

1. Record Nr.	UNINA9910557427903321
Autore	Martins Fernando Ramos
Titolo	Assessment of Renewable Energy Resources with Remote Sensing
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 electronic resource (244 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>The book "Assessment of Renewable Energy Resources with Remote Sensing" focuses on disseminating scientific knowledge and technological developments for the assessment and forecasting of renewable energy resources using remote sensing techniques. The eleven papers inside the book provide an overview of remote sensing applications on hydro, solar, wind and geothermal energy resources and their major goal is to provide state of art knowledge to contribute with the renewable energy resource deployment, especially in regions where energy demand is rapidly expanding. Renewable energy resources have an intrinsic relationship with local environmental features and the regional climate. Even small and fast environment and/or climate changes can cause significant variability in power generation at different time and space scales. Methodologies based on remote sensing are the primary source of information for the development of numerical models that aim to support the planning and operation of an electric system with a substantial contribution of intermittent energy sources. In addition, reliable data and knowledge on renewable energy resource assessment are fundamental to ensure sustainable expansion considering environmental, financial and energetic security.</p>