

## Journal Papers

### International Journals:

1. M. M. Shahidul Hassan and Omiya Hassan, "The Importance of Changing the Traditional Mode of Higher Education in Bangladesh: Creating Huge Job Opportunities for Home and Abroad," *International Journal of Humanities and Social Sciences*, Vol. 13, No:6, 2019.
2. M. M. Shahidul Hassan, "Revamping Higher Education in Bangladesh", *International Journal of Management and Applied Science*, Vol. 2, Issue 12, Dec 2016.
3. Yeasir Arafat, Farseem M. Mohammady, M. M. Shahidul Hassan, "Optical and Other Measurement Techniques of Carrier Lifetime in Semiconductors," *International Journal of Optoelectronic Engineering*, Vol. 2, No. 2, pp. 5-11, 2012
4. M M Shahidul Hassan, Orchi Hassan and Md. Iqbal Bahar Chowdhury, "Effect of Majority Carrier Current on the Base Transit Time of A BJT," *Journal of Electron Devices*, Vol. 10, pp. 511-514, 2011.
5. M M Shahidul Hassan and Orchi Hassan, "Minority Carrier Profile and Storage Time of a Nonuniformly Doped n-Si Schottky Barrier Diode," *Journal of Electron Devices*, Vol. 11, pp. 609-615, 2011.
6. M M Shahidul Hassan and Orchi Hassan, "Depletion Layer of a Nonuniformly Doped Schottky barrier Diode," *Journal of Electron Devices*, Vol. 14, pp. 1151-1154, 2012.
7. M. M. Shahidul Hassan and Md. Waliullah Khan, "Base Transit Time Model Considering Field Dependent Mobility for BJTs Operating at High-Level Injection," *IEEE Trans. On Electron Devices*, Vol. 53, No. 10, pp. 2532-2539, Oct., 2006.
8. M. M. Shahidul Hassan, Ziaur Rahman Khan and Md. Touhidur Rahman, "Base Transit Time of a Bipolar Transistor considering Field Dependent Mobility," *International Journal of Electronics*, Vol. 93, No. 11, pp. 723-735 November 2006.
9. M. M. Shahidul Hassan, Touhidur Rahman and Md. Ziaur Rahman Khan, "Analytical model for base transit time of a bipolar transistor with Gaussian doped base," *Solid-State Electron.*, Vol. 50, No. 3, pp. 327-332, 2006.
10. Md. Anwarul Abedin and Dr. M. M. Shahidul Hassan, "Base Transit Time Model of a Bipolar Junction Transistor Considering Kirk Effect," *Journal of The Institution of Engineers, Singapore*, Vol. 45, Issue 5, 2005.
11. Md. Anwarul, Abedin and M. M., Shahidul Hassan, Analytical base transit time model of uniformly doped base bipolar transistors considering Kirk effect, *The Journal of the Institution of Engineers, Malaysia*, vol. 66(3), 2005, pages 42-46
12. Md. Z. R. and M.M.S. Hassan and T. Rahman and A. k. M. Ahsan, "Expression for Base Transit Time in Bipolar Transistors," *Int. J. Electronics*, Vol. 92, No. 4, pp. 215-229, April 2005.
13. M. M. Shahidul Hassan, A. H. M. A. Rahim, "Induced Base Transit Time of an Epitaxial  $n^+pn^+$  Bipolar Transistor in Saturation," *Solid-State Electronics*, Vol. 47, No.6, pp. 943-950, 2003.
14. M. M. Shahidul Hassan, "Base Transit Time of an Epitaxial  $n^+pn^+$  Bipolar Transistor Considering Kirk Effect," *Int. J. Microelectronics and Reliability*, Vol. 43, No. 2, pp. 327-332, 2003.
15. M. M. Shahidul Hassan and S. Hasibul Majid, "Electrical Characteristics of an Epitaxial Schottky Barrier Diode," *International Journal of Electronics*, Vol. 88, No. 9, pp. 957-967, 2001.

