Supplementary Material (ESI) for Lab on a Chip
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A Systematic Evaluation of the Role of Crystalline Order in Nanoporous Materials on DNA Separation

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Supplementary Information

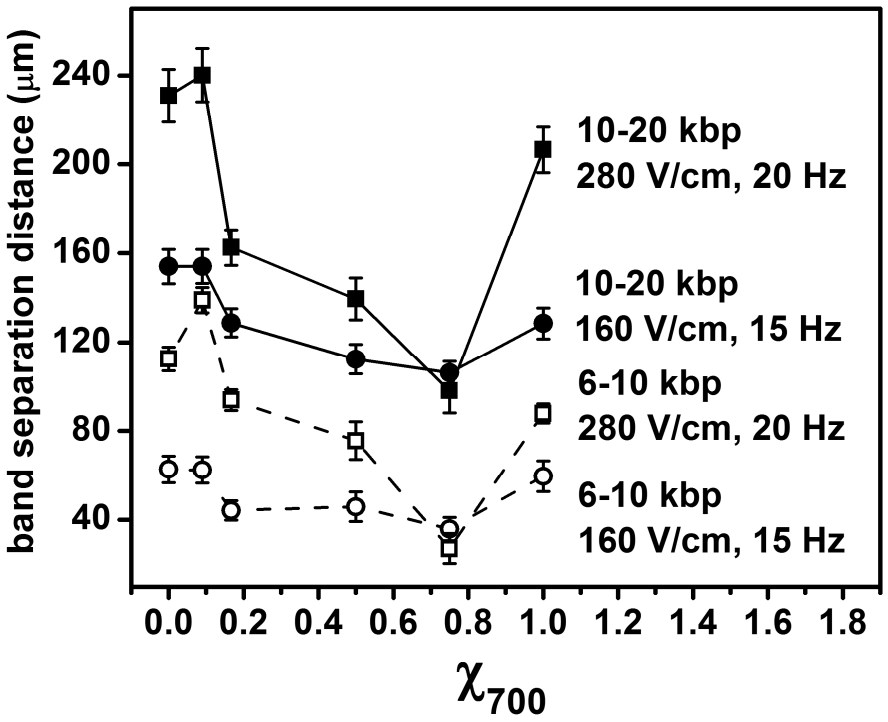

Figure 1S. Variations of band separation distance with respect to χ_{700} for (open) 6-10 kbp and (filled) 10-20 kbp DNA molecules for (circles) E_1 = 160 V/cm, f = 15 Hz and (squares) E_1 = 280 V/cm, f = 20 Hz.

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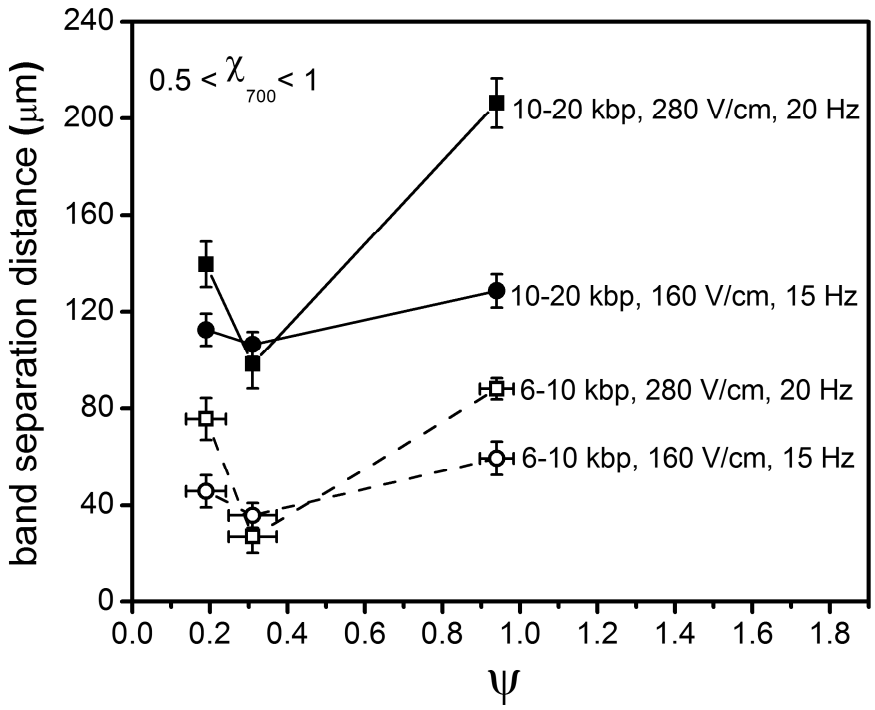

Figure 2S. Variation of band separation distance between (open) 6-10 kbp and (filled) 10-20 kbp DNA molecules with respect to ψ for $0.5 < \chi_{700} < 1$ for (circles) E_1 = 160 V/cm, f = 15 Hz and (squares) E_1 = 280 V/cm, f = 20 Hz.

