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فردى	نوعية البحث
Neven kamal Fahim	أسماء الباحثين
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Assessment the effect of thermal aging on efficiency of Chitosan in consolidation of textiles	عنوان البحث
لا	مستخلص من رسالة ماجستير او دكتوراة
<p>This paper present studying of effect of thermal ageing on chitosan for consolidation the archaeological textile. Many researches focused on applying of chitosan in treatment of archaeological organic materials. But none of them talk about the resistance of chitosan against environmental conditions, such as thermal acceleration. Regarding to the aspect of continuity for any materials used in restoration and conservation process. it should be stable in its first state by the time. Chitosan, which dissolved in water in concentration of 5% and10%, was applied on natural wool samples, then were exposed to accelerated aging by heat at 90 °c for two different periods 48-100 h. A stereo microscope, SEM, color measurement, and physical measurements were performed to evaluate its resistance to heat in the future. Stereo images show gradual changes in the morphology appearance of the wool samples. SEM photos revealed that film existed over the surface of the samples was homogenous, in addition to the significant damage in the chitosan layers after ageing for 90 c for 100 hours. Bad effect of thermal aging at 100 c on Mechanical properties of the treated sample was noticeable, and Color measurements are comingto emphasize the last results, concerning the efficiency of chitosan. The study proved the positive effect of chitosan to consolidate the wool textile, but the usage of that material in treatment of archaeological should be studied by taking into consideration the environmental circumstances, the concentration of the nano gel material, and state of damage.</p>	
ملخص البحث باللغة الانجليزية	