Supporting Information for

Study of the correlation between sensing performance and surface morphology of inkjet-printed aqueous graphene-based chemiresistors for NO₂ detection

F. Villani¹, C. Schiattarella², T. Polichetti*¹, R. Di Capua²,³, F. Loffredo¹, B. Alfano¹, M. L. Miglietta¹, E. Massera¹, L. Verdoliva¹ and G. Di Francia¹

Address: ¹ENEA - R.C. Portici, Piazzale E. Fermi 1, I-80055, Portici (Naples), Italy; ²Dipartimento di Fisica "E. Pancini", Università di Napoli "Federico II", Via Cintia, I-80126, Naples, Italy and ³CNR-SPIN UOS Napoli, Via Cintia, I-80126, Naples, Italy

Email: Tiziana Polichetti* - tiziana.polichetti@enea.it

* Corresponding author

Additional experimental data
**Figure S1**: Absorbance per unit length ($\lambda = 660$ nm) as a function of the graphite concentration (after centrifugation).

**Figure S2**: Raman analysis performed on the devices printed on different substrates.

Raman analysis performed on all the devices shows features perfectly overlapped, without any displacement of peaks positions. This is a clear indication of the absence of a doping.
effect induced by the substrates. As can be observed, even the $I(D)/I(G)$ ratio is the same for all the sensing films. This demonstrates that the defect density is retained regardless of the substrate.