

Picosecond Laser Ultrasonics

Interviene:

Prof. Oliver WRIGHT

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Abstract:

The aim of this lecture is to provide an introduction to picosecond laser ultrasonics, a means by which gigahertz-terahertz ultrasonic waves can be generated and detected by ultrashort light pulses. This method can be used to characterize materials with nanometer spatial resolution. With reference to key experiments, I review the main principles of this technique. Solids including metals and semiconductors are mainly discussed, although liquids are briefly mentioned.

Photoacoustic & Photothermal Techniques: Theory and Applications

Interviene:

Prof. Roberto LI VOTI

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Sapienza Università di Roma

Abstract:

Photoacoustic and Photothermal Techniques have been applied since the beginnings for nondestructive testing of materials allowing to measure the thermal and optical properties of materials (thermal diffusivity, optical absorbance). In this seminar the basic principles are deeply discussed together with some relevant applications for NDE & NDT in the fields of microelectronics, photovoltaics, photonics and nano-optics, nanomechanics. Some recent activities in the environmental and agricultural fields will be also briefly reported.

Coordinano i lavori:

Dott. Francesco BANFI, Università Cattolica del Sacro Cuore

Prof.ssa Laura Eleonora DEPERO, Università degli Studi di Brescia

Seminari

Lunedì 10 aprile 2017

Sala Riunioni, ore 11.00

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