

Supporting Information

Vortex Flow Induced Self-Assembly in CsPbI₃ Rods Leads to Improved Electrical Response Towards External Analyte

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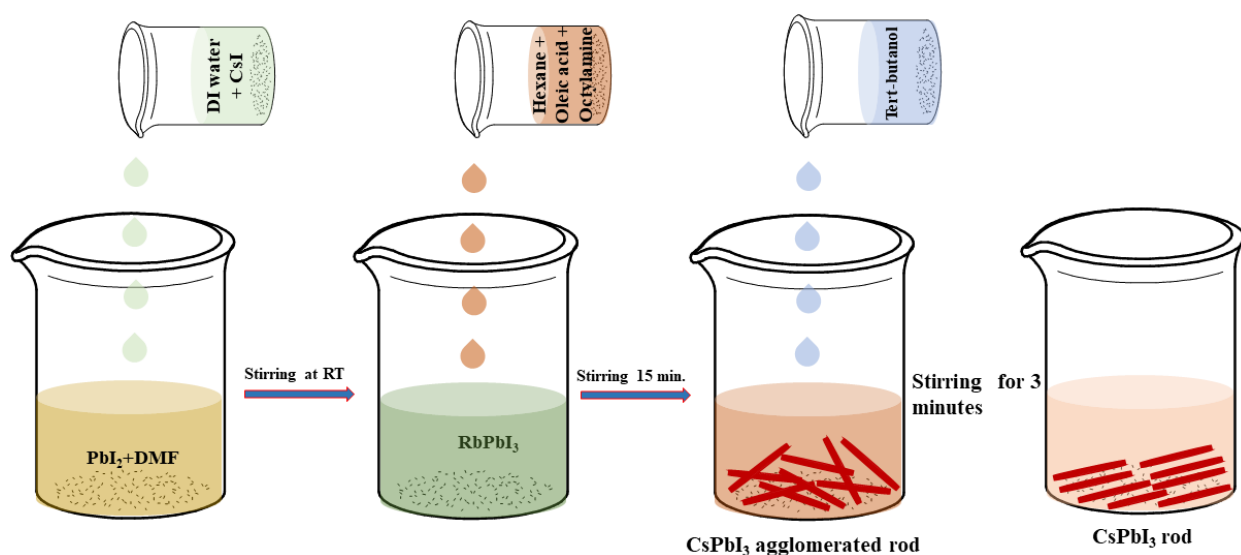


Figure S1: Schematic illustration of the CsPbI₃ synthesis procedure.

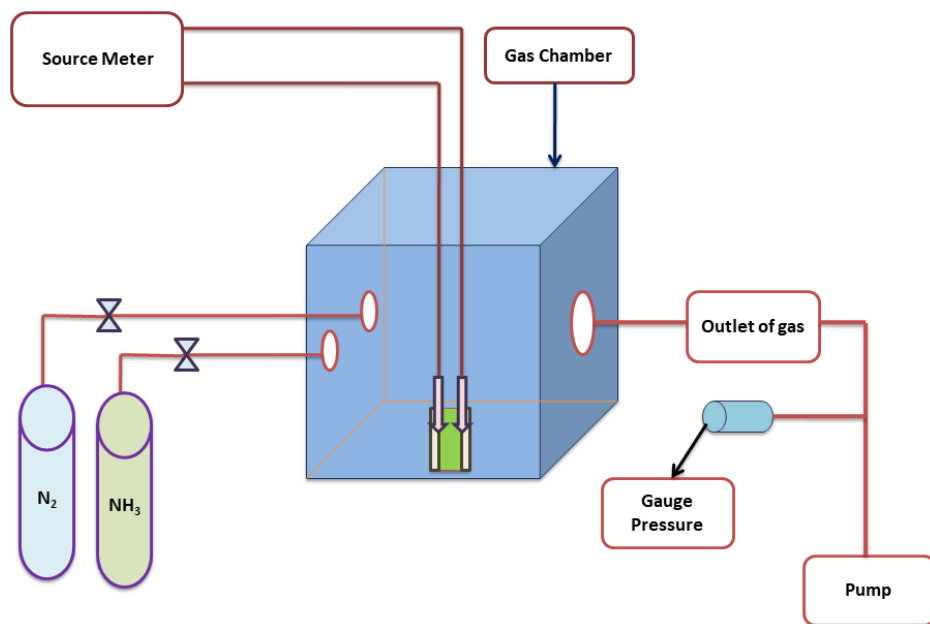


Figure S2: Schematic diagram of our custom designed set up for sensing.

