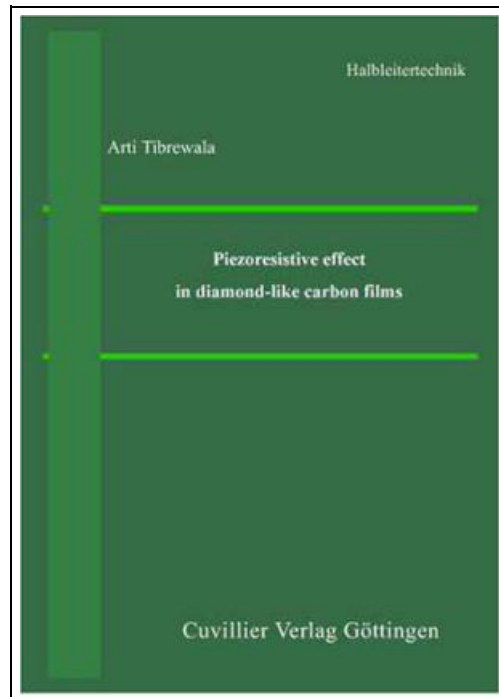


Piezoresistive effect in diamond-like carbon films



Filesize: 1.57 MB

Reviews

Merely no words to clarify. I could comprehend every little thing using this created e pdf. I am just effortlessly could possibly get a enjoyment of reading through a created publication.

(Mr. Ari Powlowski)

PIERZOESISTIVE EFFECT IN DIAMOND-LIKE CARBON FILMS



To read **Piezoresistive effect in diamond-like carbon films** PDF, remember to click the web link beneath and download the ebook or have accessibility to other information which are in conjunction with PIERZOESISTIVE EFFECT IN DIAMOND-LIKE CARBON FILMS book.

Cuvillier Verlag Sep 2006, 2006. Taschenbuch. Condition: Neu. Neuware - Diamond-like carbon (DLC) is the metastable form of amorphous carbon with significant sp bonding. DLC is a semiconductor with a high mechanical hardness, chemical inertness and optical transparency. This contribution examines the structural and electrical transport properties of sputtered a-C and plasma-assisted chemical vapour deposited (PACVD) a-C:H as a functional material for MEMS technology, i.e. for piezoresistive strain gauges on bulk micromachined silicon cantilever and boss membrane sensors. The current transport mechanism at high temperature is studied for both the films. The heterojunction of DLC/Si is studied so that devices can be manufactured using it. In this study the piezoresistive properties of a-C and a-C:H strain gauges integrated on a bulk micromachined silicon are addressed for the first time. An extensive study was undertaken to measure the gauge factor of a-C and a-C:H films at high temperatures, different voltages, under longitudinal, transversal, tensile and compressive strain configurations and under vertical and lateral current injection mechanism. The gauge factors were also studied by changing the deposition parameters of the films. Finally a model was introduced to explain the origin of piezoresistance in the a-C and a-C:H films and parameters which can further enhance the value of gauge factor in the films, which was confirmed experimentally. 162 pp. Deutsch.



[Read Piezoresistive effect in diamond-like carbon films Online](#)

[Download PDF Piezoresistive effect in diamond-like carbon films](#)

See Also



[PDF] The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds

Access the link under to download and read "The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds" PDF document.

[Download eBook](#)

»



[PDF] Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: Cat in a Bag (Hardback)

Access the link under to download and read "Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: Cat in a Bag (Hardback)" PDF document.

[Download eBook](#)

»



[PDF] The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program

Access the link under to download and read "The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program" PDF document.

[Download eBook](#)

»



[PDF] Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: Such a Fuss (Hardback)

Access the link under to download and read "Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: Such a Fuss (Hardback)" PDF document.

[Download eBook](#)

»



[PDF] Tia Sharp - a Family Betrayal

Access the link under to download and read "Tia Sharp - a Family Betrayal" PDF document.

[Download eBook](#)

»



[PDF] My Life as a Third Grade Zombie: Plus Free Online Access (Hardback)

Access the link under to download and read "My Life as a Third Grade Zombie: Plus Free Online Access (Hardback)" PDF document.

[Download eBook](#)

»