

Prof. Dr. Arafa Hussien Aly

Physics Department
Faculty of Sciences
Beni-Suef University, Egypt
T +201220553834
arafa.hussien@science.bsu.edu.eg
arafaaly@aucegypt.edu



أ.د. عرفة حسين علي

قسم الفيزياء
كلية العلوم
جامعة بني سويف, مصر
ت: 201220553834
arafa.hussien@science.bsu.edu.eg
arafaaly@aucegypt.edu

PERSONAL INFORMATION

المعلومات الشخصية

Full name: *Arafa Hussien Aly*
Date of birth: *November 16, 1964*
Home Address: *El-Haram Street- Giza-Egypt*
Citizenship: *Egyptian*
Previous Positions: *Head of Physic Department 2013~2020*
Current Position: *Professor of physics department, Beni-Suef University, Egypt*



ResearchGate: [A. H. Aly](#)
Orcid: [0000-0003-0795-378X](#)
Scopus: [ID: 16229650800](#)

الاسم رباعي: عرفة حسين علي حسين
تاريخ الميلاد: 16 نوفمبر 1964
محل الإقامة: شارع الهرم- الجيزة- مصر
الجنسية: مصري
- رئيس قسم الفيزياء - جامعة بني سويف (من 2013 حتى نهاية 2020)
الدرجة الحالية: أستاذ بقسم الفيزياء - جامعة بني سويف
منتدبا

Dean of the Higher Technological Institute for Applied Health Sciences-Beni-Suef (2021- Present)

عميد المعهد التكنولوجي العالي للعلوم الصحية التطبيقية

أظهر تصنيف علماء جامعة ستانفورد الأمريكية ادراج اسمي ضمن 2% من الباحثين المتميزين والمؤثرين في التخصص على مستوى العالم اكتوبر 2020 وكذلك أكتوبر 2021

ACADEMIC BACKGROUND

المؤهلات العلمية

Ph.D. in "Physics", Faculty of Sciences, Cairo University, Egypt. **1999**
M.Sc. in "Physics", Faculty of Sciences, Egypt. **1992**
B.Sc. in "Physics and Mathematics", Faculty of Sciences, Egypt. **1987**

دكتوراة في "الفيزياء" -كلية العلوم- جامعة القاهرة.
ماجستير في "الفيزياء" - كلية العلوم-
بكالوريوس في "الفيزياء" - كلية العلوم-

SCIENTIFIC SOCIETIES

الجمعيات العلمية

- [Chairman](#) of Egyptian Materials Research Society (Eg-MRS).
- Korean Physical Society (KPS).
- Optical society of America (OSA)
- Phononics Society
- Member of the National Committee of Crystals, ASRT

- رئيس الجمعية المصرية لبحوث المواد
- عضو الجمعية الفيزيائية الكورية
- عضو الجمعية الأمريكية للبصريات
- عضو جمعيه الفونونك والفونونك
- عضو اللجنة القومية - أكاديمية البحث العلمي

TEACHING EXPERIENCE

الخبرات التدريسية

Introduction of Optometry, Geometrical and Physical Optics, contact lens- Photonic crystals –Bio statistics -Low Vision- Laser- Statistical Mechanics – Computational Physics – Radiobiology- Interaction between radiation and matter – Theoretical condensed matter – Biophysics- Physical optics – Waves – General physics - Thermodynamics –Properties of matter – Radiobiology- Nuclear Medicine- Radiology devices- Thin film Technology – Nanotechnology – Radiation Biophysics – Renewable energy-MATLAB – Mathematica – Mathematical Physics – Optical technology

مقدمه في علم البصريات –الضوء الهندسي -الضوء الفيزيائي- العدسات اللاصقة - البلورات الضوئية - الاحصاء الحيوي- قصر النظر – الليزر - ميكانيكا إحصائية - فيزياء حسابية - فيزياء اشعاعية - تفاعل الأشعاع مع المادة - فيزياء الحالة المكثفة النظرية - فيزياء حيوية - بصريات فيزيائية – موجات - فيزياء عامة - ديناميكا حرارية - خواص مادة - الضوء الفيزيائي - اغشية رقيقة - نانو تكنولوجيا - فيزياء حيوية اشعاعية - الطاقة المتجددة – متالاب – ماثماتيكا - فيزياء رياضية- طب نووي – تكنولوجيا البصريات – تقنيات اجهزة الاشعه

