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Drop impact of suspensions M.-J. THORAVAL, F. BOYER, E. SANDOVAL NAVA, J.F. DIJKSMAN, D. LOHSE, J.H. SNOELJER, Physics of Fluids, University of Twente — Drop impact studies have a wide range of applications, many of which involve complex fluids. We study here the liquid drop impact of a silver nano-particles dispersion on a solid glass surface. This dispersion is used for inkjet printing of functional electronic materials. When the impact velocity increases, the drop classically splashes into smaller droplets. However, it surprisingly stops splashing above a critical impact velocity. We combine high-speed imaging experiments with different characterizations of the dispersion to understand this transition to non-splashing.

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