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"This book provides an excellent overview of nitric oxide (NO) sensors and detection methods, and their applications in research and therapy. Metal complexes, electrochemical sensors, fluorophores, carbon nanotubes, and other materials—everything is covered. This is a great book not only for the expert but also for the novice who wants to get started in this exciting area of science."

Prof. Nicolai Lehnert
University of Michigan, USA

"This book provides a clear picture of the recent developments on NO sensing using transition metal complexes, noble metal-based nanostructures, and carbon-based materials. It is a concise reference book on NO sensing and will guide not only the experienced researcher working in this area but also the beginner interested in this elective topic."

Prof. Ashok K. Ganguli
Indian Institute of Technology Delhi, India

"NO sensing is a contemporary research topic. Over the last decades, different methods, including techniques and devices, have been developed through a multidisciplinary approach. These methods have potential applications in environmental and biological research and have been systematically put together in this book. This is an excellent book and will attract the attention of researchers in this area."

Prof. Tapan Kanti Paine
Indian Association for the Cultivation of Science, India

Although NO is an important biological signaling molecule, its free-radical electronic configuration makes it a most reactive molecule and one of the scariest colorless gas causing immense environmental and health hazards. Detection of NO levels in biological samples and in the atmosphere is therefore crucial. In the past few years, extensive efforts have been devoted to developing many active sensors and effective devices to detect and quantify NO that is present in the atmosphere, generated in biological samples, and exhaled in human breath.

This book provides a concrete summary of the recent state-of-the-art small-molecule probes and novel carbon nanomaterials used for chemical, photoluminescent, and electrochemical NO detection. One chapter is especially dedicated to the available devices used for detecting NO in human breath indicating the extent of lung inflammation. The authors with expertise in diverse dimensions have attempted to cover almost all areas of NO sensing.



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