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Titolo	Bio-based Building Skin [[electronic resource] /] / by Anna Sandak, Jakub Sandak, Marcin Brzezicki, Andreja Kutnar
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ISBN	981-13-3747-0
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Descrizione fisica	1 online resource (183)
Collana	Environmental Footprints and Eco-design of Products and Processes, , 2345-7651
Disciplina	720.47
Soggetti	Sustainable architecture Building materials Biomaterials Sustainable development Buildings—Design and construction Building Construction Engineering, Architectural Structural materials Sustainable Architecture/Green Buildings Building Materials Sustainable Development Building Construction and Design Structural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	State-of-the-art in building facades -- Biomaterials for building skins -- Designing building skins with biomaterials -- Best practices -- Service life performance -- Portfolio of bio-based façade materials -- Future perspectives.
Sommario/riassunto	This book provides a compendium of material properties, demonstrates several successful examples of bio-based materials' application in building facades, and offers ideas for new designs and novel solutions.

It features a state-of-the-art review, addresses the latest trends in material selection, assembling systems, and innovative functions of facades in detail. Selected case studies on buildings from diverse locations are subsequently presented to demonstrate the successful implementation of various biomaterial solutions, which defines unique architectural styles and building functions. The structures, morphologies and aesthetic impressions related to bio-based building facades are discussed from the perspective of art and innovation; essential factors influencing the performance of materials with respect to functionality and safety are also presented. Special emphasis is placed on assessing the performance of a given facade throughout the service life of a building, and after its end. The book not only provides an excellent source of technical and scientific information, but also contributes to public awareness by demonstrating the benefits to be gained from the proper use of bio-based materials in facades. As such, it will appeal to a broad audience including architects, engineers, designers and building contractors.