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## Dr. Md. Iqbal Bahar Chowdhury

### Professor, Dept. of EEE

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### Publications

**Journals:** \* M. TanvirAlam, Md. Nurul Rashid, HabibullahNahid, Shovon Kumar Paul and **Md. IqbalBaharChowdhury** ,  
â€œJ-V Characteristics of GaN Based Solar Cell with InGaN-Quantum Dots Layers in the Absorber,â€ ISTP Journal of  
Research in Electrical and Electronics Engineering (ISTP-JREEE), Special Issue on 1st International Conference on Research  
in Science, Engineering & Management (IOCRSEM 2014), pp. 55-58, 2014. \* Jahorul Islam, Md. MahmudulHasan,  
SadiahUmmeyFarwah and **Md. IqbalBaharChowdhury** , â€œA Novel Cylindrical Gate All Around MOSFET Using InAs as  
Channel and HfO<sub>2</sub> as gate oxide,â€ ISTP Journal of Research in Electrical and Electronics Engineering (ISTP-JREEE), Special  
Issue on 1st International Conference on Research in Science, Engineering & Management (IOCRSEM 2014), pp. 59-62,  
2014. \* Mohammad Ali, Ahmed Neamul Islam, HumiraAlamand **IqbalBaharChowdhury** , â€œCurrent-Voltage  
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Research in Electrical and Electronics Engineering (ISTP-JREEE), Special Issue on 1st International Conference on Research  
in Science, Engineering & Management (IOCRSEM 2014), pp. 63-66, 2014. \* Aneek Islam and **IqbalBaharChowdhury** ,  
â€œSimulation of Two-Diode Model Based PV Solar Cell/Array: A SIMULINK Approach,â€ ISTP Journal of Research in  
Electrical and Electronics Engineering (ISTP-JREEE), Special Issue on 1st International Conference on Research in Science,  
Engineering & Management (IOCRSEM 2014), pp. 67-72, 2014. \* Sahajadee Islam Reba, Md. ShihabUddin, Md.  
RashedulHuqe and **IqbalBaharChowdhury** , â€œEffect of Auger Recombination on the Emitter saturation Current of Si-  
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the Base Transit Time In SiGe-HBT with Gaussian Doped Base,â€ ISTP Journal of Research in Electrical and Electronics  
Engineering (ISTP-JREEE), Special Issue on 1st International Conference on Research in Science, Engineering &  
Management (IOCRSEM 2014), pp. 80-86, 2014. \* Ayesha, ShamaraKabirSilvi and **IqbalBaharChowdhury** , â€œInternal  
Quantum Efficiency and Current-Voltage Characteristics Modeling of ZnO/CZTS Thin Film Solar Cells,â€ ISTP Journal of  
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in Science, Engineering & Management (IOCRSEM 2014), pp. 110-114, 2014. \* RashedulHuqe, Sahazadee Islam Reba, Md.  
ShihabUddin and **Md. IqbalBaharChowdhury** , â€œAnalytical Modeling of the Base Dark Saturation Current of Drift-Field  
Solar Cells Considering Auger Recombination,â€ International Journal of Renewable Energy Research, vol 3, no. 2, pp.420-  
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the Base Transit Time of a BJT,â€ Journal of Electron Devices, vol. 10, pp. 511- 514, 2011. \* **IqbalBaharChowdhury** and M.  
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wave functions in the inversion layers of MOSFETs with ultra-thin gate oxidesâ€ , Solid-State Electronics, vol. 44, pp. 1833-  
1836, 2000.

