024 wt% CD).

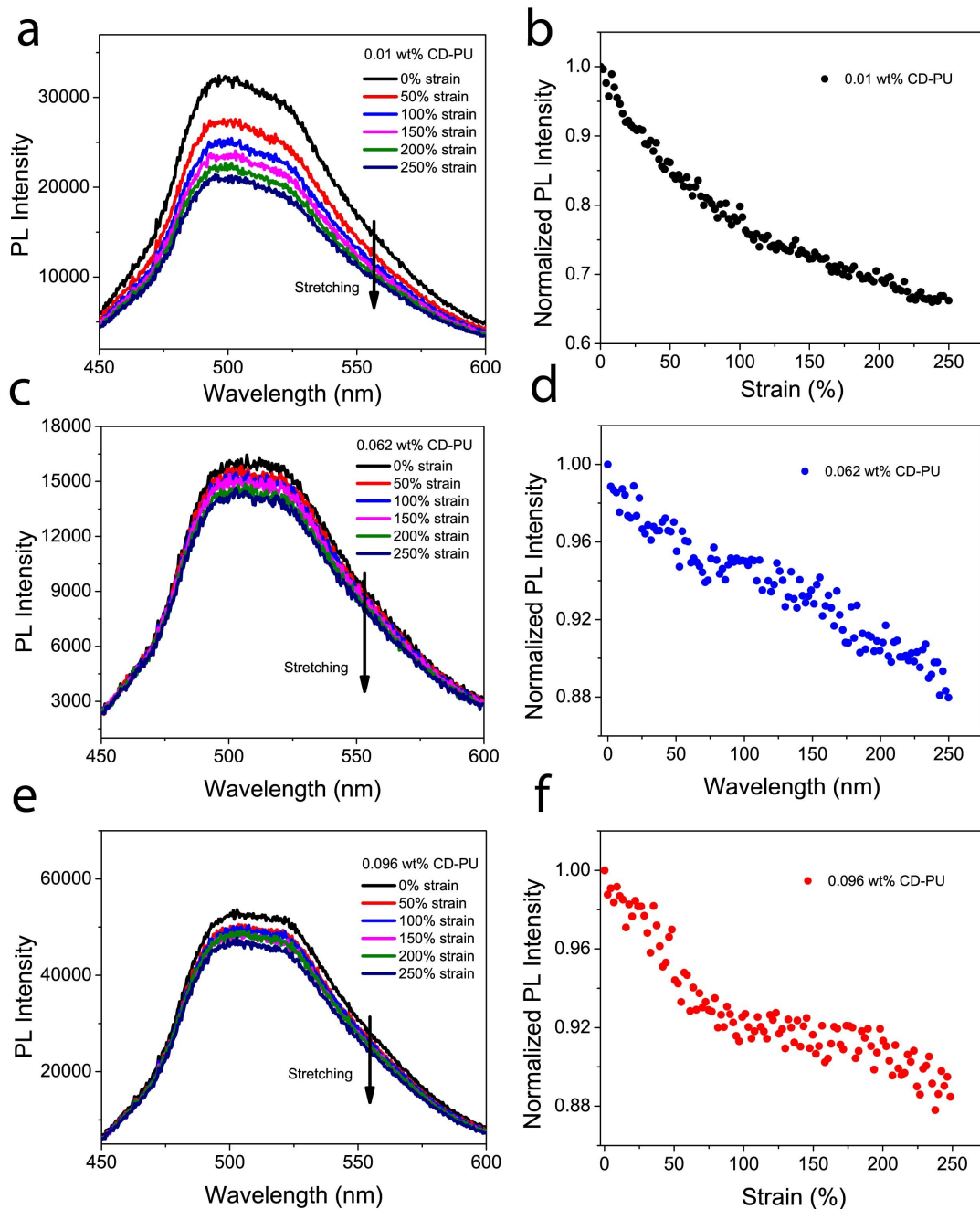


Figure S3. PL spectra of the CD-PU film recorded under uniaxial strain for (a) 0.01 wt% CD-PU, (c) 0.062 wt% CD-PU and (e) 0.096 wt% CD-PU. Normalized PL intensity as a function of the applied tensile strain for (b) 0.01 wt% CD-PU, (d) 0.062 wt% CD-PU and (f) 0.096 wt% CD-PU film.

