



Curriculum Vitae

PROF. DR. GHUSOON M. ALI

Mustansiriyah University – College of Engineering
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PERSONAL SUMMARY:

- GHUSOON MOHSIN ALI RECEIVED THE B. ENG. (TECH.) AND M. ENG. (TECH.) DEGREES IN ELECTRICAL ENGINEERING FROM UNIVERSITY OF TECHNOLOGY, BAGHDAD-IRAQ, IN 1984 AND 1989, RESPECTIVELY, AND THE PH.D. DEGREE IN ELECTRONICS ENGINEERING FROM THE INDIAN INSTITUTE OF TECHNOLOGY (IIT), BANARAS HINDU UNIVERSITY, VARANASI INDIA, IN 2011. SHE IS WORKING AS PROFESSOR AND FORMER HEAD OF DEPARTMENT (2019-2022) WITH THE ELECTRICAL ENGINEERING DEPARTMENT, COLLEGE OF ENGINEERING, AL-MUSTASIRIYAH UNIVERSITY, BAGHDAD-IRAQ. SHE HAS PUBLISHED 57 RESEARCH PAPERS IN LEADING TECHNICAL JOURNALS AND IN CONFERENCE PROCEEDINGS. SHE HAS ALSO WORKED AS A PRINCIPAL INVESTIGATOR IN MANY SPONSORED PROJECTS. SHE IS A RECIPIENT OF IRAQ-SCIENCE-FELLOWSHIP-PROGRAM (ISFP) AT COASTAL CAROLINA UNIVERSITY, SC, USA. HER RESEARCH INTERESTS INCLUDE NANOSTRUCTURE FILM BASED ELECTRONIC AND OPTOELECTRONIC DEVICES.

EDUCATION:

- Ph.D. #1: Electronics Engineering, Indian Institute of Technology (IIT), Banaras Hindu University, Varanasi, India, 2011
- M.Sc. #2: Electrical Engineering, University of Technology, Baghdad, Iraq, 1989
- B.Sc. #3: Electrical Engineering, University of Technology, Baghdad, Iraq, 1984

ACADEMIC HONORS AND AWARDS:

- #1: Iraq Science Fellowship Program ISFP-2013 to Coastal Carolina University, SC, USA, 2013
- #2: Ministry of High Education and Scientific Researches of Iraq: Certificate of Appreciation as one of the topper Iraqi scientific researchers for 2010.
- #3: Chemical Security Improvement Grants (CSIG), CRDF, USA, 2015

ACADEMIC /TEACHING EXPERIENCE:

#1: Post-Graduate

- Semiconductor Devices (MSc)
- Optical Fiber Communications (MSc)
- Nanoelectronics; Devices and materials (PhD)
- Optoelectronics and Photonics (PhD)

#2: Under graduate

- Physics of Electronics
- Electronics Circuits I, II, III
- Digital Electronics I,II
- Microprocessors
- Computer Science
- Engineering Statistic

- Reliability
- Mathematics

COURSES TAUGHT:

Under graduate	Graduate
<ul style="list-style-type: none"> • Physics of Electronics • Electronics Circuits I, II, III • Digital Electronics I,II • Microprocessors • Computer Science • Engineering Statistic • Reliability • Mathematics 	<ul style="list-style-type: none"> • Semiconductor Devices (MSc) • Optical Fiber Communications (MSc) • Nanoelectronics; Devices and materials (PhD) • Quantum Photonics (PhD)

PROFESSIONAL AFFILIATIONS:

- Electrical Engineering Department, College of Engineering, Al-Mustasiriyah University, Baghdad-Iraq.
- Electronics Engineering Department, Indian Institute of Technology (IIT), Banaras Hindu University, Varanasi India.
- Physics and Chemistry Department, College of Science, Coastal Carolina University, SC, USA.
- Electronics Engineering, High Institute of Al-Quba, Al-Quba, Libya.
- Electromechanical Engineering Department, University of Technology , Baghdad Iraq