16. M. M. Shahidul Hassan and A. H. Khondoker, "New Expression for Base Transit Time in a Bipolar Transistor for all levels of Injection," *Microelectronics and Reliability*, Vol. 41, No. 1, pp. 137-140, 2001.
17. M. M. Shahidul Hassan, "Analytical Base Transit Time of Integrated Bipolar Transistors in Quasi-saturation and Hard-saturation," *IEE Proc.-Circuits, Devices and Systems*, 147, No. 2, pp. 129-132, 2000.
18. M. M. Shahidul Hassan, "Characteristics of Epitaxial Schottky Barrier Diode for all Levels of Injection," *Solid-State Electronics*, Vol. 44, No. 6, pp. 1111-1116, 2000.
19. M. M. Shahidul Hassan, "Modelling of Lightly Doped Collector of a Bipolar Transistor Operating in Quasi-saturation Region," *Int. Journal of Electronics*, Vol. 86, No. 1, pp. 1-14, 1999.
20. M. M. Shahidul Hassan and M. A. Choudhury, "New Formulation of the Collector Current and Current Gain Relations for Design Purposes of Power Transistors Switches," *IEE Proc. – Circuits, Devices and Systems*, Vol. 142, No. 2, pp. 113-119, 1995.
21. M. M. Shahidul Hassan and Md. Aynal Haque, "Evaluation of Optimal Collector Parameters of a Transistor with Buried Layer," *Int. J. Electronics*, Vol. 75, No. 3, pp. 437-440, 1993.
22. M. M. Shahidul Hassan, Golam Rasul Chowdhury and Zahirul Alam, "Breakdown Voltage of High-Voltage Bipolar Transistors," *Solid-State Electronics*, Vol. 34, No. 10, pp. 1109-1111, 1991.
23. M. M. Shahidul Hassan and H. Domingos, "Design of Optimal Values of Parameters of Epitaxial Bipolar Transistor Switches," *Int. J. Electronics (IJE)*, Vol. 71, No. 5, pp. 745-755, 1991.
24. M. M. Shahidul Hassan and A. Habib, "Avalanche Breakdown Voltages of Linearly Graded Si Junctions," *IJE* Vol. 71, No. 3, pp. 403-409, 1991.
25. M. M. Shahidul Hassan and H. Domingos, "Breakdown Voltages of Base-Collector Junctions of Medium- and Low-Voltage Graded Collector Transistors," *Int. J. Electronics*, Vol. 70, No. 1, pp. 69-75, 1991.
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27. M. M. Shahidul Hassan and H. Domingos, "Control of Current Mode Second Breakdown in Transistors through Use of Double-Graded Collectors," *Solid-State Electronics*, Vol. 33, No. 10, pp. 1217-1221, 1991.
28. M. M. Shahidul Hassan and H. Domingos, "Calculation of Avalanche Breakdown Voltages of Abrupt Si P-N Junctions," *Int. J. Electronics*, Vol. 68, No. 4, pp. 533-537, 1990.
29. M. M. Shahidul Hassan and H. Domingos, "Estimate of Peak Voltage for Triggering Current Mode Second Breakdown of BJTs during Inductive Turnoff," *Int. J. Electronics*, Vol. 66, No. 3, pp. 361-369, 1989.
30. M. M. Shahidul Hassan and H. Domingos, "Estimate of Minimum Current for Inducing Current Mode Second Breakdown in Reverse Biased Epitaxial Bipolar Transistors," *Int. J. Electronics*, Vol. 66, No. 3, pp. 371-377, 1989.
31. M. M. Shahidul Hassan and H. Domingos, "Increase of Critical Current Density and Voltage for Triggering Avalanche Injection through Use of Graded Collector Doping," *Int. J. Microelectronics and Reliability*, Vol. 29, No. 2, pp. 217-226, 1989.

