

# Graphene coated glass

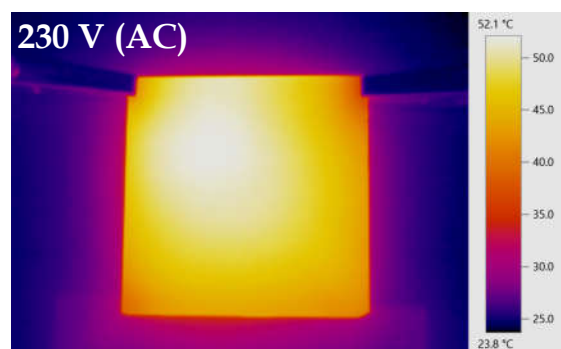


Functional glass coatings have gained significance in the context of Smart window technology. Among various types of coatings, transparent conducting layers on glass are popular as essential components of optoelectronic items, transparent heaters etc. Graphene as a coating is ideal as it is transparent to visible light, exhibits low sheet resistance and high thermal conductivity.

In the present invention, graphene coatings on glass have been achieved by the decomposition of a natural hydrocarbon, without the use of a catalyst. The graphene coated glass, shown below, are highly transparent and conduct well.



**Transparent Heaters**



**IR photograph**

When connected to a power supply, the current passing through the layer produces joule heating raising the glass temperature above ambient. It has promise as transparent heater in defogging, defrosting or thermochromic panels.

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