

Graphene lighting

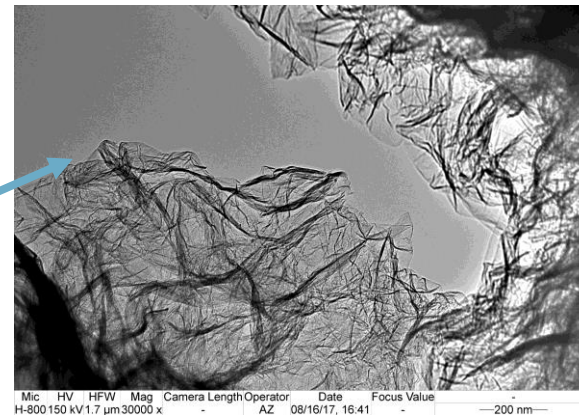
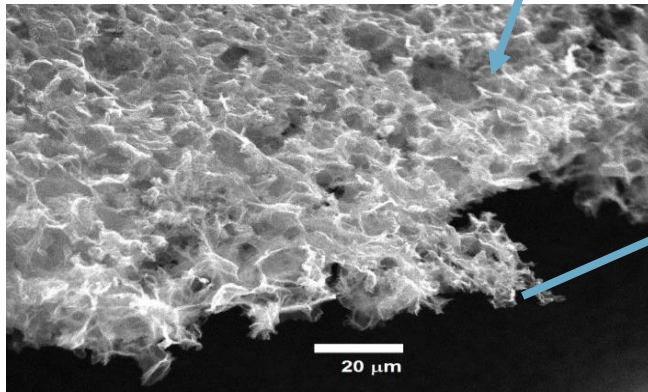
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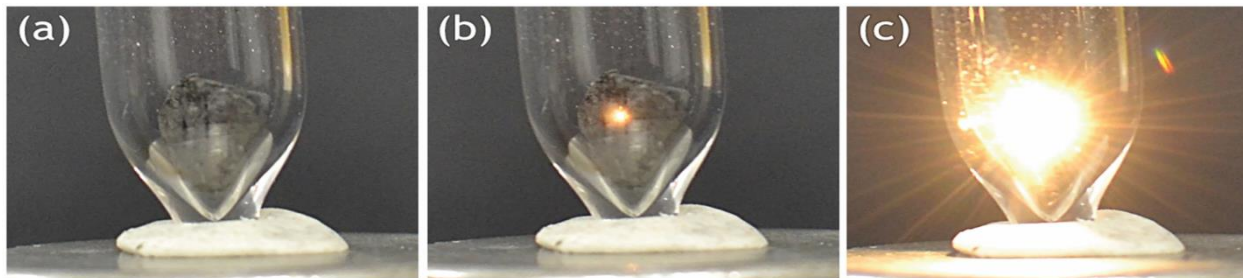
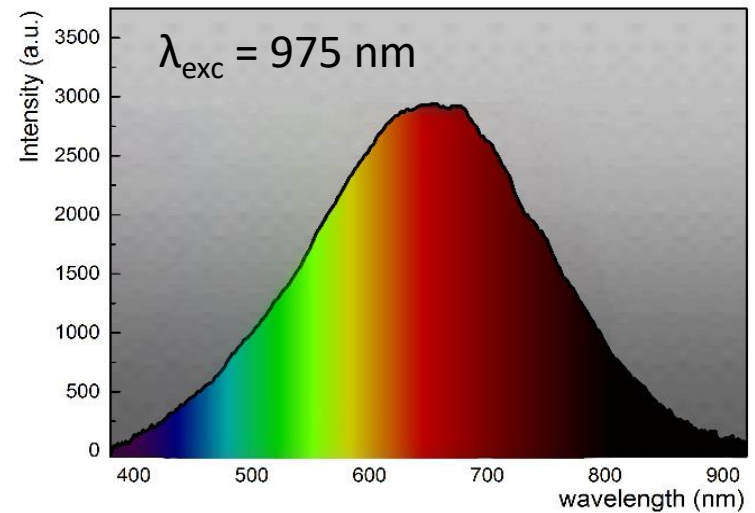
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Graphene foam – 3D form of graphene

