

## **Benefiting from the nanotechnology applications in the design and production of metal furniture and construction**

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### **Abstract:**

The ability to see nanoscale materials has opened up a world of possibilities in a variety of industries and scientific endeavors. Because nanotechnology is essentially a group of technologies that allow properties to be manipulated on a very small scale, it can have many applications worldwide as an innovative approach to enhancing the durability and functionality of different product categories. Over the past decades, the number of consumer goods that contain nanomaterials (NMs) has been increasing rapidly, and the application of this technology in creating systems at the level of structural materials, cladding and coating materials to be manufactured on a small nanoscale is one of the most important modern trends, which helped provide the possibility of revealing new scientific dimensions and thus obtaining more accurate and more important information, which may be exploited in the same way in the manufacture of furniture and metal construction so that it depends in its creation on these capabilities and multiple applications of nanotechnology. Accordingly, the research aims to monitor the implications of nanotechnology and its most important features on the future of furniture design and metal construction activities, and to try to extrapolate the possible development of all these reflections and the relationships between them in the process of designing and producing furniture and metal constructions. The research concluded that it is possible to benefit from the employment of nanotechnology in the field of arts and architecture in the field of designing and processing the raw materials for architectural cladding. "The technology generally touched on glass processing as a start, as a result of the increase in the rate of use of glass in the construction of interior facades in the form of glass walls and glass tiles, as well as in the fields of decoration. Treating artistic paintings to bring archaeological and valuable paintings to their original condition and remove traces of wear and tear and time factors.

### **Keywords:**

nanotechnology, metal furniture design, metal construction