

1. Record Nr.	UNINA9910799218103321
Autore	Chalkias Dimitris A
Titolo	The Emergence of Agrivoltaics : Current Status, Challenges and Future Opportunities // by Dimitris A. Chalkias, Elias Stathatos
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-48861-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (0 pages)
Collana	Green Energy and Technology, , 1865-3537
Altri autori (Persone)	StathatosElias
Disciplina	621.31244
Soggetti	Photovoltaic power generation Renewable energy sources Agriculture Power resources Photovoltaics Renewable Energy Natural Resource and Energy Economics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Water-Energy-Food-Ecosystems (WEFE) nexus -- Energy and agriculture -- Solar photovoltaic energy in agriculture -- An overview of solar cell technologies towards next-generation agrivoltaics -- Designing the future of agrivoltaics.
Sommario/riassunto	This book assists in the adoption of the sustainable cross-sectoral nexus approach of agrivoltaics, which can provide a quite significant untapped potential for the sustainable development of humanity. Increasing demand for water, energy and food, due to population growth and urbanization, is aggravated by unprecedented extreme weather and climatic conditions. This situation is likely to undermine the sustainable and peaceful development of humanity. Today, more than ever, there is an imperative need to support the identification and development of practical solutions, where the use of a nexus approach can lead to improved outcomes in the integrated management of water–energy–food–ecosystem (WEFE) resources. This book disseminates the current knowledge of the modern approach of

agrivoltaics, providing a comprehensive state of the art on the field, discussing the current status, the challenges and the future perspectives for their further development. This new currently in-depth unexplored topic will be covered thoroughly by the present book, which will attract the readership of both the scientific and industrial research communities, even of people who are dealing with cultivations, promoting the development in the field, from conceptual designs to practical realizations.