ACADEMIC POSITIONS

التدرج الأكاديمي

Beni-Suef University

Assistant Lecture	1995-1999	مدرس مساعد
Lecturer	2000-2006	مدرس
Associate Professor	2007- 2012	أستاذ مساعد
Professor (Permanent position)	2012-Present	استاذ
Head of Physics Department	2013-2020	رئيس قسم الفيزياء

Different universities (paralle)

Visitor to ICTP, Trieste, Italy (Condensed Matter Group).	Oct.-Nov..2001	زائر إلى المركز الدولي للفيزياء النظرية، تريستا، إيطاليا (علوم المواد).
Postdoctoral Fellowship, Center of theoretical physics, Seoul national University - South Korea .	Oct. 2004– Sept. 2005	مهمه علميه ما بعد الدكتوراه، جامعة سيول الوطنية - كوريا الجنوبية.
Research Professor, Center for Advanced Mathematical Sciences, American University of Beirut, Lebanon	Oct. 2005-Sept. 2006	أستاذ باحث، مركز العلوم الرياضية المتقدمة، الجامعة الأمريكية في بيروت، لبنان
Visitor Postdoctoral Fellowship, Nano-Photonic Lab., Department of physics, Chonnam national University - South Korea	Oct.2006- Feb. 2008	زمالة لما بعد الدكتوراه، مختبر البصريات والنانوتكنولوجيا، قسم الفيزياء، جامعة تشونام الوطنية - كوريا الجنوبية
Research Professor, Department of Physics, Inha University, Incheon, South Korea	March 2008- end of 2008	أستاذ باحث، قسم الفيزياء – معمل البصريات، جامعة إنها، إنتشون، كوريا الجنوبية
Visiting Professor, Department of Physics, University of Zaragoza, Pedro Cerbuna, 50009 Zaragoza- Spain	Jan. 2008- Dec. 2008	أستاذ زائر ومشروع بحثي، قسم الفيزياء، جامعة سرقسطة، بيدرو سيربونا، 50009 سرقسطة، إسبانيا
Research professor as a part time in American University of Cairo.	2009- 2016	أستاذ باحث بدوام جزئي في الجامعة الأمريكية بالقاهرة
Part time for Teaching: Radiation Physics and Radiation Protection, 6 October University , Egypt.	September 2016 -2018	دوام جزئي للتدريس: الفيزياء الإشعاعية والوقاية من الإشعاع، جامعة 6 أكتوبر، مصر --التعاون مع زارة الصحة المصريه في التدريس ووضع مناهج تدريسيه لقسم البصريات والإشعه – المعاهد الفنيه الصحيه