PUBLICATIONS:

Papers in prestigious international journals

1. Mowj R. Sabity, **Ghusoon M. Ali**, "Staggered heterojunction Pentacene/ZnO based organic-inorganic flexible photodetector' Results in Optics, vol 11, 100403, May 2023.
2. Kahtan Adnan Hussain, **Ghusoon M Ali**, Aïmen Boubaker, Adel Kalboussi, "Richardson constant and characteristics of pentacene organic planar Schottky diode" vol 771, 139800, April 2023.
3. • Salah M. Swadi*, Ahmed K. Kadhim, **Ghusoon M. Ali**, 'Design of Path Planning Controller of Autonomous Wheeled Mobile Robot Based on Triple Pendulum Behavior" International Journal of Mechanical Engineering and Robotics Research Vol. 12, No. 1, January 2023.
4. Jaaffar J Duair, Ammar I Majeed, **Ghusoon M Ali**, 'Design and Implementation of IoT-Based SCADA for a Multi Microgrid System." Journal of ECS Transactions, 107-1-17345 (April 2022)
5. **Ghusoon M Ali** ",Performance analysis of planar Schottky photodiode based on nanostructured ZnO thin film grown by three different techniques" - **Journal of Alloys and Compounds, 2020**
6. **Ghusoon M Ali**, Maan S Hassan, Ehssan S Hassan, Mohammed O Dawood- "Layer by Layer Silver Acetate based Coating on Glass and Cement Substrates to Tailor Reflectance and Conductance." Journal of Engineering & ..., 2020

7. AK Kadhim, SM. Swadi, **Ghusoon M Ali**, "Design and implementation of a feedback programmable spin coating system," **Indonesian Journal of Electrical Engineering and Computer Science** 17 (3) 2020.
8. AK Hassan, **Ghusoon M Ali**, "Thin film NiO/BaTiO₃/ZnO heterojunction diode-based UVC photodetectors," - **Superlattices and Microstructures**, 2020
9. Ghusoon M Ali, AK Khalid, SM Swadi – "Nanoflower ZnO thin-film grown by hydrothermal technique based Schottky diode" **Journal of Semiconductors**, 2020
10. A.R. Nasser, and **Ghusoon M. Ali**. "A Porous Silicon P-Type Interdigitated Extended-Gate Field Effect Transistor pH Sensor" **Silicon** vol. 11: pp.2095–2102 (2019).
11. **Ghusoon M. Ali**, " Interdigitated Extended Gate Field Effect Transistor Without Reference Electrode", **Journal of Electronic Materials**, 46:713-717, 2017.
12. **Ghusoon M. Ali**, James C. Moore,, Ahmed K. Kadhim, Cody V. Thompson, "Electrical and optical effects of Pd microplates embedded in ZnO thin film based MSM UV photodetectors: A comparative study", **Sensors and Actuators A: Physical** 209, 16-23, 2014.
13. **Ghusoon M. Ali**, Cody V. Thompson, Ali K. Jasim, Isam M. Abdulbaki and James C. Moore, "Effect of Embedded Pd Microstructures on the Flat-Band-Voltage Operation of Room Temperature ZnO-Based Liquid Petroleum Gas Sensors" **Sensors** 13, 16801-16815, 2013.
14. **Ghusoon M. Ali** and P. Chakrabarti, "Fabrication and characterization of thin film ZnO Schottky contacts based UV photodetectors: A comparative study" **Journal of Vacuum Science & Technology-B**, vol.30 (3), 2012. (Among top 20 most downloaded articles of Journal of JVSTB in the month of August 2012.)
15. Shaivalini Singh, **G. M. Ali** and P. Chakrabarti, "Fabrication and Characterization of ZnO Thin Films Prepared by Thermal Oxidation of Vacuum Deposited Zn" **Science of Advanced Materials**, vol. 3, 926–931, 2011.
16. **Ghusoon M. Ali** and P. Chakrabarti, "ZnO-based Interdigitated MSM and MIS ultraviolet photodetectors " **Journal of Physics D: Applied Physics**, vol. 43, 415103 (8pp), 2010.
17. **Ghusoon M. Ali** and P. Chakrabarti, "Effect of Thermal Treatment on the Performance of ZnO Based MIS Ultraviolet Photodetectors" **Applied Physics letter**, vol. 97, no. 1, pp. 1-3, 2010.
18. **Ghusoon M. Ali** and P. Chakrabarti, "Performance of ZnO Based Ultraviolet Photodetectors Under Varying Thermal Treatment " **IEEE Photonics Journal**, vol. 2, no.4, pp. 1-10, August 2010.
19. **Ghusoon M. Ali**, A.D.D. Dwivedi, S. Singh, and P. Chakrabarti, "Interface properties and junction behavior of Pd contact on ZnO thin film grown by vacuum deposition technique," **Physica Status Solidi (c)**, vol.7, pp. 252-255, 2010.
20. **Ghusoon M. Ali**, S. Singh, and P. Chakrabarti, " Ultraviolet ZnO Photodetectors with High Gain" **Journal of Electronic Science and Technology**, vol. 8, no. 1, pp.55-59, 2010
21. **Ghusoon M. Ali**, S. Singh, and P. Chakrabarti, "Fabrication and characterization of ZnO photodetectors with high gain," **Journal of Nanoelectronics and Optoelectronics**, vol.4, pp. 316-320, 2009.

