

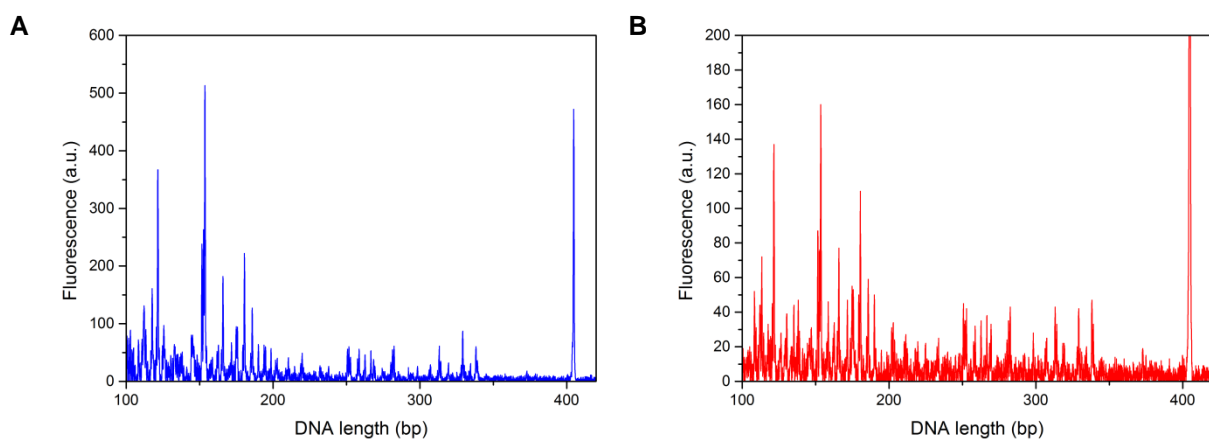
SUPPLEMENTARY INFORMATION

Photochemical analysis of structural transitions in DNA liquid crystals reveals differences in spatial structure of DNA molecules organized in liquid crystalline form

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      10      20      30      40      50      60      70      80      90      100
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3' -GGCGGAAACTCACTCGACTATGGCGAGCGGGCTCGGCTTGCTGGCTCGGCTCGCTCAGTCACTCGCTCCTTCGCCTTCTCGCGGGTTATGCGTTTGGCGG
      110     120     130     140     150     160     170     180     190     200
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *
AGAGGGGGCGCGCAACCGGCTAAGTAATTACGTCGACCGGTGCTGTCCAAGGGCTGACCTTTCGCCCGTCACTCGCGTTGCGTTAATTACACTCAATCGAG
      210     220     230     240     250     260     270     280     290     300
*   *   *   *   *   *   *   *   *   *   *   *   *   *
TGAGTAATCCGTGGGGTCCGAAATGTGAAATACGAAGGCCGAGCATAACACACCTTAACACTCGCCTATTGTTAAAGTGTGTCCTTTGTCGATACTGG
      310     320     330     340     350     360     370     380     390     400
*   *   *   *   *   *   *   *   *   *   *   *   *   *
TACTAATGCGGGTTCGAGCTTTAATTGGGAGTGATTTCCCTTGTTTTCGACCTCGAGGTGGCGCCACCCGCGGCGAGATCTTGATCACCTAGGGGGCCCGA-5'
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Figure S1. Part of pBSK sequence analyzed during our experiments. The complementary sequence for R1090 reverse primer is in blue. Y-Y steps in the region analyzed (bases between 110-400) are shown in red.



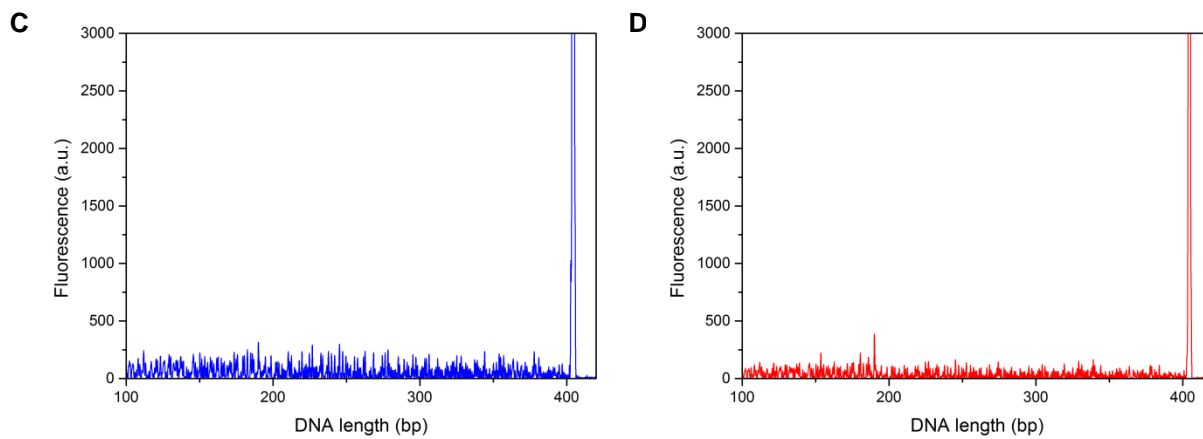


Figure S2. Differences between capillary electrophoretograms obtained after primer extension with R1090 primer for (A) irradiated DNA solution S1; (B) irradiated DNA LC1; (C) non-irradiated DNA solution S1 and (D) non-irradiated DNA LC1.