

# Curriculum Vitae

Dr. Atef AbdElKader. (MSc, PhD)

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## Personal Information

**Name:** Atef AbdElKader  
**Title:** Associate Professor in Physics  
**Date of birth:** 23-04-1969  
**Nationality:** Palestinian/Canadian  
**Current Address/Country:** Ajman University  
Collage of Humanities and Sciences, P.O. Box 346, Ajman, UAE.  
**Telephone Number:** +971 56 6385222  
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## QUALIFICATIONS

**Years:** 1995-1998  
**University, Country:** The Queens University, UK.  
**Degree (y/n) & title:** **PhD** in Physics, August 1998.  
**Thesis title:** **Experimental Studies of Two-Dimensional Foam.**

**Years:** 1994-1995  
**University, Country:** The Queens University, UK.  
**Degree (y/n) & title:** **M. Sc** in Opto-Electronics and Optical Information Processing, August 1995.

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## WORK EXPERIENCE

**Years:** September 2002 - Now  
**Institution, City, Country:** Ajman University, Ajman, UAE.  
**Job title:** *Associate Professor in Physics*  
*Head of Mathematics and Science Department*

**Responsibilities:**

- Teaching Physics courses of undergraduate students of the BSc degree of the colleges of Medicine, Dentistry, and Engineering.
- Head of Math and Science Department Sept 2016 - Now
- Participate in committee(s) and other activities for the development of the department, college and University.
- Publication, academic and scientific documentation and conference representation.

**Years:** Sept 1998 - July 2002  
**Institution, City, Country:** Al-Quds University, Al Aqsa University and in the University of Science and Technology, Gaza Strip.  
**Job title:** *Assistant Professor in Physics*

**Responsibilities:**

- Teaching Physics courses of undergraduate students of the BSc degree of the colleges of Engineering and Science.
- Participate in committee(s) and other activities for the development of the departments.

## PROFESSIONAL EXPERIENCE

- Rich experience as lecturer, course developer, and problem solving and class teacher.
- Experience as reviewer of scientific journals.

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## LANGUAGES

○ Co-organizer and speaker at several international conferences.  
English/Arabic

## COMPUTER SKILLS

Expert MS office, simulation and modelling

## PERSONAL INTERESTS

Reading, Traveling, Playing football.

## ADDITIONAL INFO

Fields of expertise:

- 2D foam physics,  
- Semiconductors laser.  
- Materials science and application of nanomaterials.

Experience:

- Various optical characterization and analysis techniques in materials growth.  
- Knowledge of Semiconductor technology, cleaning room processing and fabrication.  
- Effective implementation and brainstorming.  
- Modelling/simulation techniques AFM, SEM, XRD and TEM.  
- International network in the academia (nano) optics.  
- Complex optical experiments.

Skills:

Leadership, analytical, pragmatic attitude, self-motivated, hands-on, pro-active, independent and cross-functional teamwork, excellent communication, and time management.

Scientific Journals membership of:

Journal of Rheology, University of California,  
American Journal of Physics,

Funding received:

Azure sponsorship credits, Microsoft AI funding programme.

Trainings:

Leadership and scientific writing.

## SELECTED PUBLICATIONS:

- *Pseudorapidity dependence of the bulk properties of hadronic medium in pp collisions at 7 TeV*, Ajaz, M., Haj Ismail, A.A.K., Waqas, M., ...AbdelKader, A., Suleymanov, R., *Scientific Reports*, (2022) (Q1\* journal).
- *Excitation Function of Kinetic Freeze-Out Parameters at 6.3, 17.3, 31, 900 and 7000 GeV*, Waqas, M., Haj Ismail, A.A.K., Ajaz, M., Abdelkader, A., *Universe*, (2022) (Q2 journal).
- *Numerical modeling of high conversion efficiency fto/zno/cds/czts/mo thin film-based solar cells: Using scaps-1d software*, Zyoud, S.H., Zyoud, A.H., Ahmed, N.M., ...Abdelkader, A.F.I., Shahwan, M. *Crystals*, (2021) (Q2 journal).
- *Numerical modelling analysis for carrier concentration level optimization of CdTe heterojunction thin film-based solar cell with different non-toxic metal chalcogenide buffer layers replacements: Using SCAPS-1D software*, Zyoud, S.H., Zyoud, A.H., Ahmed, N.M., Abdelkader, A.F.I. *Crystals* (2021) (Q2 journal).
- *Study of kinetic freeze-out parameters as a function of rapidity in pp collisions at cern sps energies*, Waqas, M., Chen, H.-M., Peng, G.-X., ...Jamal, S., Abdelkader, A., *Entropy*, (2021) (Q1 journal).

