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Sommario/riassunto

This book is an outcome of the 36th International Conference EnviroInfo 2022, held at the University of Hamburg, Germany, organized by the technical committee for Environmental Informatics of the German Informatics Society. It presents a selection of papers that describe innovative scientific approaches and ongoing research in environmental informatics and the emerging field of environmental sustainability, promoted and facilitated by the use of information and communication technologies (ICT). The respective articles cover a broad range of scientific aspects including advancements in core environmental informatics-related technologies such as earth observation, environmental modelling, geographical information systems, sustainable transportation, risk modelling and assessment, artificial intelligence applications, renewable energy-based solutions, optimization of infrastructures, sustainable industrial processes, citizen science, as well as applications of ICT solutions that are aiming at supporting societal transformation processes towards more sustainable management of resource use and energy supply. A special focus is on how environmental informatics research covers the societal challenges of digitalization and sustainability, green in IT, green by IT and their relationships, green data centres, green software engineering, green coding and green environmental management information systems. The book is essential reading for scientists, experts and students in these fields of research.