## الآيـــة

قَالَ تَعَالَىٰ: ﴿ وَٱلشَّمْسُ تَجُرِى لِمُسْتَقَرِّ لَهَا ذَلِكَ تَقْدِيرُ ٱلْعَزبِيزِ الْعَالَيْ وَٱلْقَدِيمِ الْكَالَعُرُجُونِ ٱلْقَدِيمِ اللَّهَ الْعَلِيمِ اللَّهَ مَنَاذِلَ حَتَىٰ عَادَكَالْعُرْجُونِ ٱلْقَدِيمِ اللَّهَ لَا الْعَلِيمِ اللَّهَ مَنُ وَالْقَدَيمِ اللَّهُ الللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ الل

#### **DEDICATION**

I dedicate this research to the spirit of my father, and brother, sisters and also dedicated to science students in various fields of knowledge.

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#### **ABSTRACT**

In this research the attenuation coefficient of X-ray to some selected elements based on atomic number were studied as a function of different thicknesses for Aluminum foils was studied and revealed exponential relation.

Also different martials for the same thickness was conducted which is revealed that the attenuation coefficient depend on the atomic number (z) beside the crystal structure of atom (fcc, sc, bcc).

### ملخص البحث

في هذا البحث تم دراسة معامل التوهين للأشعة السينية لبعض العناصر المختارة بناءً على العدد الذري. كما تمت دراسة معامل التوهين كدالة في رقائق الألومنيوم مختلفة السماكات ووجدت العلاقة أسية.

كما تمت ايضا دراسة معامل التوهين لعناصر مختلفة ذات سمك واحد ووجد أن معامل التوهين يعتمد على العدد الذري (Z) بجانب التركيب البلوري للذرة (مكعب مركز الوجه، مكعب مركز الجسم، مكعب مركز القاعدة)

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