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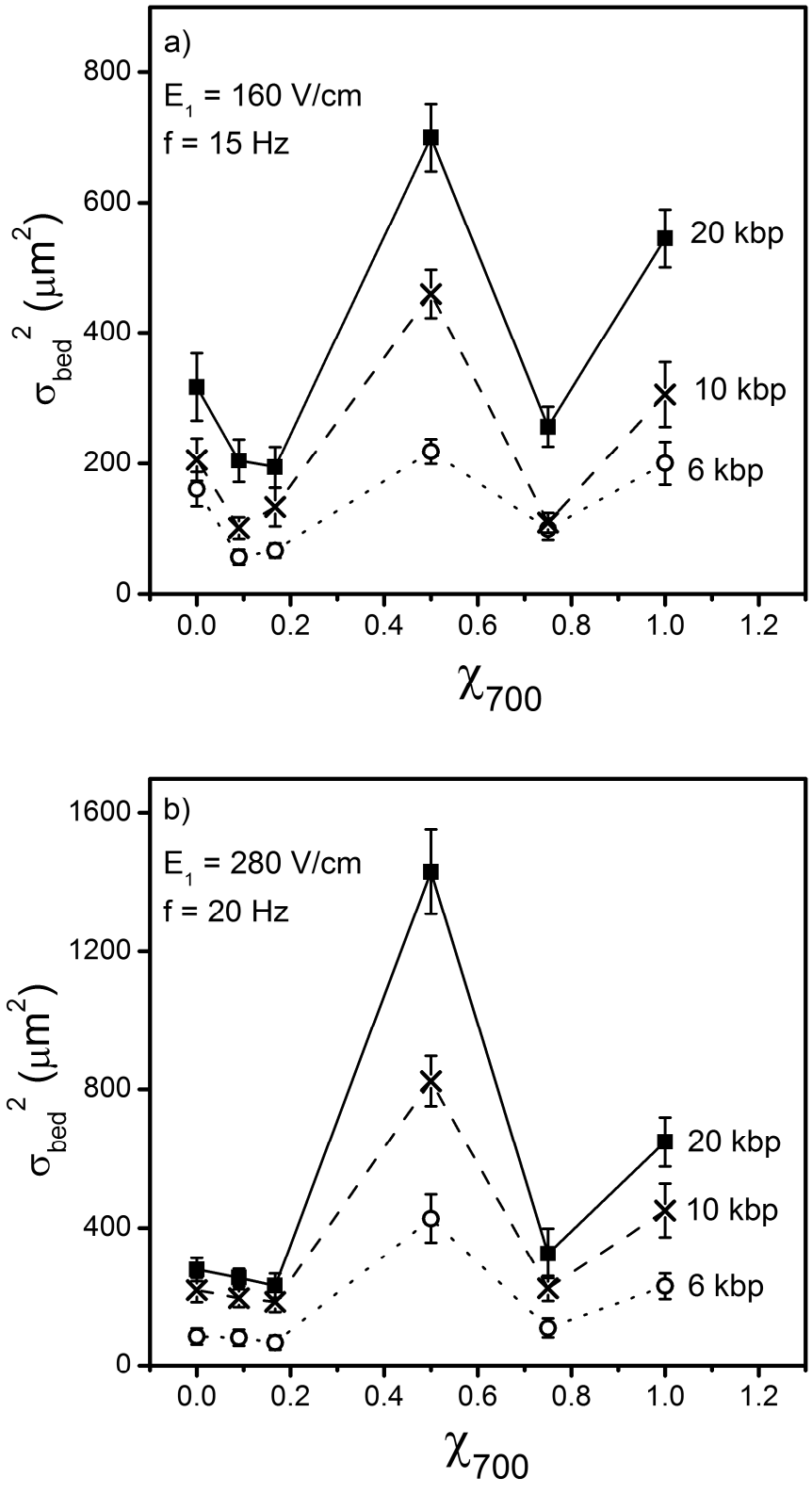

Figure 3S Variation of band broadening, $\sigma^2_{bed,}$ calculated using Eq. 2b, for 6, 10, and 20 kbp DNA molecules with respect to χ_{700} for (a) E_1 = 160 V/cm, f = 15 Hz and (b) E_1 = 280 V/cm, f = 20 Hz.

