

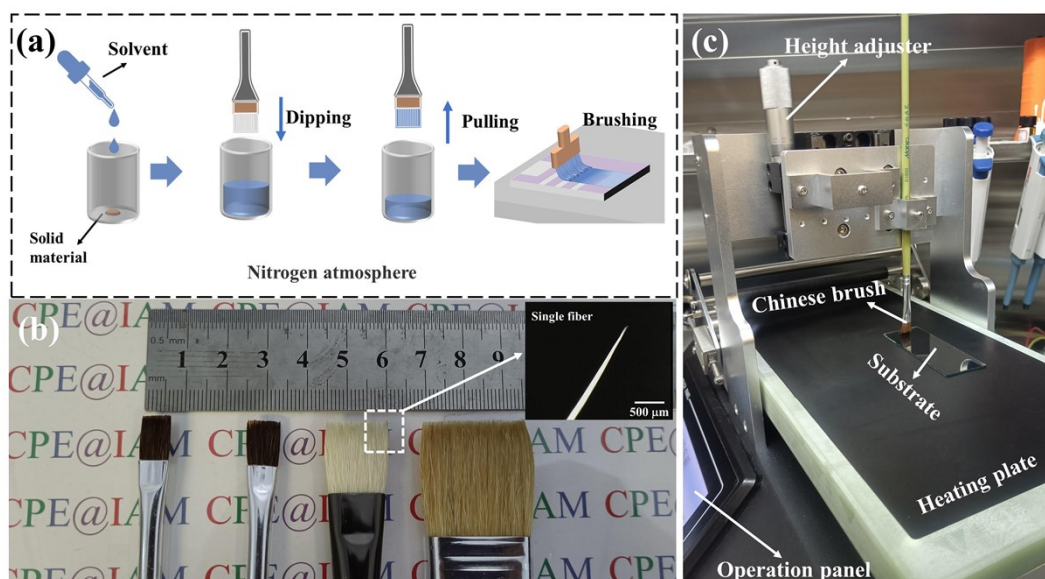
## Supporting information

### Efficient small molecule organic light-emitting diodes fabricated by brush-coating

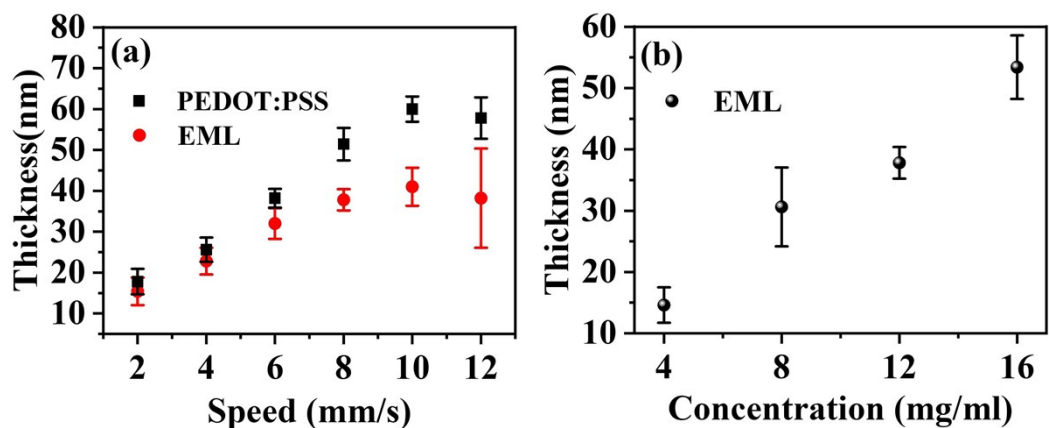
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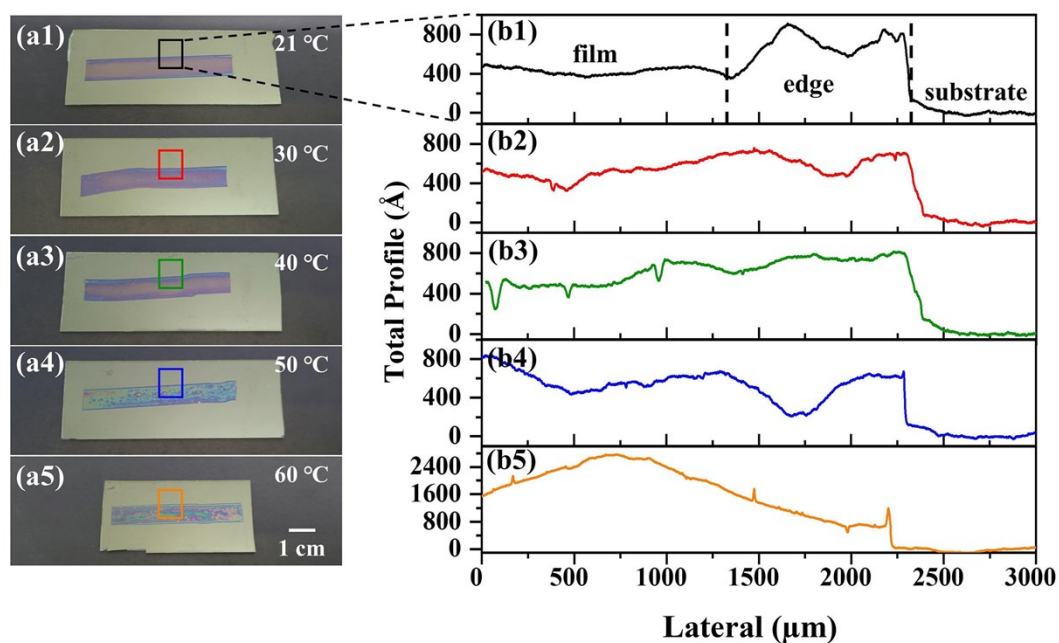
