

Microtomographic PIV measurements of viscoelastic instabilities in a 3D micro-contraction

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Supplemental movie captions

Movie 1

Animated isosurfaces of $1/3u_x^*$ from the microtomographic PIV measurements for $Wi = 5, 11, 22, \text{ and } 44$. The animation is rendered and played back at 24 frames per second (FPS), twice the recording speed (12 FPS).

Movie 2

Animated isosurfaces at $Wi = 87$ of $0.5\langle\dot{\gamma}\rangle^*$ (the grey surface) and $0.5\langle U \rangle^*$ (the pink surface), one half the phase averaged dimensionless rate-of-strain magnitude and velocity magnitude, respectively. Circulation for phase time $\phi^* = 0 - 1$ is repeated on a loop. The animation is matched to the recording speed (12 FPS), and frames interpolated in the movie to 24 FPS.