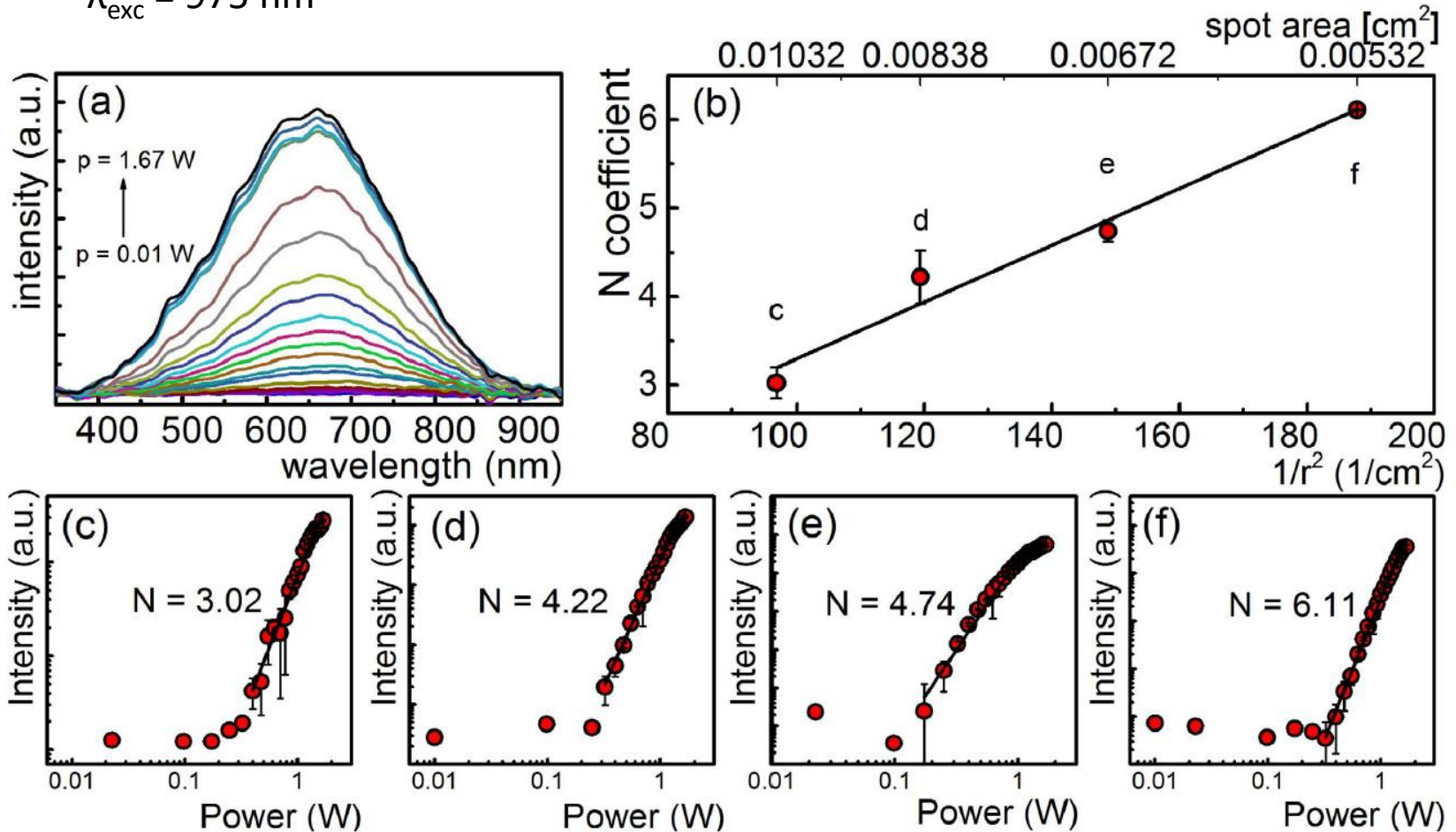


- **High efficiency**
- **High Color Rendering Index (>99)**
- **Warm-white emission color**
- **Energy Saving**

