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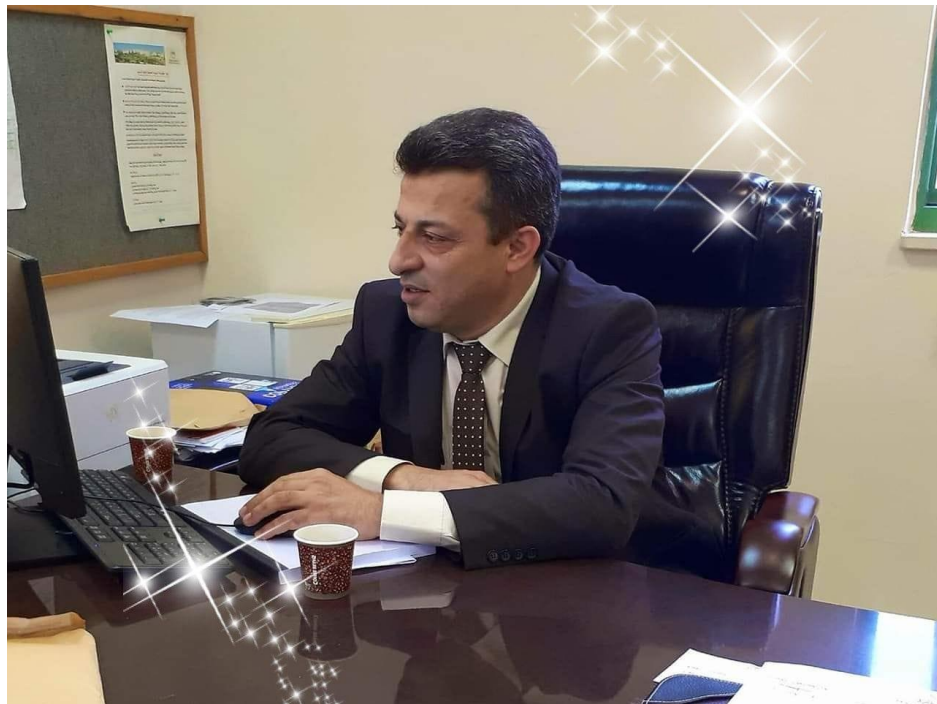
MUAYAD ABU SAA

HOME ADDRESS

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WORK ADDRESS

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PERSONAL INFORMATION

Marital status: Married
NATIONALITY: Palestinian
DATE OF BIRTH: 17/01/1970
PLACE OF BIRTH: Nablus - West Bank – Palestine

EDUCATION

2009-2015

Brussels/Belgium
Vrije Universiteit Brussel
PhD of Physics/Laser Physics

1993-1995

Famagusta/ North Cyprus
Eastern Mediterranean University
M.SC. Of physics / Solid State Physics (CGPA 3.96)

1988- 1992

Yarmouk University
Irbid - Jordan
B .SC OF Physics

PROFESSIONAL EXPERIENCE

1. Vice President for Academic Affairs /Arab American University/Jenin (2019- present)
2. Dean of faculty of science /Arab American University/Jenin (2017-2018)
3. Head of the physics department / Arab American University/Jenin (2016-2017)
4. Full-Time Assistant Professor of physics/ Arab American University/Jenin. (2015- present)
5. Full-Time lecturer of physics/ Arab American University/Jenin. (2011-2015)
6. PhD student / VUB/ Belgium. (2009-2011)
7. Full-Time lecturer of physics / Arab American University/Jenin. (2006-2009)
8. Full-Time instructor of physics / Arab American University/Jenin. (2003-2006)
9. Teacher of physics, Chemistry, General Sciences & mathematics/ - P.N.A- / Trainer of Physics teachers. Ministry of Education Tulkarm Directorate. (1995-2003)
10. Part - Time lecturer of physics, methods of teaching sciences and math courses /Al - Quds Open University/ Tulkarm Directorate -P.N- (1996-2009)
11. Teacher & lab Coordinator as a full-time assistant /Famagusta - North Cyprus. (1993-1995)

COURSES TAUGHT: GRADUATE

1. Advanced Statistical Mechanics.
2. Advanced Classical Mechanics
3. Laser Design and Technology.
4. Laser Dynamics.

COURSES TAUGHT: UNDER GRADUATE

- 1- General Physics 101(Mechanics)
- 2- General Physics 102(Electricity & Magnetism)
- 3- General Physics Lab 105(Mechanics)
- 4- General Physics Lab 106(Electricity & Magnetism)
- 5- Classical Mechanics I
- 6- Classical Mechanics II
- 7- Solid State Physics I
- 8- Statistical Mechanics
- 9- Mathematical Phys I
- 10- Mathematical Phys II
- 11- Thermodynamics
- 12- Optics and Lasers
- 13- Laser Design and Technology
- 14- Astronomy
- 15- Modern Physics.
- 16- Physics for Medical Students
- 17- Physics Lab for Medical Students
- 18- Physics for IT (information technology)
- 19- Physics Lab for IT
- 20- Vector Analysis
- 21- Methods of teaching sciences
- 22- General math courses
- 23- Introduction to Mathematical Physics and Software Packages
- 24- Fundamentals of Research Methods

RESEARCH INTERESTS

- 1- Laser dynamics
- 2- Quantum Dot Lasers modeling.
- 3- Two state operation in Quantum Dot Lasers.
- 4- Optoelectronic devices.
- 5- Thin films.
- 6- Fractional Calculus.

