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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	From the Contents: Part I Water Purification -- Ionic Transport in Nanocapillary Membrane Systems -- Part II Clean Energy and Greenhouse Gas Management.- Part III Sustainable Materials and Manufacturing -- Recovery of silica from electronic waste for the synthesis of cubic MCM-48 and its application in preparing ordered mesoporous carbon molecular sieves using a green approach -- Part IV Societal Perspectives.
Sommario/riassunto	The world is facing great challenges in meeting rising demands for basic commodities, finished goods, technologies and services while minimizing the impact of human activities on Earth's global environment and climate. Nanotechnology has emerged as a

multidisciplinary research field that could provide efficient, cost-effective, and environmentally acceptable solutions to the global sustainability challenges that our societies are facing. This book is devoted to the utilization of nanotechnology to improve or achieve sustainable development. It reports recent advances and discusses opportunities of utilizing nanotechnology to address global challenges in water purification, clean energy, greenhouse gas management, materials supply/utilization and manufacturing. It addresses societal perspectives and provides an outlook of the role of nanotechnology in the convergence of knowledge, technology and society for achieving sustainable development. This book offers a thematic collection of papers previously published in the Journal of Nanoparticle Research.

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