

PRESS RELEASE

06 | 2010

Fraunhofer Institute for Electron Beam
and Plasma Technology FEP

Winterbergstrasse 28
01277 Dresden

Annett Arnold
Public Relations / Marketing
Phone +49 351 2586-452 | Fax - 55 452
annett.arnold@fep.fraunhofer.de
www.fep.fraunhofer.de

TESTS OF MATERIALS VIA ULTRASONIC SOUND GET IMPROVED

September 24th, 2010

Fraunhofer researchers improved the quality of ultrasonic sound images

Researchers from the Fraunhofer Institute for Electron Beam and Plasma Technology FEP in Dresden developed piezoelectric layers with more advantageous properties.

The focus is on aluminum-nitride coatings produced with reactive pulse sputtering. The result of using this technology is a coating rate of 200 nanometers per minute.

An application of these thin film coatings is the start and detection of oscillations in ultrasonic sound microscopy. This allows essential improvement for the images of ultrasonic sound.

Dr. Hagen Bartzsch, head of the research project confirms: "Packaging of integrated circuits will benefit from the improved image quality using the new piezoelectric films."

Also a second field of application gets interesting for the near future – the micro energy harvesting. The aluminum-nitride coatings could have the potential to power sensors autarkic with energy.

You want to know more about our aluminum-nitride coatings and their fields of application?

We would appreciate your visit from October 19th - 21st, 2010 at SEMICON Europe in Dresden, booth # 4.611
www.semiconeuropa.org

Further information about the Fraunhofer FEP can be found at: www.fep.fraunhofer.de/enu

Scientific contact:

Dr. Hagen Bartzsch
Fraunhofer Institute for Electron Beam and Plasma Technology FEP
Phone +49 351 2586-390
hagen.bartzsch@fep.fraunhofer.de

Press contact:

Annett Arnold
Fraunhofer Institute for Electron Beam and Plasma Technology FEP
Phone +49 351 2586-452
annett.arnold@fep.fraunhofer.de

