CURRICULUM VITAE

PERSONAL DETAILS	
Full Name	Nurul Huda Binti Osman
Citizenship	Malaysia
Designation	Senior Lecturer
Department/Faculty	Jabatan Fizik, Fakulti Sains, Universiti Putra Malaysia, 43400 Serdang, Selangor
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ACADEMIC QUALIFICATION			
Certificate / Qualification	Name of School / Institution	Year obtained	Area of Specialization
HnD in Medical Electronic Engineering	UniKL-British Malaysian Institute, Malaysia	2003	Medical Electronic
Beng in Electronic Engineering	University of Surrey, UK	2006	Electronic Engineering
PhD in Electrical Electronic Engineering	University of Surrey, UK	2010	Microwave, Thick Film Fabrication and miniature components

SCIENTIFIC EXPERIENCE AND SPECIALIZATION				
Organization	Position	Start Date	End Date	Expertise
University of Surrey & EADS Astrium	Post Doctorate Research Fellow	2010	2011	Design packaging for GaN Microwave power amplifier with emphasis on high frequency performance and thermal performance for space applications. Work focus in particular on ceramic technology and the use of multilayer circuit structures

RESEARCH PROJECT				
Project Title	Role	Year	Source of fund	Status
Gan Microwave Power Amplifiers (Component Assembly And Microwave Packaging Research And Development)	Main Researcher	2010	EADS Astrium Ltd, UK	Completed
Microstrip LC (Inductor Capacitor) Sensor Incorporating Chitosan Film For Detection Of Heavy Metal Ion	Project Leader	2013	UPM	Completed
Design And Development Of An Imaging Device For Detection Of Tuberculosis Infection Via Fluorochrome Acid-Dast Stained Tubercle Bacilli Samples	Member	2013	UPM	Completed
Carbon Nanotubes-Graphene Hybrid Solar Cells	Member	2013	Public Fund (FRGS)	Completed

Study On Crosslinked Chitosan Films For Real Time Heavy Metal Detection System Incorporating Interdigitated Electrode Array	Project Leader	2015	Public Fund (FRGS)	On going
Transparent And Flexible Chitosan Polymer Film Embedded With Metal Ions Filler For Electromagnetic Interference (EMI) Shielding Application	Project Leader	2018	Public Fund (FRGS)	On going
Tailoring Structural, Optical and Electrical Properties of Organo-Bismuth Bromide Hybrid Perovskite (ABX3) for Stable Solar Cell Application	Member	2018	Public Fund (FRGS)	On going

PATENT / COPYRIGHT/ TRADE MARK		
Title	**File number**	**Year**
Hydrophobic Coating System	PI2017704529	2017

LIST OF PUBLICATIONS

1. Josephine Ying Chyi Liew, Zainal Abidin Talib, Zulkarnain Zainal, Mazliana Ahmad Kamarudin, **Nurul Huda Osman** and Han Kee Lee. "Structural and transport mechanism studies of copper selenide nanoparticles" Semiconductor Science and Technology, Volume 34, Number 12, 2019.
2. **N. Osman**, A. Idris, P.A. Bakar, M.A.H.M.A. Majid, C. Free. "Tunable Rectangular Ring Resonator Filter with Embedded Shunt Barium Strontium Titanate Capacitors" IEEE International RF and Microwave Conference, IEEE Proceedings, pp. 363-366, 2019.
3. **N.Osman**, A. Idris , P. Abu Bakar, M.A. Mohd Abdull Majid, R. Radzali1 and J.Y.C. Liew. "Detection Of Copper (II) Ion On Chitosan Film Using Microstrip Ring Resonator", International Journal of Nanoelectronics and Materials, International Journal of Nanoelectronics and Materials Volume 11 (Special Issue) , pp. 179-186, 2019.
4. Adilah Idris, **Nurul Huda Osman** , "Adsorption Of Cu (Ii) Ion In Aqueous Solution Using Crosslinked Chitosan Bentonite Composite Beads And Film" Solid State Science And Technology, Vol. 26, pp 97-105, 2018.
5. Kassim, A.N.M., Mohtar, M.N**., Osman, N.H.**, Shafie, S. "Sensor Fabrications using Inkjet Distributions and Analysis Systems" IEEE 5th International Conference on Smart Instrumentation, Measurement and Application, IEEE Proceedings, 2018.
6. **N. Osman**, and R. Radzali."Detection of Mercury Ion (Hg2+) on Chitosan Film using Microstrip Interdigital Capacitor." 2017 IEEE proceeding Asia Pacific Microwave Conference (APMC), pp. 573-575, 2017.
7. Makiyyu Abdullahi Musa, Raba'ah Syahidah Azis**, Nurul Huda Osman**, Jumiah Hassan, Tasiu Zangina "Structural and magnetic properties of yttrium iron garnet (YIG) and yttrium aluminum iron garnet (YAlG) nanoferrite via sol-gel synthesis" Results in Physics, Vol. 7, pp. 1135-1142, 2017.
8. Makiyyu Abdullahi Musa, Raba'ah Syahidah Azis, **Nurul Huda Osman**, Jumiah Hassan, Mustafa Mousa Dihom "Structural and magnetic properties of yttrium aluminum iron garnet (YAlG) nanoferrite prepared via auto-combustion sol-gel synthesis" Journal of the Australian Ceramic Society, pp. 1-9, 2017.
9. Nor Azila Abd Aziz, Jumiah Hassan, **Nurul Huda Osman**, Zulkifly Abbas, "Extraction of Essential Oils from Zingiberaceace Famili by using Solvent-free Microwave Extraction (SFME), Microwave-assisted Extraction (MAE) and Hydrodistillation (HD)" Asian Journal Of Applied Sciences, vol.5, 2017.

