High-Resolution and Scalable Printing of Highly Conductive PEDOT:PSS for Printable Electronics

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Figure S1. Optical microscope image of PEDOT:PSS deposited by TDD non-uniformly in PDMS microchannels with 20 μm pitch using PEDOT:PSS ink dispersion with 50% ethanol and inking speed of 100 μm s⁻¹.

Figure S2. Volume-weighted distribution of dispersed PEDOT:PSS particle size in the PEDOT:PSS aqueous dispersion as measured by DLS. The major peak is at 12.2 nm with 2.6 nm standard deviation and 87.1% area and the minor peak is at 885 nm with 416 nm standard deviation and 11.9% area. The major peak is size of the majority volume of PEDOT:PSS particles and the minor peak is the size and distribution of the larger aggregates in the dispersion.
Figure S3. Optical microscope image of PEDOT:PSS patterns deposited by TDD in PDMS microchannels with ‘wrinkled’ edges when using DMSO cosolvent and heat curing.

Figure S4. Optical microscope image of PEDOT:PSS line pattern transferred over Au/Cr electrodes at a perpendicular orientation for conductivity measurements.