Supporting Information for *Sequential drop impacts onto horizontal fiber arrays*

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Supplementary Figures

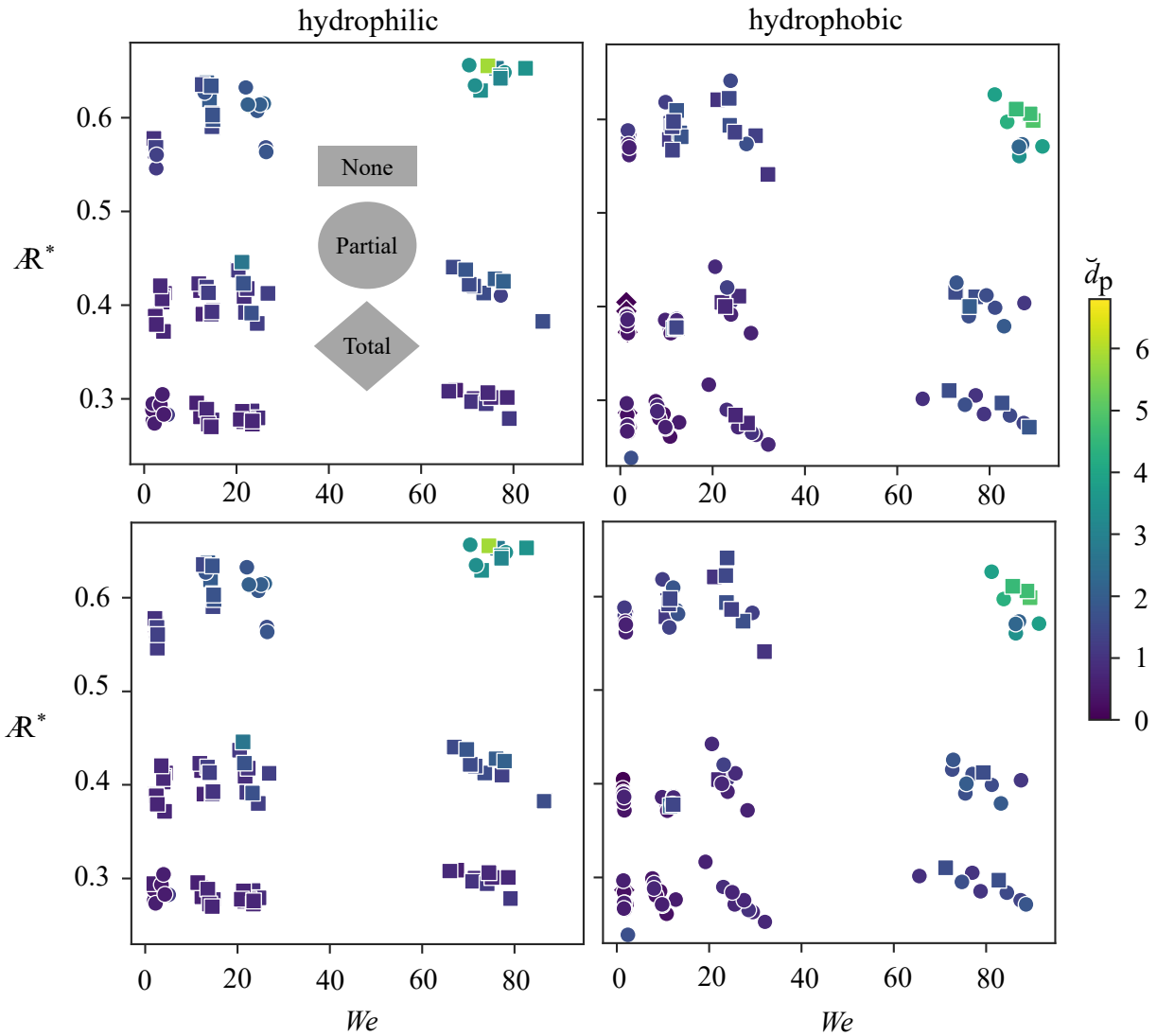

Figure 1: Staggered fiber impacts classified according to the degree of supersurface retention and plotted across the modified aspect ratio $\mathcal{R}^*$ and Weber number We. Brighter colors correspond to higher penetration depths; refer to **Fig.4** in the paper. **(a-b)** Impact classifications after the first drop. **(c-d)** Impact classifications after the second drop.

