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Green nanotechnology applications to improve indoor environment quality for accommodation units in university campuses

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Abstract:

University campuses are an alternative role that includes many expatriate students. Accommodation units in university dormitories are one of the main pillars that contribute to the formation and safety of students, and besides providing daily shelter for them, it positively affects their psychological peace and stability. It was noted that there are design shortcomings in these facilities and their contents, as well as shortcomings in making use of nanotechnology applications in its interior design in light of the age of science and technology. For this reason, the use of some nanotechnology applications that help create an interior design that suits the requirements of students and the vocabulary of the interior space of accommodation units in university campuses has been studied.

The insulation that is used in buildings is one of the modern technologies that work on the quality of buildings and maintain the temperature inside the building and protect it from humidity or high heat in the summer, cold and rain in the winter and various weather factors. Therefore, in this research we will study the importance of applying the latest insulation methods. And temperature regulation, as well as moisture- and heat-resistant coatings and self-cleaning, using nanotechnology technology in order to create a good indoor environment.

Keywords:

(University campuses - Nanotechnology - Applications in nanotechnology and architecture - Sustainable architecture - Quality of the building's internal environment - Atmosphere and architecture - Nano and interior

Color in the interior design of virtual stores and its impact on shopper behavior

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Abstract:

Recently, virtual reality technology has captured the attention of the whole world. Especially in the entertainment and commercial sectors. A virtual store provides the advantages of a traditional store and an online store. As it offers unlimited working hours, endless stock of merchandise in a real-time immersion experience and a clear perception of a product. Color plays an important role as it has psychological and physiological impact on human being. Color is considered as one of the most important elements in the commercial interior space because of its energy and influence on sensory and mental human perception. the consumer's choices, the time he spends inside the store and his desire to shop, and buy are affected by the colors used in the virtual commercial space. Color is an effective tool for guiding shopper behavior. Statement of the Problem is the use of color in the interior design of virtual stores lacks a positive impact on the behavior of the shopper. The objective of this paper is to determine the relationship between color in interior design of virtual store and shopper behavior. To fulfil this objective, The research utilizes the descriptive analytical approach to study and analyze the environment of

the virtual commercial space, also describe and analyze the effect of color in the interior design of the virtual store on the behavior of the shopper. The significance of the research lies in the realism of its problem, as virtual stores have become a marketing necessity in which international companies compete. Color plays a major role in success of virtual store interior design, since color helps influencing the shopper behavior. In addition to the lack of studies that dealt with this research point. The most important results of the research are: About 80% of purchasing decisions are made inside the store, so store design and the general atmosphere inside play an important role in increasing purchase rates, The majority (62-90%) of purchasing decisions are based on colour, Color preferences vary according to many factors such as gender, age, culture, ethnicity, etc...., Warm colors (red) excite customers and stimulate impulsive buying, Cool colors (blue) calm the nerves and lead to thoughtful purchase decisions stemming from the customer's thinking and logic, Green encourages the shopper to spend more time in the store, which will increase the likelihood of more unplanned purchases (more impulsive purchases).

Keywords:

Color, Interior design, virtual store, shopper behavior

Reverse Engineering as an added Value in The Field of Furniture Design

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Abstract:

The use of reverse engineering (RE) is one of the most important methods used in manufacturing technology, both old and new; Due to its positive role towards continuous product improvement processes. Especially if the methodology of its operations is integrated with modern technological technologies, including 3D laser scanners, digital control mechanisms for CNC deleting machines and addition mechanisms such as 3D printers, through the use of flexible automation mechanisms and modern programs to achieve more economic efficiency and productivity for the furniture industry. In addition to Attempting to provide a methodology that solves many of the problems that we have raised, threatening the competitive role in the furniture industry locally and internationally.

Therefore, this research study aims to identify the origin of reverse engineering with an explanation of its most important concepts, highlighting the legal and economic aspect, and the most important areas of its use, as well as addressing the positive role of the importance of its use in various industries in general and in the furniture industry in

particular, and in the technical fields of design and manufacturing and development for the furniture industry.

Key words:

Reverse Engineering - 3D scanners- Modeling- 3D printing

The tissue cells of plants in nature to formulate spoken designs that enrich the field of decorative design

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Abstract:

Art is linked to technology and design with strong ties, two great artists to the other are greater than the consolidation of the relationship on a degree of integration and compatibility between art and design. The artist and designer have expressive capabilities that make tools and materials more flexible in their hand, as technology is affected by art. A change in the exclusivity of art is based on a great intuition to know the extent of the impact of modern and scientific media, the vision of the artist's vision and his thinking towards art and an impetus to reconsider the new artistic problems And the translation of the internal design pigments into structural systems for tissue cells according to the laws of movement and growth according to which the natural elements grow, which means controlling the systems and coordination of the natural elements according to a digital engineering and mathematical system that control structural factors such as diversity, balance, rhythm, repetition, symmetry, regularity and proportionality through networks of tissue cells in The vacuum is used by the designer to move from the flat shape to the stereoscopic shape in the void of plants in nature.

Keywords:

Tissue cells - plants in nature - design formulations - design field.

The use of digital technology in the design of virtual environment sites in natural reserves

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Abstract:

Nature reserves are considered among the touristic attractions, as it is one of the important areas of biological diversity, with all the living things it contains. Therefore, it must be preserved for as long as possible, and exploited for tourism due to the nature of its unique environment, here lies the problem of the research in the lack of interest in some environmental reserves, and the weak role of the designer in the development of ecotourism for the natural reserves in Egypt, and here comes the importance of the research in arriving at the appropriate way to exploit the natural reserves as a touristic area without causing any negative impact on its environment. Therefore, the research aims to develop nature reserves by finding a design language that develops solutions that are compatible with the surrounding environment and satisfy the needs and requirements of eco-tourism. This is done through the use of modern technology and techniques, and the use of programs, tools and applications of augmented reality and virtual reality in the design of a virtual environment, and the designer must use it in the best way towards the environment. The research followed the descriptive and analytical method the research concluded that the use of digital technology leads to overcoming the problems facing the environment of natural reserves in Egypt in a way that does not negatively affect its vital components, rather, it contributes to protecting it effectively and influencing the development of ecotourism.

Keywords:

Digital technology, virtual design, ecotourism, nature reserves