**Conferences:** \* MahfuzulHaque and **Md. IqbalBaharChowdhury** , â€œEffects of the Field-dependence of the Carrier

Mobility on the Base Transit Time of SiGe HBTs Having Non-uniformly Doped Base,â€ Accepted for oral presentation in 3rd International Conference on Advances in Electrical Engineering (ICAEE 2015), Independent University of Bangladesh, Dhaka, Bangladesh to be held on December 17-19, 2015. \* Ashiq Been Rahim, Abdullah Sakib Hasan, Protik Biswas, Aman Ullah and Md. Iqbal Bahar Chowdhury, â€ Analytical Modeling of J-V Characteristics of CIGS Based Thin Film Solar Cell Considering Voltage and Space Dependent Electric Field in the Absorber Layer,â€ Accepted for oral presentation in 3rd International Conference on Advances in Electrical Engineering (ICAEE 2015), Independent University of Bangladesh, Dhaka, Bangladesh to be held on December 17-19, 2015. \* Mahfuzul Haque and **Md. Iqbal Bahar Chowdhury**, â€ Analytical Modeling of the Base Transit Time of SiGe HBTs Including the Effect of Recombination in the Non-uniformly Doped Base,â€ International Conference on Materials, Electronics and Information Engineering (ICMEIE 2015), University of Rajshahi, Bangladesh, June 5-6, 2015. \* Shihab Uddin, Md. Rashedul Huque and **Md. Iqbal Bahar Chowdhury**, â€ Analytical Model of the Internal Quantum Efficiency of Non-uniformly and Heavily Doped Silicon Solar Cells Including Non-ideal Effects,â€ International Conference on Materials, Electronics and Information Engineering (ICMEIE 2015), University of Rajshahi, Bangladesh, June 5-6, 2015. \* Monirul Haque, Md. Moshir Rahman and **Md. Iqbal Bahar Chowdhury**, â€ Current Voltage Characteristics of CdS/CIGS Thin Film Solar Cells: An Analytical Approachâ€, 2014 1st International Conference on Non Conventional Energy (ICONCE 2014), Kalyani, India, pp. 24-27, Jan. 16-17, 2014. 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Monirul Haque and **Md. Iqbal Bahar Chowdhury**, â€ Current- Voltage Characteristics of Hydrogenated a: Si Thin Film Solar Cells: An Analytical Approach,â€ International Conference on Electrical, Computer and Telecommunication Engineering (ICECTE-2012), Rajshahi, Bangladesh, Jan. 21-24, 2013. \* Mohiuddin Mahmud Romel, H. Rahman Khan, Nasim Saba Shommo and **Iqbal Bahar Chowdhury**, â€ Analytical Modeling of Internal Quantum Efficiency of CIGS Solar Cell,â€ International Conference on Electrical, Computer and Telecommunication Engineering (ICECTE-2012), Rajshahi, Bangladesh, Jan. 21-24, 2013. \* M. Moududul Islam, **Md. Iqbal Bahar Chowdhury**, Yeasir Arafat and Md. Ziaur Rahman Khan, â€ Base transit time of a heterojunction bipolar transistor (HBT) with Gaussian doped base under high-level of injectionâ€, International Conference on Devices, Circuits and Systems (ICDCS 2012), Karunya University, Coimbatore, India, pp. 114- 118, March 15-16, 2012. DOI: 10.1109/ICDCSyst.2012.6188685. \* Rashedul Huque, Hasan Mohaiminul Aziz, Khalid Mahfuz Kollince, Md. Shihab Uddin and **Md. Iqbal Bahar Chowdhury**, â€ Effect of Ge-doping Profile of Exponentially- doped Base on the Internal Quantum Efficiency of a SiGe Solar Cell,â€ International Conference on Devices, Circuits and Systems (ICDCS 2012), Karunya University, Coimbatore, India, pp. 119-123, March 15-16, 2012. DOI: 10.1109/ICDCSyst.2012.6188686. \* Sujoy Kumar Saha, Syeda Israt Ferdous, Asif Mohammad Farhan, Sahajadee Islam Reba and **Iqbal Bahar Chowdhury**, â€ Effect of field dependent mobility on the analytical modeling of emitter saturation current of a silicon solar cell,â€ 2011 IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE), Penang, Malaysia, pp. 7-11, Dec 8-10, 2011. DOI: 10.1109/ICCAIE.2011.6162094. \* Syeda Israt Ferdous, Sujoy Kumar Saha, Md. Yeazul, Kabir Hossain, Md. Forhad Hossain and **Iqbal Bahar Chowdhury**, â€ Effects of the field dependent mobility on the high frequency performance of BJT under base pushout condition,â€ 2011 IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE), Penang, Malaysia, pp. 268-273, Dec 8-10, 2011. DOI: 10.1109/ICCAIE.2011.6162143. \* Sujoy Kumar Saha, Syeda Israt Ferdous, Shahazadi Islam Reba and **Iqbal Bahar Chowdhury**, â€ Effect of Field Dependent Mobility and Simultaneous Consideration of Both SRH and Auger Recombination on the Analytical Modeling of Internal Quantum Efficiency of a Si-Solar Cellâ€, 2011 IEEE Region 10 Conference (TENCON 2011), Bali, Indonesia, pp. 662-666, Nov. 21-24, 2011. DOI: 10.1109/TENCON.2011.6129190. \* Syeda Israt Ferdous, Sujoy Kumar Saha, Md. Yeazul, Kabir Hossain, Md. 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Forhad Hossain, Sujoy Kumar Saha and **Iqbal Bahar Chowdhury**, â€ Effect of Recombination on the Base Transit Time Model Considering Base Pushoutâ€, 2011 IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Kota Kinabalu, Malaysia, pp. 14-18, Sep. 28-30, 2011. DOI: 10.1109/RSM.2011.6088281. \* **Iqbal Bahar Chowdhury** and M. M. Shahidul Hassan, â€ Analytical modeling of base transit time considering recombination in the non-uniformly doped base,â€ 2011 International Symposium on Humanities, Science & Engineering Research (SHUSER), Kuala Lumpur, Malaysia, pp. 117 â€“ 122, June 06-07, 2011. DOI: 10.1109/SHUSER.2011.6008482. \* **Iqbal Bahar Chowdhury** and M. M. Shahidul Hassan, â€ Analysis of base transit time for a bipolar junction transistor considering base currentâ€, International Conference on Electrical and Computer