CONFERENCES

المؤتمرات

1. International Conference "Nanomeeting2001", **Minsk-Belarus** May-**2001**.
مؤتمر دولي عن النانو تكنولوجي (مينسك بيلاروس) **2001**
2. International conference on "Materials Science and Technology", **Beni-Suef**, Egypt April **2001**
مؤتمر دولي عن علوم المواد والنانو تكنولوجي (بني سويف) **2001**
3. International conference (Th2002) theoretical physics, UNESCO, Paris, France, July,22-27, **2002**
مؤتمر دولي عن الفيزياء النظرية (باريس - فرنسا) **2002**
4. International conference on "Solid State Science", **Sharm-Al-Shiekh**, Egypt, Sep. **2002**
مؤتمر دولي عن علوم المواد (شرم الشيخ) **2002**
5. First Workshop on Dynamics and its Applications, American University of Beirut (Center of the advanced mathematical Sciences) October 21-25, **2002**, **Lebanon**.
ورشة عمل عن علم الديناميكا وتطبيقاته. (لبنان) **2002**
6. International Conference "Nanomeeting2003", **Minsk-Belarus** May-**2003**.
مؤتمر دولي عن النانو تكنولوجي (مينسك بيلاروسيا) **2003**
7. Twelfth International Conference on discrete Simulation of fluid Dynamics, American University of Beirut (Center of the advanced mathematics), **Beirut, Lebanon**, August 25-29 **2003**.
المؤتمر الدولي الثاني عن محاكاة منفصلة لديناميكيات الموائع. (لبنان) **2003**
8. Work shop on "Nano-Mesoscopic Systems", Information Research Laboratories R143, Pohang University of Science and Technology, **Pohang, South Korea**,17-18 Dec,**2004**.
ورشة عمل عن الأنظمة الدقيقة (كوريا الجنوبية) **2004**
9. International conference "The Ninth Annual Science and Math teachers (SMEC 9), **American university of Beirut, Lebanon**, Nov, **2005**.
مؤتمر دولي عن السنة التاسعة لمعلمي العلوم والرياضيات (لبنان) **2005**
10. Korean Physical Society Meeting, **EXCO, Daegu, South Korea**.,19-20 Oct. **2006**.
اجتماع الجمعية الكورية لعلوم الفيزياء (كوريا الجنوبية) **2006**
11. Workshop, DamYang Resort, **Gwangju, South Korea**.,15-16 Jan. **2007**.
ورشة عمل (كوريا الجنوبية) **2007**
12. The 3rd SPIE International Symposium on Advanced Optical Manufacturing and Testing Technology (AOMATT07, Chengdu, China, July, 8-11,**2007**.
حول التصنيع البصري المتقدم SPIE الندوة الدولية الثالثة وتكنولوجيا الاختبار (الصين) **2007**
13. The 10th Asia Pacific Physics Conference (APPC10), **Pohang, South Korea**,August 21-24, **2007**.
المؤتمر العاشر لآسيا والمحيط الهادئ للفيزياء (كوريا الجنوبية) **2007**
14. ***Invited speaker*** International Workshop on Nano Materials and Optoelectronic Devices" **Chonnam National University, South Korea**, 5 Oct. **2007**.
متحدث المدعو لورشة عمل دولية حول المواد النانوية والأجهزة الإلكترونية الضوئية (كوريا الجنوبية) **2007**
15. International Workshop on Electronic Coherence and Correlations School of Environmental Science and Engineering, POSTECH, **Pohang, South Korea**, November 29 -December 01, **2007**.
ورشة عمل دولية حو والترابط الإلكتروني (كوريا الجنوبية) **2007**
16. The 5th INTERNATIONAL CONFERENCE on ADVANCED MATERIALS and DEVICES ICAMD **2007**,Jeju, **South Korea**, December 12-14,**2007**.
المؤتمر الدولي الخامس للمواد والأجهزة المتقدمة (كوريا الجنوبية) **2007**
17. Optical Society of Korea (OSK), Summer Meeting,Phoenix Park, **Bongpyeong, South Korea**, July 10-11,**2008**.
اجتماع صيفي بالجمعية البصريه الكورية (كوريا الجنوبية) **2008**
18. The Fifth International Summer School,CFN, **Bad Herrenalb ,Germany**, 21-25 Aug.**2008** ,
CFN المدرسة الصيفية الدولية الخامسة (كوريا الجنوبية) **2008**
19. International Workshop "Nonequilibrium Nano structures",Max Plank Institute(MPIPKS), **Dresden, Germany**, December 01-06,**2008**.
ورشة العمل الدولية "الهياكل النانوية غير المتزنة" معهد ماكس بلانك (المانيا) **2008**
20. International Workshop "e-learning and Physics (Tempus Project)" ,**Aachen University, Aachen, Germany**, July 05-12,**2009**.
ورشة العمل الدولية "التعلم الإلكتروني والفيزياء (المانيا) **2009**

