

Abdelrahman A. Ghozlan

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Summary of Qualifications

- Modeling and simulations of nanomaterial
 - Sensors modeling.
 - Ab initio calculations
 - Simulations of X-ray diffractions
 - Nanotubes/Polymer composites.
 - Excellent laboratory and teaching skills
 - Professional in managing advanced science labs and their instruments
 - Highly skilled in laboratory setup, operating laboratory electronics, designing, machining, and assembling experimental apparatus
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Education

- Jordan University of Science and Technology Irbid, Jordan
Bachelor degree in applied Physics , Good June 2007
- AL al-Bayt University Mafraq, Jordan
Master degree in Physics, Excellent July 2016

Thesis Title: "Co-doping carbon nanotubes for toxic gas sensors applications: Ab initio simulations".

Research Experiences

- Three months scholarship training at **Universität Paderborn, Germany**
 - Experience in studying electrical, mechanical, optical and thermal properties of different nano-materials such as carbon nanotubes and boron nitride nanotubes silicon carbide nanotubes etc.
 - Very excellent experience in density functional theory codes such as DMOL3, CASTEP, ABINIT, DFT+, Gaussian etc.
 - Experience in commercial packages such as Materials Studio software.
 - Excellent experience in data processing programs such: Origin, kaleda graph, easy plot, and Endnote.
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Work Experience

Physics labs supervisor

- ✓ **AL al-Bayt University, Department of Physics** **Nov. 2008 – Current**
 - Author and editor of explanatory manual for the Modern Physics lab.
 - General Manager, supervisor and technician for the Modern Physics lab PHY 312.
 - Taught PHY 103, PHY 104 “Mechanics, electricity and magnetism physics labs”.
 - Taught PHY 211 “ Optics Laboratory for physics students”
 - Taught PHY 311 “Electronics Laboratory for physics students”
 - Independent responsibility of setting up the experiments for all the taught physics labs.
 - Responsible for the maintenance of the labs advanced instruments.
 - Taught and facilitated over a hundred student each semester with the independent responsibility of the lab and grades management.

- ✓ **Physics labs administrator and Technician / part time**

Amman Academy **Sep 2012 – 2014**

- Design and prepare experiments for all the school level scientific classes in the fields of:
- Mechanics, electricity, optics, materials properties, and magnetism.
- Responsible of managing students and their lab grades.
- Responsible of designing and judging experiments in Scientific Fair 2012 and 2013.

- ✓ **Storyboard writer / part time**

Obeikan Research Development Company (ORDC) **Nov 2009 – 2013**

- SME (subject matter expert) and storyboard writer for science, physics, chemistry, and biology, of 1 to 12 scholastic grades, which is within the science lab project of e-learning
- Designed experiments using several simulation software in the scientific fields: Physics, Chemistry, and biology.
- Participated in computerizing scientific curricula through several specialized projects.

Science Teacher

UNRWA schools **Aug 2008 – Nov 2008**

- Worked as a teacher of physics, science, mathematics for different school levels
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Training courses and Licenses

- Conversation in English language course (1)
AL al-Bayt University **15 Nov/2009 – 31 Dec/2009**
 - Conversation in English language course (2)
AL al-Bayt University **24 Jun/2011 – 28 July/2011**
 - Youth prevention of sexually transmitted diseases course
AL al-Bayt University **1 Nov/2011**
 - The Radiation Protection Training Course
Jordan Nuclear Regulatory Commission (JNRC) **27 Nov/2011 – 1 Dec/2011**
 - Personal License from Jordan Nuclear Regulatory
Commission (JNRC) , for use the radioactive sources
in education and scientific research.
 - Introduction to ABINIT software **4 Oct/2016 - 23 Dec/2016**
Universität Paderborn, Germany
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Language Skills

- Excellent skills in English language
 - Beginner skills in German language
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Computer Skills

- Editing e-learning materials and preparing simulated learning programs (Physics and science media & simulation).
 - Operating Systems: Dos, Extensive knowledge in most windows based application NT/2000/XP/Vista.
 - Hardware: General PC hardware, such as remove and replace HDD, Floppy Drive, CD-Drive, and most other devices.
 - Software: Ms-Office, Adobe Acrobat Professional & (Adobe Indesign), and I have capability to install and work with any software program within few days.
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Published Articles

- [1] J.A. Talla, K.A. Al-Khaza'leh, **A.A. Ghozlan**, Boron Nitride Nanotubes as a Container for 5-Fluorouracil Anticancer Drug Molecules: Molecular Dynamics Simulation Study, *Advanced Science, Engineering and Medicine*, 11 (2019) 383–388
- [2] M. Serhan, M. Abusini, E. Almahmoud, R. Omari, K. Al-Khaza'leh, H. Abu-Farsakh, **A. Ghozlan**, J. Talla, The electronic properties of different chiralities of defected boron nitride nanotubes: Theoretical study, *Computational Condensed Matter*, 22 (2020) e00439.
- [3] Rami Omari¹, Emad Almahmoud , Jamal A. Talla, Khaled Al-Khaza'leh, **Abdelrahman Ghozlan** and Ahmad Al-Diabat, Influence of substitutional doping on the electronic properties of carbon nanotubes with Stone Wales defects: density functional calculations "Under review".
- [4] **A.A. Ghozlan**, J.A. Talla, OPTICAL PROPERTIES OF DEFECTIVE SILICON CARBIDE NANOTUBES: THEORETICAL STUDY, *Rev. Cubana Fis.*, 36 (2019) 27-36.
- [5] J.A. Talla, M. Nairat, K. Khazaeleh, **A.A. Ghozlan**, S.A. Salman, Optical properties of carbon nanotubes with Haeckelite structure under a transverse electric field: Density functional theory, *Computational Condensed Matter*, 16 (2018) e00311.
- [6] J.A. Talla, **A.A. Ghozlan**, Effect of boron and nitrogen co-doping on CNT's electrical properties: Density functional theory, *Chinese Journal of Physics*, 56 (2018) 740-746.
- [7] J.A. Talla, **A.A. Ghozlan**, Effect of Haeckelite Structure on Optical Properties of Carbon Nanotubes Bundles: Density Functional Theory Study, *Journal of Advanced Physics*, 7 (2018) 33-42.

References

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