Graphene based wearable touch sensor

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Abstract

Wearable electronics have undergone great progress through the advancement of smart watches and fitness trackers. Recently, their applications have been expanded by combining conformal electronics with skin-attachable sensors for monitoring various bio-signals and body movements [1,2]. These devices require flexible or wearable touch sensors to offer users a convenient data input. However, it is very difficult to accomplish such electronics with rigid electronic materials such as indium tin oxide. Graphene possesses an extremely good mechanical property that should maintain a stable operation under a high strain, offering great electronic properties that make it a promising host for device applications. The recent advances in synthesis and fabrication technique of graphene films are expected to enable various applications for wearable electronics. In this talk, I present recent results on graphene based wearable electronics including touch and tactile sensor [3,4].

References

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