



جامعة الكرخ للعلوم  
كلية العلوم  
السيرة الذاتية العلمية

**المعلومات الشخصية**

الإسم الثلاثي واللقب	د. نهاد خلف علي العبيدي
المواليد	1963/12/30
الحالة الاجتماعية	متزوج
عدد الأبناء	واحد
التخصص العام	فيزياء الحالة الصلبة
التخصص الدقيق	الاشعية الرقيقة ومواد النانو
البريد الإلكتروني	nihad@kus.edu.iq

**الشهادات**

سنة الحصول على الشهادة	القسم / الكلية	الجامعة المانحة للشهادة	الشهادة الحاصل عليها
2009	كلية الفيزياء	جامعة العلوم الماليزية/ ماليزيا	الدكتوراه
2004	كلية الفيزياء	جامعة العلوم الماليزية/ ماليزيا	الماجستير
1986	كلية العلوم/قسم الفيزياء	الجامعة المستنصرية	البكالوريوس

**السلك الوظيفي**

سنة اشغال المكان الوظيفي	المكان الوظيفي	العنوان الوظيفي
2016 - مستمر	جامعة الكرخ للعلوم	مدرس
2014-2010	الجامعة التكنولوجية الماليزية/ماليزيا	مدرس
2010-2009	جامعة العلوم الماليزية/ماليزيا	باحث
2002-1997	هيئة التعليم المهني/ليبيا	مدرس

**المشروعات البحثية التخصصية لخدمة البيئة والمجتمع أو تطوير التعليم**

اسم البحث	كلمات مفتاحية عن البحث	تاريخ النشر

### المهام التدريسية

العام الدراسي	المرحلة الدراسية	التخصص العام	اسم المادة
2014 - 2010	الثانية	الهندسة الالكترونية	Electronic Devices
2014 - 2010	الثانية	الهندسة الالكترونية	Microelectronic I
2014 - 2010	الثالثة	الهندسة الالكترونية	Industrial Electronics
2002 - 1997	الثالثة	علوم الحاسوب	الفزياء
2002 - 1997	الثانية	علوم الحاسوب	الفزياء
2002 - 1997	الاولى	علوم الحاسوب	الفزياء

### النشاطات والمهام العلمية

#### A. Post graduate co-supervision

1. Mohammed Jasim Jawad (PhD).
2. Mastura Shafinaz Zainal Abidin (PhD, graduated).
3. Shaharin Fadzli Abd Rahman (PhD, graduated).
4. Sazan M. Haidary (PhD, graduated).
5. Tengku Sarah Aumran (MSc, graduated).
6. Nurul Izni Rusli (MSEn., graduated).

#### B. Under graduate supervision

More than 20 students (Final year project).

#### C. Research grants (project leader)

- 1- Title: Synthesis of Germanium Quantum Dots using Liquid GeCl4 as a Precursor.  
Vote No:.....(FRGS)  
Amount: RM 60,000.00  
Duration: Dec 2013- Dec 2015  
Project Leader: Dr. Nihad K. Ali Al-Obaidi
- 2- Title:Porous Silicon Electrical Sensor for DNA Hybridization Detection.  
Vote No: 03H82-UTM  
Amount: RM 88,000.00  
Duration: Dec 2012- Dec 2014 (2Years)  
Project Leader: Dr. Nihad K. Ali Al-Obaidi
- 3- Title: Porous Silicon Microparticles as Drug Delivery Device for Cancer Treatment.  
Vote No: 02H83-UTM

Amount: RM 70,000.00

Duration: June 2012- May 2014 (2 Years)

Project Leader: Dr. Nihad K. Ali Al-Obaidi

4- Title :Synthesis of Nanostructured ZnO Thin Films and Nanowires for Gas Sensing

Vote No: 01H04-UTM

Amount: RM 130,000.00,

Duration: April 2011- March 2012 (2 Years),

Project Leader: Dr Nihad K.Ali Al-Obaidi

5- Title: Study of Passivation Effects on the Hydrogen Adsorption Performance of the AlGaN-based Schottky Diode for Sensing Application.

Vote No: 77546-UTM Short Term Grant,

Amount: RM 20,000.00,

Duration: August 2010- July 2011 (1 Years),

Project Leader: Dr Nihad K.Ali Al-Obaidi

### البحوث المنشورة

1. Sazan M. Haidary, Awaz B. Mohammed, Emma P. Córcoles, Nihad K. Ali, M.R. Ahmad, Effect of coatings and surface modification on porous silicon nanoparticles for delivery of the anticancer drug tamoxifen. Microelectronic Engineering 161 (2016) 1–6.
2. M. J. Jawad, M. R. Hashim, Nihad K. Ali, E. P. C'orcoles, and Vijay K. Arora, Photoluminescence of Ultraviolet Initiated Green Emission from Electrochemically Deposited



Germanium Films on (100) Silicon. *Journal of The Electrochemical Society*, 161 (14) D801-D805 (2014).

