Supplementary Information

Microliter-Scale Solution Processing for Controlled, Rapid Fabrication of Chemically Derived Graphene Thin Films

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Two movies visualizing the MDD coating process are provided (in AVI format):

- **Movie1_MDD_Coating_Glass.avi**

This movie shows the meniscus-dragging deposition (MDD) of the GO thin film on a glass slide with a GO concentration of 2.4 mg mL^{-1}. The coating area of the GO film is 2.5 × 5.0 cm^2. The deposition velocity and deposition angle are 10 mm sec^{-1} and 30°, respectively. The movie is recorded with Panasonic Lumix DMC-LX5 digital camera.

- **Movie2_MDD_Coating_PET_Large_Area.avi**

This movie shows the meniscus-dragging deposition (MDD) of the large-area GO thin film on a PET with a GO concentration of 2.4 mg mL^{-1}. The coating area of the GO film is 25 × 10 cm^2. The deposition velocity and deposition angle are 10 mm sec^{-1} and 30°, respectively. The movie is recorded with Panasonic Lumix DMC-LX5 digital camera.

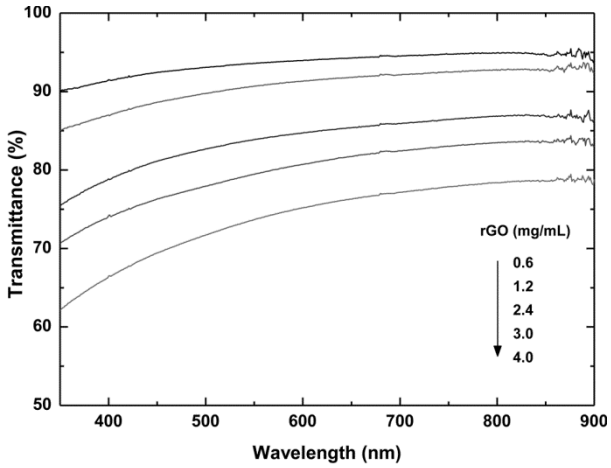

Figure S1. Transmission spectra of reduced GO thin films on glass slides at various deposition concentrations. The reduced GO films are deposited at the DN = 20 and deposition speed of 10 mm sec^{-1}, followed by HI acid vapor reduction for 3 h at 80 °C.

