

1. Record Nr.	UNINA9910682587403321
Titolo	Atmospheric water harvesting development and challenges // Elvis Fosso-Kankeu [and three others] editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2023] ©2023
ISBN	3-031-21746-2
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (218 pages)
Collana	Water science and technology library ; ; Volume 122
Disciplina	628.142
Soggetti	Water harvesting Water vapor, Atmospheric
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Atmospheric Water Generator Technologies -- Outdoor testing of double slope condensation surface for extraction of water from air -- New materials for sorption-based atmospheric water harvesting: opportunities and challenges -- Metal-oxide frameworks for Atmospheric Water Harvesting -- Solar adsorption-based atmospheric water harvesting systems: Materials and technologies.
Sommario/riassunto	The commercial operation of atmospheric water harvesting systems is still limited to few countries; this is mainly due to the low energy efficiency of the system and the inability to effectively operate throughout the various seasons of the year. Researchers have attempted to develop strategies to render the operation of atmospheric water harvesters easier and cost effective. This book covers work progress toward such direction, including among others the co-operation of these systems with renewable energy source and the adaptation of the systems to local conditions; the response of the communities around the world to such technology and how its implementation is affected by cultural believe, cost, and technological friendliness. The book is of interest to academic researchers, students, water authorities, professional in relevant industries, government regulatory bodies officers, and environmentalists.