3. A.F. Abd Rahim, M.R. Hashim, N.K. Ali, A.M. Hashim, M. Rusop, M.H. Abdullah, The evolution of Si-capped Ge islands on Si (100) by RF magnetron sputtering and rapid thermal processing: The role of annealing times. *Microelectronic Engineering* 126 (2014) 134–142.
4. M. J. Jawad, M. R. Hashim, N. K. Ali, Synthesis of Ge nanostructures on Si substrate by a convenient electrochemical technique at room temperature for different durations. *Superlattices and Microstructures* 69 (2014) 129–135
5. Sazan M. Haidary, Emma P. Córcoles, and Nihad K. Ali, Folic Acid Delivery Device based on Porous Silicon Nanoparticles Synthesized by Electrochemical Etching, *Int. J. Electrochem. Sci.*, 8 (2013) 9956 – 9966. (IF: 3.729) (ISSN: 1452-3981)
6. A.F. Abd Rahim, M.R. Hashim, N.K. Ali, M. Rusop, M.D. Johan Ooi, M.Z.M. Yusoff, Self-assembled Ge islands and nanocrystals by RF magnetron sputtering and rapid thermal processing: The role of annealing temperature, *Applied Surface Science*, 275 (2013) 193-200. (IF: 2.103) (ISSN: 0169-4332)
7. Nurul Izni Rusli, Mastura Shafinaz Zainal Abidin, Budi Astuti, Nihad K. Ali & Abdul Manaf Hashim, Formation of Porous Silicon: Mechanism of Macropores Formation in n-Type Si, *Sains Malaysiana* 42(5)(2013) 643–648. (IF: 0.408) (ISSN: 0126-6039)
8. Tengku Sarah Tengku Amran, Md Roslan Hashim, Nihad K Ali Al-Obaidi, Hanani Yazid and Rohana Adnan, Optical absorption and photoluminescence studies of gold nanoparticles deposited on porous silicon, *Nanoscale Research Letters*, 8 (2013) 35. (IF: 2.73)
9. T. S. T. Amran, M. R. Hashim, N. K. Ali, H. Yazid and R. Adnan, The role of pulse time  $T_{off}$  on porous silicon as template for Au nanoparticles by using integrated electrochemical technique, *Physica B*, 407 (2012) 4540-4544. (IF: 1.063)
10. M. J. Jawad, M. R. Hashim, N. K. Ali, Germanium Growth in Low Dimensions Based on Relaxed-Porous Silicon by Using A Simple Way of Electrochemical Deposition, *Int. J. Electrochem. Sci.*, 7 (2012) 10244 – 10253. (IF: 3.729)
11. Sazan M. Haidary, Emma P. C' orcoles, and Nihad K. Ali, Nanoporous Silicon as Drug Delivery Systems for Cancer Therapies, *Journal of Nanomaterials*, 2012 (2012) 1-15. (IF: 1.67)
12. M. J. Jawad, M. R. Hashim, N. K. Ali, E. P. Corcoles, and Maneea E. Sharifabad, An Alternative Method to Grow Ge Thin Films on Si by Electrochemical Deposition for Photonic Applications, *Journal of The Electrochemical Society*, 159 (2) (2012) D124-D128. (IF: 2.42)
13. K. Al-Heuseen, M.R. Hashim, N.K. Ali, Effect of Different Electrolytes on Porous GaN Using Photo-electrochemical Etching, *Applied Surface Science*, 257 (2011) 6197-6201. (IF: 1.616)
14. K. Al-Heuseen, M.R. Hashim, N.K. Ali, Growth and Characterization of Tree-Like Crystalline Structures during Electrochemical Formation of Porous GaN, *Journal of The Electrochemical Society*, 158 (5) (2011) D240-D243. (IF: 2.341)
15. A.F. Abd Rahim, M.R. Hashim and N.K. Ali, High Sensitivity of Palladium on Porous Silicon MSM Photodetector, *Physica B* 406 (2011) 1034-1037. (IF: 1.056)
16. A.F. Abd Rahim, M.R. Hashim and N.K. Ali, Characterization of Ge Nanostructures Embedded Inside Porous Silicon for Photonics Application, *Sains Malaysiana* 40 (1) (2011) 5-8. (IF: 0.3)
17. M J Jawad, M R Hashim, and N K Ali, Synthesis, structural and optical properties of electrochemically deposited  $\text{GeO}_2$  on porous silicon, *Electrochemical and Solid-State Letters*, 14(2) (2011) D17-D19. (IF: 1.837)
18. K. Al-Heuseen, M.R. Hashim, N.K. Ali, Synthesis of hexagonal and cubic GaN thin film on Si (111) using a low-cost electrochemical deposition technique, *Materials Letters* 64 (2010) 1604–1606. (IF: 1.837)