Engineering 2010 (ICECE 2010), Dhaka, Bangladesh, pp. 20- 24, Dec. 20-24, 2010. DOI: 10.1109/ICECE.2010.5700787. \* M. Moududul Islam., Yeasir Arafat, **Md. IqbalBaharChowdhury** , Md. ZiaurRahman Khan and M. M. Shahidul Hassan, “Base transit time of a Heterojunction Bipolar Transistor with Gaussian doped base”, International Conference on Electrical and Computer Engineering 2010 (ICECE 2010), Dhaka, Bangladesh, pp. 127 – 130, Dec. 18-20, 2010. DOI: 10.1109/ICECE.2010.5700643. \* M. Shahidul Hassan and **Md. IqbalBaharChowdhury** , “Effect of majority carrier current on the base transit time of a BJT for exponential doping”, IEEE International Conference of Electron Devices and Solid-State Circuits (EDSSC), Hong Kong, pp. 1 – 4, Dec. 15-17, 2010. DOI: 10.1109/EDSSC.2010.5713717. \* **IqbalBaharChowdhury** and M. M. Shahidul Hassan, “Base transit time of a bipolar junction transistor considering majority-carrier current”, International Conference on Electrical and Computer Engineering 2008 (ICECE 2008), Dhaka, Bangladesh, pp. 133 – 138, Dec. 20-22, 2008. DOI: 10.1109/ICECE.2008.4769187. \* **IqbalBaharChowdhury** and Haque, A., “Accurate determination of gate capacitance in deep submicron MOSFETs using an improved boundary condition”, International Conference on ElectricalandComputerEngineering 2001 (ICECE 2001), Dhaka, Bangladesh, pp. 175-178, Jan 05-06, 2001.

**Publications (Other Fields) Journal:** \* RubaRummana, **IqbalBaharChowdhury** and Rumana Rashid, “An Analysis of the Budgetary Share of Labour in Bangladesh,” World Journal of Management, vol. 2, no. 2, pp.84-98, September 2010.