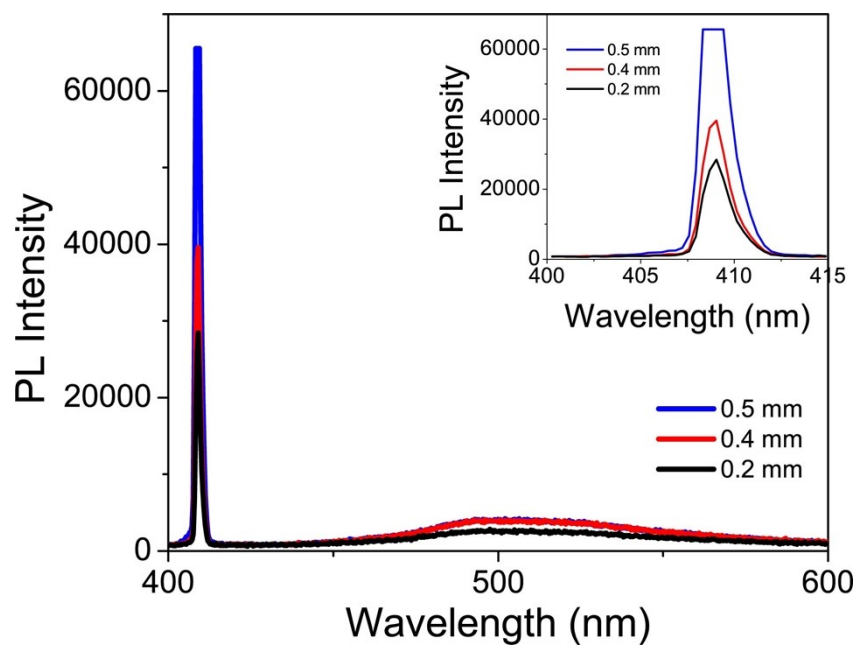


Figure S4. PL spectra of 0.01 wt% CD-PU film recorded with different film thickness. The inset shows an enlarged view of the excitation light intensity.

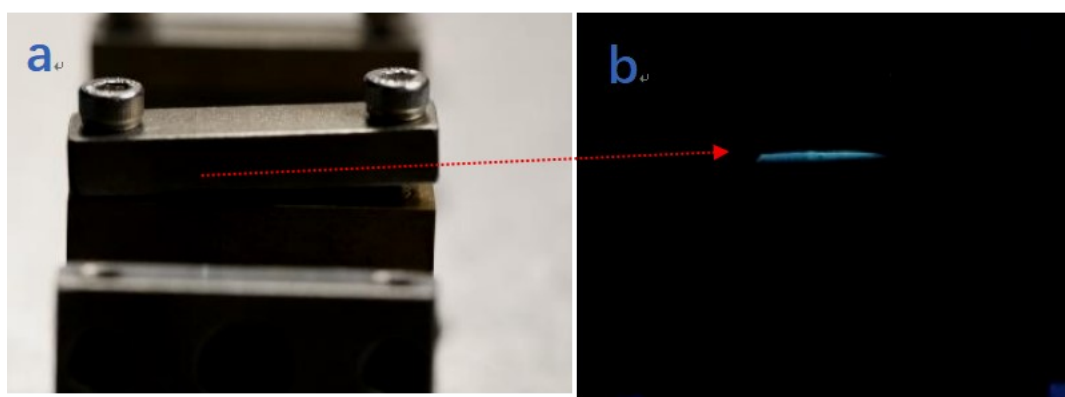


Figure S5. (a) The photo of 0.76 wt% CD-PU film under high compression. and (b) the corresponding fluorescence photo of the film.