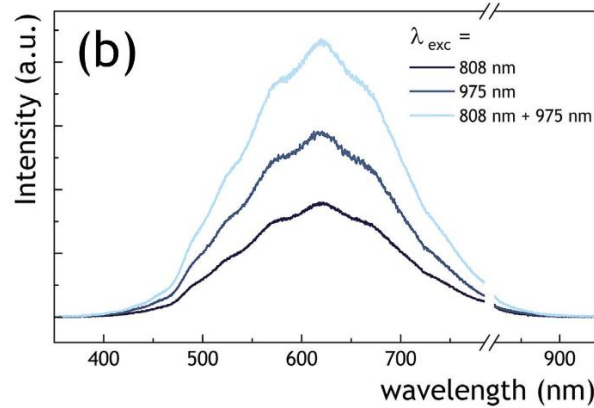
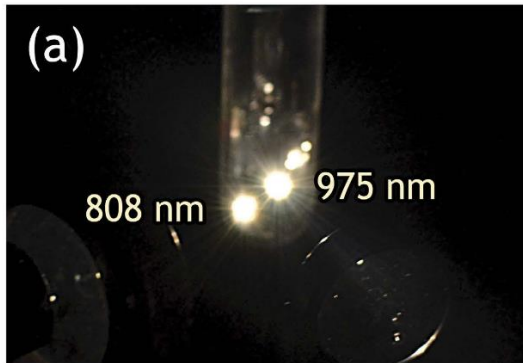


Properties of invention

$\lambda_{exc} = 975 \text{ nm}$



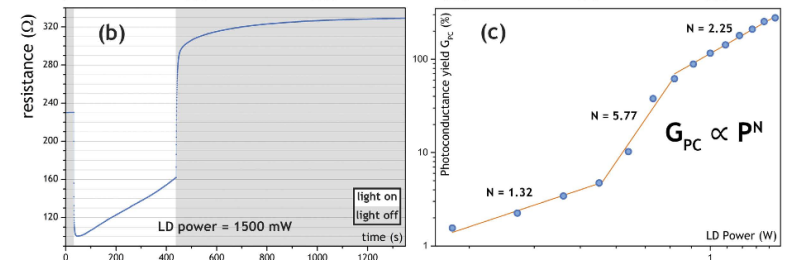
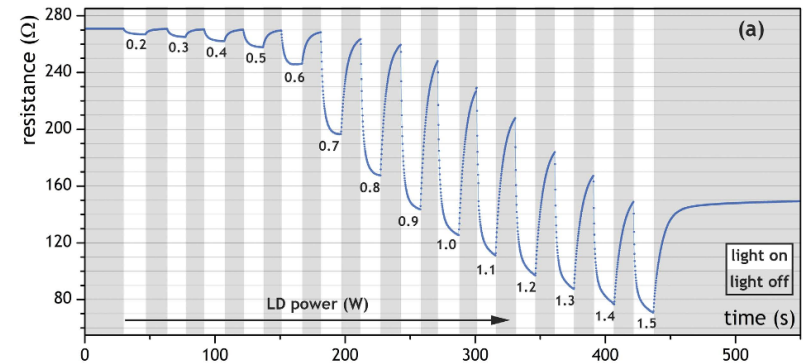
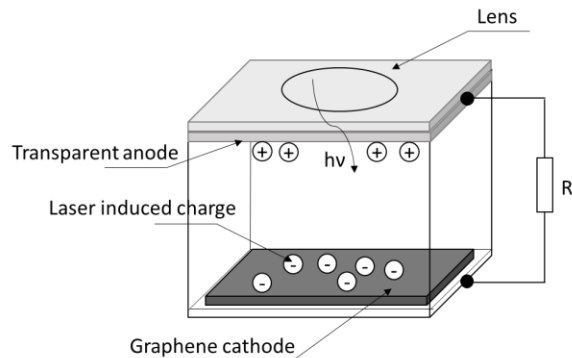
Properties of invention



