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Titolo	21st Century Maritime Silk Road: Construction of Remote Islands and Reefs // by Chongwei Zheng, Chongyin Li, Hailang Wu, Min Wang
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Soggetti	Oceanography Marine sciences Fresh water Renewable energy resources Ocean engineering Marine & Freshwater Sciences Renewable and Green Energy Offshore Engineering
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Necessity, Difficulties and Countermeasures of Important Remote Islands and Reefs Construction -- Wave and Wind Energy Boost the Construction of Important Remote Islands and Reefs -- Wind Energy Resource Assessment in the Gwadar Port -- Climatic Trend and Prediction of the Wind Energy in the Gwadar Port -- Wind and Wave Energy in the Important Waters of the South China Sea -- Feasibility of Wind Power and Wave Power Generation in the South China Sea -- Wind Climate and Wave Climate in the Remote Island of the South China Sea -- Wind-sea, Swell and Mixed Wave Energy -- Wind Climate Under the Demand of Island Runway Construction.
Sommario/riassunto	This book focuses on the construction of remote islands and reefs in the Maritime Silk Road. Firstly, it analyzes the functions, necessity and difficulties of the construction of remote islands and reefs; then provides corresponding countermeasures. According to the urgent demand of electricity and freshwater, it focus on wave and offshore wind energy evaluation of the important remote islands and reefs of the

Maritime Silk Road, providing reference for the choice of location of power plants, daily operation and long term plan of wave/wind power generation. Several important key points are selected in the case study to realize their electricity and freshwater self-sufficiency and thus to improve their viability. This book also presents the marine characteristics (especially hazardous elements) under the demands of island runway construction and marine new energy development, to promote safe and efficient implementation of the remote islands and reefs construction. This book is one of the series of publications on the 21st Century Maritime Silk Road (shortened as “Maritime Silk Road”). It covers the characteristics of the marine environment and marine new energy, remote islands and reefs construction, climate change, early warning of wave disasters, legal escort, marine environment and energy big data construction, etc. contributing to the safe and efficient construction of the Maritime Silk Road. It aims to improve our knowledge of the ocean, thus to improve the capacity for marine construction, enhance the viability of remote islands and reefs, ease the energy crisis and protect the ecological environment, improve the quality of life of residents along the Maritime Silk Road, and protect the rights, interests of the countries and regions participating in the construction of the Maritime Silk Road. It will be a valuable reference for decision-makers, researchers, and marine engineers working in the related fields.