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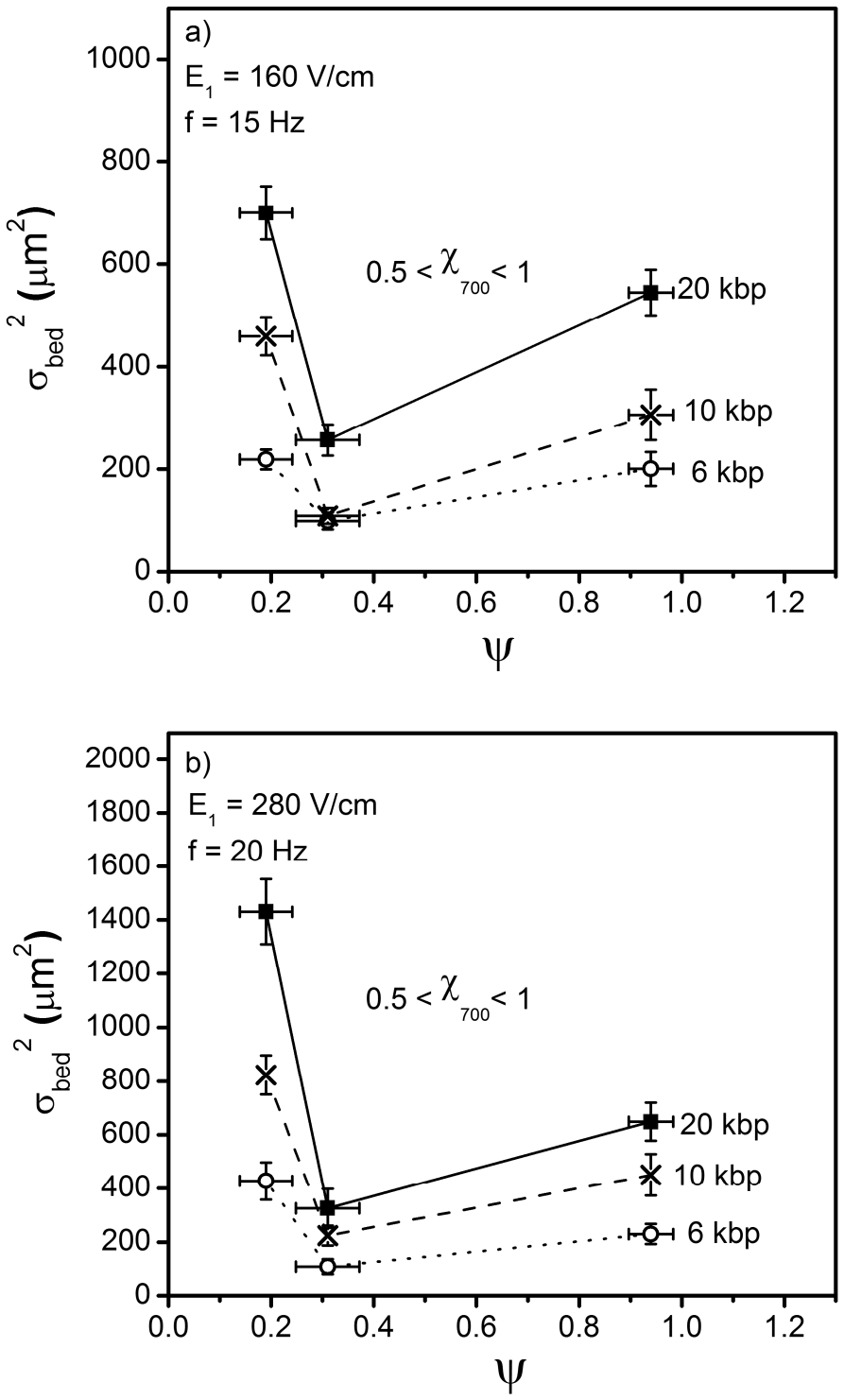

Figure 4S Variation of band broadening, $\sigma^2_{bed,}$ calculated using Eq. 2b, for 6, 10, and 20 kbp DNA molecules with respect to ψ for $0.5 < \chi_{700} < 1$ for (a) E_1 = 160 V/cm, f = 15 Hz and (b) E_1 = 280 V/cm, f = 20 Hz.