19. K. Al-Heuseen, M.R. Hashim, N.K. Ali, Enhanced optical properties of porous GaN by using UV-assisted electrochemical etching, *Physica B* 405 (2010) 3176–3179. (IF: 1.056)
20. A F Abd Rahim, M R Hashim, and N K Ali, Study of Ge embedded inside porous silicon for potential MSM photodetector, *Microelectronics International*, 27 (2010) 154-158.
21. Mazuina Mohamad, Farahiyah Mustafa, Shaharin Fadzli Abd Rahman, Mastura Shafinaz Zainal Abidin, Nihad K. Ali Al-Obadi, Abdul Manaf Hashim, Azlan Abdul Aziz and Md Roslan Hashim, "The Sensing Performance of Hydrogen Gas Sensor utilizing Undoped-AlGaN/GaN HEMT", *Journal of Applied Sciences*, Vol. 10 (2010) pp. 1797-1801.
22. N K Ali, M R Hashim, A Abdul Aziz, H. Abu Hassan, and J. Ismail. "Formation of porous GaAs by pulsed current electrochemical anodization: SEM, XRD, Raman and PL studies". *Electrochemical and Solid-State Letters*, 12 (3), (2009), K9-K13. (IF: 1.837)
23. N K Ali, M R Hashim, A Abdul Aziz. "Pulsed current electrochemical deposition of silicon for porous silicon capping: Method to improve hardness and stability of porous silicon". *Electrochemical and Solid-State Letters*, 12 (3), (2009), D11-D14. (IF: 1.05)
24. Khalid M. Omar, N. K. Ali, Z. Hassan, M. R. Hashim, and H. Abu Hassan, Spectroscopic investigation of porous silicon prepared by laser-induced etching. *J. of Optoelectronics and Advanced Materials*, 10, (2008) p. 2653 – 2656. (IF: 0.4)
25. N K Ali, M R Hashim, A Abdul Aziz. Effects of surface passivation in porous silicon as H<sub>2</sub> gas sensor. *Solid-State Electronics* 52 (2008) p.1071-1074. (IF: 1.05)
26. N K Ali, M R Hashim, A Abdul Aziz and H Abu Hassan, Correlation of Raman and photoluminescence spectra of electrochemically prepared n-type porous GaAs. *Semicond. Sci. Technol.* 23 (2008) 055016 (8p.). (IF: 1.56)
27. N K Ali, M R Hashim, A Abdul Aziz, I Hamammu. Method of controlling spontaneous emission from porous silicon fabricated using pulsed current etching. *Solid-State Electronics* 52 (2008) p. 249–254. (IF: 1.05)
28. N K Ali, M R Hashim, A Abdul Aziz, Fabrication and Characterization of Uniform Quantum Size Porous Silicon, *Mat. Sci Forum*, 517 (2006) p. 232-236. (IF: 0.48)
29. N K Ali, H A Hassan, M R Hashim, The Study of Energy Bandgap and Refractive Index of Si<sub>1-x-y</sub>Ge<sub>x</sub>C<sub>y</sub> Alloys, *Solid State Science and Technology*, 12 (2004) p. 150-158.
30. N K Ali, H Abu Hassan, M R Hashim, Analysis of SiGeC Buried Waveguides as 1.3/1.55mm Wavelength Division Demultiplexer Based on Multimode Interference, *Jurnal Fizik Malaysia*, 25(1 &2) (2004) p1-4.

### الجان والتکلیفات

السنة	الرقم الأمر	امر اللجنة / التکلیف	اللجنة / التکلیف
2017	35	35	1- لجنة دراسة استحداث

المؤتمرات والدورات العلمية

1. Mastura Shafinaz Zainal Abidin, Shahjahan, Abdul Manaf Hashim, Nihad K. Ali Al-Obaidi, Nafarizal Nayan, Mohamad Rusop Mahmood, Fabrication of Germanium by electrochemical process for memory application, IEEE Conference Publications, International Conference on Enabling Science and Nanotechnology 2012 (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA.
  2. Nurul Izni Rusli, Hind Abdulgafour, Zainuriah Hassan, Fong Kwong Yam, Nihad K. Ali, Abdul Manaf Hashim, Mohamad Rusop Mahmood and Nafarizal Nayan, ZnO Nanostructures Grown on Porous Silicon Substrate without Catalyst, IEEE Conference Publications (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA.
  3. Nurul Izni Rusli, Mastura Shafinaz Zainal Abidin, Budi Astuti, Nihad K. Ali and Abdul Manaf Hashim, Effects of Etching Time on the Morphology of Porous Silicon Structure Formed by Potential-assisted Electrochemical Etching, IEEE Conference Publications (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA.
  4. T.S.T.Amran, M.R.Hashim, N.K.Ali, H.Yazid and R.Adnan, The role of pulse time  $T_{off}$  on porous silicon as template for Au nanoparticles by using integrated electrochemical technique, IEEE Conference Publications (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA.

