

Abstract Submitted  
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**“Cold” Leidenfrost effect** PHILIPPE BOURRIANNE, CHRISTOPHE CLANET, DAVID QUERE, PMMH, ESPCI / LadHyX, Ecole Polytechnique —  
An evaporating Leidenfrost drop placed on a hot substrate can levitate on its own vapor if the temperature of the substrate is high enough. We discuss the possibility to decrease this critical Leidenfrost temperature using a super-hydrophobic coating. Measuring adhesion and observing the liquid-solid interface, we suggest a possible explanation for this “cold” regime of levitation.

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