

Dedication

I dedicate this study

To my parents...

To my confidant...

And

To my fiancée...

Kamal

Abstract

The aim of this investigation is to simulate the Compton Effect computationally. Special attention is paid to safety, low cost and timesaving compared with the experimental approach.

The basic of the accurate quantitative analysis of the simulation is shown using Monte Carlo method and the random variable method.

Simulated results are compared with that of the experiment, showing good agreement.

الهدف من هذه الدراسة هو محاكاة تجربة أثر كمتون حوسبة
من محاسن هذه المحاكاة أنها آمنة , رخيصة الثمن وحافضة
للزمن إذا ما قورنت بالتجربة الحقيقية.
تحليل وضبط المقادير الرئيسية لهذه المحاكاة تم باستخدام
نموذج مونت كارلو والمتغيرات العشوائية.
نتائج هذه المحاكاة تم مقارنتها بالتجربة الحقيقية وأدت إلى
نتائج متوافقة.

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