Supporting Information

Tensorial modulation of electrokinetic streaming potentials on air and liquid filled surfaces

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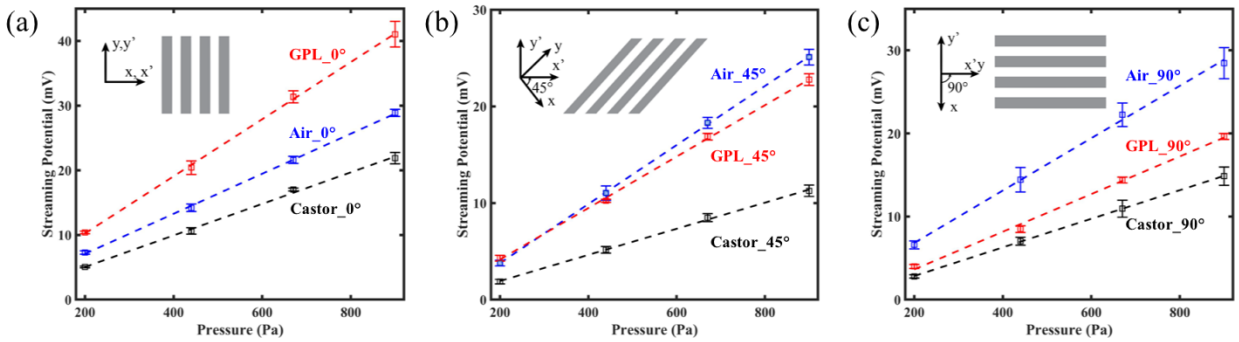

Figure S1. The measured V_s over an *AFS*, castor oil filled *LFS*, and GPL oil filled *LFS*, as a function of groove orientation angle, **(a)** $\theta = 0^o$, **(b)** $\theta = 45°$ and **(c)** $\theta = 90°$. It was noted that the V_s of the GPL filled *LFS* is larger than that of *AFS* only for $\theta = 0^o$, while the V_s of *AFS* is always larger than that of *LFS* for both $\theta = 45^o$ and $\theta = 90^o$.

Table S1 Values of streaming mobilities at principal directions for *AFS* and *LFS* (at 0.1 mM electrolyte concentration, σ = 0.001 S/m, $\frac{dP}{dx'} = 7627$ Pa/m).

	M_x (10^{-5} mV. S. Pa/m)	M_y (10^{-5} mV. S. Pa/m)	$M_x - M_y$ (10^{-5} mV. S. Pa/m)
AFS	-3.21	-3.16	-0.05
Castor *LFS*	-2.43	-1.65	-0.78
GPL *LFS*	-4.56	-2.18	-2.38