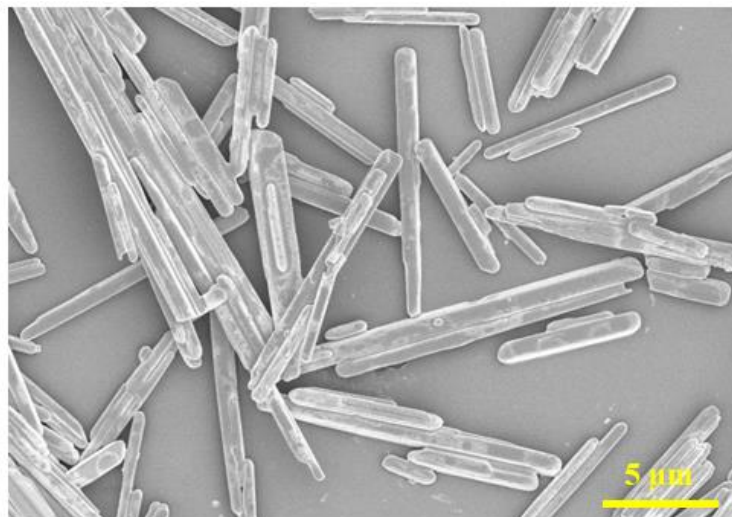


Figure S3: FESEM image of CsPbI₃ microrods

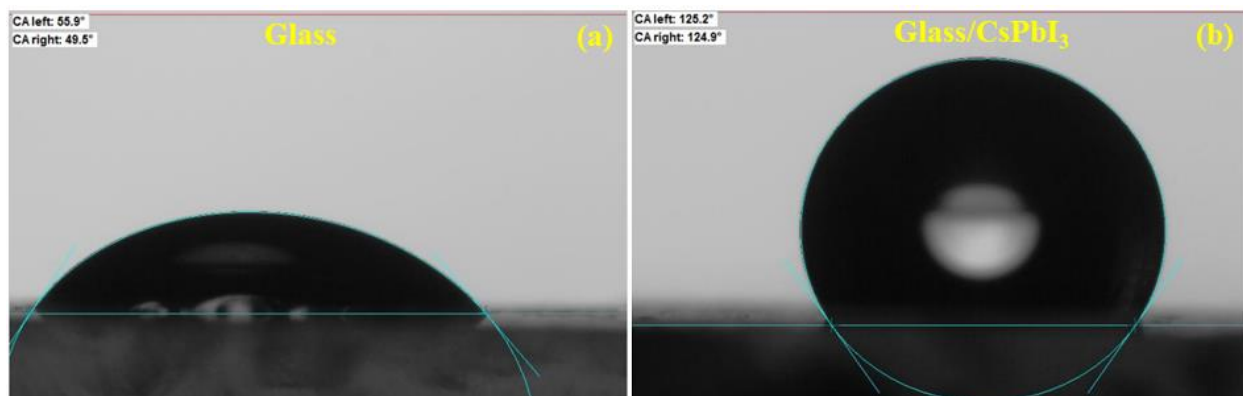


Figure S4: Contact angle measurement on (a) glass substrate and (b) self-assembled film on the glass substrate.

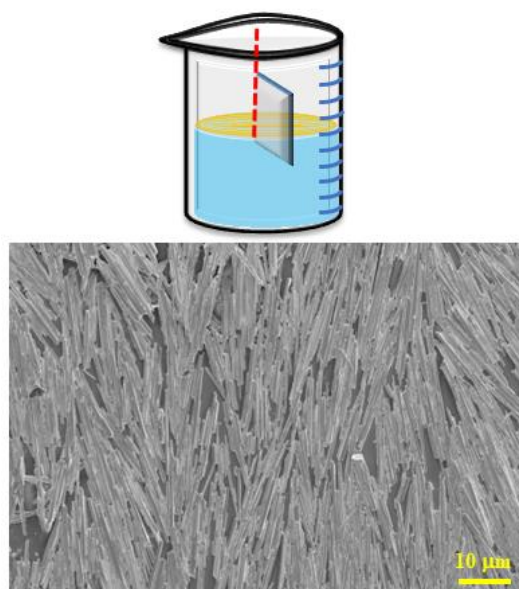


Figure S5: FESEM image of aligned CsPbI₃ rods on a glass substrate lifted from the beaker at an angle of 90°.

