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Nota di contenuto	Physical properties of gases -- gas sensors -- optical gas measurement -- humidity measurement -- flow measurement -- calibration and qualification -- dust measurement -- gas sensors in application systems.
Sommario/riassunto	The metrological detection of gases is of great importance in many areas of technology. These include above all energy technology, food technology, process engineering, biotechnology, safety engineering, medical technology and environmental technology. The book describes the physical properties of gases and describes the different measuring methods and sensor principles for the analysis of gas mixtures. The use of gas sensors in the different applications is shown by means of practical examples. This book is a translation of the original German

1st edition Gasmesstechnik in Theorie und Praxis by Gerhard Wiegler, published by Springer Fachmedien Wiesbaden GmbH, part of Springer Nature in 2017. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors. The Content Physical properties of gases Gas sensors Optical gas measurement technology Humidity measurement Flow Measurement Technology Calibration and Qualification Dust Measurement Gas sensors in application systems This book is a translation of an original German edition. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. The Author Prof. Dr. Gerhard Wiegler has been working in the field of gas measurement technology since 1980. He worked in industry as R&D manager for more than 15 years before he accepted a call to the FH-Dortmund for environmental measurement technology in 1995. Since then he has been working in the field of miniaturization of gas sensors.