(b) Papers in national journals

22. Mowj R Sabity, **Ghusoon M Ali**, 'PERFORMANCE ANALYSIS OF PD/ZNO BASED FLEXIBLE UV MSM PHOTODETECTORS.' **Journal of Engineering and Sustainable Development (JEASD)**,26-5, 89-104 (Sep_2022)

23. Jaaffar J Duair, Ammar I Majeed, **Ghusoon M Ali**, 'DESIGN OF MAXIMUM POWER POINT TRACKER CONTROLLER FOR BOOST CONVERTER PHOTOVOLTAIC ARRAY SYSTEM BASED ON FUZZY MAMDANI LOGIC." Journal of Engineering and Sustainable Development (JEASD),25(Special_ Issue_2021)
24. ST Armoot, **Ghusoon M. Ali**,, "NANORODS ZnO THIN FILM GROWN BY HYDROTHERMAL METHOD BASED PLANAR AND VERTICAL PD/ZnO SCHOTTKY DIODE CONFIGURATIONS", Journal of Engineering and Sustainable Development 24 (Special_ Issue_2020)
25. M. W. Naji, Ghusoon M. Ali, M. A. Hashem ELECTRICAL AND OPTICAL EFFECTS OF Ag DOPANT ON ZnO THIN FILM BASED MSM UV PHOTODETECTORS, Journal of Engineering and Sustainable Development, 22, 4, pp.124-142, 2018
26. R.H. Thaher, Ghusoon M. Ali, A.A Abdullateef "Fabrication and characterization of palladium-doped zinc oxide thin films and its application as extended-gate field effect transistor ph sensor", Journal of Engineering and Sustainable Development, 20,1, pp.164-177, 2016.
27. Ghusoon M. Ali, Enhanced photoresponsivity by metal microisland in ZnO thin film based UV photodetector, Journal of Engineering and Sustainable Development,19, 2, pp. 58-71, 2015.
28. Ghusoon M. Ali and P. Chakrabarti "Thermal Stability of Sol-Gel Deposited Thin Film Zno-Based Schottky Ultraviolet Photodetectors," Engineering and Technology Journal, 32, 4 Part (B) Scientific, 2014