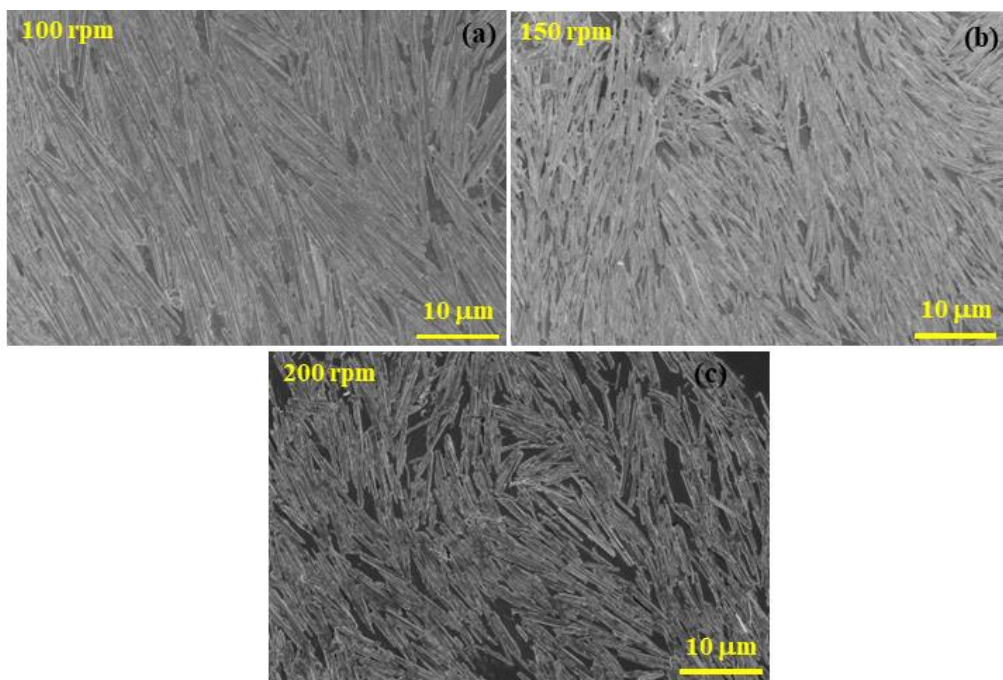


Figure S6: FESEM images of aligned CsPbI3 rods at (a) 100 rpm, (b) 150 rpm, and (c) 200 rpm rotational speed.

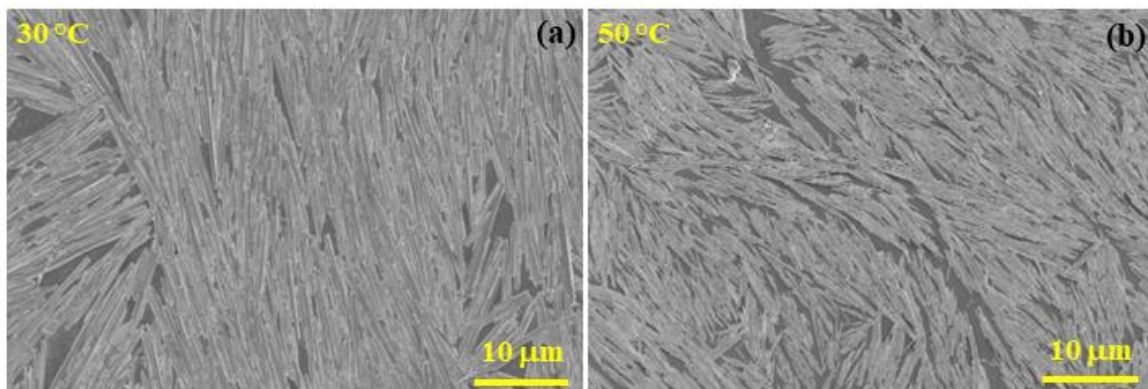


Figure S7: FESEM images showing differences in the alignment of CsPbI3 rods at (a) 30°C and (b) 50°C temperature of the subphase.

