

1. Record Nr.	UNINA9910452754003321
Autore	Chubb John
Titolo	An introduction to electrostatic measurements [[electronic resource] /] / John Chubb
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2010
ISBN	1-61122-687-2
Descrizione fisica	1 online resource (230 p.)
Collana	Electrical engineering developments
Disciplina	537/.2
Soggetti	Electrostatics - Measurement Electrostatic analyzers 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 and index.

2. Record Nr.	UNINA9910960097603321
Titolo	Basic research opportunities in earth science / / Committee on Basic Research Opportunities in the Earth Sciences, Board on Earth Sciences and Resources, Commission on Geosciences, Environment, and Resources, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, c2001
ISBN	9786610185399 9780309171502 0309171504 9781280185397 1280185392 9780309569880 0309569885
Edizione	[1st ed.]
Descrizione fisica	1 online resource (168 p.)
Disciplina	550/.7/2073
Soggetti	Earth sciences - Research - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""BASIC RESEARCH OPPORTUNITIES IN Earth Science""; ""Copyright""; ""Acknowledgments""; ""Preface""; ""Contents""; ""Executive Summary""; ""OPPORTUNITIES FOR BASIC RESEARCH""; ""PRINCIPAL FINDINGS AND RECOMMENDATIONS""; ""Long-Term Support of Investigator-Driven Science""; ""Mechanisms for Multidisciplinary Research""; ""Instrumentation and Facilities""; ""Education""; ""PARTNERSHIPS IN EARTH SCIENCE""; ""REQUIRED RESOURCES""; ""1 Basic Earth Science and Society ""; ""INTRODUCTION""; ""Role of the National Science Foundation""; ""Organization of the Report"" ""APPLICATIONS OF BASIC EARTH SCIENCE TO NATIONAL PROBLEMS"" Natural Resources""; ""Energy""; ""Minerals and Other Raw Materials""; ""Water""; ""Soil""; ""Natural Hazards""; ""Geoscience-Based Engineering""; ""The Environment""; ""National Defense and Global Security""; ""THE AGENDA FOR BASIC RESEARCH""; ""Reading the Record of Terrestrial Change and Extreme Events""; ""Observing the Active

Earth"; "2 Science Opportunities"; "THE CRITICAL ZONE: EARTH'S
NEAR-SURFACE ENVIRONMENT"; "Science Opportunities"; "Global
Climate Change and the Terrestrial Carbon Cycle"
"The Interactions of Life, Water, and Minerals""The Land-Ocean
Interface"; "Tectonics, Climate, and Weathering"; "Earth History";
"New Tools and Observations"; "Need for Coordinated Field Work and
Integrated Modeling"; "GEOBIOLOGY"; "Recent Advances"; "Climate
Studies"; "Biological Controls on Earth Chemistry"; "Molecular
Geobiology"; "Evolutionary Innovations"; "Environmental and
Ecological Dynamics"; "New Tools and Capabilities"; "Science Goals
and Challenges"; "EARTH AND PLANETARY MATERIALS"; "Recent
Advances"; "Science Opportunities"
"Development of Intense Neutron Beams and Other Powerful New
Probes of Material Properties""Retrieval of Samples From Other
Planets, Interplanetary Space, and Comets"; "Application of Molecular
Biology to Earth Materials"; "Long-Term Observations in Natural
Laboratories"; "THE CONTINENTS"; "Recent Advances"; "Science
Opportunities"; "Surface Processes, Climate, and Tectonics"; "Active
Deformation"; "Fluids in the Crust"; "Lower Continental Crust";
"Continental Deep Structure"; "EarthScope: A Major Initiative";
"DEEP INTERIOR"; "Major Areas of Investigation"
"Mantle Convection and Geochemical Reservoirs""The Core-Mantle
Boundary (CMB)"; "The Core Dynamo and Magnetic Field"; "Inner
Core"; "Disciplinary Advances"; "Seismology"; "Geomagnetic
Studies"; "Geochemistry Studies"; "High-Pressure Studies of Earth
Materials"; "THE PLANETS"; "Promise of Planetary Exploration";
"Science Opportunities"; "Analytical Challenges"; "3 Findings and
Recommendations"; "LONG-TERM SUPPORT OF INVESTIGATOR-
DRIVEN SCIENCE"; "Geobiology"; "Earth and Planetary Materials";
"Hydrology, Geology, and the Critical Zone"; "Hydrology"
"Geology"

Sommario/riassunto

Basic Research Opportunities in Earth Science identifies areas of high-priority research within the purview of the Earth Science Division of the National Science Foundation, assesses cross-disciplinary connections, and discusses the linkages between basic research and societal needs. Opportunities in Earth science have been opened up by major improvements in techniques for reading the geological record of terrestrial change, capabilities for observing active processes in the present-day Earth, and computational technologies for realistic simulations of dynamic geosystems. This book examines six specific areas in which the opportunities for basic research are especially compelling, including integrative studies of the near-surface environment (the "Critical Zone"); geobiology; Earth and planetary materials; investigations of the continents; studies of Earth's deep interior; and planetary science. It concludes with a discussion of mechanisms for exploiting these research opportunities, including EarthScope, natural laboratories, and partnerships.