

1. Record Nr.	UNINA9910437931803321
Autore	Di Giuseppe Elisa
Titolo	Nearly zero energy buildings and proliferation of microorganisms : a current issue for highly insulated and airtight building envelopes / / Elisa Di Giuseppe
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , 2013
ISBN	3-319-02356-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (x, 94 pages) : illustrations (some color)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-530X
Disciplina	579.17
Soggetti	Buildings - Airtightness Buildings - Energy conservation Molds (Fungi) - Control Algae - Control Sick building syndrome - Prevention
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 2191-530X."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Definitions -- Introduction -- Algal Growth on External Building Envelope -- Development of Mould in Indoor Environments -- Analytical and Experimental Methods for the Assessment of the Biological Proliferation in Buildings -- Nearly Zero Energy Buildings and Proliferation of Microorganisms -- Remedial Actions and Future Trends -- Conclusions.
Sommario/riassunto	This book provides a concise review of the thermo-physical phenomena which regulate heat and moisture transportation in Nearly Zero Energy Buildings envelopes, and their relationship with the growth of biological organisms. It describes the main microorganisms proliferating on contemporary building elements and within buildings. It also states the consequences of biological growth on durability, aesthetics and human health; and provides the main methods for the analytical and experimental evaluation of proliferation. Finally, through the review of recent developments, remedial actions to counter the biological phenomenon are examined, and an outline is provided for future innovations in a field not yet widely investigated.