5. A F Abd Rahim, M R Hashim, N K Ali, Thermally treated Ge crystallites embedded inside PS with Si capping layer for Potential Photonics Application, American Institute of Physics Conf. Series, Vol. 1341, 2011. In press. (ISI Listed)
6. M. J. Jawad, M. R. Hashim, and N. K. Ali, Hydrogen Sensor Based on Pd/GeO<sub>2</sub> Using a Low Cost Electrochemical Deposition, American Institute of Physics Conf. Series, Vol. 1341, 2011. In press. (ISI Listed)
7. T. S. Amran, M. R. Hashim, and N. K. Ali, Silver Nanoclusters Formation by using Thermal Annealing on Porous GaAs, , American Institute of Physics Conf. Series, Vol. 1341, 2011. In press. (ISI Listed)
8. K. Al-Heuseen, M. R. Hashim, and N. K. Ali, Electrical Properties of Electrolyte-GaN Junction during Photoelectrical Etching Processing, American Institute of Physics Conf. Series, Vol. 1341, 2011. In press. (ISI Listed)
9. K Al Heuseen, M R Hashim, and N K Ali, Themal Effects on Photoelectric Properties of Ni Contact to n-GaN and p-GaN, AIP Conf Proc. Vol.1250, pp.77-80 (2010).
10. M J Jawad, M R Hashim, and N K Ali, Improvement of Al Metal Contact on Porous Silicon, AIP Conf. Proc. Vol.1250, pp.73-76 (2010).
11. A F Abd Rahim, M R Hashim and N K Ali, Characterization of Ge Nanocrystal Embedded Inside Porous Silicon for Photonics Application, AIP Conf. Proc. Vol.1250, pp. (2010).
12. N K Ali, M R Hashim, A Abdul Aziz. Synthesis of GaAs Oxides Grown During Electrochemical Formation of Porous GaAs in HF Based Solution. National Physics Conference (2007) Kuala Terengganu, Malaysia (PERFIK2007). Published in AIP Conference Proc. 1017, p. 94-98.
13. Khalid M Omar, N K Ali, Z Hassan, M R Hashim and H Abu Hassan. The methodology effects on surface morphology pattern of porous semiconductors. National Physics Conference (2007) Kuala Terengganu, Malaysia (PERFIK2007). Published in AIP Conference Proc. 1017, p. 129-133.
14. N K Ali, M R Hashim, A Abdul Aziz Highly Enhanced Photoluminescence of as-Anodized N-type Porous GaAs. International Conference on Advancement of Materials and Nanotechnology 2007 (ICAMN 2007).
15. N K Ali, Khalid M Omar, Z Hassan, M R Hashim, H Abu Hassan and N M Ahmed. Surface Morphology of Porous Si, Prepared by Laser-Induced Etching. International Conference on Advancement of Materials and Nano-technology 2007 (ICAMN 2007).
16. N K Ali, M R Hashim, A Abdul Aziz. Study of Porous Silicon Fabricated by Pulsed Anodic Etching of n-Si(100). ICSE2006 Proc. 2006, Kuala Lumpur, Malaysia.

### براءات الاختراع

العدد - التاريخ	طلب تسجيل الاختراع	الادعاء	الموضوع / الفكرة

### تقييم براءات الاختراع

الموضو / الفكرة	الادعاء	طلب تسجيل الاختراع	التاريخ

### تقييم البحث

عنوان البحث	المجلة	العدد	التاريخ

### كتب الشكر والتقدير

الجهة المانحة	حسب الكتاب	العدد	التاريخ

### التعهد الإلكتروني

اني عضو الهيئة التدريسية (د. نهاد خلف علي) أتعهد بصحمة المعلومات المدرجة اعلاه واتحمل كافة التبعات القانونية في حالة مخالفة المعلومات التي ستدرج في الموقع الإلكتروني الخاص بجامعتنا.

نعم ، اوافق على التعهد اعلاه

كلا ، لا اوافق على التعهد اعلاه

مصادقة السيد رئيس الجامعة

ملاحظة : في حالة الموافقة على التعهد الالكتروني اعلاه ، يرجى اختيار اللون الابيض في الخانة المرافقة ادنى التعهد " كلا ، لا اوافق على التعهد اعلاه" والعكس صحيح.