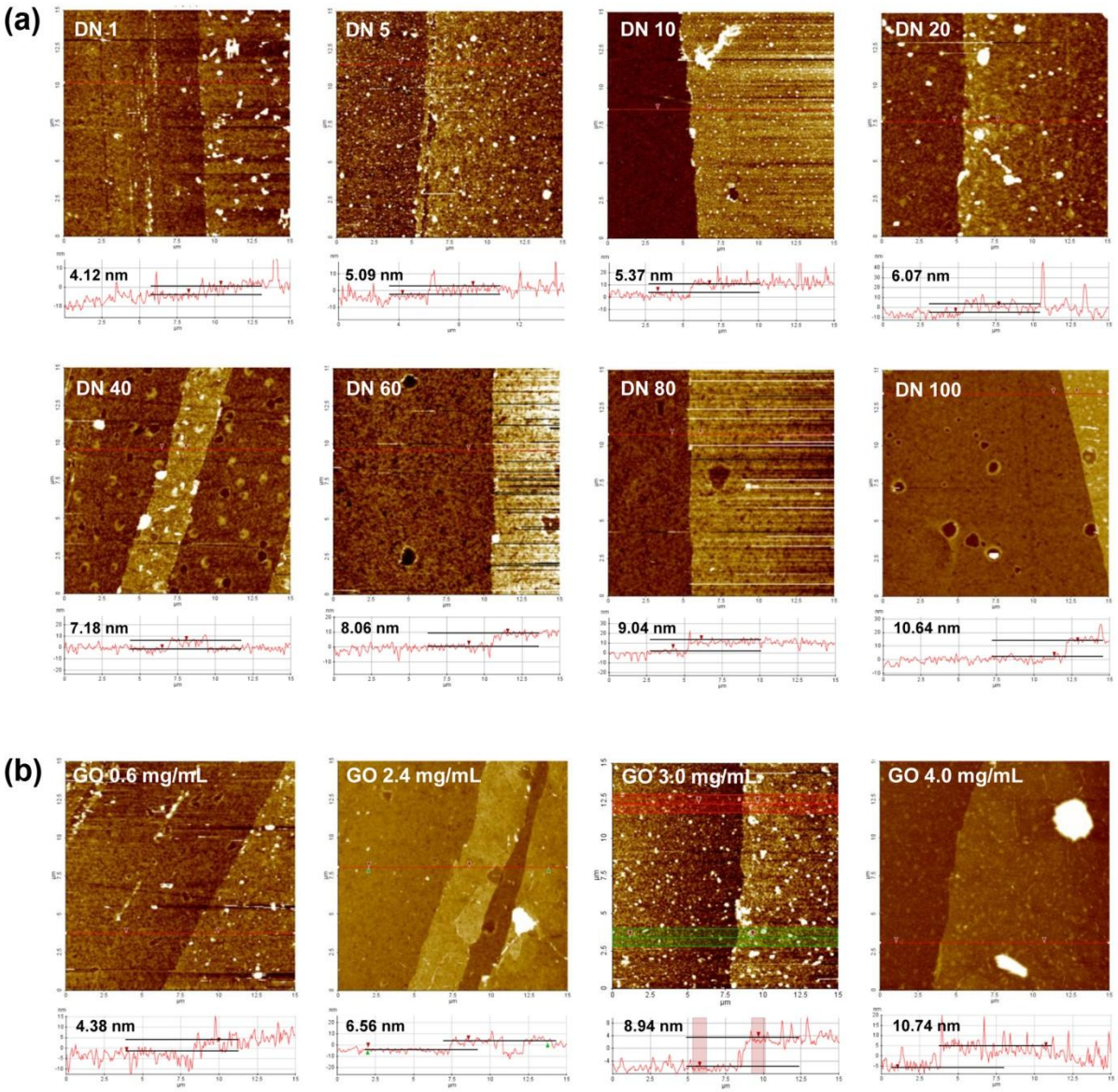

Figure S2. AFM images and height profiles of the rGO thin films on a glass slide (a) at different deposition numbers with a GO concentration of 2.4 mg mL^{-1} and (b) with various GO concentrations at DN = 20. All of the reduced GO films were deposited with a deposition velocity of 10 mm sec^{-1} and deposition angle of θ = 30°, followed by HI acid vapor reduction for 3 h at 80 ℃. The images are for 15×15 μm regions.

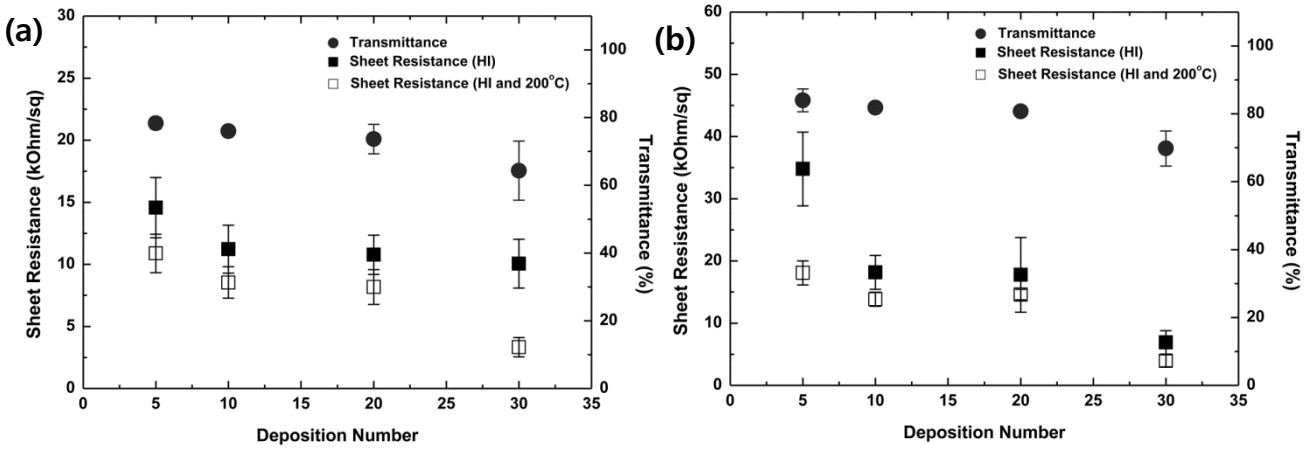

Figure S3. Electrical and optical properties of the rGO thin films deposited on glass slides at DN 20. Sheet resistance and transmittance at λ = 550 nm as a function of deposition concentration, (a) 3.0 mg mL^{-1} and (b) 4.0 mg mL^{-1}. The deposition velocity and deposition angle (θ) for the reduced GO thin film coatings are 10 mm sec^{-1} and 30°, respectively.

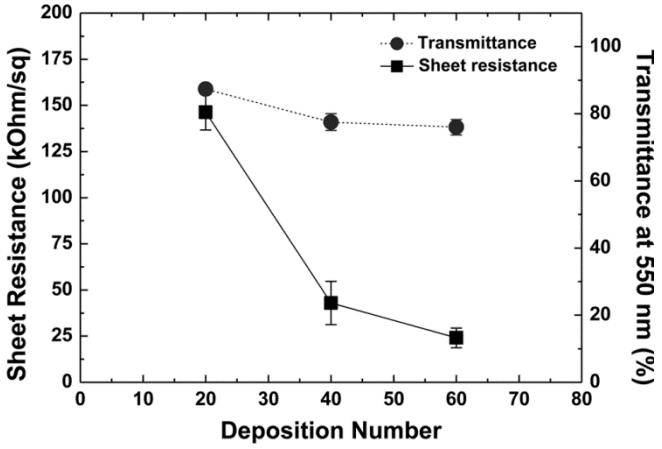

Figure S4. Electrical and optical properties of the rGO thin films deposited on PET with a GO concentration of 2.4 mg mL^{-1}. Sheet resistance and transmittance at λ = 550 nm as a function of deposition number. The deposition velocity and deposition angle (θ) for the reduced GO thin film coatings are 10 mm sec^{-1} and 30°, respectively.