Curriculum Vitae for XMUM Official Website

Name	**Dr. Ng Zi Neng**
Current Position	Lecturer
Room No.	-
Programme	Electrical and Electronics Engineering, School of Computer and Electrical Engineering
Telephone	-
Email	zineng.ng@xmu.edu.my

BIOGRAPHY

Dr. Ng Zi Neng completed his Bachelor of Engineering (Honours) Electronics degree in 2011. He then proceeds to pursue a degree in Master of Engineering Science and graduated in 2014. He continues on his journey in higher education with a PhD in Engineering and graduated in 2019 from Multimedia University. His PhD thesis was entitled “Fabrication and Characterization of Doped ZnO Films and Diodes".

While pursuing his PhD, he gained teaching experience by assisting his faculty in teaching engineering related subjects, namely Circuit Theory, Electronics 1 and 2, Digital Signal Processing, and Physics Laboratory. Towards completing his PhD, he was hired as a sessional staff by Monash University for two semesters in 2019. Shortly after that, he was promoted as a Scholarly Teaching Fellow in the department of Electrical & Computer Systems Engineering in 2020. During his tenure there, he has contributed significant teaching hours to these engineering subjects: Electrical Circuits, Engineering Design: Cleaner, Safer, Smarter, Digital Systems, and Electrical Energy Systems.

RESEARCH INTERESTS

Semiconductors and thin film materials, micro and nano device applications, sensors, solar cells, electrochromic devices.

EDUCATIONAL BACKGROUND

- Doctor of Philosophy in Electronics Engineering, Multimedia University Cyberjaya, 2019
- Master of Engineering Science, Multimedia University Cyberjaya, 2014
- Bachelor of Engineering (Honours) Electronics, Multimedia University Cyberjaya, 2011

WORKING EXPERIENCE

- Scholarly Teaching Fellow, Electrical & Computer Systems Engineering (ECSE), School of Engineering, Monash University, Malaysia (2020 – 2021).
- Sessional Lecturer, Electrical & Computer Systems Engineering (ECSE), School of Engineering, Monash University, Malaysia (2019 – 2020).
- Research Officer/Graduate Research Assistant, Centre for Advanced Devices and Systems (CADS), Faculty of Engineering, Multimedia University (2011 – 2019)

RESEARCH EXPERIENCE / GRANTS

- Project member of Fundamental Research Grant Scheme (FRGS), Ministry of Higher Education (2014 – 2016). Grant amount: RM80200. Project title: Investigation of Structural, Optical and Electrical Properties of Doped Zinc Oxide Films Prepared by Magnetron Sputtering Technique.

PROFESSIONAL APPOINTMENTS / MEMBERSHIPS

- Graduate Engineer, registered to the Board of Engineers Malaysia (BEM)

REPRESENTATIVE PUBLICATIONS

- **Z.N. Ng**, K.Y. Chan, Ultraviolet photodetectors based on doped ZnO films, J. Phys. Conf. Ser. 1349 (2019) 012043. doi:10.1088/1742-6596/1349/1/012043.
- K.Y. Chan, C.Y. Low, B.W.C. Au, **Z.N. Ng**, M.E. Yeoh, W.L. Pang, C.L. Lee, S.K. Wong, Radio frequency magnetron sputter deposited ZnO films doped with Al, Ga and Ti, Mater. Res. Innov. 23 (2019) 22–26. doi:10.1080/14328917.2017.1356013.
- **Z.N. Ng**, K.Y. Chan, S. Muslimin, D. Knipp, P-Type Characteristic of Nitrogen-Doped ZnO Films, J. Electron. Mater. 47 (2018) 5607–5613. doi:10.1007/s11664-018-6468-2.
- **Z.N. Ng**, K.Y. Chan, Ga-sn co-doped zno films via sol-gel route, Solid State Phenom. 280 SSP (2018) 43–49. doi:10.4028/www.scientific.net/SSP.280.43.
- K.Y. Chan, **Z.N. Ng**, B.W.C. Au, D. Knipp, Visibly transparent metal oxide diodes prepared by solution processing, Opt. Mater. (Amst). 75 (2018) 595–600. doi:10.1016/j.optmat.2017.10.047.
- B.W.C. Au, K.Y. Chan, Y.K. Sin, **Z.N. Ng**, Hot-point probe measurements of N-type and P-type ZnO films, Microelectron. Int. 34 (2017) 30–34. doi:10.1108/MI-08-2015-0067.
- **Z.N. Ng**, K.Y. Chan, Y.K. Sin, F.K. Yam, D. Knipp, Sol-gel derived Al-Ga co-doped ZnO thin films embedded with microrods, J. Nanosci. Nanotechnol. 17 (2017) 348–353. doi:10.1166/jnn.2017.12477.
- **Z.N. Ng**, K.Y. Chan, C.Y. Low, S.A. Kamaruddin, M.Z. Sahdan, Al and Ga doped ZnO films prepared by a sol-gel spin coating technique, Ceram. Int. 41 (2015) S254–S258. doi:10.1016/j.ceramint.2015.03.183.
- **Z.N. Ng**, K.Y. Chan, Influence of baking method and baking temperature on the optical properties of ZnO thin films, in: AIP Conf. Proc., AIP Publishing, 2015: p. 100003. doi:10.1063/1.4915210.
- C.Y. Low, K.Y. Chan, **Z.N. Ng**, J.W. Hoon, W.L. Pang, Humidity Sensors on Thermally Oxidized Silicon Substrates, Adv. Mater. Res. 970 (2014) 111–114. doi:10.4028/www.scientific.net/AMR.970.111.
- **Z.N. Ng**, K.Y. Chan, S.A. Kamaruddin, M.Z. Sahdan, Influence of Spinning Speed on the Properties of Sol-Gel Spin Coated ZnO Films, Adv. Mater. Res. 970 (2014) 115–119. doi:10.4028/www.scientific.net/AMR.970.115.
- **Z.N. Ng**, K.Y. Chan, Y.K. Sin, J.W. Hoon, S.S. Ng, Influence of post-annealing condition on the properties of ZnO films, Ceram. Int. 39 (2013) S263–S267. doi:10.1016/j.ceramint.2012.10.074.

- J.W. Hoon, K.Y. Chan, **Z.N. Ng**, T.Y. Tou, Transparent Ultraviolet Sensors Based on Magnetron Sputtered ZnO Thin Films, Adv. Mater. Res. 686 (2013) 79–85. doi:10.4028/www.scientific.net/AMR.686.79.
- **Z.N. Ng**, K.Y. Chan, T. Tohsophon, Effects of annealing temperature on ZnO and AZO films prepared by sol-gel technique, Appl. Surf. Sci. 258 (2012) 9604–9609. doi:10.1016/j.apsusc.2012.05.156.