Sudan University of Science and Technology



College of Graduate Studies

Efficiency Enhancement of Silicon Photovoltaic Cells by Radiating (CO₂) Pulses Laser

زيادة كفاءة الخلية الضوئية السيليكونية بتشعيعها بنبضات ليزر ثانى أكسيد الكربون

A Thesis Submitted in Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Laser Application in Physics

By:

Husam Abdalla Eljack Bakkri Supervisor:

Prof: Kais Abdelsatar Al-Naimee

Co- Supervisor:

Dr. Babikr Osman Elbashir

August 2017