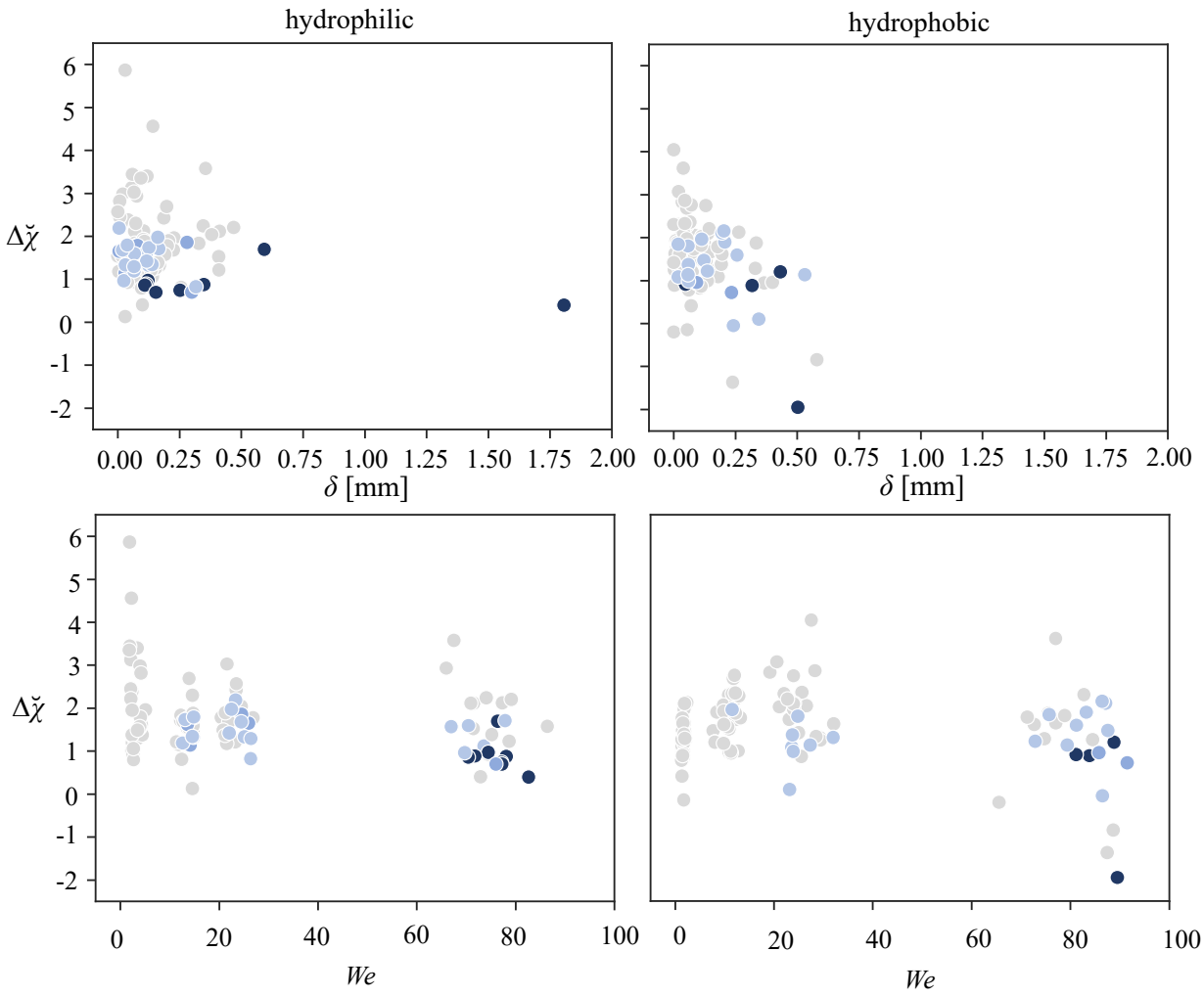

Figure 2: Change in spreading of liquid mass within the staggered array imposed by the second drop. **(a)** Change in spread versus the displacement of the second drop relative to the first drop. **(b)** Change in spread versus the impact Weber number. Colors indicate degree of fragmentation; refer to **Fig.4** in the paper.