21. International conference of metamaterials "Meta10", **Cairo, Egypt**, February 22-25, **2010**.
المؤتمر الدولي للمواد الخارقة (مصر) **2010**
22. International conference of Nanotechnology for Society Development, **Beni-Suef University**, Faculty of Sciences, Egypt May **2010**.
المؤتمر الدولي لتقنية النانو لتنمية المجتمع (بنى سويف) **2010**
23. French-Syrian International conference of renewable energy, Damascus University, **Damascus, Syria**, 24-28 Oct. **2010**.
المؤتمر الدولي الفرنسي السوري للطاقة المتجددة (سوريا) **2010**
24. The International Conference on the advancement of Materials and Nanotechnology (ICAMN) , **Kuala Lumpur, Malaysia**, 29th Nov.- 1st Dec. **2010**.
المؤتمر الدولي حول تطوير المواد وتكنولوجيا النانو (ماليزيا) **2010**
25. The International Conference on Nanotechnology, Optoelectronics and Photonics, (ICNOP), **Penang, Malaysia**, February 22-24, **2011**.
المؤتمر الدولي لتكنولوجيا النانو والإلكترونيات الضوئية والضوئيات (ماليزيا) **2011**
26. *Organizer* THE XXIX INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, 03 - 06 October, **Sharm El- Shiekh** , Egypt, **2011**.
منظم المؤتمر الدولي التاسع والعشرون لعلوم الجوامد وفيزياء المواد (شرم الشيخ) **2011**
27. Progress In Electromagnetics Research Symposium Proceedings (PIERS), **Kuala Lumpur, Malaysia**, March 27-30, 1043, **2012**.
التقدم في إجراءات الندوة البحثية الكهرومغناطيسية (ماليزيا) **2012**
28. *Organizer*THE XXX INTERNATIONAL CONFERENCE ON Solid State Science And Materials Physics, Eg-MRS, 25-28 November, **Marsa Alam, Egypt**, **2012**.
منظم المؤتمر الدولي الثلاثين لعلوم الجوامد وفيزياء المواد (ماليزيا) **2012**
29. *Organizer* Phononics 2013, The 2nd International Conference on Phononic Crystals/Metamaterials, Phonon Transport and Optomechanics. **Sharm El-Sheikh, Egypt**, June .**2013**.
منظم المؤتمر الدولي الثاني الصوتيات 2013 حول البلورات الصوتية / المواد المعدنية، نقل الفونون والميكانيكا البصرية (شرم الشيخ) **2013**
30. *Organizer*The XXXI INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, 6-9 Jan. **Hurghada, Egypt**, **2015**.
منظم المؤتمر الدولي الحادي والثلاثون لعلوم الجوامد وفيزياء المواد (الغردقة) **2015**
31. Phononics 2015, THE 3rd International Conference on Phononic Crystals/Metamaterials, Phonon Transport and Optomechanics, **Paris, France**, May 31-5 June, **2015**.
32. الصوتيات 2015 ، المؤتمر الدولي الثالث حول البلورات الصوتية / المواد الفوقية ونقل الفونون والميكانيكا البصرية (فرنسا) **2015**
32. *Organizer*The 32 INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, **Aswan-Luxor, Egypt**, Jan., **2016**.
منظم المؤتمر الدولي الثاني والثلاثون لعلوم الحالة الصلبة وفيزياء المواد (اسوان- الأقصر) **2016**
33. *Chirman*The 1st International Conferences "Egy Nanophotonics and Nanophononics" ENPPC#1, **Hurghada, Egypt**, 10-13 Aug. **2016**.
رئيس المؤتمر الدولي الأول للنانو فوتونك (الغردقة) **2016**
34. *Chirman*The 2nd International Conferences "Egy Nanophotonics and Nanophononics" ENPPC#2, **Sharm El-Shiekh , Egypt**, 10-13 September. **2017**.
رئيس المؤتمر الدولي الثاني للنانو فوتونك (شرم الشيخ) **2017**
35. *Chirman*The 3rd International Conferences "Egy Nanophotonics and Nanophononics" ENPPC#3, **Hurghada, Egypt**, 26-29 September, **2018**
رئيس المؤتمر الثالث الأول للنانو فوتونك (الغردقة) **2018**
36. *Chirman*The 33 INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, **Hurghada, Egypt**, Nov., **2019**.
رئيس المؤتمر الدولي الثالث والثلاثون لعلوم الحالة الصلبة وفيزياء المواد (الغردقة) **2019**
37. **Chirman*** the one-day seminar "Material sciences and energy applications" 26-2-**2020**, Eg-MRS in cooperation with NRIAG., **Helwan, Egypt**.
رئيس الندوة ليوم واحد "علوم المواد وتطبيقات الطاقة (حلوان) **2020**
38. *Chirman*The 34th INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, in cooperation with NRC, BUE, **Online, Cairo, Egypt**, 29-30-Aug., **2020**.
رئيس المؤتمر الدولي الرابع والثلاثون لعلوم الحالة الصلبة وفيزياء المواد عبر برنامج زوم (القاهرة) **2020**
- 39.
40. *Chairman*” V-Laser2021, Laser, Optics and Photonics Virtual, 5-6 April **2021** <https://www.sciwideonline.com/v-laser2021/>
رئيس المؤتمر الدولي لليزر والبصريات اونلاين من 5- 6 ابريل **2021** + المحاضره افتتاحيه