(c) Papers in conferences

1. Mowj. R. Sabity, Ghusoon M. Ali, Flexible Interdigitated Pd/ZnO-SWCNT/Pd Ultraviolet Photodetectors" The 13th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META 2023), PARIS - FRANCE, JULY 18 3 21, 2023
2. Haider TH. Salim ALRikabi, Ghusoon Mohsin Ali, "A Survey on The Latest FET Technology for Samsung Industry", AIP 4th International Scientific Conference of Alkafeel University (ISCKU 2022).
3. Mowj R Sabity, Ghusoon M Ali, 'Performance Analysis of Flexible Pd/ZnO/ITO Ultraviolet Photodetectors.'" 2nd International Conference for Engineering Sciences and Information Technology (ESIT 2022) (Iraq-August_2022)
4. Shahad T Armoot, **Ghusoon M Ali**," Monocrystalline ZnO Nanorods Thin-film based Schottky Barrier Diode" 2022 IEEE 22nd International Conference on Nanotechnology (NANO),Spain-July 2022.
5. K. A. Hussain, **Ghusoon M Ali**, A. Boubaker," Temperature dependent electrical properties for planar Pentacene Schottky diode" IEEE Muthanna International Conference on Engineering Science and Technology (MICEST), Iraq-March 2022.
6. Shahad T Armoot, **Ghusoon M Ali**," Temperature analysis and Richardson constant dependent characteristics of planar ZnO Schottky diode grown by hydrothermal method" AIP Conference Proceedings, 2372 (1), 100001, Turkey-2021.

7. AA Mirza, **Ghusoon M. Ali**, "Thin Film Transistors p-type Depletion Mode based on Nickel-doped Zinc Oxide" **IOP Conference Series: Materials Science and Engineering** 870 (1), 012124, 2020.
8. AK Hassan, **Ghusoon M. Ali**, "Dark current analysis of pin NiO/BiTiO₃/ZnO thin film heterojunction diode," - **IOP Conference Series: Materials Science** 870 (1),, 2020
9. A. R. Nasser, and **Ghusoon M. Ali**. "Orientation Effect of n-Type PSi on Integrated Interdigitated Electrode EGFET pH Sensor Performance. **2018 International Conference on Advanced Science and Engineering (ICOASE)**, 9-11 Oct. 2018
10. **Ghusoon M. Ali** and P. Chakrabarti, " Fabrication and Performance of UV Photodetector based on Nanostructure ZnO Thin-film Deposited by Vacuum Coating Technique" **2015 International Conference on Developments of E-Systems Engineering (DeSE 2015)**, Dubai, United Arab Emirates, 13-14 December 2015.
11. **Ghusoon M. Ali**, Ra'ad H. Dhaher, and Ali A. Abdullateef, " pH Sensing Characteristics of EGFET based on Pd-Doped ZnO Thin Films Synthesized by Sol-gel method" **Proceedings of The Third International Conference on Technological Advances in Electrical, Electronics and Computer Engineering, Beirut, Lebanon 29th April-1st March 2015**.
12. **Ghusoon M. Ali**, Muneer A. Hashem, and Mohammed W. Naji, " Performance Analysis of Ag:ZnO Based UV MSM Photodetectors Prepared by Sol-gel Technique" **Proceedings of The Third International Conference on Technological Advances in Electrical, Electronics and Computer Engineering, Beirut, Lebanon 29th April-1st March 2015**.
13. **Ghusoon M. Ali** "Fabrication, Characterization and Testing of ZnO Thin Film Based Solar Cell" **International Conference for Engineering Science -2013, College of Engineering, Al-Mustansiriya University, Baghdad, Iraq 26th-27th March 2014**.
14. **Ghusoon M. Ali** and P. Chakrabarti, " **Thermal Stability of Sol-Gel Deposited Thin Film ZnO-Based Schottky UV Photodetectors**" **The Fourth International Conference on Nanotechnology, University of Technology - Baghdad – Iraq, Nov. 6-9, 2013**
15. **Ghusoon M. Ali** "ZnO thin films based interdigitated ultraviolet photodetectors with metal embedded microparticles" **Lasers, Optics & Photonics-2013 San Antonio, USA, October 7-9, 2013**.
16. **Ghusoon M. Ali** and P. Chakrabarti, "Fabrication and characterization of nanostructure thin film ZnO Schottky contacts based UV photodetectors" **Optics and Photonics-2013 San Diego, USA, August 25-29, 2013**.
17. **Ghusoon M. Ali** " Thin-film ZnO based UV Photodetectors" **Implementation of Postgraduate's Researches to Serve the Society, College of Engineering, Al-Mustansiriya University, Baghdad, Iraq 7th-8th May 2012**.
18. P. Chakrabarti and **Ghusoon M. Ali** " Nanostructure Thin-film ZnO/Metal Contacts based UV Photodetectors **International Workshop on Physics of Semiconductor Devices, IWPSD, IIT Kanpure, India 19th-22nd Dec. 2011**.
19. Shaivalini Singh, **G. M. Ali**, and P. Chakrabarti "Preparation and Characterization of ZnO Thin Films Prepared by Thermal Oxidation of Vacuum Deposited Zn," **Recent Trends in Nanoscience & Technology, RINT-2011, Bhubaneswar, India, 16th-17th September 2011**.
20. **Ghusoon M. Ali** "Fabrication and characterization of ZnO UV photoconductor" **3rd Scientific Conference of college of Engineering held in the University of Babel, Babel-Iraq, March 23-24, 2011**.

