

Dedication

I dedicate this thesis to *my husband for supporting and helping me, My gorgeous parents ,My family ,My friends and everyone who lightened a dark spot in my mind.*

Acknowledgement

Thank to my supervisor Dr. Ahmed E lhassan El faki for his continuous and valuable guidance.

Abstract

The possibility to take advantage of the energy generated by nuclear fusion has been studied due to the world's need for new sources of energy, and found that it is the best solution, if possible to use nuclear fusion reactors, after availability of materials tolerant of high temperatures resulting from this interaction.

المستخلص

تمت دراسة إمكانية الإستفادة من الطاقة الناتجة من الإندماج النووي المحكوم نظراً لحاجة العالم لمصادر طاقة جديدة ووجد أن ذلك هو الحل الأمثل إذا أمكن إستخدام مفاعلات تعمل بالإندماج النووي وذلك بعد توفر المواد التي تستحمل الحرارة العالية الناتجة من هذا التفاعل.

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