PERSONAL DATA

Name	:	Azzafeerah binti Mahyuddin
Date / Place of birth	:	23 September 1986 / Kuala Lumpur, Malaysia
Nationality	:	Malaysian
Sex	:	Female
Marital status	:	Single
Religion	:	Islam
Weight	:	52 KG
Height	:	156 cm
Permanent address	:	No. 17 Jalan Anggerik 1B/5, Desa Anggerik, 48200 Serendah, Selangor
Email	:	zafira_86@yahoo.com
Mobile no.	:	+6017-4155459

SUMMARY

- A remarkably knowledgeable and have experience in the field of Physics, its theoretical practices and application translated to interesting content for young and adult learners.
- Experienced in teaching Physics for Diploma and Degree level.
- Strong research background in Physics which specialized in semiconductor and material engineering field.
- Able to work in one team to achieve goals or target and able to work with minimum supervision.
- Able to communicate effectively with all levels in the organization, posses good interpersonal and organizational skills.
- Highly organized and efficient at multitasking.
- Ability to priorities workload and able to meet deadlines.
- A creative and ideally person.
- Quick learner and willing to learn any new knowledge.

ACADEMIC QUALIFICATION

2008 - 2012	Universiti Sains Malaysia, MSc Science (Solid State Physics) by research mode.
2005 - 2008	Universiti Sains Malaysia, BSc (Hons) in Science of Physics (GPA: 3.22; CGPA: 3.01)
2004 - 2005	Perak Matriculation College (Physics)
1999 - 2003	Sekolah Agama Menengah Rawang, Selangor

AREA OF EXPERTIES

- III-nitrides semiconductor thin film.
- Theory and practical of plasma-assisted molecular beam epitaxy system (PAMBE).
- Studies of heteroepitaxial growth of III-nitrides semiconductor thin film.
- Material and electrical studies of semiconductor thin film.
- Fabrication of semiconductor devices.

WORK EXPERIENCE

Universiti Kuala Lumpur MITEC, Johor

Duration: January 2013 – present
Position: Lecturer

Work profile
- Academician: Teaching subject (Engineering Science) for Diploma and Degree level.
- Coordinator: Teaching and Learning Unit

NanoBiotechnology Research and Innovation (NanoBRI),
Institute for Research in Molecular Medicine (INFORMM), USM

Duration: December 2011- present
Position: Research Officer (contract)
Monthly salary: RM 2,471.18

Work profile
- Conducting a research project based on gold nanoparticles for memory devices and biosensing applications.

School of Physics, Universiti Sains Malaysia (USM), Pulau Pinang

Duration : July 2009 – June 2011
Position : USM Fellowship
Monthly salary: RM 1,800

Work profile
- Teaching Physics (Thermodynamics, Modern Physics) for tutorials class.
- Demonstrating and assisting the laboratory works for undergraduate students.
- Grading students and marking their works on assignments and tests.
- Librarian for School of Physics.
- Conducting research and experimental works in Nano-optoelectronic Research and Technology Laboratory (NOR lab).
- Writing conference and journal papers for publication.
- Presenting research papers at international conferences and seminars.

Universiti Teknologi Mara (UiTM), Pulau Pinang

Duration : July 2010 – October 2010
Position : Part-time Lecturer
Monthly salary: RM 1,800
Work profile
- Teaching Physics (Fundamental Physics/General Physics) for Diploma students majoring in Civil and Mechanical Engineering.
- Giving lectures, conducting tutorial classes and demonstrates experimental works in laboratory.
- Involves in preparing test questions as well examination questions.
- Grading students and marking their works on assignments, tests and final examination.

School of Physics, USM, Pulau Pinang

Duration : July 2008 – June 2009
Position : Research Assistant
Monthly salary: RM 1,325

Work profile
- Assisting supervisor by conducting the research project in Nano-optoelectronic Research Laboratory, School of Physics.
- Handling the grant's account.
- Manage data collection projects.

- Writing and presenting research papers for international conferences.
- Assisting lecturer by translating and editing Physics book from English to Bahasa Malaysia for university publications.

GRANT

Short Term Research Grant (STRG)

Title: Fabrication and Characterization of Nanoporous Gallium Nitride (GaN) by UV Assisted Electrochemical Etching
Location: Unikl MITEC, Johor
Amount: RM 19,000
Duration: 16th October 2014 – 16th October 2015

AWARD

"Gold Award for Poster" for poster presentation awarded by UNIKL MITEC during MRCIE2015 Conference.

"Hadiah Sanjungan 2010" award for the journal publication category awarded by Universiti Sains Malaysia.

PUBLICATIONS

1) **A.Mahyuddin,** A. Azrina, M. Z. Mohd Yusoff, Z. Hassan, The effect of Single AlGaN Interlayer on the Structural and Electrical Properties of AlN/GaN Heterostructures Grown by Molecular Beam Epitaxy. Presented in Malaysian Research Conference and Innovation Exhibition (MRCIE2015), Johor. Submitted to Jurnal Teknologi. (2015)

2) A.Azrina, S.A.Ismail, A.Rafidah, A.Nurulhuda, Y.Suhaila, **A. MAhyuddin,** Effect of Compressive Residual Stress on TiaAiN Coated high speed steel via microblasting, Submitted to ARPN Journal of Engineering and Applied Sciences. (2015)

3) **A.Mahyuddin,** N. Alias, A. W. Mohamad Ikbar, A. Azrina, M. Z. Mohd Yusoff, M. F. Omar, A. K. Ismail, Implementation of Design of Experiment for Optimization of Etching Conditions for Fabrication of Porous Gallium Nitride (GaN), MRCIE2015, Unikl MITEC, Johor (Dec 2015) – Gold Award for poster category.