21. P. Chakrabarti and G. Ali, "UV Photodetectors based on Metal/ZnO thin-film based contacts," *Invited talk delivered at NSPTS-2011 held at Lucknow University, Lucknow during Feb.11-13, 2011.*
22. Shaivalini Singh, G. M. Ali, and P. Chakrabarti "Fabrication and Characterization of Pd/ZnO Schottky Contact Based on ZnO Thin Film prepared by Thermal Oxidation of Evaporated Zn Thin Films", *International Conference on Nanoelectronics (ICONE 2011), Muthayammal Engineering College, Salem, Tamilnadu-India, Feb. 26-28 2011.*
23. Ghusoon M. Ali and P. Chakrabarti "Effect of Thermal Treatment on the Performance of ZnO Based MISIM UV Photodetectors" *The Second Scientific Conference on Nanotechnology, Advanced Materials and Their Applications (SCNAMA'2010) University of Technology - Baghdad – Iraq, Nov. 3-4, 2010*
24. Ghusoon M. Ali and P. Chakrabarti, "Fabrication and characterization and testing of the thermal stability of ZnO-based Schottky ultraviolet photodetectors" *International Conference on Optical and Optoelectronic Properties of Materials and Applications" Budapest, Hungary, August 15-20, 2010.*
25. Ghusoon M. Ali and P. Chakrabarti "ZnO-based Interdigitated MSM ultraviolet photodetectors" *Advances and Trends in Engineering Materials and their Applications, Le Quebec, Canada, June 27 –July 3, 2010*
26. Ghusoon M. Ali and P. Chakrabarti "ZnO based Interdigitated MIS ultraviolet photodetectors" *Optical Sensors (Sensors) 21-24 June 2010 , Karlsruhe, Germany.*
27. Ghusoon M. Ali, S. Singh, and P. Chakrabarti, " Ultraviolet ZnO Photodetectors with High Gain" *2010 International Conference on Nanotechnology, Optoelectronics and Photonics Technologies (NOPT 2010) Singapore, Feb. 26-28, 2010.*
28. Ghusoon M. Ali, A.D.D. Dwivedi, S. Singh, and P. Chakrabarti, "Interface properties and junction behavior of Pd contact on ZnO thin film grown by vacuum deposition technique," *12th International Conference on the Formation of Semiconductor Interfaces From Semiconductors to Nanoscience and Applications with Biology (12th ICFSI) Weimar, Germany held at July 05 - 10, 2009*