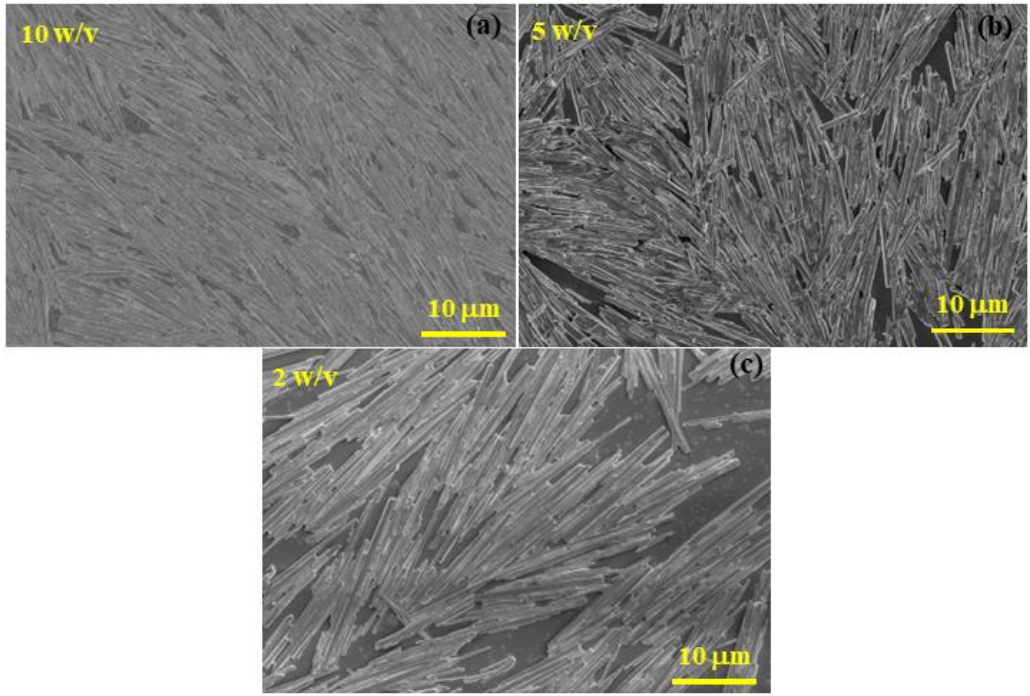


Figure S8: FESEM images of aligned CsPbI_3 rods at (a) 10 w/v, (b) 5 w/v, and (c) 2 w/v concentration on a glass substrate.

