

## Probing the Intrinsic Ice Adhesion at the Nanoscale

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The strength of ice adhesion is underpinned by the atomistic interactions at the real contact area between ice and its substrate. As such, deciphering the intrinsic ice adhesion strength at the real ice-substrate contacting area is key to the understanding of the anti-icing performances of different icephobic surfaces. The current study focuses on utilizing molecular dynamics simulations to probe the atomistic ice interactions with different substrates of varied inter-atomic interaction potentials,<sup>1</sup> and as such to gain insights on the interesting impacts of an amorphous quasi-liquid water layer on ice adhesion as well as different ice rupturing modes from the substrate.<sup>2, 3</sup> The results of this study shed new light on revealing the nanoscale fundamentals of ice adhesion, and at the same time seed design concepts of future anti-icing surface.

## REFERENCES

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