

H24年度VBLプロジェクト研究の概要

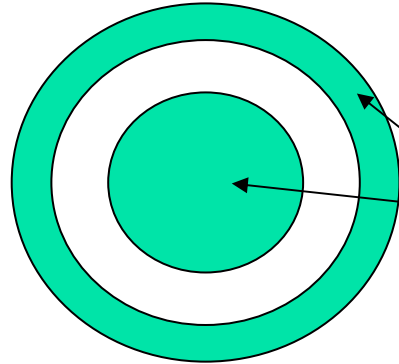
Touch sensors for robotics

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特任助教: ティエティエルコブ ズミトリー

H23年度：研究目的と成果

Circular structure



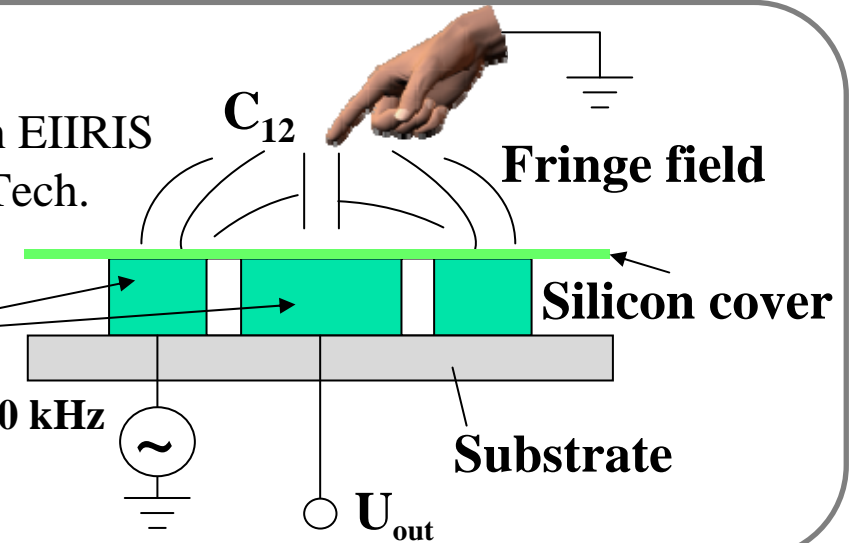
Capacitive graphene touch sensor

Graphen will be manufactured in EIIRIS by Chemical Vapor Deposition Tech.

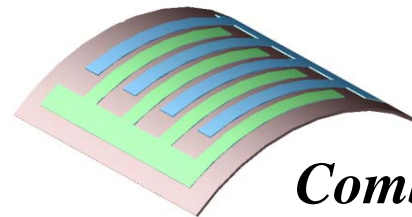
Graphene layer

Excitation signal 250 kHz

Robot skin



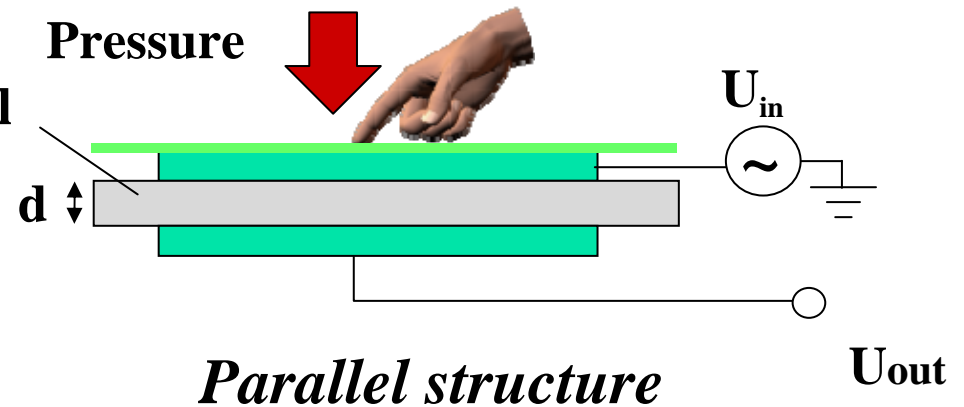
When the finger touches the sensor surface, the distance between the sheets decreases.



Comb structure

Plastic cover protects the graphene from dirt and spillage.

Soft gel



$$C = \frac{Q}{V} = \frac{\epsilon_0 A}{d}$$

Parallel structure

H24年度計画

- ***Design the touch sensor based on graphene technology***
- ***Manufacturing the touch sensor***