

Supporting information for:

UV light enhanced TiO₂/graphene device for oxygen sensing at room temperature

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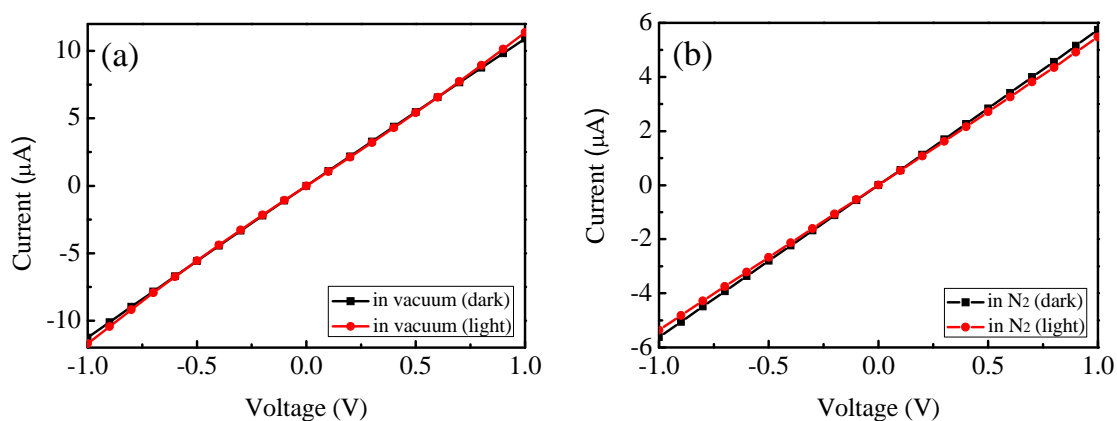


Fig. S1 Current-voltage (*I-V*) characteristics of the TiO₂/graphene device in high vacuum (a) and in high purity N₂ atmosphere (b) with and without UV light.

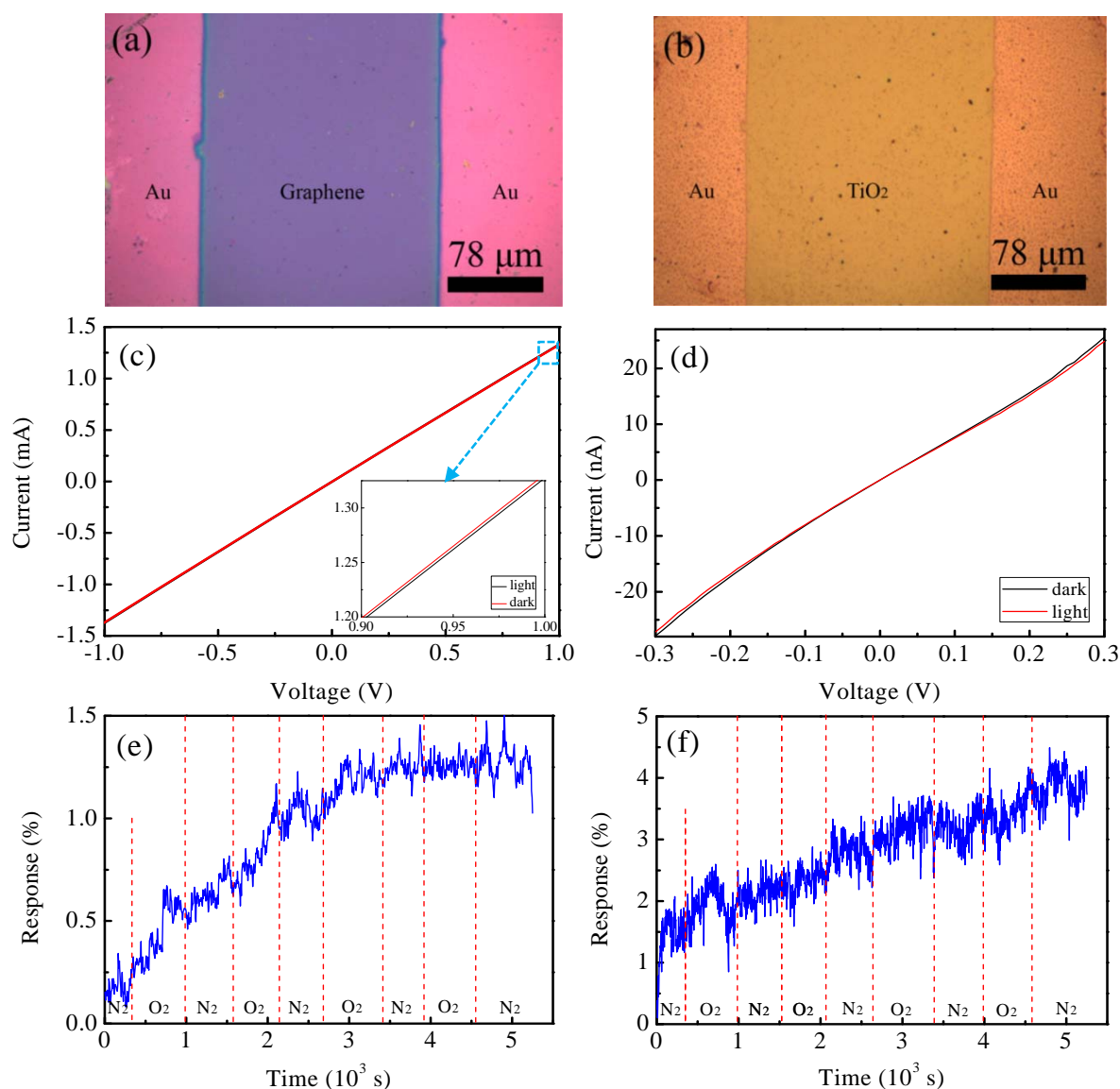


Fig. S2 Characteristics of O₂ sensing performance of the pristine graphene and TiO₂ device. Optical image of the pristine graphene (a) and TiO₂ device (b). (c) *I-V* curves of the pristine graphene device in O₂ with and without UV light, inset is enlarged curves. (d) *I-V* curves of the TiO₂ device in O₂ with and without UV light. (e) Response of the pristine graphene device sequent exposure to N₂ and O₂ with UV light, $V_{\text{bias}}=1$ V. (f) Response of the TiO₂ device sequent exposure to N₂ and O₂ with UV light, $V_{\text{bias}}=1$ V.