

〈原 著〉

## 個人用紫外線センサーの開発と応用

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### Development and Application of a New Solar UV Radiation Sensor for Personal Use

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#### Abstract

The field of medical science, in particular, requires the exact measurement of the intensity of solar UV radiation and of the degree of exposure to it. Furthermore, exposure to solar UV radiation has also become a matter of concern to the general population. We have therefore developed a new solar UV radiation sensor for personal use. The sensor has several novel features which derive from a new principle of measurement and the use of integrated circuit technology and a microcomputer. Using this sensor, we have investigated the average MED for sample Japanese populations. The intensity of solar UV radiation and the degree of exposure to it has been also determined in a number of everyday situations.

**Key words:** solar, ultraviolet, sensor, MED, intensity, exposure.