41. ***Chirman***The 35th INTERNATIONAL CONFERENCE ON Solid State Science and Materials Physics, Eg-MRS, **Online, Cairo, Egypt**, 3-4, **July, 2021**. رئيس المؤتمر الدولي الرابع والثلاثون لعلوم الحالة الصلبة وفيزياء المواد عبر برنامج زوم (القاهرة 2021)
42. **Keynote presentation on "Photonic Crystals Umbrella for Thermal Desalination: Simulation Study"** at the Global Webinar on Laser, Optics and Photonics held during September 25-26, 2021.

JOURNALS EDITOR BOARD محرر في مجلات دولية

1. International journal of Nanoelectronics and Materials.
2. Composite Materials Research
3. Current Nanotoxicity and Prevention
4. The American Publishing House
5. Beni-Suef University Journal of Basic and Applied Sciences

JOURNALS REVIEWER مراجع معتمد في مجلات دولية متميزة

1. IEEE, Quantum Electronics, selected topics.
2. IEEE, Sensors
3. Materials Chemistry and Physics
4. Journal of Applied Physics
5. Journal of Electromagnetic Waves and Applications
6. PIERS
7. European Journal of Engineering research and Science
8. SPIE
9. Journal of photonics for energy (JPE)
10. Optica Applicata
11. International journal of modern physics B
12. Drug Delivery journal
13. Physica E: Low-dimensional Systems and Nanostructures
14. Indian Journal of Physics
15. ACS Applied Materials & Interfaces
16. Physica B
17. Journal of King Saud University - Science
18. Physica C
19. Beni-Suef University Journal of Basic and Applied Sciences
20. Microelectronics engineering
21. Journal of superconductivity and novel magnetism
22. Silicon journal
23. Optoelectronics and Advanced Materials
24. Journal of Materials Sciences
25. Microwave and Optical Technology Letters
26. Rapid Communications (OAM-RC)
27. Journal of Physics and Chemistry of Solids
28. Results in Physics Journal
29. IEEE Transactions on Plasma Science
30. Energies-MDPI
31. International Journal of Mechanical Sciences
32. Crystals-MDPI
33. Journal of Magnetism and Magnetic Materials
34. Measurement Journal
35. Advances in Nano Research, An International Journal
36. Sensor journal
37. Nanomaterials-MDPI
38. Scientific reports (Nature)
39. Materials-MDPI
40. Polymers-MDPI
41. Applied surface science

INTERNATIONAL COOPERATION

التعاون الدولي

1-Prof Zhang Pengming

School of Physics,
Sun Yat-sen University, Zhuhai 519082, **China**
E-mail: zhangpm5@mail.sysu.edu.cn

2- Prof. Eugene B. Yakimov

Institute of Microelectronics Technology and
High Purity Materials Russian Academy of Science
Chernogolovka, Moscow distr.,142432, **Russia**
E-mail: yakimov@iptm.ru

3- Prof Thomas F. Krauss

York University, UK
E-mail: thomas.krauss@york.ac.uk

4- Prof. Dr. Abdelkrim Khelif

Directeur de Recherche CNRS
Département Micro-Nano Sciences et Systèmes
Institut Femto-st 15B av des Montboucons, 25033 Besançon, **France**
E-mail: abdelkrim.khelif@femto-st.fr

5-Prof Ihab El-Kady

Principal Member of Technical Staff
Sandia National Laboratories
Associate Professor, Electrical and Computer Engineering
University of New Mexico, **USA**
Email: ielkady@sandia.gov