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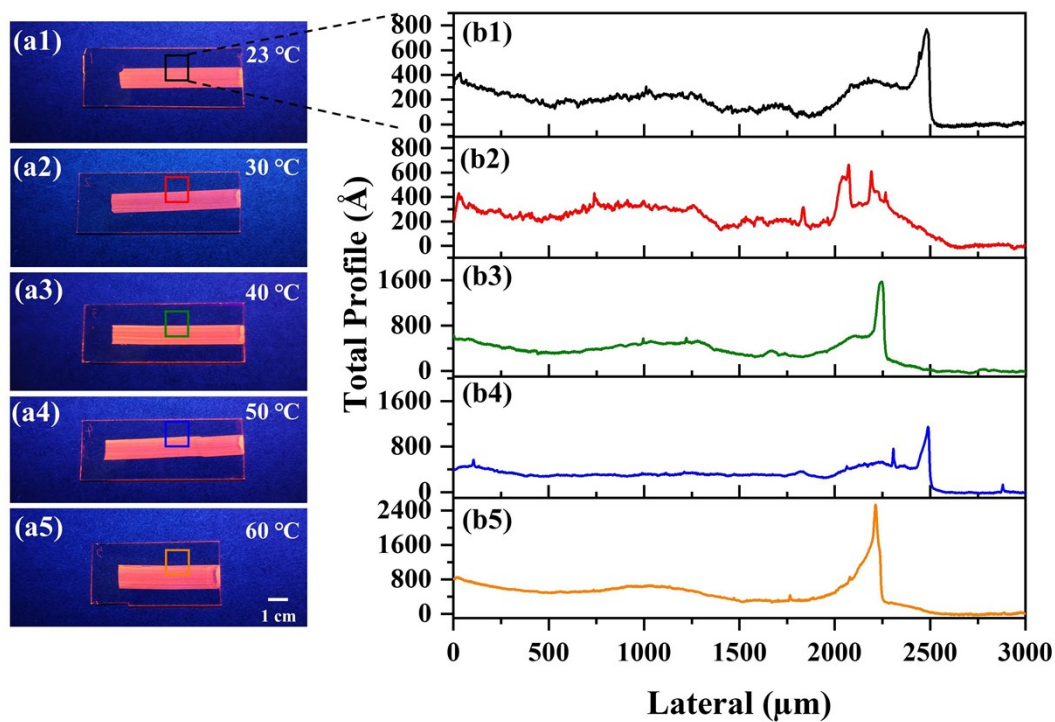
**Fig. S1.** (a) Schematic diagram of brush-coating process, (b) different sized Chinese brushes, and the inserted image is a single fiber (c) brush-coating machine, the brush-coating speed and the temperature of the heating plate can be set on the operation panel.



