

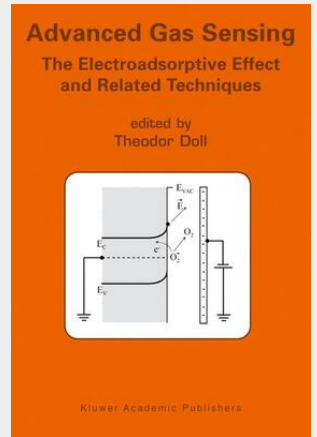
Doll

Advanced Gas Sensing

The Electroadsorptive Effect and Related Techniques

Advanced Gas Sensing focuses on the Electroadsorptive Effect: its theory, experimental measurement and applications in consumer gas sensors as well as in surface physics laboratory work. The Electroadsorptive Effect is invaluable when used in MEMS gas sensors. The authors use a general approach that covers new insights into temperature modulation and the use of light. The emphasis is given to electrical fields in gas sensors, which cause the Electroadsorptive Effect. The effect has long been known by experts working in the field, but has been regarded as too difficult for use until recently because of increasing sensor miniaturization. The book will serve as an introduction to sensitivity tuning of semiconductor gas sensors, introducing the underlying theory and experimental models before moving on to design considerations, applications and market considerations. A literature review and examples of experimental data are included.

Advanced Gas Sensing focuses on the Electroadsorptive Effect: its theory, experimental measurement and applications in consumer gas sensors as well as in surface physics laboratory work. The Electroadsorptive Effect is invaluable when used in MEMS gas sensors. The authors use a general approach that covers new insights into temperature modulation and the use of light. The emphasis is given to electrical fields in gas sensors, which cause the Electroadsorptive Effect. The effect has long been known by experts working in the field, but has been regarded as too difficult for use until recently because of increasing sensor miniaturization. The book will serve as an introduction to sensitivity tuning of semiconductor gas sensors, introducing the underlying theory and experimental models before moving on to design considerations, applications and market considerations. A literature review and examples of experimental data are included. This book is one of the first publications on the subject providing a comprehensive introduction and data source as well as an examination of the current and future applications. It will become a valuable reference for scientists and engineers with an interest in materials research, chemical sensors and surface physics.



106,99 €

99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781402074332

Medium: Buch

ISBN: 978-1-4020-7433-2

Verlag: Springer US

Erscheinungstermin: 31.05.2003

Sprache(n): Englisch

Auflage: 2003

Produktform: Gebunden

Gewicht: 1060 g

Seiten: 202

Format (B x H): 160 x 241 mm