SCIENTIFIC PRODUCTION:

- **ROLE OF Au NANOSHEETS IN ENHANCING THE PERFORMANCE OF Yb/ZnS/CdS/Au TUNNELING PHOTODETECTORS.** M. AbuSaa¹, A. F. Qasrawi ^{*}, Batool M. Asaad¹, Hazem. K. Khanfar *Chalcogenide Letters* Vol. 17, No. 11, November **2020**
- **Structural, optical and dielectric performance of molybdenum trioxide thin films sandwiched with indium sheets.** M. AbuSaa, A. F. Qasrawi, , Haifaa' K. Kmail¹, Hazem. K. Khanfar *Journal of Nanomaterials and Biostructures*. Vol. 15, No. 4, October - December **2020**
- **Monotonicity Analysis of Fractional Proportional Differences.**Iyad Suwan, Shahd Owies, Muayad Abussa, and Thabet Abdeljawad *Discrete Dynamics in Nature and Society Journal*. **2020**, Article ID 4867927, 11 pages
- **Post annealing effects on the structural and optical properties of MoO₃ sandwiched with indium slabs,** A. F. Qasrawi,Haifaa' K Kmail,Muayad M.A Abusaa,Hazem K. Khanfar.*Materials Research Express*,**2019**. 6 116453
- **Structural and electrical characterizations of the as grown and annealed Au/MoO₃/In/MoO₃/C bandpass filters.** Hazem K. Khanfar,A. F. Qasrawi,Masa Daraghmeh,Muayad Abusa. *Microwave and Optical Technology Letters*, **2019**. Volum:61,Issue:11Pages From:1To:7
- **Dielectric and Optoelectronic Properties of InSe/CdS/CdSe heterojunctions.** M. Abusaa, A.f. Qasrawi, Sufyan R. Shehada.*Journal of Electronic Materials*,**2018**.ls.47, pages6583–6590
- **Dynamical and Thermal Properties of 850 nm Vertical Cavity Surface Emitting Laser (VCSEL)**December. DOI: 10.12816/0044520 Muayad Abussa *Journal of the Arab American University*. Volume (3). Number (2)/ **2017**
- **Lasing due to the excited state in quantum dot lasers .**Muayad Abussa , Co-authored by J. Danckaert, and E. A. Viktorov *Journal of Physics. Conference Series*,**2017**.869(1):012008
- **Analysis Of The Current-voltage Characteristics Of The Yb/TlInSe₂/C Interfaces** M. Abusaa Reham M. Kmeil, Hazem K. Khanfar,A.F. Qasraw. *Fifth Palestinian Conference on Modern trends in Mathematics and Physics*,**2016**.Page 53
- **Au/inSe Interface Designed As Resonators For Optical Communications.**M. Abusaa Alaa A. Ikmail, Hazem K. Khanfar.*Second Palestinian International Conference on Material Science and Nanotechnology*,**2016**.Page 61
- **Palestine Analysis Of The Current-voltage Characteristics Of The Yb/TlInSe₂/C Interfaces.** Fifth Palestinian Conference on Modern trends in Mathematics and Physics.AAUP, M. Abusaa,Reham M. Kmeil,Hazem K. Khanfar,A.F. Qasrawi. July 31, **2016**