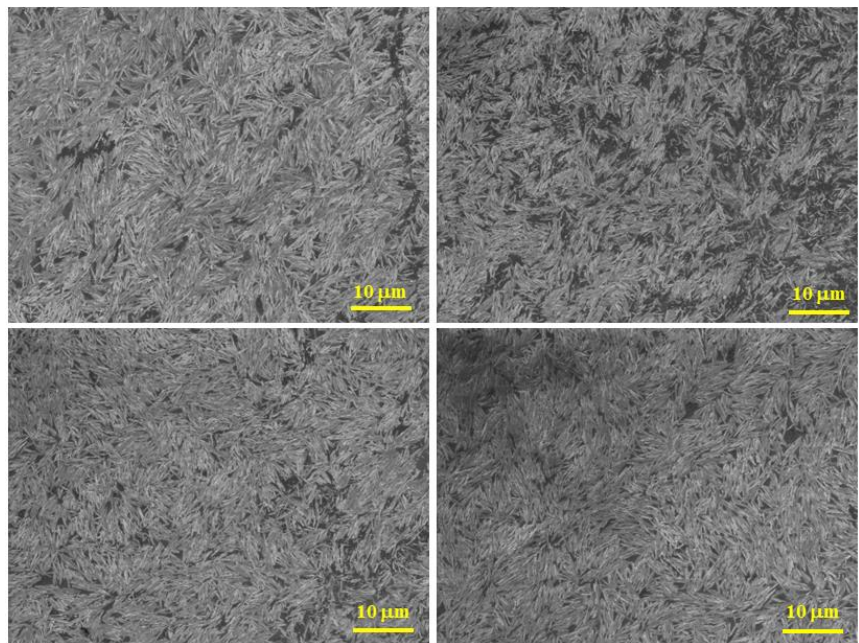


Figure S9: FESEM images of self-assembled CsPbI_3 films on Si substrates.

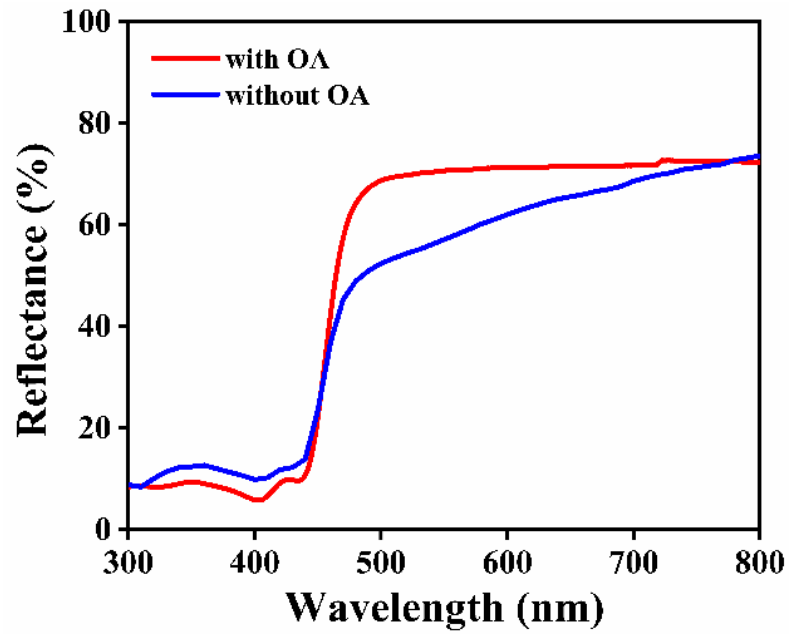


Figure S10: UV-vis spectra of with OA and without OA of CsPbI₃.

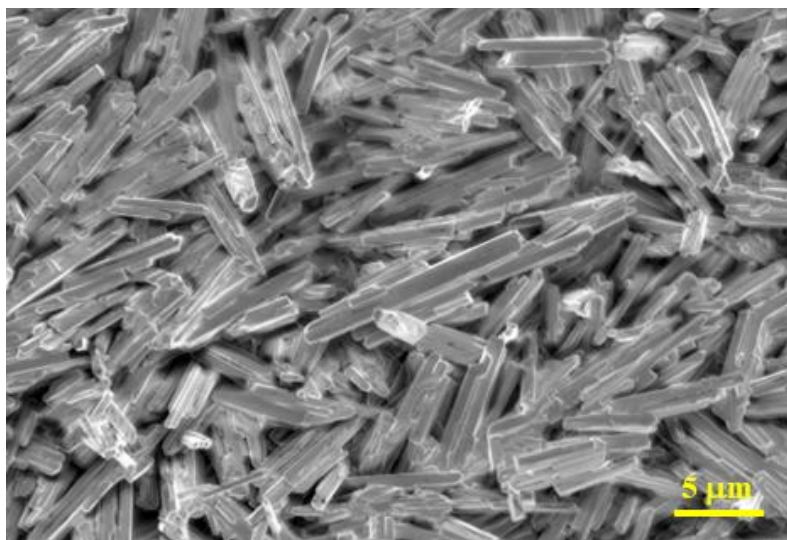


Figure S11: FESEM image of CsPbI₃ without synthesis of OA.

