

〈シンポジウム〉
(皮膚計測工学)

最近の皮膚計測工学の進歩

高橋 元次*

Recent Advances in Skin Bioengineering Techniques

Motoji TAKAHASHI*

Abstract

Recently new non-invasive methods and instrumentations have been developed to measure physical and physiological properties in addition to internal structures of the skin *in vivo*. They are very useful for the clinical study in dermatology and the efficacy test of cosmetics. In this paper, ATR-FTIR, NIR, TDR, OTTER for skin hydration measurement, ultrasound, MRI, OCT, *in vivo* confocal microscopy for skin cross sectional imaging, and wrinkle, mechanical, melanin and hemoglobin measurements of the skin are described.

Key words: bioengineering, non-invasive method, physical properties of skin, physiological properties of skin, instrumentation.