



Biomimetic approach for experimentation and digital fabrication with bio-based material: the lightness and resistance of the Agave Sisalana [

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Analítica

Bioinspiration in nature's design strategies aligned with digital fabrication, have great relevance for problem solving with a focus on the systematic application of biological information for the emulation of natural elements. Currently, the possibilities are given by the latest technologies, production systems and the development of new structures and materials. This research explores the investigation of biology, the use of parametric computing and digital fabrication, including experiments with sustainable materials as inseparable dimensions of bioinspired design. Agave Sisalana fibers have excellent lightness and resistance properties provided by the structural pattern of cell walls and their material properties. Being presented as a natural system of biomimetic inspiration and bio-inspired material experimentation

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