

Article

DNA-Modified Liquid Crystal Droplets

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Table S1. Details of the DNA sequences utilized in this paper.

Name	Detailed sequence information
R1	5'-TCTATTCGCATGAGAATTCCATTACCG-TAAGTACACATCTACTTCACCA-3'
R2	5'-CTTACGGTGAATGGAATTCTCATGCGAATAGATA-CACATCTACTTCACCA-3'
DNA-C18	C ₁₈ H ₃₇ (PO ₃ H)-5'- TGGTGAAGTAGATGTGTA -3'
S1	5'-CCTGTCTGCCTAATGTGCGTCGTAAG TACACATCTACTTCACCA-3'
S2	5'-CTTACGACGCACAAGGAGATCATGAGCTGTCATCGGTCA -3'
S3	5'-CTCATGATCTCCTTTAGGCAGACAGGGACACACTAAGGT-3'
FAM-DNA	FAM-5'-TGACCGATGACAG-3'
ROX-DNA	ROX-5'-ACCTTAGTGTGTC-3'
Hg ²⁺ aptamer 1	5'-CGCATTTCAGGATTCTCAACTCGTATACACATCTACTTCACCA-3'
Hg ²⁺ aptamer 2	5'-TTCGTGTTGTTGTTTCTGTTTGCCTACACATCTACTTCACCA-3'
Thrombin aptamer 1	5'-AGTCCGTGGTAGGGCAGGT-GGGGTGACTTACACATCTACTTCACCA-3'
Thrombin aptamer 2	5'-GGTTGGTGTGGTTGGTACACATCTACTTCACCA-3'
ATP aptamer1	5'-TGGACACCTTCCTTACACATCTACTTCACCA-3'ACCTGTGGAAGGA
ATP aptamer2	5'-ACCTGGGGGAGTATTGCGAGGAAGAAGGTGTCACATA-CACATCTACTTCACCA-3'
H1	5'-TCTATTCGCATGAGGATCCCATTACCG-TAAGTACACATCTACTTCACCA-3'
H2	5'-CTTACGGTGAATGGGATCCTCATGCGAATAGATA-CACATCTACTTCACCA-3'
random 1	5'-TCTATTCGCATGAGAATTGCATTACCGTAAG-3'
random 2	5'-CTTACGGTGAATGCAATTGTCATGCGAATAGA-3'
C-DNA-SH	SH-5'-TACACATCTACTTCACCA-3'
NC-DNA-SH	SH-5'-GCTCACTCAGTCTCAACA-3'

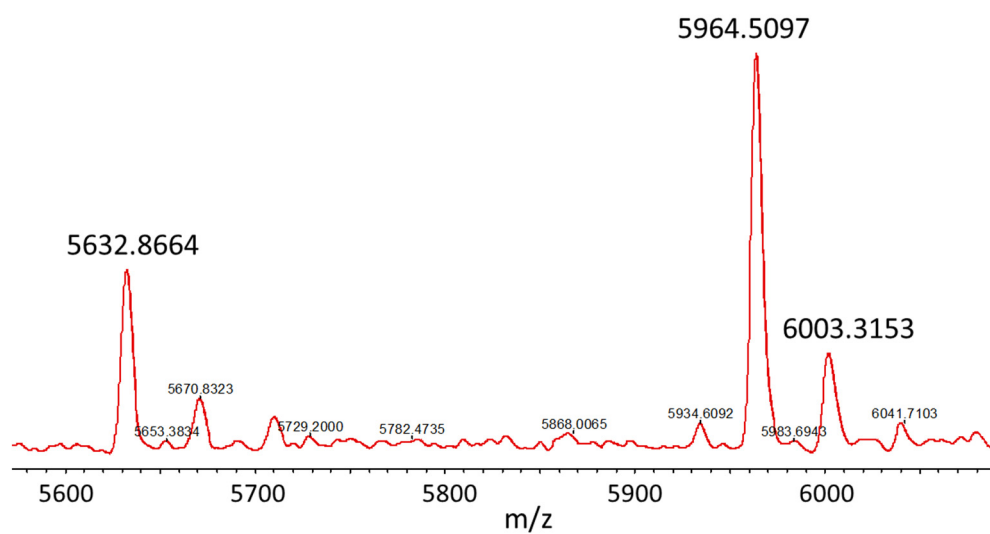


Figure S1. The MALDI - TOF mass spectra of DNA-C18.

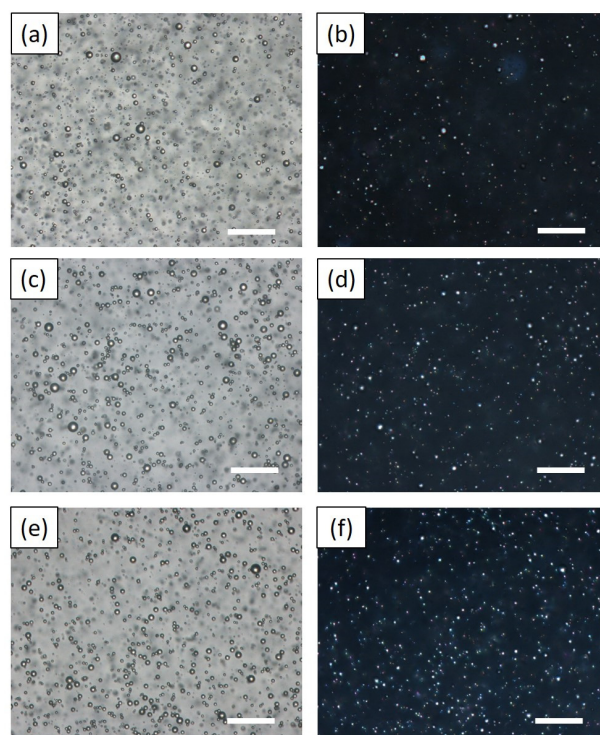


Figure S2. Microscopy images of DNA modified LC droplets before (a, b) and after adding (c, d) 20 μM R1, (e, f) 20 μM R2, (a, c, e) bright field, (b, d, f) polarized light images.

