Movie S1: The evolution of a hanging droplet upon the impact of a drop of diameter, $D = 2$ mm, released from a height of $h = 4.98$ mm (impact velocity of $\sqrt{2gh} = 0.313$ m/s).

Movie S2: The evolution of a hanging droplet upon the impact of a drop of diameter, $D = 1.6$ mm, released from a height of $h = 10.46$ mm (impact velocity of $\sqrt{2gh} = 0.453$ m/s).

Movie S3: The evolution of a hanging droplet upon the impact of a drop of diameter, $D = 1$ mm, released from a height of $h = 24.27$ mm (impact velocity of $\sqrt{2gh} = 0.690$ m/s).

Movie S4: The evolution of an intermediate droplet upon the impact of a drop of diameter, $D = 0.6$ mm, released from a height of $h = 61.67$ mm (impact velocity of $\sqrt{2gh} = 1.1$ m/s).

Movie S5: The evolution of an intermediate droplet upon the impact of a drop of diameter, $D = 1$ mm, released from a height of $h = 27.16$ mm (impact velocity of $\sqrt{2gh} = 0.730$ m/s).

Movie S6: The evolution of an intermediate droplet upon the impact of a drop of diameter, $D = 1.4$ mm, released from a height of $h = 14.86$ mm (impact velocity of $\sqrt{2gh} = 0.540$ m/s).

Movie S7: The evolution of a wrapping droplet upon the impact of a drop of diameter, $D = 2$ mm, released from a height of $h = 50.97$ mm (impact velocity of $\sqrt{2gh} = 1$ m/s).

Movie S8: The evolution of a wrapping droplet upon the impact of a drop of diameter, $D = 1.6$ mm, released from a height of $h = 21.53$ mm (impact velocity of $\sqrt{2gh} = 0.650$ m/s).

Movie S9: The evolution of a wrapping droplet upon the impact of a drop of diameter, $D = 1$ mm, released from a height of $h = 32.62$ mm (impact velocity of $\sqrt{2gh} = 0.8$ m/s).