

Research Publications of Dr. M.J. Iqbal

1. On the annealing mechanism of AuGe/Ni/Au ohmic contacts to a two-dimensional electron gas in GaAs/AlGaAs heterostructures,
E. J. Koop, M. J. Iqbal, F. Limbach, M. Boute, B. J. van Wees, D. Reuter, A. D. Wieck, B. J. Kooi, and C. H. van der Wal
Semicond. Sci. Technol. **28**, 025006 (2013), available at arXiv:0809.0928
(This article was also selected for IOP select).
IF: 2.30
2. Odd and Even Kondo Effects from Emergent Localization in Quantum Point Contacts,
M. J. Iqbal, Roi Levy, E. J. Koop, J. B. Dekker, J. P. de Jong, J. H. M. van der Velde, D. Reuter, A. D. Wieck, Ramón Aguado, Y. Meir & C. H. van der Wal
Nature **501**, 79 (2013). doi:10.1038/nature12491,
also available at arXiv:1307.7167
News & Views about this and related work: *Nature Physics* **9**, 530 (2013).
Press release could be found here:
<http://www.rug.nl/news-and-events/news/archief2013/nieuwsberichten/light-on-twenty-year-old-mystery->
IF: 42.35
3. Split-gate quantum point contacts with tunable channel length,
M. J. Iqbal, J. P. de Jong, D. Reuter, A. D. Wieck and C. H. van der Wal
J. Appl. Phys. **113**, 024507 (2013), also available at arXiv:1207.1331v1).
IF: 2.19
4. Emergent Localization from Many-Body Physics in Clean Quantum Point Contacts,
Caspar H. van der Wal, M. J. Iqbal, E. J. Koop, J. B. Dekker, J. P. de Jong, J. H. M. van der Velde, D. Reuter, A. D. Wieck, R. Aguado, Y. Meir
Bulletin of the American Physical Society **58** (2013)
5. Robust recipe for low-resistance ohmic contacts to a two-dimensional electron gas in GaAs/Al_xGa_{1-x}As heterostructures,
M. J. Iqbal, D. Reuter, A. D. Wieck and C. H. van der Wal
available at: <https://arxiv.org/abs/1407.4781>
6. Electron Many-body Effects in Quantum Point Contacts,
PhD thesis published by University of the Groningen , the Netherlands (2012)
<http://irs.ub.rug.nl/ppn/344115682>
Propositions accompanying the dissertation can be found here:
http://www.quantumdevices.nl/theses/iqbal_propositions2012.pdf

7. Fabrication and Characterization of Chemically Prepared ZnO Nanotubes based Sensors
Sajid-Ur-Rehman, Javaid Iqbal, Saira Riaz, Shahzad Naseem
Conference: The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), At ICC Jeju, Jeju Island, Korea

8. Impedance analysis of magnesium doped hematite thin films
Aseya Akbar , Saira Riaz, Shahid Atiq, Javaid Iqbal, Shahzad Naseem
Conference: The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), At ICC Jeju, Jeju Island, Korea

9. Influence of DC-biasing on the performance of graphene spin valve
M. Z. Iqbal, G. Hussain, S. Siddique, T. Hussain, M. J. Iqbal
Solid State Communications **272**, 33–36 (2018)
IF: 1.55

10. Optical CO₂ Gas Sensing Based on TiO₂ Thin Films of Diverse Thickness Decorated with Silver Nanoparticles
Muhammad Akram Raza, Anam Habib, Zakia Kanwal, Syed Sajjad Hussain, Muhammad Javaid Iqbal, Murtaza Saleem, Saira Riaz, and Shahzad Naseem
Advances in Materials Science and Engineering **2018**, Article ID 2780203, 12 pages (2018)
<https://doi.org/10.1155/2018/2780203>
IF: 1.37