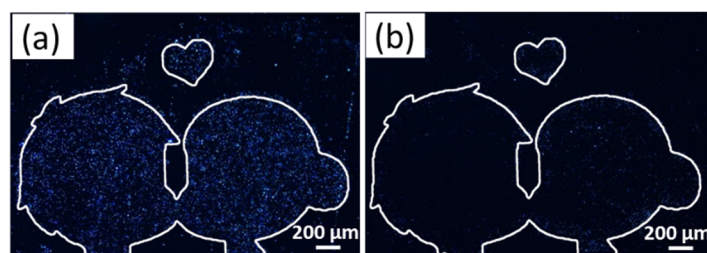


Figure S3. The printing pattern forming with LC droplets, which were linked to Au substrate by base complementation pairing rule. (a) LC droplets are linked to Au substrate by complementary DNA-SH, (b) LC droplets cannot be linked to Au substrate by non-complementary DNA-SH.

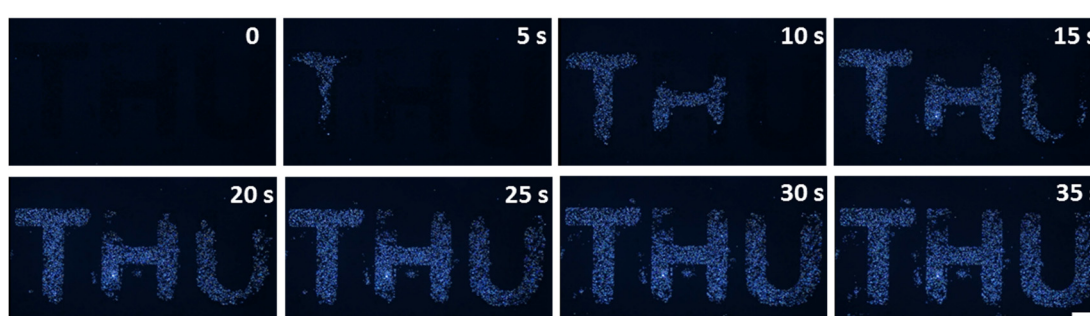


Figure S4. Patterned LC droplets were immersed in 40 °C PBS and the pattern change with the temperature decreased.

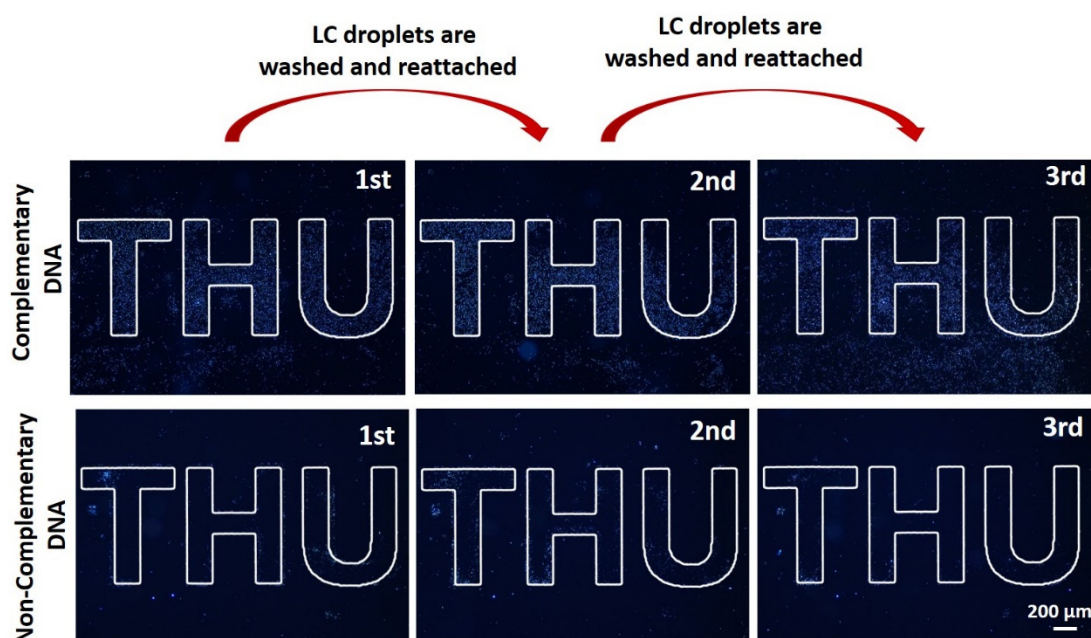


Figure S5. The Au substrate modified by C-SH-DNA and NC-DNA-SH after heating and washing which can be utilized to adsorb LC droplets at least 3 times.