1. Record Nr. UNINA9910141641103321

Titolo	Naar nieuwe wegen in milieubeleid
Pubbl/distr/stampa	The Hague : , : WRR, , 2003
Descrizione fisica	1 online resource (177 pages) : digital file(s)
Collana	Rapporten aan de regering ; ; 67
Disciplina	363.70561094
Soggetti	Environmental policy - European Union countries Environmental policy - Netherlands Biodiversity - Government policy Pollution - Government policy The environment
Lingua di pubblicazione	Olandese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	In dit rapport gaat het om de gewenste beleidsvorming voor de nu nog openstaande, hardnekkige milieuproblemen zoals de problematiek van de CO2-uitstoot en van klimaatverandering en de afnemende biodiversiteit. Deze problemen zijn van bovennationale schaal en hebben een lange tijdsdimensie. Voor dit soort problemen kan niet worden uitgegaan van de bestaande, vertrouwde beleidsconcepten. De legitimatie van het overheidsbeleid vraagt om nieuwe combinaties van mobilisatie van kennis en een brede maatschappelijke deling en inbedding van kennis.

2. Record Nr. UNINA9910820808203321

Autore	Kimoto Tsunenobu <1963->
Titolo	Fundamentals of silicon carbide technology : growth, characterization, devices and applications / / Tsunenobu Kimoto, James A. Cooper
Pubbl/distr/stampa	Singapore : , : John Wiley & Sons Singapore Pte. Ltd., , [2014] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2014]
ISBN	1-118-31353-4 1-118-31354-2
Descrizione fisica	1 online resource (555 p.)
Altri autori (Persone)	CooperJames A. <1946->
Disciplina	621.3815/2
Soggetti	Silicon carbide Semiconductors Integrated circuits
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 at the end of each chapters and index.
Nota di contenuto	About the Authors xi -- Preface xiii -- 1 Introduction 1 -- 1.1 Progress in Electronics 1 -- 1.2 Features and Brief History of Silicon Carbide 3 -- 1.2.1 Early History 3 -- 1.2.2 Innovations in SiC Crystal Growth 4 -- 1.2.3 Promise and Demonstration of SiC Power Devices 5 -- 1.3 Outline of This Book 6 -- References 6 -- 2 Physical Properties of Silicon Carbide 11 -- 2.1 Crystal Structure 11 -- 2.2 Electrical and Optical Properties 16 -- 2.2.1 Band Structure 16 -- 2.2.2 Optical Absorption Coefficient and Refractive Index 18 -- 2.2.3 Impurity Doping and Carrier Density 20 -- 2.2.4 Mobility 23 -- 2.2.5 Drift Velocity 27 -- 2.2.6 Breakdown Electric Field Strength 28 -- 2.3 Thermal and Mechanical Properties 30 -- 2.3.1 Thermal Conductivity 30 -- 2.3.2 Phonons 31 -- 2.3.3 Hardness and Mechanical Properties 32 -- 2.4 Summary 32 -- References 33 -- 3 Bulk Growth of Silicon Carbide 39 -- 3.1 Sublimation Growth 39 -- 3.1.1 Phase Diagram of Si-C 39 -- 3.1.2 Basic Phenomena Occurring during the Sublimation (Physical Vapor Transport) Method 39 -- 3.1.3 Modeling and Simulation 44 -- 3.2 Polytype Control in Sublimation Growth 46 -- 3.3 Defect Evolution and Reduction in Sublimation Growth 50 -- 3.3.1 Stacking Faults 50 -- 3.3.2 Micropipe Defects 51 -- 3.3.3 Threading Screw Dislocation 53 --

Applications 487 -- 12.1 Microwave Devices 487 -- 12.1.1 Metal-Semiconductor Field-Effect Transistors (MESFETs) 487 -- 12.1.2 Static Induction Transistors (SITs) 489 -- 12.1.3 Impact Ionization Avalanche Transit-Time (IMPATT) Diodes 496 -- 12.2 High-Temperature Integrated Circuits 497 -- 12.3 Sensors 499 -- 12.3.1 Micro-Electro-Mechanical Sensors (MEMS) 499 -- 12.3.2 Gas Sensors 500 -- 12.3.3 Optical Detectors 504 -- References 509 -- Appendix A Incomplete Dopant Ionization in 4H-SiC 511 -- References 515 -- Appendix B Properties of the Hyperbolic Functions 517 -- Appendix C Major Physical Properties of Common SiC Polytypes 521 -- C.1 Properties 521 -- C.2 Temperature and/or Doping Dependence of Major Physical Properties 522 -- References 523 -- Index 525.

Sommario/riassunto

A comprehensive introduction and up-to-date reference to SiC power semiconductor devices covering topics from material properties to applications Based on a number of breakthroughs in SiC material science and fabrication technology in the 1980's and 1990's, the first SiC Schottky barrier diodes (SBDs) were released as commercial products in 2001. The SiC SBD market has grown significantly since that time, and SBDs are now used in a variety of power systems, particularly switch-mode power supplies and motor controls. SiC power MOSFET's entered commercial production in 2011, providing rugged, high

3.

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Autore	Wang Yuan
Titolo	Aerosol-Cloud Interactions from Urban, Regional, to Global Scales / / by Yuan Wang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-47175-2
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (100 p.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	363.7392
Soggetti	Atmospheric science Physical geography Climatology Air - Pollution Atmospheric Sciences Earth System Sciences Atmospheric Protection/Air Quality Control/Air Pollution
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Doctoral Thesis accepted by Texas A&M University, College Station, USA"--T.p.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Numerical model description -- Impacts of urban pollution on thunderstorms -- Aerosol effects on the stratocumulus and evaluations of microphysics -- Impacts of asian pollution outflows on the pacific storm -- Conclusions.
Sommario/riassunto	The studies in this dissertation aim at advancing our scientific understandings about physical processes involved in the aerosol-cloud-precipitation interaction and quantitatively assessing the impacts of aerosols on the cloud systems with diverse scales over the globe on the basis of the observational data analysis and various modeling studies. As recognized in the Fifth Assessment Report by the Inter-government Panel on Climate Change, the magnitude of radiative forcing by atmospheric aerosols is highly uncertain, representing the largest uncertainty in projections of future climate by anthropogenic activities. By using a newly implemented cloud microphysical scheme in

the cloud-resolving model, the thesis assesses aerosol-cloud interaction for distinct weather systems, ranging from individual cumulus to mesoscale convective systems. This thesis also introduces a novel hierarchical modeling approach that solves a long outstanding mismatch between simulations by regional weather models and global climate models in the climate modeling community. More importantly, the thesis provides key scientific solutions to several challenging questions in climate science, including the global impacts of the Asian pollution. As scientists wrestle with the complexities of climate change in response to varied anthropogenic forcings, perhaps no problem is more challenging than the understanding of the impacts of atmospheric aerosols from air pollution on clouds and the global circulation.