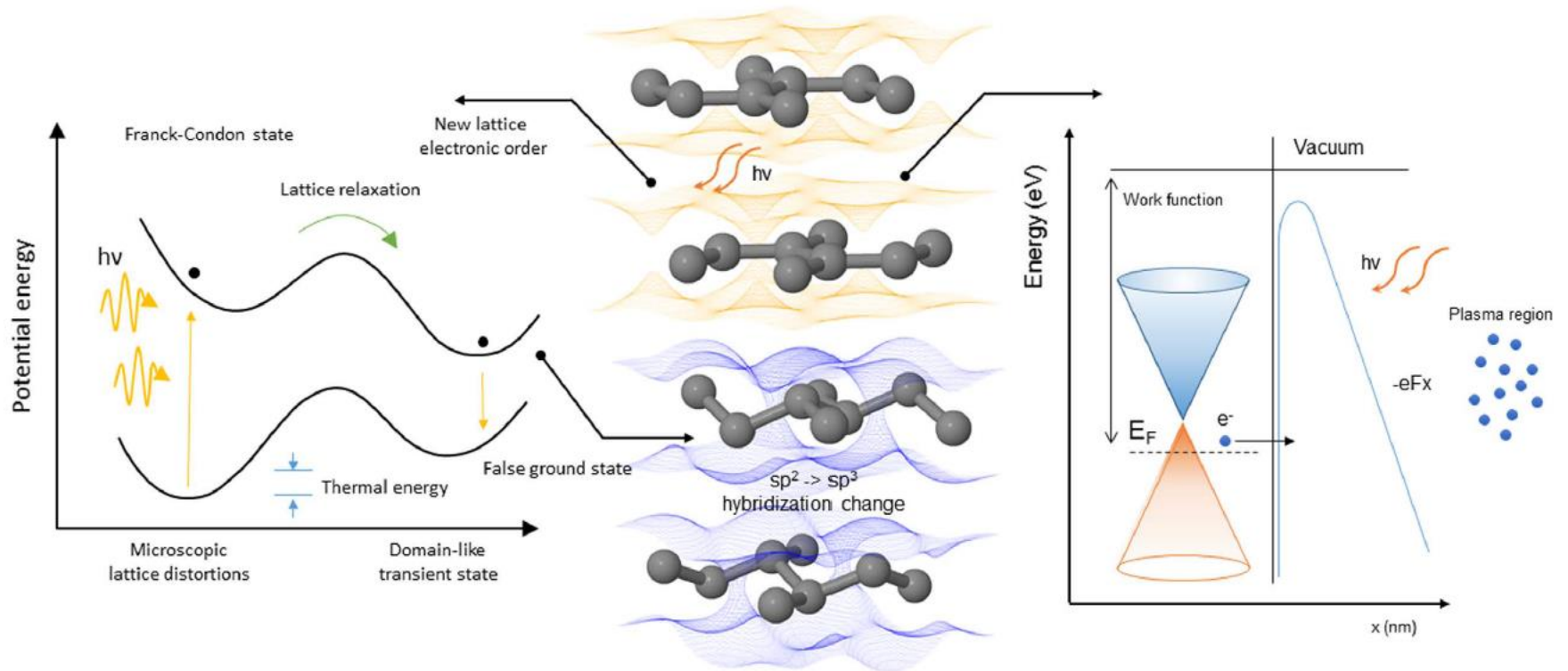
Multiply of excitation spots
-
increase of overall intensity