## National Journals

1. Yeasir Arafat, Md. Jannatul Ferdous and M . M. Shahidul Hassan, “ Effect of Temperature on the Fill Factor of a Heterojunction (CIGS) Solar Cell,” JIEB, Vol. EE 38, No. 11, December, 2012.
2. M M Shahidul Hassan, Orchi Hassan and Md. Azharul Haque, “Minority Carrier Profile and Storage Time of a Schottky Barrier Diode for All levels of injection,” JIEB, Vol 37, No 2, pp. 15-21, 2011.
3. Md.Waliullah Khan Nomani and M. M. Shahidul Hassan , “A New model of base transit time for BJTs operating at high level of injection,” JIEB, 2006.
4. M. M. Shahidul Hassan and M. Azharul Haque, “Base Transit Time of a High Speed NPN Transistor Considering Hole current,” JIEB, Vol. EE 33, No. 1& II, pp. 120-124, Decber 2006.
5. Touhidur Rahman, Md. Ziaur Rahman Khan, Hassan MMS, “Base Transit Time of a Bipolar Transistor with Gaussian Base Doping Profile”, IEB Journal of Electrical Engineering, Vol. EE 31, No. I & II), pp. 6 - 9, Dec 2004
6. Md. Aynal Haque and M. M. Shahidul Hassan, “Design of a Graded Collector of High Voltage Bipolar Transistors,” JIEB, Vol. EE 27, No. 1, pp. 57-61, 1999.
7. Mohammad Zahangir Kabir and M. M. Shahidul Hassan, “Determination of Excited Energy States of Submicron Inversion MOSFETs by Variational Method,” JIEB, Vol. EE24, pp. 61-67, 1996.
8. Md. Nasim Ahmed Dewan and M. M. Shahidul Hassan, “ Modeling of Bipolar Junction Transistor Thermal Effects,” JIEB, Vol. EE24, pp.19-26, 1996.
9. M. M. Shahidul Hassan and Md. Kamrul Hassan , “Dependence of Second Breakdown on Load Inductance and Reverse Base Drive,” JIEB, Vol. EE23, pp. 29-36, 1995.
10. Md. Tanvir Quddus and M. M. Shahidul Hassan, “Analytical Modelling of Breakdown in Short Channel MOSFET’s”, JIEB, Vol. EE 23, pp. 1-8, 1995.
11. M. M. Shahidul Hassan, “Optimum Design of Darlington Power Transistor Switches,” JIEB, Vol. 22, No. 1, pp. 215-222 , 1994.
12. M. M. Shahidul Hassan and G.. R. Choudhury, “ Effect of Doping on Efficiency of MIS Inversion Layer Solar Cells,” JIEB, Vol. 20, pp. 33-39, 1992.
13. M. M. Shahidul Hassan and M. A. Choudhury, “ A Model for Designing Power Transistor Switches Driven in Hard Saturation in its On-State,” JIEB, Vol. 20, No. 3, pp. 29-35, 1992.
14. M. M. Shahidul Hassan, M. M. Rahman and S. M. Sohel Imtiaz, “An Analytical Model for Current Mode Second Breakdown in Epitaxial Bipolar Transistor under Open-Base Operating Conditions,” JIEB, Vol. 18, pp. 23-34, 1990.
15. M. M. Shahidul Hassan and M. A. Choudhury, “Effect of Low-High junction on the Current-Gain Product of High-Voltage Power Transistors Operating in Saturation Region,” JIEBS, Vol. 3, pp. 19-22, 1993.
16. M. M. Shahidul Hassan, “Evaluation of Optimal Values of Double-Graded Collector Parameters of High-Voltage Transistors,” JBES, Vol. 2, No. 1, pp. 37-40, 1992.
17. M. M. Shahidul Hassan and M. Sohel Imtiaz, “Current- Voltage Characteristics of a Reverse Biased Transistor Driven in Current Mode Second Breakdown,” JBES, Vol. 1, No. 1, pp. 17-23, 1991.

18. M. M. Shahidul Hassan and Golam Rasul Chowdhury, "Doping Dependence of Current Mode Second Breakdown in Epitaxial Bipolar Transistor," JBES, Vol. 1, No. 1, pp. 27-30, 1991.

### **Papers on Higher Education**

- British Council, Sri Lanka organized a dialogue on 'Transforming Higher Education in South Asian' on 18-19 June 2013.

Presented a paper titled 'Requirement of a National Framework for Overseas Higher Education Delivery Models', parallel session 4, 18 June 2013, Cinammon Grand Hotel, Colombo 3, Srilanka.

### **Int. Journals**

1. M. M. Shahidul Hassan and Omiya Hassan, "The Importance of Changing the Traditional Mode of Higher Education in Bangladesh: Creating Huge Job Opportunities for Home and Abroad", World Academy of Science, Engineering and Technology International Journal of Humanities and Social Sciences, Vol:13, No:5, 2019
2. M. M. Shahidul Hassan, "Revamping Higher Education in Bangladesh", International Journal of Management and Applied Science, Vol. 2, Issue 12, Dec 2016.

### **National**

1. M M Shahidul Hassan, "On Challenges of Implementing Outcome Based Engineering Education in Universities in Bangladesh", Journal of Presidency University, Dhaka, Bangladesh, 20-22 Dec. pp. 362 - 364 2012.