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Responsivity and Response Time of Nano Silver Oxide on Silicon Heterojunction Detector

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Abstract

In this manuscript, nano and micro silver peroxide and silver oxide thin films have been deposited and grown using a Reactive Pulse Laser Diode (RPLD) technique. The peroxide of silver has been deposited on p-silicon substrates. Annealing of the films has been taken under vacuum above (200 oC -600 oC) to produce oxide films. The I-V characteristics were investigated and discussed. The better reverse current has been changed from 20 μ A to 16mA in the graph of the curve of the I-V characteristics, the current had changed proportionally with voltage. The responsivity sensing had been sensed more optically for green (560nm) and near IR (840nm).