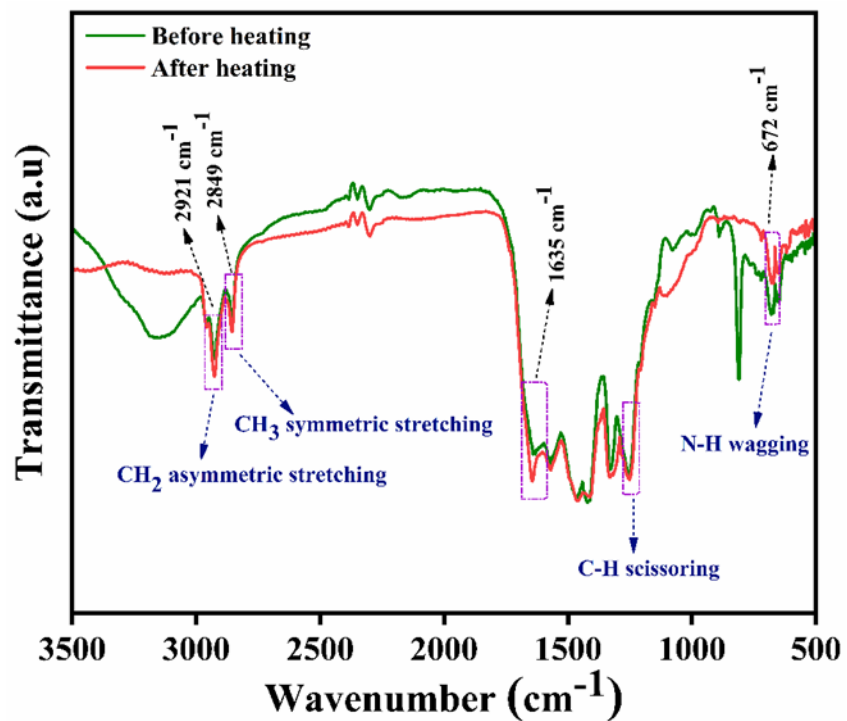


Figure S12: FTIR spectra of the vortex-aligned CsPbI₃ samples before and after heating.

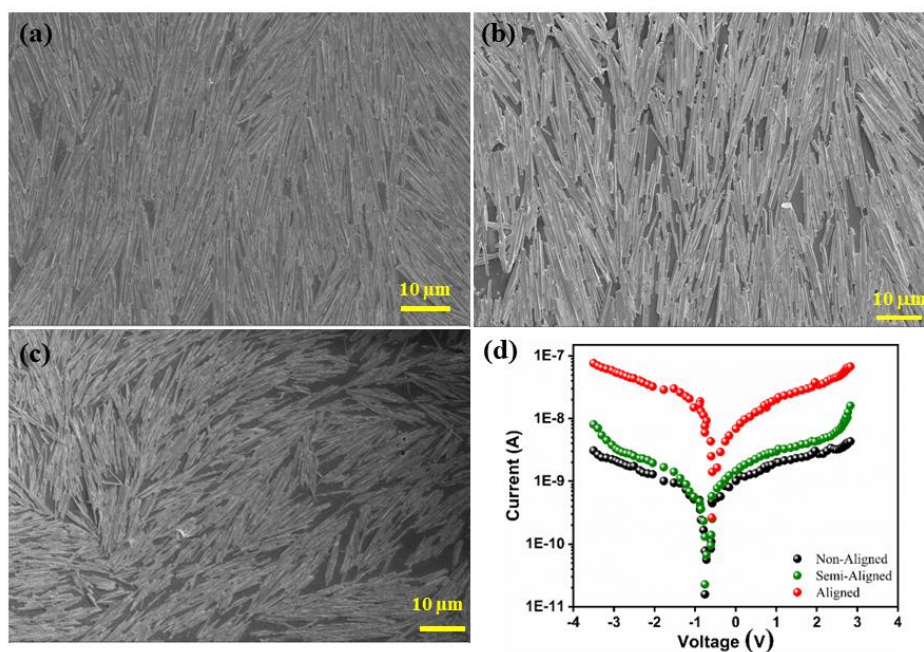


Figure S13: FESEM image of (a) aligned, (b) semi-aligned, and (c) non-aligned thin films. (d) Shows the I-V characteristics for the CsPbI₃ films with different coverages.