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ISBN	3-642-54086-4
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Descrizione fisica	1 online resource (358 p.)
Collana	Dynamic Modeling and Econometrics in Economics and Finance, , 1566-0419 ; ; 15
Disciplina	363.7
Soggetti	Environmental economics Calculus of variations Environmental sciences Energy policy Operations research Decision making Economics Environmental Economics Calculus of Variations and Optimal Control; Optimization Math. Appl. in Environmental Science Energy Policy, Economics and Management Operations Research/Decision Theory Economic Theory/Quantitative Economics/Mathematical Methods
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Interactions between Economy and Climate: Climate Change and Technical Progress: Impact of Informational Constraints -- Environmental Policy in a Dynamic Model with Heterogeneous Agents and Voting -- Optimal Environmental Policy in the Presence of Multiple Equilibria and Reversible Hysteresis -- Modeling the Dynamics of the Transition to a Green Economy -- One-Parameter GHG Emission Policy With R&D-Based Growth -- Pollution, Public Health Care, and Life Expectancy when Inequality Matters -- Uncertain Climate Policy and the

Green Paradox -- Uniqueness Versus Indeterminacy in the Tragedy of the Commons - A "Geometric" Approach -- Optimal Extraction of Resources: Dynamic Behavior of Oil Importers and Exporters Under Uncertainty -- Robust Control of a Spatially Distributed Commercial Fishery -- On the Effect of Resource Exploitation on Growth: Domestic Innovation vs. Technological Diffusion Through Trade -- Forest Management and Biodiversity in Size-Structured Forests Under Climate Change -- Carbon Taxes and Comparison of Trading Regimes in Fossil Fuels -- Landowning, Status and Population Growth -- Optimal Harvesting of Size-Structured Biological Populations.

Sommario/riassunto

The book presents new developments in the dynamic modeling and optimization methods in environmental economics and provides a huge range of applications dealing with the economics of natural resources, the impacts of climate change and of environmental pollution, and respective policy measures. The interrelationship between economic activities and environmental quality, the development of cleaner technologies, the switch from fossil to renewable resources and the proper use of policy instruments play an important role along the path towards a sustainable future. Biological, physical and economic processes are naturally involved in the subject, and postulate the main modelling, simulation and decision-making tools: the methods of dynamic optimization and dynamic games.