- Palestine Au/inSe Interface Designed As Resonators For Optical Communications. Second Palestinian International Conference on Material Science and Nanotechnology An-Najah National University, M. Abusaa, Alaa A. Ikmail, Hazem K. Khanfar. March 23, **2016**.
- Temperature Effects On The Physical Parameters Of Yb/MgO/CMSM Devices. Second Palestinian International Conference on Material Science and Nanotechnology. An-Najah National University, Palestine. M. Abusaa, Sundos K. M. Kabaha, Hazem K. Khanfar March 23, **2016**
- Dropout dynamics in pulsed quantum dot lasers due to mode jumping. Muayad Abusaa, Grigorii S. Sokolovskii et al. App. Phys. **2015**. Lett. 106, 261103.
- Two state QD laser turn on: slow passage effects. Muayad Abusaa, Grigorii S. Sokolovskii et al. European Conference on Lasers and Electro-Optics - European Quantum Electronics Conference, (Munich, Germany), **2015**.
- The effect of slow passage in the pulse-pumped quantum dot. Muayad abusaa, Grigorii S. Sokolovskii et al. laser. SPIE Photonics Europe, Brussels, **2014**. Vol: 9134
- Intradot time scales strongly affect the relaxation dynamics in quantum dot laser. Muayad Abusaa, E.A. Viktorov, T. Erneux, J. Danckaert Phys .Rev . A, **2013**. 87. 063827
- Nonlinear pulse shaping in pulsed quantum dot lasers. Muayad Abusaa, Grigorii S. Sokolovskii et al. "Nanostructures: Physics and Technology" Saint Petersburg, Russia, 21st Int. St Petersburg Academic University. **2013**, page 79.
- Impact of gain factor on simultaneous two-state operation in quantum dot lasers.. Muayad Abusaa, E.A. Viktorov, T. Erneux, J. Danckaert. Annual Symposium of the IEEE Photonics Society Benelux Chapter, **2012**. Page 219.
- Stability properties of a dual wavelength operation in quantum dot. Muayad Abusaa, E.A. Viktorov, T. Erneux, J. Danckaert. lasers Laser Optics-2012 Conference, St. Petersburg, Russia; **2012**.
- The energy spectra of GaAs / AL_x Ga_{1-x} As Quantum Dots. Muayad Abusaa, M. Elsaid. Tr.J. of Physics 1998.22(**1998**), 885-894.
- Interacting Electrons in Quantum Dot in The Presence of a magnetic Field. Muayad Abusaa, M. Elsaid. Phys .Stat. Sol. (b) **1997**. 203 / 357
- The Energy Spectra of Two Interacting Electrons In a Parabolic Quantum Dot In The Presence of a Magnetic Field ; Interpolation Approach". Muayad Abusaa, M. Elsaid. Physica Scripta. **1996**. Vol. 54 / 309 -311.

SUPERVISION OF MASTER THESES:

NO	Name of master student	Thesis Title	Year of granting	Place of granting	First or second Supervisor
1.	Ahmad Mahmoud Mustafa Zakarneh	Damping Rate Of Relaxation Oscillation Frequencies And K-Factor For Two-State Operation In Quantum Dot Lasers.	2020	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Dr. Adli Saleh
2.	Nouf Ibrahim	The effect of Rashba spin-orbit interaction and magnetic field on the thermos-magnetic properties of an electron confined on a 2D semiconductor quantum dot “. AAUP- 2019.	2019	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Prof. Mouhmad Alsaad
3.	Batool Asaad	Effect of Au layer on the performance of ZnS/CdS heterojunctions	2019	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Prof. Hazem Khanfer
4.	Masa Daraghme	"Enhancement of electrical performance of MoO ₃ films via Indium nano sandwiching	2018	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Prof. Hazem Khanfer
5.	Haifaa Kamil	"Design and .1 Characterization of Indium sandwiched Molybdenum Trioxide thin films".	2018	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Prof. Hazem Khanfer
	Sufyan Shehada	"Fabrication and Characterization of Wide Band Photoconductor Array". AAUP- 2017.	2017	Arab American University – Jenin / Palestine	Supervisor: Dr. Muayad Abu Saa Co-Supervisor: Prof. Hazem Khanfer

PARTICIPATION IN THE UNIVERSITY COUNCIL AND COMMITTEES:

- Faculty of Science council, member (2006-2007) & (2008-2009) (2019-2016)
- University schedule committee.(2006-2004)-
- Quality Assurance Committee, member(2005-2004)-
- University Council, member-(2007-2008). (2012-2013). (2016-2017). (2017-2018). (2018-2019)(2020-2019) .(
- Deans Council, member- (2017-present)
- Curriculum Committee, member- (2016- present)
- Scholarship Committee-(2019- present)
- Admission policy committee-(2019- present)

CONTRIBUTION TO COMMUNITY DEVELOPMENT:

- President of Palestinian Physics Society (PPS)-1/12/2019 - present
- Member of the Preparatory Committee of a series Palestinian Conferences on Modern Trends in Mathematics and Physics-2014+2016+2018

PARTICIPATION IN PUBLIC LECTURES:

- Simulation conference- Palestine Academy for Science and Technology (PALAST)
- Nanotechnology workshop- Palestine Academy for Science and Technology (PALAST)
- The (Third+ Fourth +Fifth) Science Bridge meetings and Jülich Institute - Palestine Academy for Science and Technology (PALAST)

BOOKS:

Lab manual: (Physics lab for medical students).Co-authored by Muayad Abu Saa and Anan Hussein.AAUP. Jenin/Palestine

Scientific arbitrator for the physics curriculum(11 & 12 grade)

LANGUAGES:

Arabic: Mother tongue
English: Reading & Writing (Excellent)

HOBBIES:

Reading, Travelling, and Athletics.

REFEREES:

- 1- Prof.Dr. Jan Danckaert (VUB) jandan@vub.ac.be
- 2- Prof.Dr. Evgeniy Viktorov(ULB) evviktor@ulb.ac.be
- 3- Prof.Dr. Thomas Erneux(ULB) terneux@ulb.ac.be
- 4- Dr. Adli Saleh(AAUP) asaleh@aaup.edu

N.P All documents are available under request.