

## 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<sub>x</sub>Ga<sub>1-x</sub>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](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 CO<sub>2</sub> Gas Sensing Based on TiO<sub>2</sub> 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