6-Prof. Mahi Singh

Physics and Astronomy Rm. 116
The university of western Ontario, **Canada**
E-mail: msingh@uwo.ca

7-Dr.Vigneswaran Dhasarathan

Division of Computational Physics, Institute for Computational Science, Ton Duc Thang
University, Ho Chi Minh City, **Vietnam**

8- Prof Dr. Sulaiman Wadi Harun

Department of Electrical Engineering, University of Malaya,
50603 Kuala Lumpur, **Malaysia**
E-mail: swharun@um.edu.my

Research activity, projects, and recognitions: مشاريع بحثية وتقديرية علمية

1. Obtaining research projects from the Academy of Scientific Research
الحصول على مشاريع بحثية من اكااديمية البحث العلمي
2. Research Projects from STDF and ASRT, 2016,2020 (Science up)
الحصول على مشاريع بحثية من وزارة البحث العلمي وكذلك STDF
3. Helping master's and doctoral students to obtain scholarships to complete their studies
2- مساعدة طلاب الماجستير والدكتوراه للحصول على منح دراسية لاستكمال الدراسة
4. Obtaining the distinguished researcher from Beni-Suef University for 3 continuous years
3- الحصول على الباحث المتميز من جامعة بنى سويف لمدة 3 سنوات متواصلة
5. Obtaining the highest research citations from Beni-Suef University for 3 consecutive years
4- الحصول على اعلى استشهاد بالأبحاث من جامعة بنى سويف لمدة 3 سنوات متتالية
6. Forming a distinguished scientific school in the research fields of interest to the country
5- تكوين مدرسة علمية متميزة فى المجالات البحثية التي تهتم بها الدولة
7. Cooperating with most universities and research centers through my administration for the Egyptian Society for Materials Research in Cairo
6- التعاون مع معظم الجامعات والمراكز البحثية من خلال إدارتي للجمعية المصرية لبحوث المواد بالقاهرة
8. Published more than 180 international scientific papers in the different topics
7- نشر أكثر من 180 بحثا علميا دوليا في مجال علميه ومواضيع اخرى ذات علاقة
9. Supervisor and internal & external examiner for more than 60 master's and doctoral theses - inside and outside Egypt
8- مشرف وممتحن داخلي وخارجي لأكثر من 60 رسالة ماجستير ودكتوراه - داخل وخارج مصر
10. The American Stanford University ranking showed nominal inclusion among 2% of distinguished and influential researchers worldwide in the major in October 2020 as well as 2021.
9- أظهر تصنيف جامعة ستانفورد الأمريكية ادراج أسمي ضمن 2% من الباحثين المميزين والمؤثرين على مستوى العالم فى التخصص فى اكتوبر 2020 وكذلك 2021

ADDITIONAL INFORMATION

معلومات عامة

Computer Skills

- ❑ Computational software: *MATLAB, COMSOL, Mathematica, Essential Macleod*
- ❑ Operating systems: *Windows*
- ❑ Other software: *OpenOffice, L^AT_EX*

مهارات الكمبيوتر

- ❑ برامج حسابية مثل ماتلاب وكومسول و ماثيماتيكا و
- ❑ نظام التشغيل وندوز
- ❑ برامج اخرى مثل اللاتكس والافيس

RESEARCH INFORMATION

المعلومات البحثية

Citations in Scopus:	2169~	عدد استشهادات اسكوبس:
h index (Scopus):	28~	معامل h في اسكوبس:
Total no. of international publications in Scopus:	157~	عدد الأبحاث المنشورة في اسكوبس:
Citations in Google scholar:	2584~	عدد الاستشهادات في اسكولار:
Total no. of international publications in Google scholars:	201~	عدد الأبحاث المنشورة في اسكولار:
h index (Google scholar)	30~	معامل h في اسكولار:

