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Nota di contenuto	; 1. Sensor and measurement -- ; 2. Chemical senses -- ; 3. Biomimetic membrane devices -- ; 4. Biosensors -- ; 5. Odor sensors -- ; 6. Taste sensors -- ; 7. Other methods to measure taste -- ; 8. Toward a sensor to reproduce human senses.
Sommario/riassunto	This book deals with biomimetic sensors that can quantify taste and smell - the electronic tongue and nose. Of all sensor technologies, these have been widely considered as the most difficult to realise and the development of these sensors significantly contributes to the understanding of the reception mechanisms in gustatory and olfactory systems. The author begins by dealing with the basic principles of measurement and multivariate analysis. Reception mechanisms in biological systems are briefly reviewed. Several types of biosensor, including enzyme-immobilized membranes, SPR, the quartz resonance

oscillator and IC technologies are explained in detail. This book is the first to focus on artificial taste and smell sensors and also reviews conventional biosensors, such as enzyme sensors, in detail.

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