PROFESSIONAL DEVELOPMENT

Reviewer in, Leading Technical Journals indexes by Clarivate; Verified reviews



(33) Journal of Electronic Materials **WOS**



(20) Journal of Alloys and Compounds **WOS**



(7) IEEE Transactions on Electron Devices **WOS**



(5) Materials Science in Semiconductor Processing **WOS**



(3) Materials Science and Engineering BWOS

◆ IEEE

(2) IEEE Electron Device Letters WOS



(2) Physica B: Condensed Matter WOS

(1) Al Mansour International Conference on New Trends in Computing, Communications, and Information Technology



(1) IEEE Photonics Journal WOS



(1) Materials Letters WOS

Note:-

- *Journal of Alloys and Compounds* (My name was included in the outstanding Reviewers of the JALCOM – 2015)
- *IEEE Electron Devices Letter (EDL)* (My name was included in the Golden List of Reviewers of the IEEE (EDL) – 2012. 2014)
- *IEEE Transaction of Electron Devices (TDL)* (My name was included in the Golden List of Reviewers of the IEEE (TDL) – 2017-2018-2021)

Sponsored Projects

Quality Assurance Training Program for Electrical Engineering Department, Al-Mustansiriya University. US-Iraq Higher Education Partnerships (HEP) 2016 (Principle Investigator)

- Fabrication, and characterization of Hydrogen gas sensors *sponsored by* Ministry of high Education and Scientific research on going (Principle Investigator)
- Chemical Security Improvement Grants Round Three 2013. CSIG 3-IRQ-5: Cleaning Room Set Up for Microelectronics Laboratory, (Principle Investigator).
- Fabrication, and characterization of ZnO nanostructure thin film based Schottky contacts gas sensors *sponsored by* (ASTF) and CRDF Global (Principle Investigator) 2012

Signature Head of Department

أ.م.د. ياسين يوسف محمد
رئيس قسم الهندسة الكهربائية
٢٠٢١

Signature Vice Dean

الأستاذ المساعد الدكتور
عماد محمد الجبوري
نائب عميد الشؤون العامة

السيرة الذاتية

أ. د. غصون محسن علي



قسم الهندسة الكهربائية كلية الهندسة الجامعة المستنصرية

موبايل: 07901151091

E-mail: ghusoon_m_a@yahoo.com ; eng.ghusoon_ali@uomustansiriyah.ed.iq

ملخص تعريفي:

حصلت غصون محسن علي على شهادة البكالوريوس والماجستير من الجامعة التكنولوجية ، بغداد - العراق ، 1984 و 1989 ، على التوالي ، والدكتوراه. شهادة في الهندسة الإلكترونية من المعهد الهندي للتكنولوجيا (IIT) ، جامعة بناراس هندو ، فاراناسي الهند ، في عام 2011. تعمل حالياً بصفة استاذ دكتور في قسم الهندسة الكهربائية ، كلية الهندسة ، جامعة المستنصرية ، بغداد - العراق. تدرس مواد لكل من الدراسات الأولية والعليا الماجستير والدكتوراه. اشرفت على العديد من رسائل واطاريح الماجستير والدكتوراه. لقد قامت بنشر العديد من البحوث (57) في المجالات العلمية العالمية المرموقة والرائدة وفي المؤتمرات العلمية العالمية والمحلية ولديها براءتي اختراع. لقد عملت أيضاً كباحث رئيسي في العديد من المشاريع التي تمت رعايتها من جهات مانحة عالمية. هي حاصلة استاذ زائر من برنامج الزمالة والعلوم في العراق (ISFP) في جامعة كوستال كارولينا ، كارولينا الجنوبية ، الولايات المتحدة الأمريكية. وكذلك جائزة الامان الكيماوي العالمية. وحاصلة على جائزة يوم العلم 2010. تشمل اهتماماتها البحثية تصنيع الاجهزة الإلكترونية والبصرية والمتحسسات ذات البنية النانوية .

