

1. Record Nr.	UNINA9910456258703321
Titolo	Rethinking the ozone problem in urban and regional air pollution [[electronic resource] /] Committee on Tropospheric Ozone Formation and Measurement, Board on Environmental Studies and Toxicology, Board on Atmospheric Sciences and Climate, Commission on Geosciences, Environment, and Resources, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1991
ISBN	1-280-20351-X 9786610203512 0-309-56037-3 0-585-11143-X
Descrizione fisica	1 online resource (524 p.)
Disciplina	628.5/3
Soggetti	Ozone - Environmental aspects - United States Air - Pollution - Environmental aspects - United States Air quality management - United States Electronic books.
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 (p. 429-489) and index.
Nota di contenuto	""Rethinking the Ozone Problem in Urban and Regional Air Pollution""; ""Copyright""; ""Contents""; ""Executive Summary""; ""INTRODUCTION""; ""THE CHARGE TO THE COMMITTEE""; ""THE COMMITTEE'S APPROACH TO ITS CHARGE""; ""OZONE IN THE UNITED STATES""; ""OZONE TRENDS""; ""STATE IMPLEMENTATION PLANNING""; ""ANTHROPOGENIC VOC EMISSIONS""; ""BIOGENIC VOC EMISSIONS""; ""AMBIENT AIR QUALITY MEASUREMENTS""; ""AIR-QUALITY MODELS""; ""VOC VERSUS NOX CONTROL""; ""ALTERNATIVE FUELS FOR MOTOR VEHICLES""; ""A RESEARCH PROGRAM ON TROPOSPHERIC OZONE""; ""1 What Is the Problem? ""; ""NATURAL ATMOSPHERIC OZONE"" ""Changes in Stratospheric Ozone""""Changes in Tropospheric Ozone""; ""UNDERSTANDING TROPOSPHERIC OZONE AND PHOTOCHEMICAL AIR POLLUTION""; ""Background""; ""OZONE AND AIR-QUALITY REGULATIONS""; ""NATIONAL TRENDS IN OZONE"";

""DETRIMENTAL EFFECTS OF OZONE""; ""Health Effects of Atmospheric Ozone""; ""Human Exposure Issues""; ""Effects on Vegetation""; ""PURPOSE OF THIS REPORT""; ""Chapter""; ""2 Trends in Tropospheric Concentrations of Ozone""; ""INTRODUCTION""; ""NATIONAL AMBIENT AIR QUALITY STANDARD FOR OZONE""
""NATIONAL TRENDS IN TROPOSPHERIC CONCENTRATIONS OF OZONE""; ""TRENDS IN PRECURSOR EMISSIONS""; ""OZONE TRENDS NORMALIZED FOR METEOROLOGICAL VARIATION""; ""Measurement Approaches: A More Robust Ozone Indicator""; ""Classification Techniques""; ""Regression Techniques""; ""SUMMARY""; ""3 Criteria for Designing and Evaluating Ozone Reduction Strategies"";
""INTRODUCTION""; ""THE CLEAN AIR ACT""; ""THE STATE IMPLEMENTATION PLAN""; ""Ambient Monitoring""; ""Emissions Inventories""; ""Relationships Between Emissions and Air Quality"";
""Control Strategies""; ""Rule Effectiveness""; ""SUMMARY""
""4 The Effects of Meteorology on Tropospheric Ozone"";
""INTRODUCTION""; ""OZONE ACCUMULATION""; ""CLOUDS AND VENTING OF AIR POLLUTANTS""; ""REGIONAL AND MESOSCALE PREDICTABILITY OF OZONE""; ""GLOBAL AND LONG-TERM PREDICTABILITY OF OZONE""; ""OZONE IN THE EASTERN UNITED STATES""; ""SUMMARY""; ""5 Atmospheric Chemistry of Ozone and Its Precursors"";
""INTRODUCTION""; ""GENERAL SCHEMES OF TROPOSPHERIC CHEMISTRY""; ""Tropospheric Methane Oxidation Cycle""; ""Photochemical Formation of Ozone""; ""Other Reactions in the Tropospheric Nitrogen Cycle""; ""Chemistry of the Polluted Troposphere""
""ATMOSPHERIC CHEMISTRY OF ANTHROPOGENIC VOCS"";
""Alkanes""; ""Alkenes""; ""Aromatic Voc's""; ""Carbonyl Compounds""; ""Reactions of Organic Peroxy (RO₂) Radicals""; ""Oxygenates Proposed as Alternative Fuels""; ""Methanol""; ""Ethanol""; ""Methyl t-butyl ether""; ""BIOGENIC VOCS""; ""NO₃ Radical Reaction""; ""Ozone Reactions""; ""OH Radical Reactions""; ""DEVELOPMENT AND TESTING OF CHEMICAL MECHANISMS""; ""OZONE FORMATION POTENTIAL OF VARIOUS VOCS"";
""SUMMARY""; ""6 VOCs and NOx: Relationship to Ozone and Associated Pollutants"";
""INTRODUCTION""; ""CHARACTERISTICS OF OZONE ISOPLETHS""
""UNCERTAINTIES AND SENSITIVITIES OF ISOPLETHS""