10. Nor Azila Abd Aziz, Jumiah Hassan, **Nurul Huda Osman**, Zulkifly Abbas, "Microwave dielectric properties of four types of rhizomes from Zingiberaceace family". J. Phys. Sci., 28(1), 15–26, 2017.
11. R. Radzali and **N.Osman**, "Electrical Characterization of Chitosan Film for Mercury Ion Detection by using Four-Point Probe Method", Asian Journal of Applied Sciences, vol. 4, 2016.
12. Makiyyu Abdullahi Musa, Raba'ah Azis, Mansor Hashim, **Nurul Osman**, Siti Irryani Adnan, N Daud, et al "Composition And Magnetic Properties Of Aluminium Substituted Yttrium Iron Garnet Waste Mill Scales Derived Via Mechanical Alloying Technique" Journal Of Solid State Science And Technology Letters, vol. 16. pp. 62-66. 2015.
13. **N.Osman** and C.Free "Properties of Barium Strontium Titanate at Millimeter Wave Frequencies" AIP Conference Proceedings 1657, 2015.
14. **N.Osman** and C.Free "Miniature Rectangular Ring Band-Pass Filter with Embedded Barium Strontium Titanate Capacitors" Asia Pasific Microwave Conference, Sendai Japan. 2014.
15. N.T. Wei, Z. Abbas and **N.H. Osman**. "Effect of different subsectional basis and testing function in the method of moments for the scattering from two dimensional dielectric scatterers", Malaysian Journal of Mathematical Sciences, vol. 7, pp. 247-272, 2013.
16. M.F.Zainuddin, Z. Abbas, K. N. Mohamed, W.M.M.Yunus, **N. Osman** "Application of a Monopole Sensor for Rapid in situ Water Quality Assessment: Theoretical Analysis " Proceedings of the International Conference on Environmental Forensics, 2013.
17. H.L. Hartnagel, D. Schçnherr, **N.H. Osman**, C. Free "Optically Hidden, Secure Data of Matrix of Metal Squares by THz Wave Interaction" Frequenz Journal of RF-Engineering and Telecommunications, vol. 64, pp. 85-86, 2010.
18. **N. Osman**, C. Free "The Behavior and Characterisation of Circuit Material at High Millimeter-wave Frequencies" Proc. ARMMS RF and Microwave Society Conference, 2010.
19. **N. Osman**, C. Free "Method for Characterizing Dual-layer Material Using Free Space Technique" Proc. APMC (Asia- Pacific Microwave Conference), Yokohama, Japan, 2010.
20. **N. Osman**, R. Leigh and C. Free "Characterization of LTCC Material at G-band" International Microelectronics Symposium, San Jose, Ca. Nov. 2009. (**Won outstanding student paper award).**
21. **N. Osman**, R. Leigh and C. Free "Substrate Characterization at G-band" IMAPS Advanced Technology Workshop on RF and Microwave Packaging, San Diego, Ca, 2009.
22. A.O. Lindo, A.P. Mathews, M. Gopikrishna, **N. Osman**, R. Leigh, C. Free, A.C Handroth, "Parallel and End Coupled Microstrip Band Pass Filters at W-band" Proc. Asia Pacific Microwave Conference, 2009.
23. M. Henry, **N. Osman**, T. Tick, C. Free "Integrated Air-filled Waveguide antennas in LTCC for G-band Operation" Proc.2008 Asia Pacific Microwave Conference, 2008.
24. W. Ali, **N. Osman**, C. Min, and C. Free, "Multilayer Thick Film Circuits for Microwave and Millimetre-Wave Applications," Proc. 32nd International Microelectronics and Packaging Conference (IMAPS-CPMT Poland 2008), Poland, 2008.