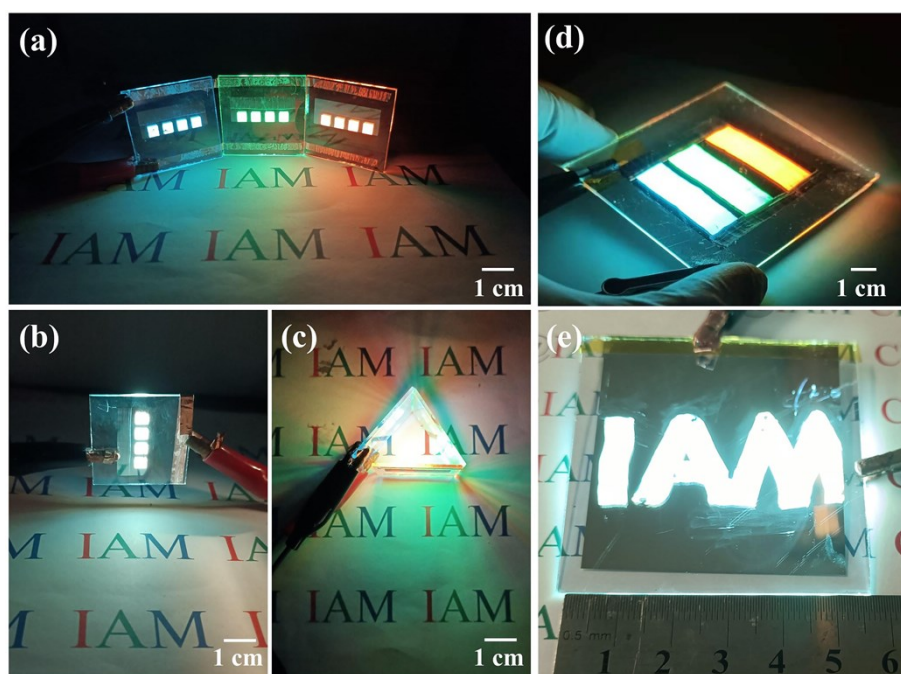
**Fig. S2.** (a) Thicknesses of PEDOT:PSS and EML at different brushing speeds, (b) thicknesses of EML with different solution concentrations.



**Fig. S3.** The influence of substrate temperature on PEDOT:PSS film. The left is the photographs of brush-coated PEDOT:PSS films at different temperature, and the right is the scanned images of the surface profiler of films. The edge of the film has a clear contour, which is caused by the surface tension of the solution at the edge of the brush.



**Fig. S4.** The influence of substrate temperature on EML film. The red emitter film is used to characterize the morphology, because the white light of mixed emitters will have a color difference (photoluminescence) under the excitation of an ultraviolet lamp.



**Fig. S5.** Various devices are prepared by brush-coating. (a) red, green and blue devices with light-emitting area of 3 mm×4 mm, (b) white device with light-emitting area of 3 mm×4 mm, (c) mix-

color space of three primary color device, (d) and (e) brush-coating random shaped light-emitting area manually.

