

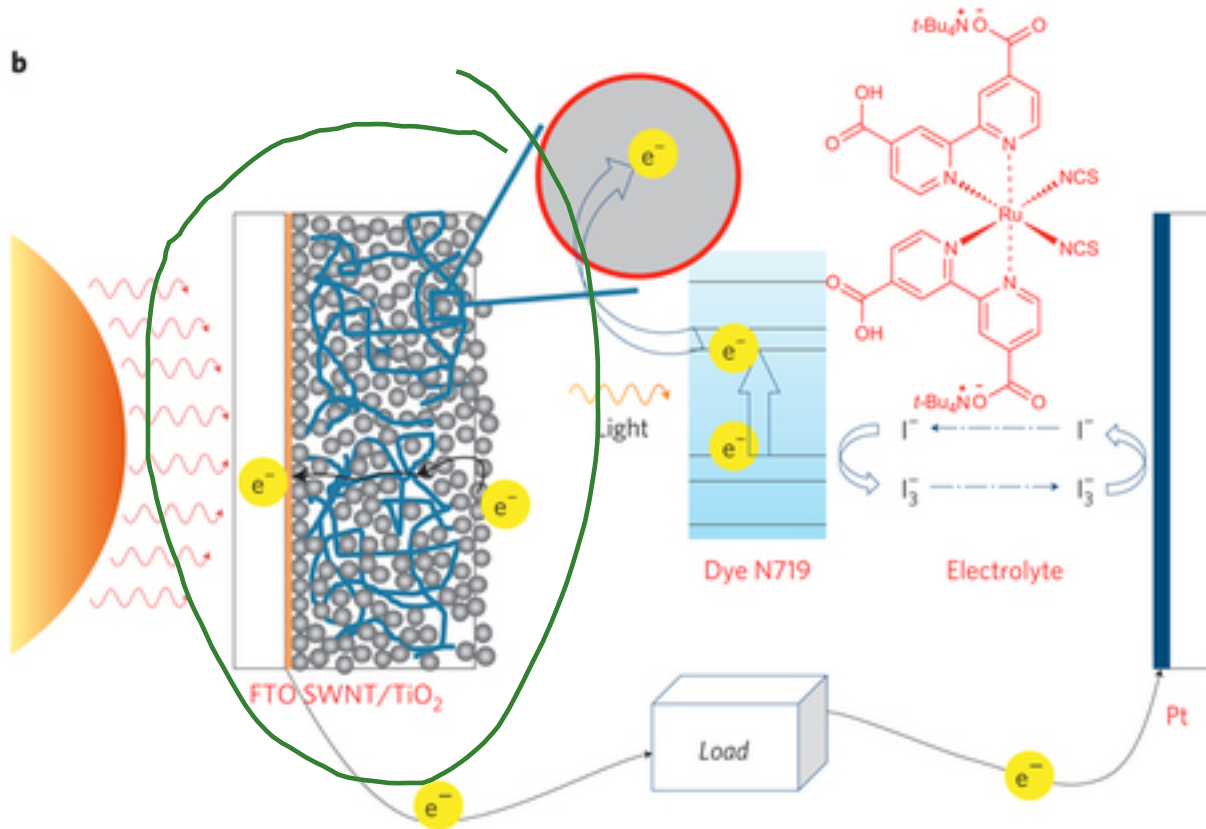
- Announcements
- Lab Quiz
- Pre-lab Lecture
 - ❖ M3 summary review
 - ❖ Preview M3 last steps

Announcements

- Blog post due tonight 12 am
- Next time: meet briefly for ~~quiz~~ and lab clean-up...
- ... and written proposals due by 1 pm of course!
- Tuesday, Dec. 11th: evaluations and class party
- Today's schedule --

option: today

What have we made so far?



SWNTs: improve e⁻ paths to detector, collection efficiency

Au: improve *light* collection efficiency, plasmonic effect

Image from wiki

Solar cell preparation, final steps

- Dye added to anode for you
- You will...
- ... contain + cook the anode
- ... add redox mediator/recycler
- ... add counter-electrode (Pt)

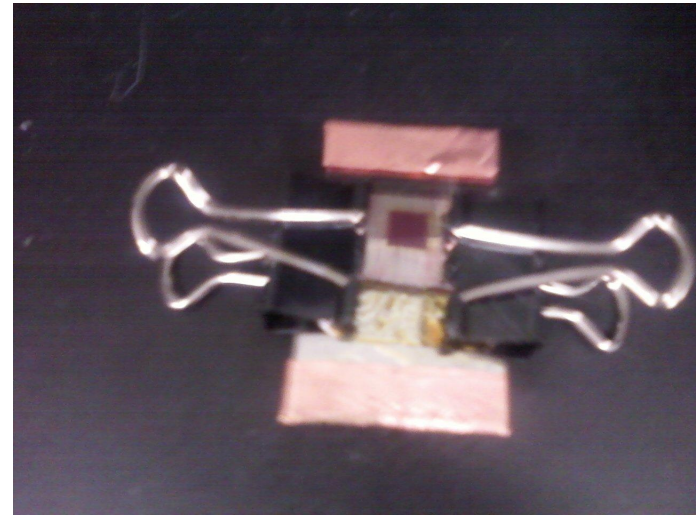
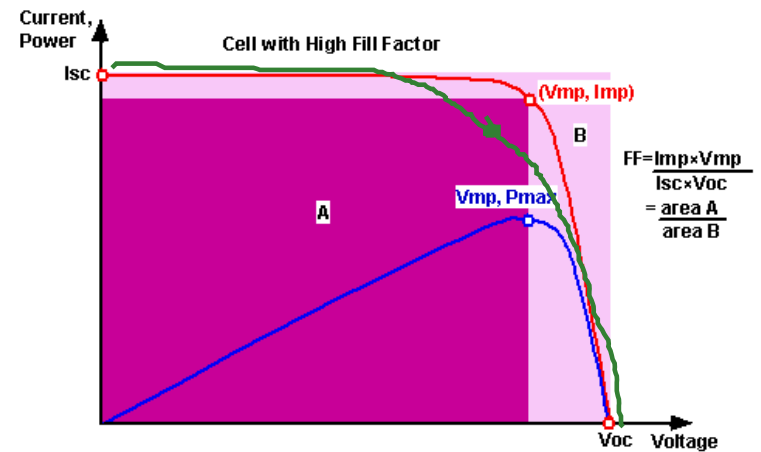


Image from wiki

Solar cell measurement

- Requires accurate measurement of solar cell **area!**
- Overall conversion efficiency – solar to electric power
- Maximum voltage and current → theoretical max power, $P = V_{oc} \times I_{sc}$
- Fill factor reflects stability of I (w/ r/t) V and *actual* vs theoretical P

Image from pveducation.org



Own image (20.309)

