

1. Record Nr.	UNINA9910337594203321
Autore	Zohuri Bahman
Titolo	Small Modular Reactors as Renewable Energy Sources // by Bahman Zohuri
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-92594-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (306 pages)
Disciplina	621.4830973
Soggetti	Renewable energy resources Nuclear energy Materials science Force and energy Renewable and Green Energy Nuclear Energy Energy Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Introduction to the Nuclear Power Industry -- Chapter2: Nuclear Power Structure from Past to Present -- Chapter3: Nuclear Energy Research and Development Roadmap -- Chapter4: A Combined Cycle Power Conversion System for Small Modular Reactor -- Chapter5: Small Modular Reactors, The Next Big Renewable Energy Source -- Chapter6: Safty and Nonproliferation Aspect of GEN-IV Reactors -- Chapter7: Electricity Production and Renewable Source of Energy, Economics -- Chapter8: Energy Storage Technologies & Their Role in Renewable Integration.
Sommario/riassunto	This book highlights Small Modular Reactors (SMRs) as a viable alternative to the Nuclear Power Plants (NPPs), which have been used as desalination plant energy sources. SMRs have lower investment costs, inherent safety features, and increased availability compared to NPPs. The unique and innovative approach to implementation of SMRs as part of Gen-IV technology outlined in this book contributes to the application of nuclear power as a supplementary source to renewable

energy. Discusses Gen-IV Power plants, their efficiency, cost effectiveness, safety, and methods to supply renewable energy; Presents Small Modular Reactors as a viable alternative to Nuclear Power Plants; Describes the benefits, uses, safety features, and challenges related to implementation of Small Modular Reactors.

---