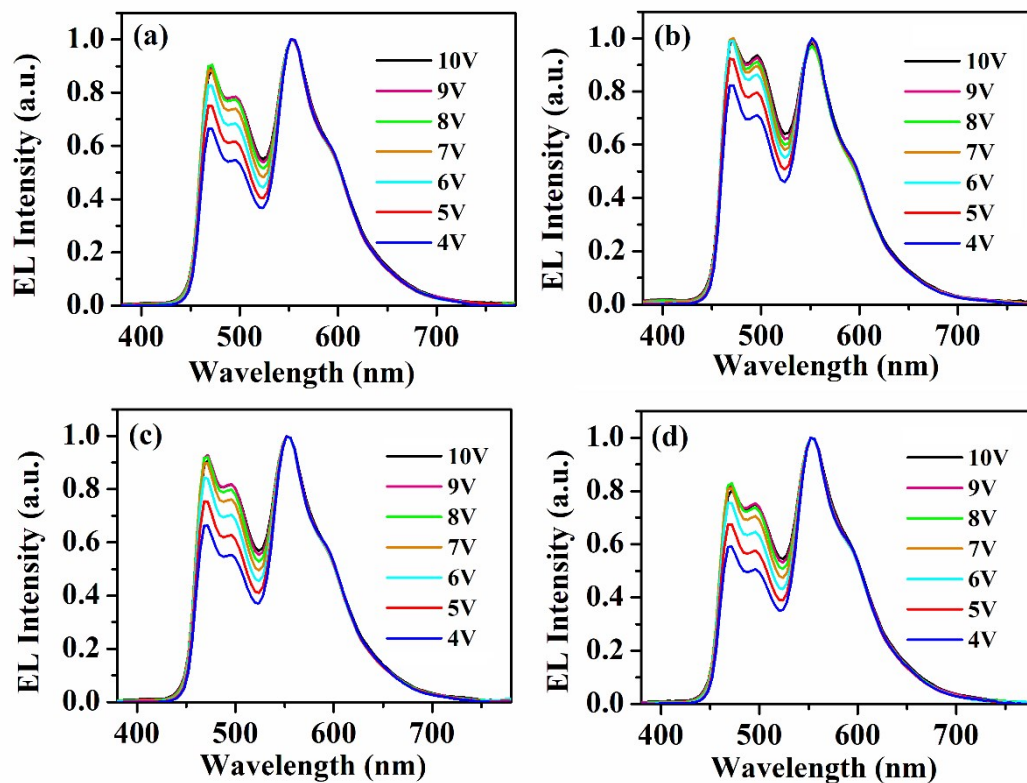


Fig. S6. Normalized EL spectra of device  $W_1$ - $W_4$  with increasing driving voltage.

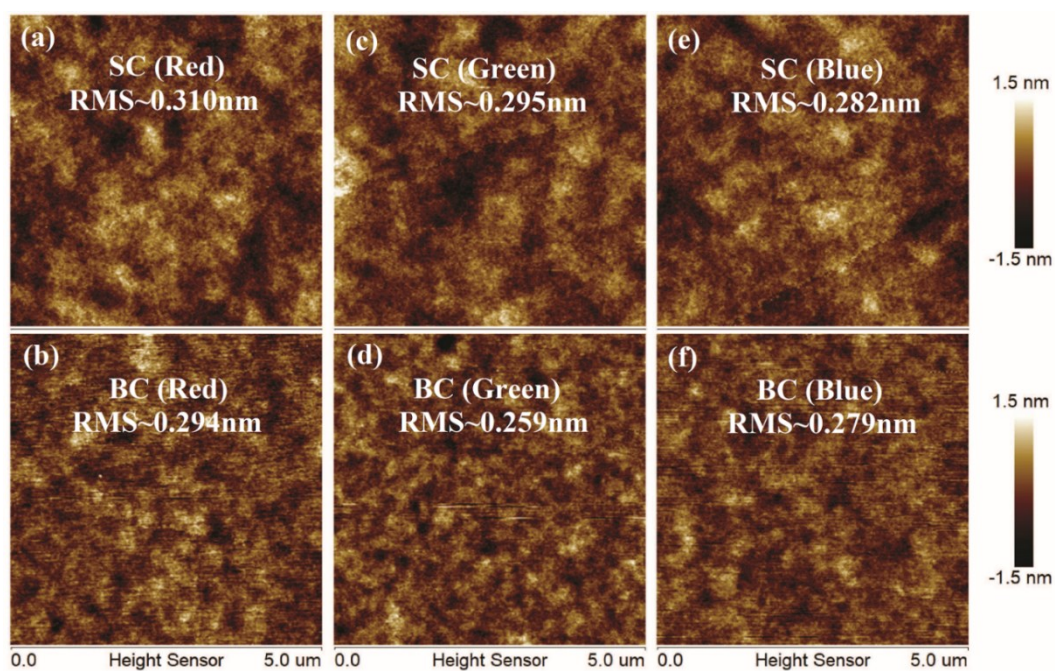


Fig. S7. AFM images of the spin-coated and brush-coated EMLs.