

## ACADEMIC INFORMATION

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- Masters of Science in Engineering (**M.Sc. Engg.**) from the Department of Electrical and Electronic Engineering, University of Rajshahi, Rajshahi 6205, Bangladesh.  
*CGPA: 3.71* (First Class, Position: 3<sup>rd</sup>)
- Bachelor of Science in Engineering (**B.Sc. Engg.**) from the Department of Electrical and Electronic Engineering (Previous name of the department: Applied Physics and Electronic Engineering), University of Rajshahi, Rajshahi 6205, Bangladesh.  
*CGPA: 3.75* (First Class with Honors, Position: 2<sup>nd</sup>)
- Higher Secondary Certificate (**H.S.C.**) from Comilla Board, Comilla, Bangladesh in 2011.  
*GPA: 5.00*
- Secondary School Certificate (**S.S.C.**) from Comilla Board, Comilla, Bangladesh in 2009.  
*GPA: 5.00*

## PROFESSIONAL EXPERIENCE

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- **Lecturer**, Department of Electrical and Electronic Engineering, North Bengal International University, Rajshahi-6100, Rajshahi, Bangladesh, From January, 2020 to Present (Full time).
- **Research Assistant**, Department of Electrical and Electronic Engineering, University of Rajshahi, Rajshahi-6205, Rajshahi, Bangladesh, From July, 2019 to December, 2020.

## JOURNAL PUBLICATIONS

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- [1] **Shamim Ahmmed**, Md. Abdul Karim, Md. Hafijur Rahman, Asma Aktar, Md. Rasidul Islam, Ashraful Islam, Abu Bakar Md. Ismail, Performance analysis of lead-free CsBi<sub>3</sub>I<sub>10</sub>-based perovskite solar cell, *Solar Energy* 226 (2021) 54-63.  
<https://doi.org/10.1016/j.solener.2021.07.076>.
- [2] Md. Rasidul Islam, Raza Moshwan, **Shamim Ahmmed**, Anuj Kumar Tuning the structural and electronic properties of two-dimensional boron antimonide with defects and group-III dopants, *Physica B: Condensed Matter* 620 (2021) 413269.  
<https://doi.org/10.1016/j.physb.2021.413269>.
- [3] **Shamim Ahmmed**, Asma Aktar, and Abu Bakar Md. Ismail, Role of a Solution-Processed V<sub>2</sub>O<sub>5</sub> Hole Extracting Layer on the Performance of CuO-ZnO-Based Solar Cells, *ACS Omega* 6 (2021) 12631–12639. <https://doi.org/10.1021/acsomega.1c00678>.
- [4] **Shamim Ahmmed**, Asma Aktar, Md. Hafijur Rahman, Jaker Hossain, Abu Bakar Md. Ismail, Design and simulation of high performance CH<sub>3</sub>NH<sub>3</sub>Pb(I<sub>1-x</sub>Cl<sub>x</sub>)<sub>3</sub> based perovskite solar cell using CeO<sub>x</sub> ETL and NiO HTL, *Semiconductor Science and Technology* 36 (2021) 035002. <https://doi.org/10.1088/1361-6641/abd266>.
- [5] Md. Hafijur Rahman, **Shamim Ahmmed**, Samia Tabassum, Abu Bakar Md. Ismail, Epitaxial deposition of LaF<sub>3</sub> thin films on Si using deep eutectic solvent based

facile and green chemical route, *AIP Advances* 11 (2021) 035010. <https://doi.org/10.1063/5.0039733>.

- [6] **Shamim Ahmed**, Asma Aktar, Samia Tabassum, Md. Hafijur Rahman, Md. Ferdous Rahman, Abu Bakar Md. Ismail, CuO based solar cell with V<sub>2</sub>O<sub>5</sub> BSF layer: Theoretical validation of experimental data, *Superlattices and Microstructures* 151 (2021) 106830. <https://doi.org/10.1016/j.spmi.2021.106830>.
- [7] Md. Ferdous Rahman, Md. Mahabub Alam Moon, Md. Hasan Ali, **Shamim Ahmed**, Samia Tabassum, Jaker Hossain, Abu Bakar Md. Ismail, A systematic study of how annealing conditions lead to the application-based microstructural, crystallographic, morphological, and optical features of spin-coated CdS thin-films, *Optical Materials* 117 (2021) 111136. <https://doi.org/10.1016/j.optmat.2021.111136>.
- [8] **Shamim Ahmed**, Asma Aktar, Jaker Hossain, Abu Bakar Md. Ismail, Enhancing the open circuit voltage of the SnS based heterojunction solar cell using NiO HTL, *Solar Energy* 207 (2020) 693–702. <https://doi.org/10.1016/j.solener.2020.07.003>.
- [9] **Shamim Ahmed**, Asma Aktar, Md. Ferdous Rahman, Jaker Hossain, Abu Bakar Md. Ismail, A numerical simulation of high efficiency CdS/CdTe based solar cell using NiO HTL and ZnO TCO, *Optik - International Journal for Light and Electron Optics* 223 (2020) 165625. <https://doi.org/10.1016/j.ijleo.2020.165625>.
- [10] Asma Aktar, **Shamim Ahmed**, Jaker Hossain, Abu Bakar Md. Ismail, Solution-Processed Synthesis of Copper Oxide (Cu<sub>x</sub>O) Thin Films for Efficient Photocatalytic Solar Water Splitting, *ACS Omega* 5 (2020) 25125–25134. <https://doi.org/10.1021/acsomega.0c02754>.
- [11] Abdul Kuddus, Md. Ferdous Rahman, **Shamim Ahmed**, Jaker Hossain, Abu Bakar Md. Ismail, Role of facile synthesized V<sub>2</sub>O<sub>5</sub> as hole transport layer for CdS/CdTe heterojunction solar cell: Validation of simulation using experimental data, *Superlattices and Microstructures* 132 (2019) 106168. <https://doi.org/10.1016/j.spmi.2019.106168>.

## GRANTS AND AWARDS

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- [1] *M.Sc. Research Fellow of ICT Division*, People's Republic of Bangladesh (2018-19)
- [2] *Dean's List Award*, *B.Sc. Engg. Part-I*, Faculty of Engineering, University of Rajshahi, Rajshahi-6205, Rajshahi.
- [3] *APEE Reunion 2011 Award*, *B.Sc. Engg. Part-I*, Department of Applied Physics and Electronic Engineering, University of Rajshahi, Rajshahi-6205, Rajshahi.
- [4] *APEE Reunion 2011 Award*, *B.Sc. Engg. Part-II*, Department of Applied Physics and Electronic Engineering, University of Rajshahi, Rajshahi-6205, Rajshahi.