Using squeeze-film effect to reduce surface friction in electrostatic actuators - DTU Orbit (08/11/2017)

Using squeeze-film effect to reduce surface friction in electrostatic actuators

This paper presents a method of reducing load friction in two degrees-of-freedom (2-DOF) transparent electrostatic induction actuator by using vibration-induced squeeze film effect. An experimental set-up was built to prove the concept. An overall 70% reduction in required driving voltage was obtained when the squeeze film is present.

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