

استفتاحية

سَدْرٍ قِيَالَمْ تَبْعَانِي فِي الْآءِ فَاقِ وَفِي أَنفُسِهِمْ حَتَّى يَتَبَيَّنَ لَهُمْ
حَقُّ أَوْ لَمْ يَكْفِ بِرَبِّكَ أَنَّهُ عَلَى كُلِّ شَيْءٍ شَهِيدٌ (فصلت : 53)

Dedication

I dedicate this research to dear my mother, to dear my father, to all my family and to all my teachers of physics in Sudan university of science and technology.

To my friends Dayfah, Badr, Osman, Mohammed, Mahgoub, Hassan, Marwa, and all my colleagues.

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Abstract

In this thesis, the nuclear reactors and their types, applications were studied and also discussed the nuclear fusion in each type, moreover, also introduce the condition for fusion reaction, basic fusion process, and characteristic of fusion. Last but not least, we discuss how to control nuclear fusion.

المخلص

فى هذه البحث دُرست المفاعلات النووية و انواعها و تطبيقاتها، وأيضاً
دُرست الاندماج النووى لكل نوع، فضلا عن دراستنا لشروط تفاعل الاندماج وعملية
الاندماج الاساسية وخصائص الاندماج واخيراً وليس اخراً نُقش كيفية التحكم فى
الاندماج النووى.

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