

Bouncing water droplets reveal small-scale beauty (w/ Video)

October 14 2010, by Lisa Zyga



A clip of a bouncing water droplet from the video below. Credit: Aria and Gharib.

In the video below, scientists have captured the simple movements of water droplets on a superhydrophobic carbon nanotube surface. The video shows the water droplets as they bounce, slide, and roll across different structures made of the carbon nanotube arrays.

The scientists, Adrianus Aria and Morteza Gharib from the California Institute of Technology, used a high-speed camera at different frame rates to capture the [water droplets](#).

The scientists controlled the exact size of the droplets with a syringe pump and released the droplets onto the surfaces using a flat-tipped needle. The droplets were illuminated from behind with a diffuse

halogen light, demonstrating the artistic side of fluid dynamics.

More information: via: "Bouncing Water Droplet on a Superhydrophobic Carbon Nanotube Array." Adrianus I. Aria and Morteza Gharib. [arXiv:1010.1351v1](https://arxiv.org/abs/1010.1351v1)

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Citation: Bouncing water droplets reveal small-scale beauty (w/ Video) (2010, October 14)
retrieved 19 April 2024 from
<https://phys.org/news/2010-10-droplets-reveal-small-scale-beauty-video.html>

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