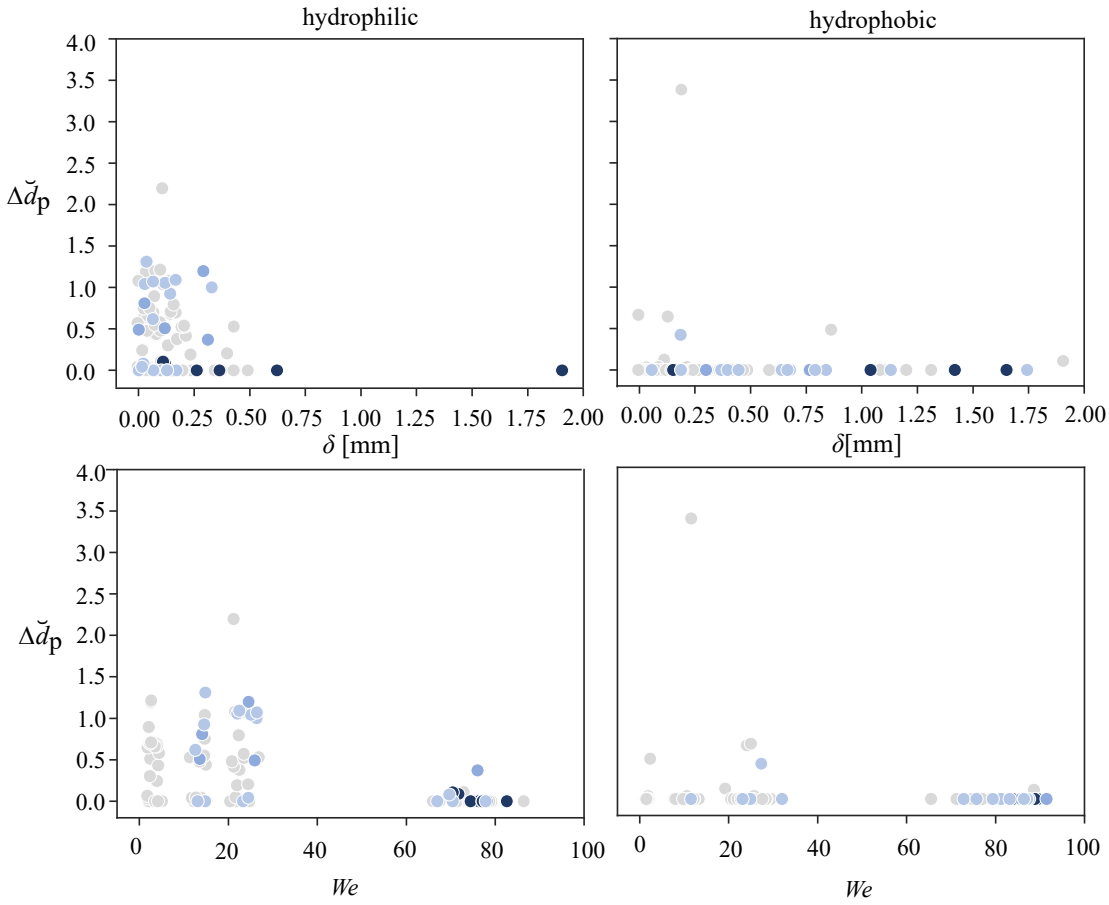

Figure 3: Change of penetration depth within the staggered array imposed by the second drop.**(a)** Change in penetration depth versus the displacement of the second drop relative to the first drop. **(b)** Change in penetration depth versus impact Weber number. Colors indicate degree of fragmentation; refer to **Fig. 4** in the paper.