Biomimetics as a strategy for the development of bioinspired structures for energy absorption based on fruits [

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text (article)

Analítica

This review seeks to update our knowledge about fruits, your structures, your materials for development of bio-inspired products, and your respective applications in-volving energy absorption, and shock dissipation. In nature, we will find a multitude of biological structure that performs the function of protection and crashworthiness. This study focuses on one of the biologically most important functions found in the natural packaging -that consists of the direct or indirect protection against mechanical damage or other negative environmental influences that involving crashworthiness- as well as energy absorption. Through of the systematic literature review, which includes all peer-reviewed research, documents that are relevant to the objective to ensure a comprehensive search were selected 21 research studies. Three research databases were identified: (I) web of Sci-ence, (II) Scopus, and (III) Science Direct. Only primary empirical studies were included. The review identified several situations where Biomimetics and Bio-inspiration method-ology are introduced for improvements and solving technological problems by analyzing, abstracting, adapting, and transposing biological principles, into the technical world. The results indicated that the structures based on fruits could improve the structure's effi-ciency that has the role of providing an effective bio-inspired absorber for a multitude of product designs. Although there are several studies, more research is needed for use of new technologies and new settings to ensure recommendations that can implement the improvement of the development of design bio-inspired
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