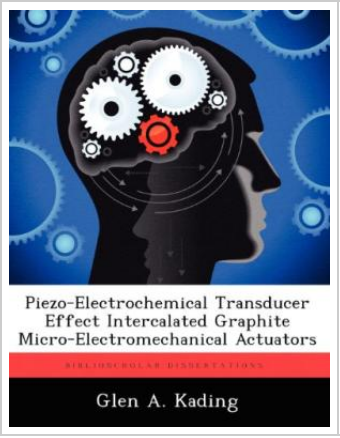

Piezo-Electrochemical Transducer Effect Intercalated Graphite Micro-Electromechanical Actuators (Paperback)

By Glen A Kading

Bibliioscholar, United States, 2012. Paperback. Condition: New. Language: English . Brand New Book. The purpose of this research is to investigate the Piezo-Electrochemical Transducer (PECT) effect in intercalated graphite as a possible mechanism of actuation for micro-electromechanical systems (MEMS). This dissertation presents the results of research into the PECT effect in H2SO4-intercalated graphitized carbon fibers, including both electrical and mechanical characteristics of this effect. PECT fibers achieve up to 1.7 strain at 1.4 V of applied potential. In contrast, the piezoelectric material polyvinylidene difluoride (PVDF) generates only 0.01 strain and polysilicon thermal expansion between 0.02 and 0.06 strain depending on the thermal conductivity of the particular polysilicon that the actuators are fabricated in.

Reviews

This book is really gripping and fascinating. Of course, it is actually play, nonetheless an interesting and amazing literature. You will not feel monotony at anytime of the time (that's what catalogs are for about if you request me).

-- ***Delbert Gleason***

A must buy book if you need to adding benefit. It can be rally exciting throgh reading time. I am pleased to let you know that this is the greatest publication we have read through during my very own life and may be he best publication for possibly.

-- ***Mr. Kade Rippin***