

**Movie 1** Movie of an air bubble collapsing onto a wall showing numerical schlieren (left) and log-scale pressure field (right). Gas volume fraction  $\alpha_g$  is shown as a shaded area of decreasing opacity with decreasing  $\alpha_g$  (left), while the  $\alpha_g = 0.5$  isoline is shown as a solid curve (right) representing a pseudo-phase-interface. Time and pressure correspond to a bubble with  $R_0 = 400 \mu\text{m}$  exposed to a driving pressure of  $p_\infty = 10^7 \text{ Pa}$ . Note that the frame rate is ten times higher at the beginning of the movie. Movie 1 shows the configuration with a smooth wall (no crevice,  $R_C = 0$ ) and an attached bubble with the stand-off distance  $S/R_0 = 0.1$ .

**Movie 2** Smooth wall (no crevice,  $R_C = 0$ ), attached bubble  $S/R_0 = 0.35$ . See caption Movie 1.

**Movie 3** Smooth wall (no crevice,  $R_C = 0$ ), attached bubble  $S/R_0 = 0.6$ . See caption Movie 1.

**Movie 4** Smooth wall (no crevice,  $R_C = 0$ ), detached bubble  $S/R_0 = 1.1$ . See caption Movie 1.

**Movie 5** Small crevice ( $R_C/R_0 = 0.15$ ), attached bubble  $S/R_0 = 0.1$ . See caption Movie 1.

**Movie 6** Small crevice ( $R_C/R_0 = 0.15$ ), attached bubble  $S/R_0 = 0.35$ . See caption Movie 1.

**Movie 7** Small crevice ( $R_C/R_0 = 0.15$ ), attached bubble  $S/R_0 = 0.6$ . See caption Movie 1.

**Movie 8** Small crevice ( $R_C/R_0 = 0.15$ ), detached bubble  $S/R_0 = 1.1$ . See caption Movie 1.

**Movie 9** Large crevice ( $R_C/R_0 = 0.75$ ), attached bubble  $S/R_0 = 0.1$ . See caption Movie 1.

**Movie 10** Large crevice ( $R_C/R_0 = 0.75$ ), attached bubble  $S/R_0 = 0.35$ . See caption Movie 1.

**Movie 11** Large crevice ( $R_C/R_0 = 0.75$ ), attached bubble  $S/R_0 = 0.6$ . See caption Movie 1.

**Movie 12** Large crevice ( $R_C/R_0 = 0.75$ ), detached bubble  $S/R_0 = 1.1$ . See caption Movie 1.