

Supporting Information

Magnetoresistance and Charge Transport in Graphene Governed by Nitrogen Dopants

Markus Rein,^{†,§} Nils Richter,^{†,§} Khaled Parvez,[‡] Xinliang Feng,[¶] Herman

Sachdev,[‡] Mathias Kläui,^{*,†} and Klaus Müllen[‡]

*Institut für Physik, Johannes Gutenberg-University, 55128 Mainz, Germany, Max Planck
Institute for Polymer Research, 55128 Mainz, Germany, and Dresden University of Technology,
Molecular Functional Materials, 01069 Dresden, Germany*

E-mail: klaeui@uni-mainz.de

*To whom correspondence should be addressed

[†] Johannes Gutenberg-University Mainz

[‡] Max Planck Institute for Polymer Research Mainz

[¶] University of Dresden

[§] These authors contributed equally to this work.

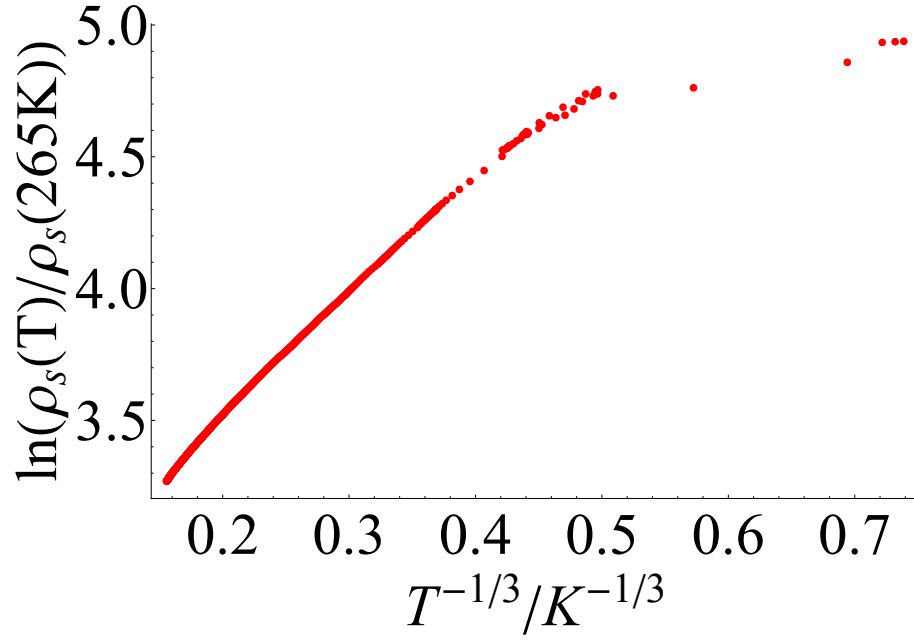


Figure S 1: Plot of the sheet resistance as function of temperature over the entire temperature range. While at high temperatures a clear exponential behavior is observed, a deviation can be seen at lower temperatures. Below ~ 8 K the resistance becomes logarithmic as expected for weak localization. From the exponential increase a transport gap of 9.1 meV can be estimated as described in the main manuscript.