الشهادات الدراسية:

- الدكتوراه #1: هندسة الكترونية - المعهد الهندي للتكنولوجيا (IIT) _ جامعة بناراس هندو _ فارناسي _ الهند-2011.
- الماجستير #2: هندسة كهربائية-الجامعة التكنولوجية - بغداد-العراق-1989.
- البكالوريوس #3: هندسة كهربائية-الجامعة التكنولوجية - بغداد-العراق-1984.

الجوائز والتكريم الأكاديمي

- استاذ زائر من برنامج الزمالة والعلوم في العراق (ISFP) في جامعة كوستال كارولينا ، كارولينا الجنوبية ، الولايات المتحدة الأمريكية 2013
- جائزة يوم العلم عن فئة البحث العلمي 2010.
- جائزة الجامعة العربية - المؤسسة العربية للعلوم والتكنولوجيا ASTF 2012
- جائزة الامان الكيماوي لتأثيرات المختبرات CRDF السفارة الاميركية في بغداد 2015.

الخبرة الأكاديمية والتدريس:

خبرة أكاديمية وتدريس لمدة 38 سنة

#1 : الدراسات العليا

- نبائط اشباه موصلات (ماجستير)
- اتصالات الياف بصرية (ماجستير)
- النانوإلكترونيك (دكتوراه)
- ضويات و بصريات الكترونية (دكتوراه)

#2 : الدراسات الأولية

- فيزياء الالكترونيك
- اتصالات الياف بصرية

- بصريات الكترونية
- الكترونك تماثلي I, II, III
- الكترونك رقمي I, II
- معالج دقيق
- علم الحاسوب
- احصاء
- وثوقية
- رياضيات
- المقررات الدراسية التي تم تدريسها:

الدراسات الأولية	الدراسات العليا
<ul style="list-style-type: none"> • Physics of Electronics • Electronics Circuits I, II, III • Digital Electronics I,II • Microprocessors • Computer Science • Engineering Statistic • Reliability • Mathematics 	<ul style="list-style-type: none"> • Semiconductor Devices (MSc) • Optical Fiber Communications (MSc) • Nanoelectronics; Devices and materials (PhD) • Quantum Photonics (PhD)

براءات الاختراع

- البوابة المتشابكة الممتدة لتانزستور تأثير المجال من دون القطب المرجعي كمتحسس درجة الحموضة, 2017.
- بناء جهاز طلاء مغزلي فراغي بالاستعانة بالمتحكمات الدقيقة 2022.

الانتماءات الاكاديمية

- قسم الهندسة الكهربائية -كلية الهندسة -الجامعة المستنصرية-بغداد-العراق
- قسم الفيزياء والكيمياء -كلية العلوم – جامعة كوستال كارولينا-صاوث كارولينا-الولايات المتحدة
- قسم الهندسة الالكترونية- المعهد الهندي للتكنولوجيا- جامعة بنارس هندو-فارناسي -الهند
- قسم الهندسة الالكترونية- المعهد العالي – القبّة-ليبيا
- قسم هندسة الكهروميكانيك الجامعة التكنولوجية –بغداد-العراق

البحوث المنشورة

البحوث المنشورة في المجلات العالمية المرموقة

1. Mowj R. Sabity, Ghusoon M. Ali, "Staggered heterojunction Pentacene/ZnO based organic-inorganic flexible photodetector' Results in Optics, vol 11, 100403, May 2023.
2. Kahtan Adnan Hussain, Ghusoon M Ali, Aimen Boubaker, Adel Kalboussi, "Richardson constant and characteristics of pentacene organic planar Schottky diode" vol 771, 139800, April 2023.
3. Salah M. Swadi*, Ahmed K. Kadhim, Ghusoon M. Ali, 'Design of Path Planning Controller of Autonomous Wheeled Mobile Robot Based on Triple Pendulum Behavior" International Journal of Mechanical Engineering and Robotics Research Vol. 12, No. 1, January 2023.

