Supporting Information

Advanced Optical Detection through the Use of a Deformably Transferred Nanofilm

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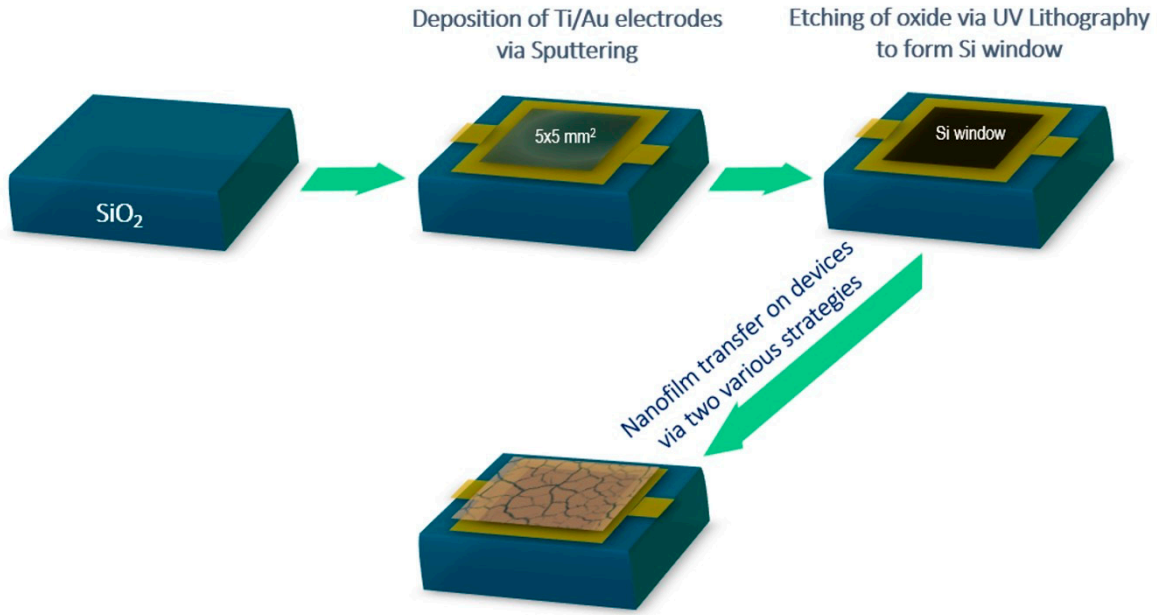

Figure S1. Fabrication process of nanofilm-based photodetection devices.

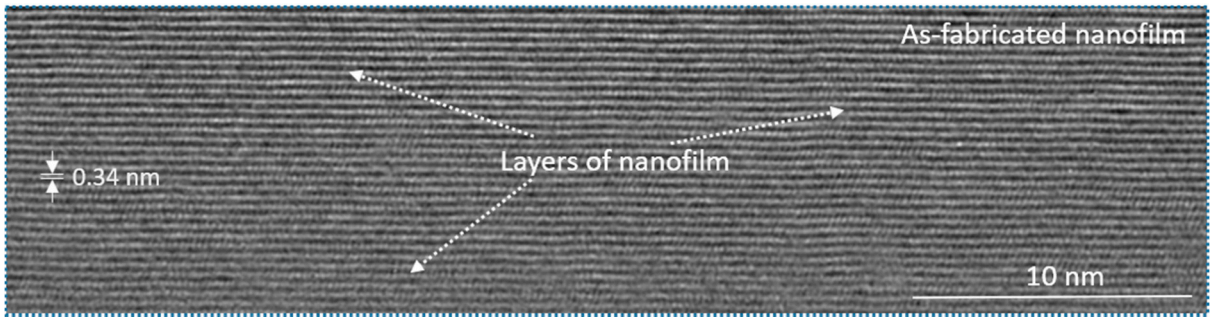

Figure S2. Cross-sectional TEM image of as-fabricated nanofilm.

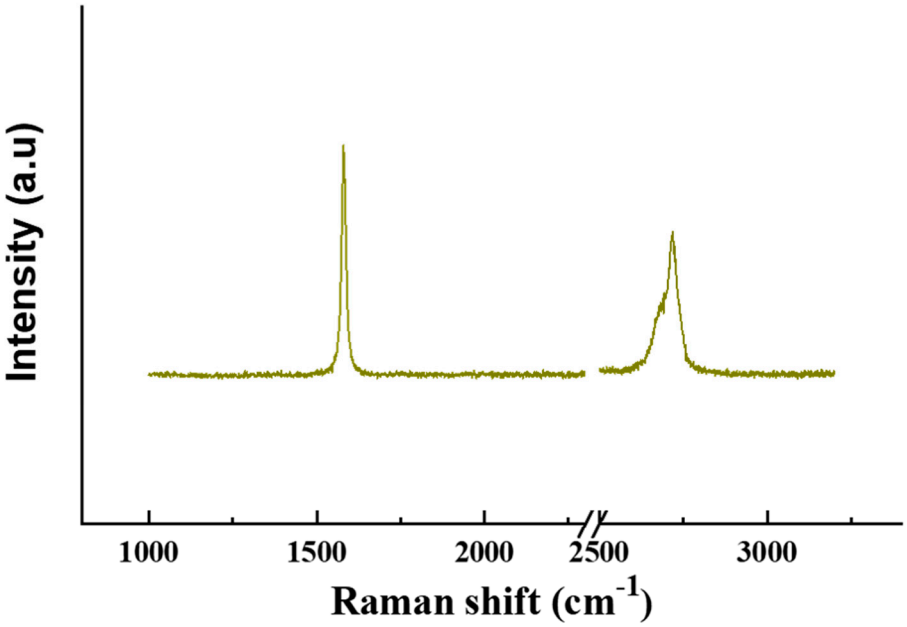

Figure S3. Raman spectra of as-fabricated nanofilm.