4) Yusoff, M. M., **Mahyuddin, A**., Hassan, Z., Hassan, H. A., Abdullah, M. J., Rusop, M. & Ahmed, N. M. AlN/GaN/AlN heterostructures grown on Si substrate by plasma-assisted MBE for MSM UV photodetector applications. *Materials Science in Semiconductor Processing*, *29*, 231-237 (2015).

5) Mohd Yusoff, M. Z., **Mahyuddin, A**., Hassan, Z., Abu Hassan, H., Abdullah, M. J., & Rusop, M. Fabrication of aluminum nitride heterostructures on Si (1 1 1) substrate by plasma-assisted MBE. *Composite Interfaces*, *21*(8), 723-735 (2014).

6) Yusoff, M. M., **Mahyuddin, A**., Hassan, Z., Yusof, Y., Ahmad, M. A., Chin, C. W. & Abdullah, M. J. Plasma-assisted MBE growth of AlN/GaN/AlN heterostructures on Si (111) substrate. *Superlattices and Microstructures*, *60*, 500-507 (2013).

7) Yusoff, M. M., **Mahyuddin, A**., Hassan, Z., Hassan, H. A., & Abdullah, M. J. Influence of Al-flux on the growth of AlN/GaN/AlN films on Si (111) substrate by MBE. *Superlattices and Microstructures*, *64*, 367-374 (2013).

8) Yusoff, M. Z., **Mahyuddin, A**., Baharin, A., Hassan, Z., Abu Hassan, H., & Abdullah, M. J. The study of Al0. 29Ga0. 71N and AlN cap layers grown on GaN/AlN/Si (111) by RF plasma assisted MBE. *Journal of Optoelectronics and Advanced Materials*, *14*(11-12), 935-940 (2012).

9) Yusoff, M. Z. M., **Mahyuddin, A**., Hassan, Z., Hassan, H. A., & Abdullah, M. J. The investigation of Al0. 29Ga0. 71N/GaN/AlN and AlN/GaN/AlN thin films grown on Si (111) by RF plasma-assisted MBE. In American Institute of Physics Conference Series*,* Vol. 1455, pp. 248-254 (2012).

10) M. Z. Mohd Yusoff, **A. Mahyuddin**, Z. Hassan, H. Abu Hassan, M. J. Abdullah, "The fabrication of Ag Islands on AlN/GaN/AlN/Si (111) by using Thermal Evaporator and Thermal Annealing Methods", Advanced Materials Research, Vol. 364, 327-332 (2011).

11) **A. Mahyuddin**, Z. Hassan, C. W. Chin, M. H. M. Mohamed, K. Y. Cheong, "Plasma-assisted molecular beam epitaxy growth of crack-free AlN cap layer on GaN-based heterostructures", Optoelectronics and Advanced Materials-Rapid Communications (OAM-RC), Vol. 4, No.6, 925-928 (2010).

12) **A. Mahyuddin**, Z. Hassan, Y. Yusof, K. Y. Cheong, "Electrical characteristics and interface properties of III nitride-based metal-insulator-semiconductor structure", AIP Conference Proceedings 1250, 105-108 (2010).

13) **A. Mahyuddin**, Z. Hassan, K. Y. Cheong, "Metal-insulator-semiconductor (MIS) structure with AlN dielectric", AIP Conference Proceedings 1136, 494-498 (2009).

14) Y. Yusof, **A. Mahyuddin**, , M.Z. Mohd Yusoff, M.A. Ahmad, Z. Hassan, H. Abu Hassan, M.J. Abdullah, "Structural and Optical Characterization of AlN/GaN/AlN/Si(111) Grown by Plasma Assisted MBE", Proceeding of International Conference on Nanoscience and Nanotechnology, (2011).

15) M. Z. Mohd Yusoff, **A. Mahyuddin**, Z. Hassan, H. Abu Hassan, M. J. Abdullah, "The Investigation of Al0.29Ga0.71N/GaN/AlN and AlN/GaN/AlN Thin Films Grown on Si (111) by RF Plasma Assisted MBE", AMSN 2010 2nd ASEAN-APCTP Workshop on Advanced Materials Science and Nanotechnology, (2010).

16) **A. Mahyuddin**, Z. Hassan, K.Y. Cheong, "Effect of annealing on the electrical properties of metal-insulator-semiconductor (MIS) structure with AlN dielectric", Proceedings of 4th International Conference on Recent Advances in Materials, Minerals and Environment AND 2nd Asian Symposium on Materials and Processing, (2009).

17) **A. Mahyuddin**, Z. Hassan, C.W. Chin and K.Y. Cheong, "Growth and properties of AlN/GaN/AlN film on Si substrates", Proceedings of 2nd International Conference on Science & Technology: Application in Industry & Education, (2008).

LANGUAGE PROFICIENCY

Malay : Excellent (writing and speaking)
English : Good (writing and speaking)

SKILLS

MS Office	(Advanced)
Macromedia Director	(Intermediate)
C++ Programming	(Intermediate)
Adobe Photoshop	(Intermediate)