Efficient photoconductivity

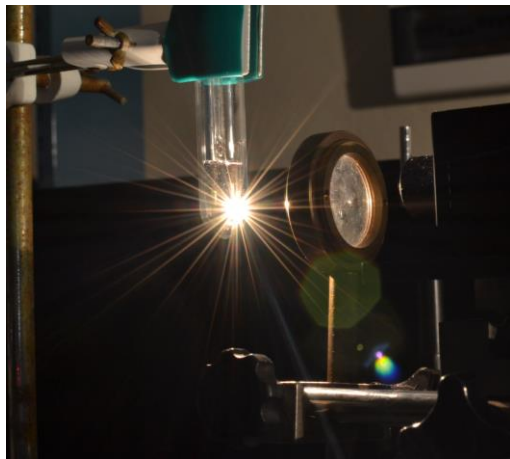
Novel applications – solar converters



$sp^2 \rightarrow sp^3$ opening the gap



Different types of bulb demonstrator



First demonstrator

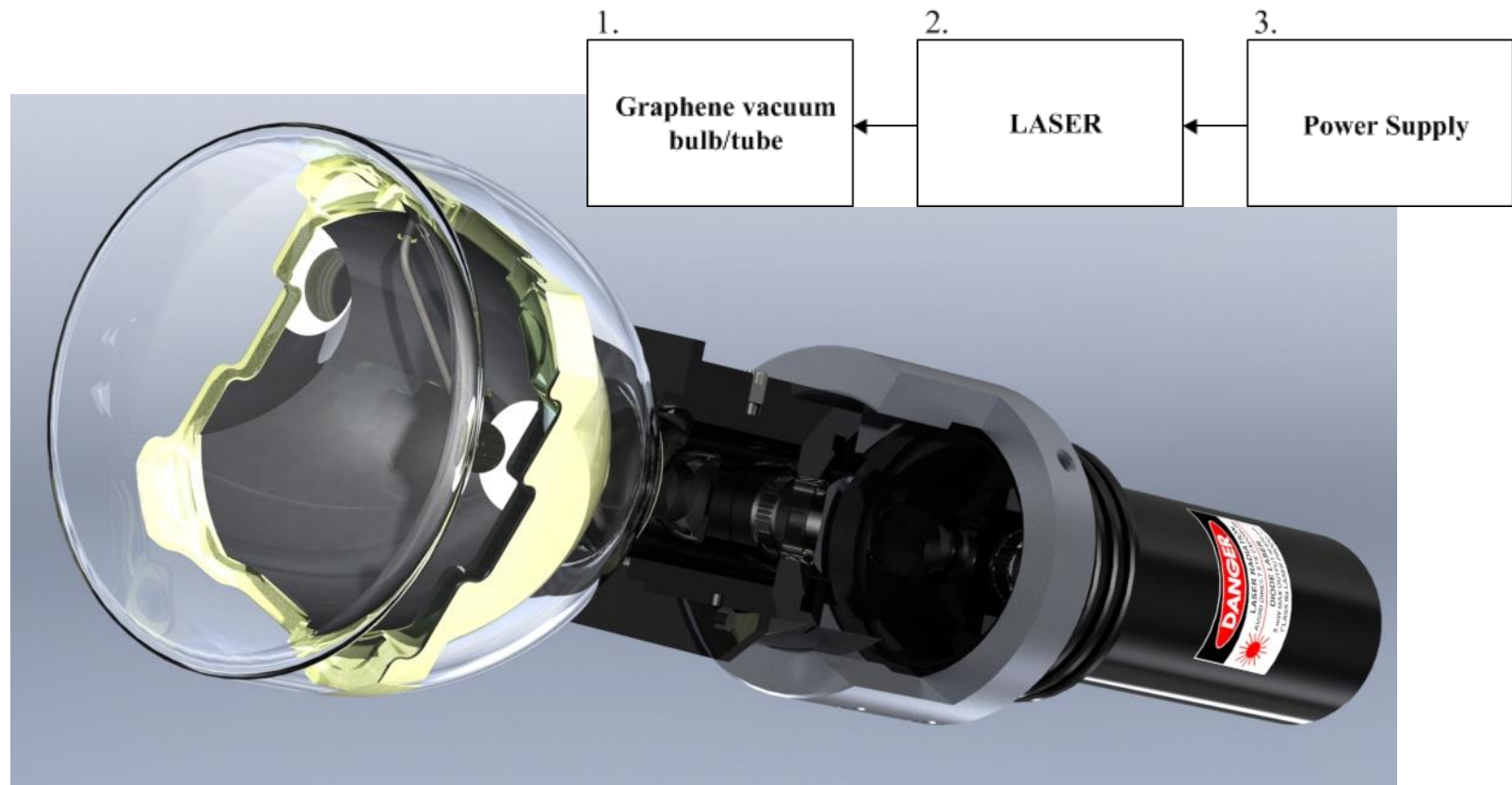


Edison-type bulb



Reflector bulb

The easiest way to create solar-like light



Publications and awards



*Patent in Polish Patent Office
Nr P.414821*

*Publications in Journals of Nature Group
Impact Factor : 13.60 and 4.84*





Thank you for attention!

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