
Curriculum Vitae

Name: Abdul Ismail Bin Abdul Rani

List of Research:

Internal Grant

Investigation of organic-inorganic (PTAA/ nSiGe) hetero-interface barrier effect on optoelectronic properties (Research Id : 4/2019/11)

External Grant

Impedance Analysis Of A P-N Junction Diode Device With Metal/Organic Inorganic/ Metal Structure (UMS Grant; Member; Amount: RM15,000; 2017-2019)

List of Publications:

1. A., A. R. I. *et al.* (2021) 'Temperature Effect on Structural and Optical Characteristics of Solution-processed Polytriarylamine (PTAA) Thin Films for Optoelectronic Applications', *ASM Science Journal*, 16, pp. 1–6. doi: 10.32802/asmscj.2021.813. (**SCOPUS, Q4**)
2. Ghosh, B. K. *et al.* (2020) 'Low Leakage Current by Solution Processed PTAA-ZnO Transparent Hybrid Hetero-Junction Device', *Electronic Materials Letters*. The Korean Institute of Metals and Materials. doi: 10.1007/s13391-020-00235-y. (**WOS & SCOPUS, Q2**)
3. Rani, A. I. A. *et al.* (2020) 'Effect of annealing temperature on electrical properties of hybrid ZnO/PTAA based heterojunction diode', *ASM Science Journal*, 13. doi: 10.32802/ASMSCJ.2020.SM26(2.10). (**SCOPUS, Q4**)

4. Yusop, N. *et al.* (2020) 'Electrical simulation for different thickness ratio of PCBM and PTAA in bilayer organic solar cells', *ASM Science Journal*, 13, pp. 1–6. doi: 10.32802/ASMSCJ.2020.SM26(2.12). (**SCOPUS, Q4**)
5. Chee, F. P. *et al.* (2019) 'Simulation of displacement damage cross section of cuprous oxide/zinc oxide (Cu₂O/ZnO) based heterojunction device', *Journal of Engineering Science and Technology*, 14(4), pp. 1820–1834. (**WOS & SCOPUS, Q3**)
6. Rani, A. I. A., Kumar, G. B., *et al.* (2019) 'Correlation Study of Structural and Optical Properties of ZnO/PTAA Hybrid Heterojunction Layer', *Journal of Physics: Conference Series*, 1358(1). doi: 10.1088/1742-6596/1358/1/012045. (**SCOPUS, Q4**)
7. Ghosh, B. K. *et al.* (2019) 'ZnO-PTAA Potential Hybrid Hetero-Junction for Transparent Renewable Energy Device All Transparent Opto-electronic Device', *Proceedings of the 18th International Conference on Sustainable Energy Technologies (SET 2019), 20-22 August 2019, Kuala Lumpur, Malaysia*, 2(ISBN:9780853583318), pp. 1–7. Available at: <https://nottingham-repository.worktribe.com/output/3936800>.
8. Rani, A. I. A., Ghosh, B. K., *et al.* (2019) (*Pdf*) *Current Advances in Microdevices and Nanotechnology*. 1st ed. Edited by N. N. S. C. FHONG and K. A. MOHAMAD. Penerbit UTHM. https://www.researchgate.net/publication/332963107_CURRENT_ADVANCES_IN_MICRODEVICES_AND_NANOTECHNOLOGY
9. Abdul Rani, A. I. *et al.* (2018) 'Electrical simulation of different photoactive layer thickness on organic heterojunction solar cell', *IET Conference Publications*, 2018(CP749). doi: 10.1049/cp.2018.1299.
10. Ghosh, B. K. *et al.* (2018) 'Analysis of emitter layer diverse effects on electrical performance for prospective si hybrid solar cell', in *IET Conference Publications*.