

1. Record Nr.	UNINA9910254118703321
Autore	Samer Mohamed
Titolo	Abatement Techniques for Reducing Emissions from Livestock Buildings // by Mohamed Samer
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-28838-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (71 p.)
Collana	SpringerBriefs in Environmental Science, , 2191-5547
Disciplina	363.738746
Soggetti	Air - Pollution Environmental sciences Climatic changes Agriculture Ecology Atmospheric Protection/Air Quality Control/Air Pollution Environmental Science and Engineering Climate Change
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; Contents; About the Author; Abstract; 1 Introduction; 2 Theoretical Considerations; 2.1 Nitrogen Cycle; 2.2 Nitrogen Oxides; 2.3 Ammonia; 2.4 Hydrogen Sulfide; 2.5 Methane; 2.6 Carbon Dioxide; 2.7 Carbon Monoxide; 2.8 Odors; 2.9 Dust and Aerosols; 3 Emissions Abatement Techniques; 3.1 Livestock Buildings and Manure Management; 3.2 Additives; 3.3 Covering Manure Storages; 3.4 Aerobic and Anaerobic Treatment; 3.5 Dietary Manipulation; 3.6 Dust Emissions Abatement Techniques; 3.6.1 Spraying Oil and Water; 3.6.2 Oxidizing Agents; 3.6.3 Ionization Systems; 3.6.4 Aerodynamic Dedusters 3.6.5 Bioscrubbers3.6.6 Windbreak Trees and Walls; 3.7 Biofiltration for Odor Control; 3.7.1 Biofilter Design; 3.7.2 Media of Biofilter; 3.7.3 Recent Advancements; 4 Perspective; 5 Summary and Conclusions; References
Sommario/riassunto	This book identifies future scientific research priorities for developing emissions inventories, emissions abatement techniques and mitigation

strategies in order to improve and sustain livestock production that is in line with climate change adaptation. Livestock production is a major source of atmospheric pollutants and greenhouse gases, such as methane, nitrogen oxides, carbon dioxide and ammonia, all of which directly contribute to global warming and climate change. Air pollutant emissions from agricultural practices have a negative environmental impact and are of relevant political importance, as highlighted in both the Kyoto and Gothenburg Protocols. This book provides solutions on how to abate these emissions by using effective abatement techniques such as additives, manure storage covers, aerobic and anaerobic treatments, and dietary manipulation. Each chapter in the book provides valuable, up-to-date information on abatement techniques, thus allowing the reader to better understand the issues involved. Recent advances and new perspectives in the field are also discussed. .
