

Abstract

Piezoelectric ultrasonic motors have great potential for space-based robot applications. The motors are light in weight and mechanically simple. The motors possess high friction when static, and, therefore, can also function as mechanical brakes. Development of advanced torque control techniques is necessary to exploit the motor's advantages in critical applications. This research enhanced the UHCL piezoelectric ultrasonic motor apparatus by the addition of an inertial load and measured motor dynamic response using a commercial motor driver.

Citation

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