Grooves shed dew

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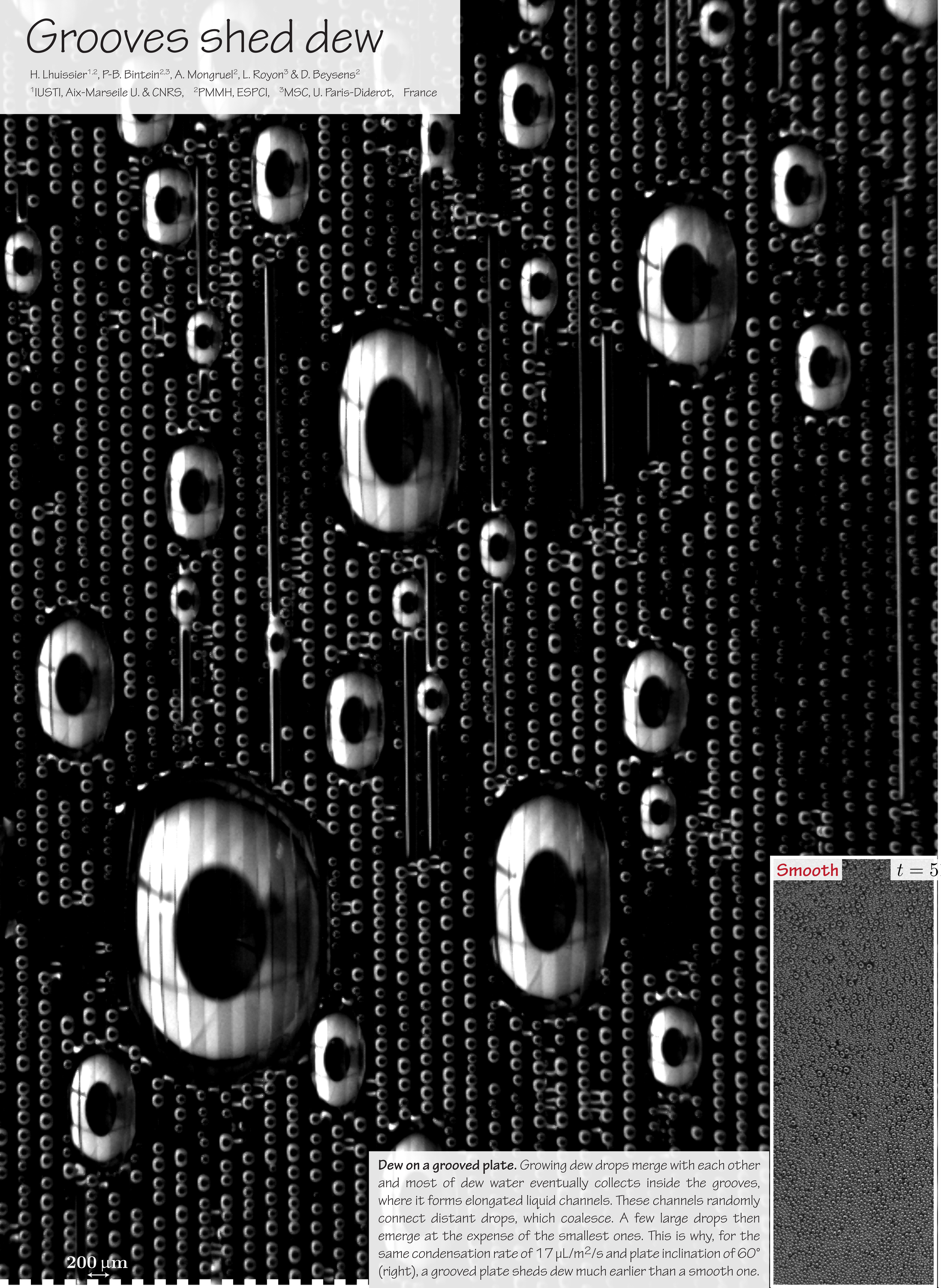

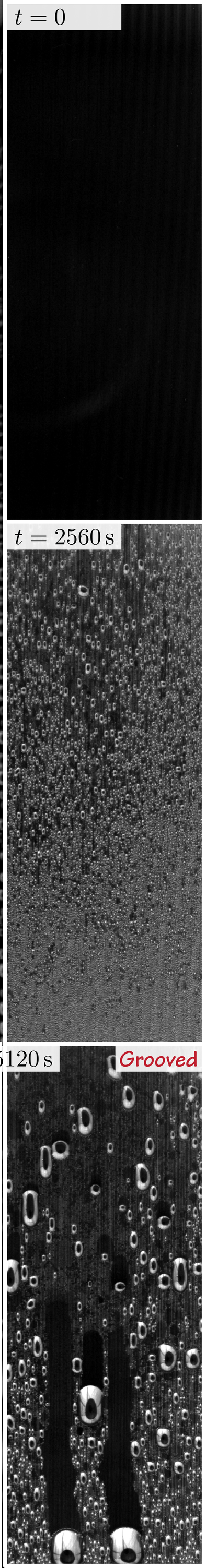

Dew on a grooved plate. *Growing dew drops merge with each other and most of dew water eventually collects inside the grooves, where it forms elongated liquid channels. These channels randomly connect distant drops, which coalesce. A few large drops then emerge at the expense of the smallest ones. This is why, for the same condensation rate of 17 μL/m²/s and plate inclination of 60° (right), a grooved plate sheds dew much earlier than a smooth one.*