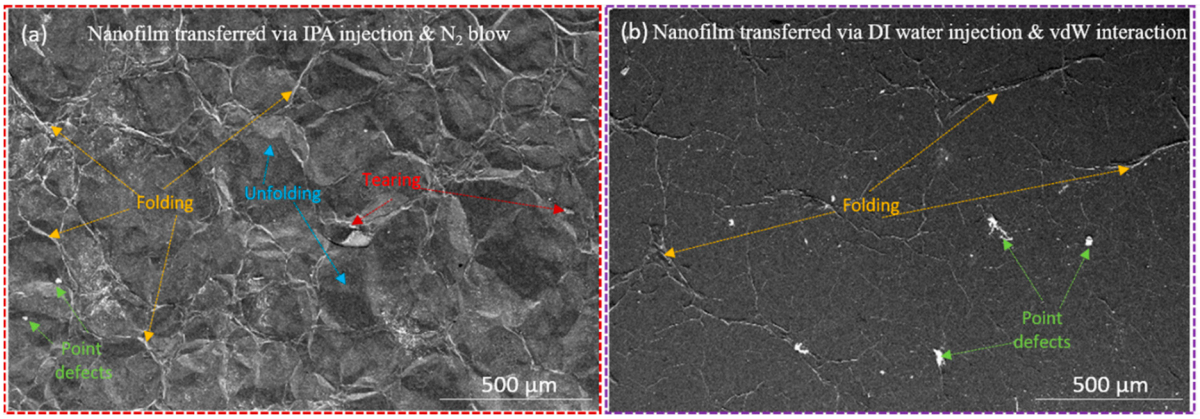

Figure S4. SEM images of nanofilm transferred on Si window via (**a**) IPA injection & N_2 blow (deformable surface) and (**b**) DI water injection & vdW interaction (smooth surface).

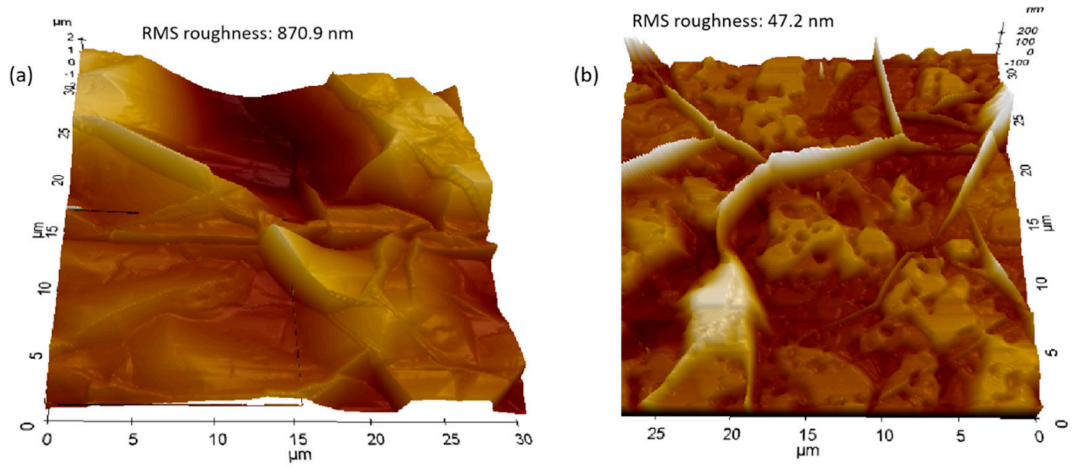

Figure S5. 3D AFM images of nanofilm-transferred on Si via (**a**) IPA injection & N_2 blow (deformable surface) and (**b**) DI water injection & vdW interaction (smooth surface).

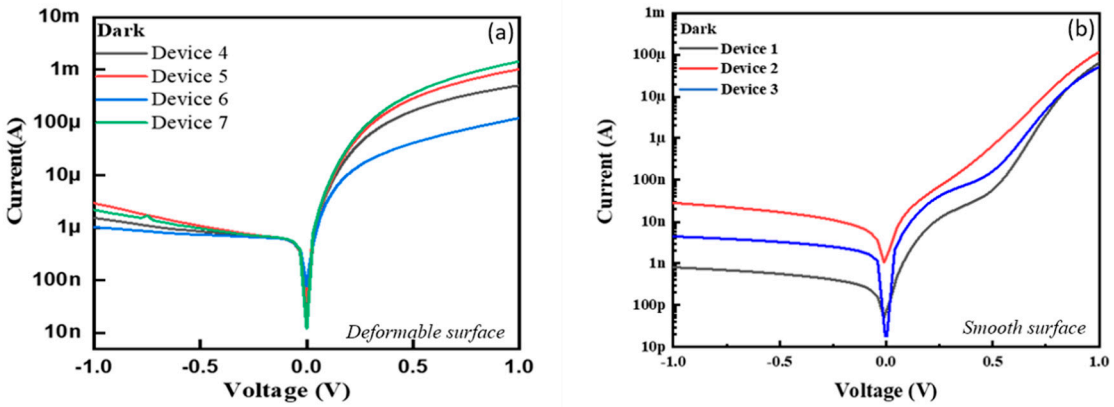

Figure S6. Dark currents measured on various nanofilm-based photodetection devices for two transfer methods via (**a**) IPA injection & N_2 blow (deformable surface) and (**b**) DI water injection & vdW interaction (smooth surface).