

Supporting information

Time-resolved polarized light imaging of sheared materials: application to polymer crystallization.

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The folder of supporting information contains montages of polarized light video (*.avi) and montages of video frames (*.jpg) of shear-induced crystallization of polymer melt (polyethylene, HDPE) acquired at two different shear conditions (Table). The shear pulses have been performed at 398 K. The scale of the frames is 18 mm.

Table.

	<i>Files</i>	<i>Conditions of shear</i>	<i>Temperature conditions</i>	<i>Number of video frames and frame rate</i>
1	omega0667time7_398Kmontage.jpg	angular acceleration $\alpha = 0.333 \text{ rad/s}^2$, maximum angular speed $\Omega_{\text{max}} = 0.667 \text{ rad/s}$ and time of shearing $t_s = 7 \text{ s}$	T = 398 K for 60 s and then cooled down	600 frames, first 200 frames at 0.2 s per frame and the rest 400 frames at 1 s per frame
2	omega0667time22_398Kmontage.jpg omega0667time22_398Ks.avi	$\alpha = 0.333 \text{ rad/s}^2$, $\Omega_{\text{max}} = 0.667 \text{ rad/s}$ and $t_s = 22 \text{ s}$	T = 398 K for 60 s and then cooled down	600 frames, $200 \times 0.2 \text{ s}$ and $400 \times 1 \text{ s}$



