On- and off-resonance measurement of the Image State lifetime at the graphene/Ir(111) interface

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PII: S0039-6028(18)30454-0
DOI: https://doi.org/10.1016/j.susc.2018.08.010
Reference: SUSC 21310

To appear in: *Surface Science*

Received date: 7 June 2018
Revised date: 7 August 2018
Accepted date: 13 August 2018

Please cite this article as: S. Tognolini, S. Achilli, S. Ponzoni, L. Longetti, C. Mariani, M.I. Trioni, S. Pagliara, On- and off-resonance measurement of the Image State lifetime at the graphene/Ir(111) interface, *Surface Science* (2018), doi: https://doi.org/10.1016/j.susc.2018.08.010

Highlights

- Surface states at the graphene/Ir(111) interface
- Optical Bloch Equations for a two levels system have been employed to estimate the depopulation and the dephasing time from the experimental results
- Dependence of the Image State depopulation time on the excitation channel
- The depopulation time of the Image State becomes four times longer when it is resonantly populated from the surface state