1. Record Nr. UNINA9910830714603321

Autore	Michaelian Kirk H
Titolo	Photoacoustic IR spectroscopy [[electronic resource]] : instrumentation, applications and data analysis / / Kirk H. Michaelian
Pubbl/distr/stampa	Weinheim, : Wiley, 2010
ISBN	1-282-77494-8 9786612774942 3-527-63321-9 3-527-63319-7 3-527-63320-0
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (403 p.)
Altri autori (Persone)	MichaelianKirk H
Disciplina	543.57
Soggetti	Infrared spectroscopy Optoacoustic spectroscopy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous edition: Photoacoustic infrared spectroscopy, 2003.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Photoacoustic IR Spectroscopy; Contents; Preface to the Second Edition; Preface to the First Edition; 1: Introduction; 2: History of PA Infrared Spectroscopy; 3: Instrumental Methods; 4: Signal Recovery; 5: Experimental Techniques; 6: Numerical Methods; 7: Applications; Appendix 1: Glossary; Appendix 2: Literature Guide - Solids and Liquids; Appendix 3: Literature Guide - Gases; Index
Sommario/riassunto	This invaluable and up-to-date source on instruments and applications covers everything needed to employ a technique for investigating various gases and materials, including biomaterials. It includes the latest developments in light sources, signal recovery and numerical methods.There is no other single publication that reviews the entire subject of photoacoustic infrared spectroscopy in such detail. Physicists, chemists, and spectroscopists in both academic and industrial laboratories, polymer and organic chemists, analysts in industry, forensic and government laboratories, and materials

2. Record Nr. UNINA9910897976903321

Titolo	Greenhouse Gas Regulating Microorganisms in Soil Ecosystems : Perspectives for Climate Smart Agriculture / / edited by Santosh R. Mohanty, Bharati Kollah
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	9783031705694 3031705696
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (IX, 351 p. 37 illus., 32 illus. in color.)
Disciplina	363.73874
Soggetti	Ecology Agriculture Agricultural ecology Environmental management Environmental Sciences Agroecology Environmental Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Sources and Sinks of Greenhouse Gasses (GHG) in Agricultural Soil Ecosystem -- 2 Soil and Environmental Variables Influencing Greenhouse Gas Cycling in an Agroecosystem -- 3 Greenhouse Gas Cycling and Ecosystem Services -- 4 Greenhouse Gas Emission from Different Fertilizers (Organic, Inorganic and Integrated) in Management Agroecosystems -- 5 Greenhouse Gas Emissions from Agroecosystems Under Conservation Agriculture -- 6 Factors Affecting Carbon Sequestration and Greenhouse Gas Emission in Agroecosystems -- 7 Prediction of Crop Response to Atmospheric Greenhouse Gas Concentration and Climate Parameters -- 8 Impact of Elevated CO2, and Temperature on Greenhouse Gas Emission and Decomposition -- 9 Carbon Speciation by Microbes in Soil -- 10 Nitrogen Cycle, N2O Emission, and Its Decomposition Processes in Soil -- 11 Soil Ecosystem Services and the Greenhouse Gas Emission and Cycling -- 12 Diversity

of Greenhouse Gas Producing and Mitigating Microbes in Soil -- 13 Strategies to Improve N Use Efficiency to Minimize N2O Emission from Agricultural Soil -- 14 Impact of Fertilizers on Greenhouse Gas Mitigating Microbes in Agroecosystem -- 15 Microbial Diversity Under Organic Fertilizer Management Systems and Identification of Best Fertilizer Practice -- 16 Climate Resilient Agriculture -- 17 Carbon Sequestration Strategies in Response to Fertilizer Application -- 18 Organic Farming -- 19 Long-Term Fertilizer Experiments -- 20 Synthesis Report on Greenhouse Gas Emissions from Agroecosystems.

Sommario/riassunto

This volume comprehensively covers soil microbial processes that regulate the flux of greenhouse gasses (GHG) from agricultural soils, in an effort to address how GHG regulating microbes can be used to mitigate harmful climate change impacts on agriculture. The chapters define the linkages among soil microbial functioning, crop responses, ecosystem functioning, and GHG cycling processes. The book is framed through three major theme, including source and sink of GHG, microbial processes regulating GHG, and agricultural strategies and technologies to mitigate GHG emissions. The chapters highlight the fundamentals of soil microbial diversity and interactions with climate changing factors, soil carbon dynamics in response to different agricultural practices, conservation agriculture strategies to reduce GHG emissions from agriculture, and climate change mitigation through organic and climate-smart farming. The book is intended for policy makers, students, and researchers of environmental science, agriculture, soil science, and soil microbiology.