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〈シンポジウム I〉

『香化粧品における生活・文化価値を考える』

触覚のメカニズムと触感の評価

前野隆司

Mechanism of Tactile Sensation and Estimation of Tactile Texture

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Abstract

In this article, mechanism of tactile sensation and an estimating technique for tactile texture are shown. First, human's tactile sensation is modeled by use of factor analysis. It is found that roughness, softness, wetness and coldness are four important factors. Then a tactile sensor is developed. It has ridge-like surface imitating human's fingerprint to detect the vibration due to the surface geometry of objects. It also have ability to measure softness and friction. As a result, it is shown that the developed tactile sensor has an ability to detect the texture similar to those of human's tactile sense.

Key words: tactile sensation, factor analysis, texture sensor, skin, finger.