1. Record Nr. UNINA9910299430403321

Titolo	Critical Loads and Dynamic Risk Assessments : Nitrogen, Acidity and Metals in Terrestrial and Aquatic Ecosystems / / edited by Wim de Vries, Jean-Paul Hettelingh, Maximilian Posch
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2015
ISBN	94-017-9508-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (671 p.)
Collana	Environmental Pollution, , 1566-0745 ; ; 25
Disciplina	333.7 363.7392 550 577.14
Soggetti	Air - Pollution Environmental chemistry Environmental sciences Geobiology Atmospheric Protection/Air Quality Control/Air Pollution Environmental Chemistry Math. Appl. in Environmental Science Biogeosciences
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 and index.
Nota di contenuto	Part I Assessment of indicators for air pollutant impacts -- Part II Empirical and model based critical loads and target loads -- Part III Dynamic modeling for the assessment of air pollution impacts at site scale -- Part IV Critical loads and dynamic model applications on a regional scale -- Part V Integrated assessment policy applications and synthesis.
Sommario/riassunto	This book provides a unique overview of research methods over the past 25 years assessing critical loads and temporal effects of the deposition of air pollutants. It includes critical load methods and applications addressing acidification, eutrophication and heavy metal pollution of terrestrial and aquatic ecosystems. Applications include

examples for each air pollution threat, both at local and regional scale, including Europe, Asia, Canada and the US. The book starts with background information on the effects of the deposition of sulphur, nitrogen and heavy metals and geochemical and biological indicators for risk assessments. The use of those indicators is then illustrated in the assessment of critical loads and their exceedances and in the temporal assessment of air pollution risks. It also includes the most recent developments of assessing critical loads and current and future risks of soil and water chemistry and biodiversity under climate change, with a special focus on nitrogen. The book thus provides a complete overview of the knowledge that is currently used for the scientific support of policies in the field of air pollution control to protect ecosystem services.