**Conferences:** \* RubaRummana, SirajuddinShaheen, NazneenChaity, RifatBokahri, Liana Anwar, IfteKhairul Amin Abbas, Nusrat Wahid, RizwanaSubhani, Rumana Rashid and **IqbalBaharChowdhury** , “Gender Differences in the Usage of Information and Communication Technologies (ICT): The Case for Entrepreneurs in Bangladesh”, 2011 IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE), Penang, Malaysia, pp. 220-223, Dec 8-10, 2011. DOI: 10.1109/ICCAIE.2011.6162134. \* RubaRummana, SyedaIsratFerdaus, Rumana Rashid and **IqbalBaharChowdhury** , “A Model for Mainstreaming Gender Perspective in Engineering Education in Bangladesh: Some Recommendations”, 2011 IEEE Region 10 Conference (TENCON 2011), Bali, Indonesia, pp. 729-733, Nov. 21-24, 2011. DOI: 10.1109/TENCON.2011.6129300 \* RubaRummana and **IqbalBaharChowdhury** , “An Overview of Budgetary Allocation on the Development of Women Entrepreneurs in Bangladesh: An Empirical Study”, 2011 International Conference on Business, Engineering Research and Industrial Applications (ICBEIA), Kuala Lumpur, Malaysia, pp. 165 – 168, June 05-07, 2011. DOI: 10.1109/ICBEIA.2011.5994233. \* RubaRummana, **IqbalBaharChowdhury** and Rumana Rashid, “Sustainable Waste Management Using Renewable Technology for Economic Empowerment of Rural Women in Bangladesh”, 2nd International Conference on Solid Waste Management in Developing Countries, WasteSafe 2011, Khulna, Bangladesh, Feb. 13-15, 2011. \* RubaRummana, **IqbalBaharChowdhury** and Rumana Rashid, “The Equation of Renewable Energy Technologies- The Gender Side- A model for empowering rural poor women in Bangladesh ”, Fifth Biennial International Conference of Indian Association for Asian & Pacific Studies, Sikkim University; Sikkim, India, Dec. 10-12, 2010.

Reviewer	**Journals:****1.** IEEE Transaction on Electron Devices**2.** International Journal of Integrated Electronics **3.** Journal of Institute Engineers, Bangladesh **Conferences:** 1. International Conference on the Developmentsin Renewable Energy Technology (2012, 2014, 2016) 2. 2011 IEEE Applied Power Electronics Colloquium (IAPEC) 3. 2011 IEEE Symposium on Computers & Informatics

Professional Experience

Position	Department/University	Duration
Associate Professor	Department of Electrical and Electronic Engineering, United International University Dhaka, Bangladesh	November 13, 2013 – Onwards
*Assistant Professor	Department of Electrical and Electronic Engineering, United International University Dhaka, Bangladesh	November 12, 2013
Head of the Department	Department of Computer Science and Engineering, The University of Asia Pacific Dhaka, Bangladesh	March 05, 2006- October 31, 2006
Assistant Professor	Department of Computer Science and Engineering, The University of Asia Pacific, Dhaka, Bangladesh	June 06, 2002- Onwards
Head-in-Charge	Department of Computer Science and Engineering, The University of Asia Pacific,Dhaka, Bangladesh	April 01, 2004 –August 31, 2004
Head-in-Charge	Department of Computer Science and Engineering, The University of Asia Pacific,Dhaka, Bangladesh	February 10, 2003- May 11, 2003

Senior Lecturer	Department of Computer Science and Engineering, The University of Asia Pacific,Dhaka, Bangladesh	June 14, 2001- June 05, 2002
Head-in-Charge	Department of Computer Science and Engineering, The University of Asia Pacific,Dhaka, Bangladesh	October 01, 2001- February 09, 2002
Lecturer	Department of Electrical and Electronic Engineering,Ahsanullah University of Science and Technology,Dhaka, Bangladesh	April 01, 1999 – June 13, 2001
### Education		
Degree Obtained	Institute	Year of Passing
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Ph. D. (Electrical & Electronic Engg.)	Bangladesh University of Engineering and Technology, Dhaka, Bangladesh	2011
M.Sc. Engg. (Electrical & Electronic)	Bangladesh University of Engineering and Technology, Dhaka, Bangladesh	2000
B.Sc. Engg. (Electrical & Electronic)	Bangladesh University of Engineering and Technology, Dhaka, Bangladesh	1996
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