PhD and MSc supervision

اشراف رسائل ماجستير ودكتوراه

MSc thesis

1-Hussien Abdel Rahman	Beni Suef University
2-Ahmed Mehaney	Beni Suef University
3-Walied Sayed Hussien	Beni Suef University
4-Doaa Mohamed Elhadad	Beni Suef University
5-Sherihan Mohamed	Beni Suef University
6-Hassan Sayed Hassan	Beni Suef University
7-Chrestina Malik Elia	Beni Suef University
8-Hussien Abdel Rahman	Beni Suef University
9-Zaky Abel Salam Zaky	Beni Suef University
10-Fatma Abdel Azeem	Beni Suef University
11-Basma Kamal	Benha University
12-Mohamed Ismael	Beni Suef University
13-Walaa Mokhtar	Benha University
14-Asmaa Mohamed	Beni Suef University
15-Fatma Khatieb	Beni Suef University

PhD thesis

1-Nashat Abdel Gwad	Beni Suef University
2-Hussien Abdel Rahman	Beni Suef University
3-Ahmed Mehaney	Beni Suef University
4-Walied Sayed Hussien	Beni Suef University
5-Sherihan Mohamed	Beni Suef University
6-Doaa Mohamed Elhadad	Beni Suef University
7-Hassan Sayed Hassan	Beni Suef University
8-Chrestina Malik Elia	Beni Suef University
9-Aliaa Gamal	Beni Suef University
10-Zaky Abel Salam Zaky	Beni Suef University
11-Fatma Abdel Azeem	Beni Suef University
12- Sharihan Mohamed	Beni Suef University

16-Aiman Ameen	Sohag University
17-Asmaa Mahmoud	Beni Suef University
18-Shimaa Elsheemy	Beni Suef University
19-Shrouk Eid	Beni Suef University
20- Shrihan Ahmed	Beni Suef University
21- Samar Mahmoud	Beni Suef University
22-Sameeha Kotb	Beni Suef University

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- 200-Matar, Z.S.; Al-Dossari, M.; Awasthi, S.K.; Mohamed, D.; Abd El-Gawaad, N.S.; **Aly, A.H.** Conventional Biophotonic Sensing Approach for Sensing and Detection of Normal and Infected Samples Containing Different Blood Components. **Crystals** 2022, 12, 650. <https://doi.org/10.3390/cryst12050650> Q2
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- 198- Malek, C.; Al-Dossari, M.; Awasthi, S.K.; Matar, Z.S.; Abd El-Gawaad, N.S.; Sabra, W.; **Arafa H.Aly**, Employing the Defective Photonic Crystal Composed of Nanocomposite Superconducting Material in Detection of Cancerous Brain Tumors Biosensor: Computational Study. **Crystals** 2022, 12, 540. <https://doi.org/10.3390/cryst12040540> Q2
- 197- Nitu Kumari, Anshu D. Varshney, Suneet K. Awasthi, Laxmi Shiveshwari and **Arafa H. Aly**. Tunable photonic bandgap and reflection phase shift properties of 1D binary photonic crystal consisting of double negative and magnetic cold plasma materials. **Physics of Plasmas** 29,042110(2022);<https://doi.org/10.1063/5.0071898> Q2
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- 195- Shimaa El-Shemy, M. F. Eissa, Hassan Sayed, M.F.Alrakshy, Z. S.Matar & **Arafa H. Aly**, Improving the efficiency counting of Cherenkov detector by using high transmittance photonic crystal materials,accepted for publications in **optical quantum electronics journal** Q2
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- 173- C. Nayak, M. Solaimani, A. Aghajamali, **Arafa H.Aly**, *Acoustic wave frequency filtering in constant total length phononic crystals of Al/Pb multilayer*, **International Journal of Modern Physics B**, Vol. **35**, No. **29 (2021)** 2150300 (11 pages), <https://doi.org/10.1142/S0217979221503008>
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- 163- **Arafa H.Aly**, Suneet K Awasthi, Asmaa M Mohamed, Walied Sabra, M Mobarak, Z.S.Matar and A S Shalaby, *Magnetic field induced multichannel tunable filter properties of photonic band gap materials*, **IOP Conf. Ser.: Mater.**

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- 157- S. Gandhi, S. K. Awasthi and **Arafa H.Aly**, *Biophotonic sensor design using 1D defective annular photonic crystal for the detection of creatinine concentration in blood serum*, **RSC Adv.**, **2021,11**, 26655-26665 <https://doi.org/10.1039/D1RA04166E>
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