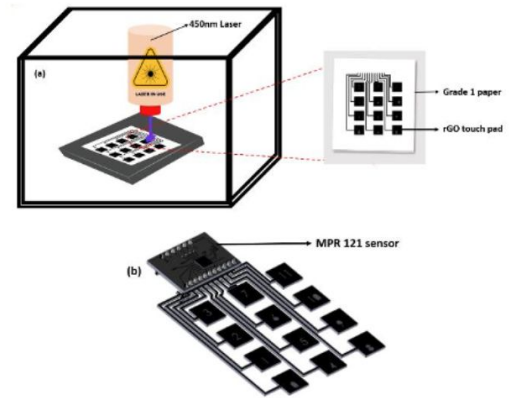


**GRANTED****(IN446942)**

## A method of fabricating reduced graphene oxide



### NEED

Reduced graphene oxide (rGO) is a key material in electronics, energy storage, and sensors. Current production methods are often expensive and inefficient. What if graphene could be produced more efficiently and cost-effectively?

### TECHNOLOGY OVERVIEW

This method fabricates reduced graphene oxide (rGO) by coating a substrate with a fire retardant liquid and irradiating it with blue laser light. The process is simple, low-cost, and highly effective for producing rGO from substrates like filter paper.

### TECHNOLOGY KEY FEATURES

Low-cost, efficient rGO production, blue laser irradiation, fire retardant liquid for safety, use of accessible filter paper, scalable for various applications in energy, electronics, and materials science.

[Read more here](#)

### MARKET ANALYSIS

The global graphene market is expected to grow at a CAGR of 38.6% from 2023 to 2033. The increasing demand for advanced materials in electronics, energy storage, and sensors will drive this growth. [Source: MarketsandMarkets, 2023]

### Target Industries

Energy Storage, Electronics, Advanced Materials, Graphene production companies, electronics manufacturers, energy storage companies, and research institutions focusing on advanced materials.

### AT A GLANCE

- SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,  
BITS Pilani Contact Details: [tec.bits@pilani.bits-pilani.ac.in](mailto:tec.bits@pilani.bits-pilani.ac.in), 91 1596-255913