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- *Simulation of the evolution of the COVID-19 pandemic in the United Arab Emirates using the SIR epidemical model, A. Haj Ismail, E.A. Dawi, A. AbdElKader, Saleh T. Mahmoud, and T. Jwaid, Arab Journal of Basic and Applied Science, (2021) (Q1\* journal).*
- *Blended Learning in Higher Education: A Study of Its Impact on Students' Performance, Alsalhi, N.R., Eltahir, M.E., Al-Qatawneh, S., ...Abdelkader, A.F.I., Jumaili, L.A., International Journal of Emerging Technologies in Learning, (2021) (Q2 journal).*
- *Impact of Using the Differentiated Instruction (DI) Strategy on Student Achievement in an Intermediate Stage Science Course, Alsalhi, N.R., Abdelrahman, R., Abdelkader, A.F.I., ...Habboush, M., Qawasmi, A.A., International Journal of Emerging Technologies in Learning, (2021) (Q2 journal).*
- *The Effect of Blended Learning on the Achievement of Students Dentistry College in Physics Course: Case Study at Ajman University", Najeh Rajeh Alsalhi, Mohd Eltahir, E.A. Dawi, Abdelkader A and Zyoud S. H, Electronic Journal of e-Learning (EJEL), Volume 19, Issue 1, (2021) (Q1 journal).*
- *Influence of Magnetic Field on Level of Linearly Polarized Laser Beam Passing through Faraday Crystal, Zyoud, S. H., AbdElKader. A, Holi, A., Defect and Diffusion Forum (2021). (Q3 Journal).*
- *Precautionary measures and the first wave evolution of Covid-19: a comparison study, A. Haj Ismail, T. Jwaid, E.A. Dawi, A. AbdElKader, International Journal of Pharmaceutical Research, Vol. 12, Issue 4, 4391-4394 (2021) (Q3 journal).*
- *Numerical Simulation for Optimization of ZnTe-Based Thin-Film. Zyoud, S., & Abdelkader, A., International Review on Modelling and Simulations, (2021) (Q2 Journal).*
- *Growth of interface region in 2D wet foam, Crystals, 10, (8) 703; DOI: 10.3390/cryst10080703 (2020), A. AbdElKader, E.A. Dawi, A.K. Haj Ismail, and S.H. Zyoud. (Q2 Journal).*
- *The Earth's magnetic field and azimuth variations of the electromagnetic component of cosmic air showers at ground level, Accepted for publication in the Journal of Advanced Research in Dynamical and Control Systems, (2020), A. Haj Ismail, E. Dawi, and A. AbdElKader.*
- *Sputtering of size-tunable oxidized Fe nanoparticles by gas flow method, Appl. Phys. A (2020). Dawi, E.A., Ismail, A.H., A. AbdElKader, and A. Karar. A. A. (Q2 Journal).*
- *The Impact of Temperature on the Performance of Semiconductor Laser Diode, International Journal of Advanced Science and Technology (2020), S. H. Zyoud, A. AbdElKader, Zyoud A. H. (Q3 Journal).*
- *Assembly and optical properties of metal nanoparticles, Solid State Phenomena (2019), E.A. Dawi, and A. AbdElKader. (Q3 Journal).*
- *Characteristics of Semiconductors Laser under Influence of Magnetic Field, Journal of Advanced Research in Dynamical and Control Systems (2019), S. H. Zyoud, A. AbdElKader. (Q3 Journal).*
- *The Influence of magnetic field on pulse distribution of laser diode, Universal Journal of Electrical and Electronic Engineering (2019), S. H. Zyoud, A. AbdElKader. (Q4 Journal).*
- *Evolution of a Defect in a 2D Wet Foam, International Journal of Recent Technology and Engineering (2019), A. AbdElKader, and E.A. Dawi. (Q4 Journal).*
- *The Effect of Cell Boundary on 2D Foam, MATEC Web of Conference, (2018); A. AbdElKader.*
- *Shear-Induced Changes in Two-Dimensional Foam' Physical Review Letter Vol. 82, pp. 2610-2613 (1999), A. AbdElKader and J.C. Earnshaw. (Q1\* Journal).*
- *Evolution of Grain Boundaries in Two-Dimensional Foam' Journal of Physics: Condense. Matter Vol 11, pp. 3051-3063 (1999), A.Abd el Kader and J.C. Earnshw. (Q2 Journal).*
- *Growth of Disorder about Point Defects in Two-Dimensional Foam' Physical Review E (1998), A. AbdElKader and J.C. Earnshaw. (Q1 Journal).*

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- *Foam to Order, The Irish Scientist, 6, pp. 127 (1998), A. Abd el Kader and J.C. Earnshaw.*
- *Evolution of a Two-Dimensional Foam containing a Single Topological Defect: An Experimental Study' Physical Review E Vol. 56, pp. 3251-3255 (1997), A.Abd el Kader and J.C. Earnshaw. (Q1 Journal).*
- *Stability of Two-Dimensional Foam' Philosophical Magazine A Vol. 76, pp. 1251-1260 (1997), A.Abd el Kader and J.C. Eernshaw. (Q2 Journal).*