

Abstract Submitted  
for the DFD17 Meeting of  
The American Physical Society

**Smart cover glass for automotive applications** SANG KUG CHUNG,  
Myongji University — This paper presents a smart cover glass based on electrowetting-on-dielectric (EWOD) actuation for automotive applications. It can remove water droplets in a wide range of sizes to allow the camera's lens to get clean at any time. The proposed cover glass offers a simple design structure to be easily installed on any device but provides a fast and energy efficient droplet cleaning operation. As proof of concept, a real imaging test is carried out using a mobile smartphone camera and landscape photography. When water droplets with different volumes are on the camera cover glass, the image of landscape photography is distorted with blurred spots. However, the distorted image is restored by removing the droplets through EWOD actuation.

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Date submitted: 31 Jul 2017

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