4. Jaaffar J Duair, Ammar I Majeed, **Ghusoon M Ali**, 'Design and Implementation of IoT-Based SCADA for a Multi Microgrid System." *Journal of ECS Transactions*, **107-1-17345 (April 2022)**
5. **Ghusoon M Ali** ",Performance analysis of planar Schottky photodiode based on nanostructured ZnO thin film grown by three different techniques" - *Journal of Alloys and Compounds*, **2020**
6. **Ghusoon M Ali**, Maan S Hassan, Ehssan S Hassan, Mohammed O Dawood- "Layer by Layer Silver Acetate based Coating on Glass and Cement Substrates to Tailor Reflectance and Conductance." *Journal of Engineering & ...*, **2020**
7. AK Kadhim, SM . Swadi, **Ghusoon M Ali**, "Design and implementation of a feedback programmable spin coating system," *Indonesian Journal of Electrical Engineering and Computer Science* 17 (3) 2020.
8. AK Hassan, **Ghusoon M Ali**, "Thin film NiO/BaTiO₃/ZnO heterojunction diode-based UVC photodetectors," - *Superlattices and Microstructures*, **2020**
9. Ghusoon M Ali, AK Khalid, SM Swadi – "Nanoflower ZnO thin-film grown by hydrothermal technique based Schottky diode" *Journal of Semiconductors*, **2020**
10. A.R. Nasser, and **Ghusoon M. Ali**. "A Porous Silicon P-Type Interdigitated Extended-Gate Field Effect Transistor pH Sensor"*Silicon* vol. 11: pp.2095–2102 (2019).
11. **Ghusoon M. Ali**," Interdigitated Extended Gate Field Effect Transistor Without Reference Electrode", *Journal of Electronic Materials*, 46:713-717, 2017.
12. **Ghusoon M. Ali**, James C. Moore,, Ahmed K. Kadhim, Cody V. Thompson, "Electrical and optical effects of Pd microplates embedded in ZnO thin film based MSM UV photodetectors: A comparative study", *Sensors and Actuators A: Physical* 209, 16-23, 2014.
13. **Ghusoon M. Ali**, Cody V. Thompson, Ali K. Jasim, Isam M. Abdulbaki and James C. Moore, "Effect of Embedded Pd Microstructures on the Flat-Band-Voltage Operation of Room Temperature ZnO-Based Liquid Petroleum Gas Sensors" *Sensors* 13, 16801-16815, 2013.
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النظير المهني

مقيم في المجلات العالمية ضمن مستوعات كلاريفيت تم تقييم 117 بحث عالمي وتم تضميني في قائمة المقيمين الذهبين للمجلتين المرموقتين

- *IEEE Electron Devices Letter (EDL) (My name was included in the Golden List of Reviewers of the IEEE (EDL) – 2012. 2014)*
- *IEEE Transaction of Electron Devices (TDL) (My name was included in the Golden List of Reviewers of the IEEE (TDL) – 2017-2018)*

وكذلك المقيم المتميز في مجلة

- *Journal of Alloys and Compounds (My name was included in the outstanding Reviewers of the JALCOM – 2015)*



(33) Journal of Electronic Materials WOS



(20) Journal of Alloys and Compounds WOS



(7) IEEE Transactions on Electron Devices WOS



(5) Materials Science in Semiconductor Processing WOS



(3) Materials Science and Engineering B WOS

◆ IEEE

(2) IEEE Electron Device Letters WOS



(2) Physica B: Condensed Matter WOS

(1) Al Mansour International Conference on New Trends in Computing, Communications, and Information Technology



(1) IEEE Photonics Journal WOS



(1) Materials Letters WOS

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توقيع معاون العميد

الأستاذ المساعد الدكتور
مؤيد محمد الجبوري
معاون العميد لشؤون الطلبة

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