

Curriculum Vitae

Omar Hamed Mohamed Abd-Elkader, Dr.

Associated Professor

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Personal information

Name & Last-named: Omar Abd-Elkader

Address (es):

- Electron Microscope Unit, Zoology Department, College of Science, King Saud University, Riyadh 11451, Kingdom of Saudi Arabia.
- Electron Microscope and Thin Films Department, National Research Center (NRC), El-Behooth Street, 12622, Giza, Egypt.

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Nationality: Egyptian.

Date of birth: 01-11-1969.

Gender: Male.

Educational Background

- **PHD 2003**

Solid State Physics, Faculty of Girls for Arts, Science and Education, Ain Shams University, Egypt. Under the Channel System between National Research Center and Bayreuth University. (Germany) as Scholarship from EGYPT (January 2000 -January 2002).

- **MSC 1996**

Solid State Physics, Faculty of Science, Suez Canal University, Egypt.

- **BSC 1991**

Physics, Faculty of Science, Suez Canal University, Egypt.

Languages

Arabic (fluent)

English (speaks, read & write, very good)

German (speaks, read & write good)

Academic Positions:

- **Assistant Professor 2003-2007**

Electron Microscope and Thin Films Department, National Research Center (NRC), Giza, Egypt.

- **Assistant Professor 2007-2012**

Electron Microscope Unit, Zoology Department, College of Science, King Saud University, Riyadh, Kingdom of Saudi Arabia.

- **Associated Professor 2012**

Electron Microscope Unit, Zoology Department, College of Science, King Saud University, Riyadh, Kingdom of Saudi Arabia.

Teaching:

Under graduate 2003 - 2007

Subject	
Atomic Physics	Physics Department, Suez Canal University
Nuclear Physics	Physics Department, Suez Canal University
Thin Films Physics	Physics Department, Suez Canal University
Heat	Physics Department, Suez Canal University
Waves	Physics Department, Suez Canal University
Thermodynamics	Physics Department, Suez Canal University
Spectroscopy	Physics Department, Suez Canal University
Sound and Optics	Physics Department, Suez Canal University
Spectral Physics	Physics Department, Suez Canal University
General Physics	Physics Department, Suez Canal University

2007 – Now

Subject	
262 Zoo Electron Microscopy.	Zoology Department, King Saud University
498 Zoo Electron Microscopy	Zoology Department, King Saud University

Experience Time

- 7 years from 1993 to 2000 Assistant Researcher and Researcher Assistant in Electron Microscope and Thin Films Department, Physics Division, National Research Center, 12311 Dokki, Giza, Egypt.
- 2 years from 2000 to 2002 Member of a government mission in Laboratory of Crystallography, Bayreuth University, Bayreuth, Germany.
- 5 years from 2002 to 2007 Researcher in Electron Microscope and Thin Films Department, Physics Division, National Research Center, 12311 Dokki, Giza, Egypt.
- 4 Years from 2003 to 2007 Faculty member part time in Faculty of science, Physics Department, Suez Canal University, Ismailia, Egypt.
- 10 years from 2007 to up now Associated Prof in Electron Microscope Unit, Zoology Department, College of Science, King Saud University, Riyadh 11451, Kingdom of Saudi Arabia.

Committees

1. **Graduate and Community Service Committee [PI]**
2. **Assigned to work in SEM in Central Laboratory College of Science.**
3. **Assigned to work in Training and Community Service Unit College of Science.**

Conference Attended

1. Fifth National Conference on crystallography and their Applications, Suez, Egypt 27-29 April. 1995.
2. Structural Analysis of a Periodic Crystals. 1-4 March 2000 Bayreuth Germany.
3. 7th Workshop on Powder Diffraction 8-4 October 2000 Bayreuth Germany.
4. 9 Jahrestagung der deutschen Gesllschft fuer Kristallographi (DGK), 12-15 March 2001. Bayreuth Germany.
5. XXIII Conference on Solid State Science and Workshop on Physics and Application potential of functional ceramic thin films, 28 September-2 October 2002, Sharm El-Sheikh: Sinai, Egypt

6. The 3rd Arab Conference on Material science (ACMS-III) 5-9 October 2003, NRC, Cairo-Hurghada, Egypt.
7. XXIV Conference on Solid State Physics and Material Science and Workshop on Photonic Materials and Optoelectronic Devices, 22-26 February 2004 Safaga, Red Sea Egypt.
8. 5th International Conference on Coating on glass ICCG and INM 4 -8 /7/2004, Saarbrucken-Germany.
9. The International Conference for Nanotechnology Industries Riyadh 5-7 April 2009.
10. First workshop DNA Research a Getaway to Knowledge Economy KSU Faculty of Science 22 may 2009.
11. Young Investigators symposium KSU Faculty of Science 8 June 2009.
12. Program Accreditation and Quality Assurance KSU Faculty of Science 15-16 June 2009.
13. Distribution of the toxic Samsun ant in the kingdom of Saudi Arabia and the use of its toxins as natural products in the treatment of breast cancer KSU Faculty of Science 24 -26 May 2010.
14. International Conference on Nano and Materials Science (ICNMS 2011) 26-27 August 2011 Dalian (PR China).
15. International Conference on Fundamental and Applied Sciences (ICFAS 2012) 12th to 14th June 2012 Kuala Lumpur, Malaysia.
16. International Conference on Nanoscience and Nanotechnology. (ICNN 2013) June 20-21, 2013 Istanbul, Turkey.
17. World Symposium on Mechatronics Engineering and Applied Physics (WSMEAP 2016) July 16-18, 2016 Sousse Tunisia.

Workshops

Preparations and equipment in laboratories

Pollution hazards and methods of prevention

Applications on the Scanning Electron microscope.

Applications on the X ray Diffraction

Applications on the XRF

Development of technical and scientific skills for laboratory technicians

Training and Community Service Unit 2016-2017

Training and Community Service Unit 2016-2017

Training and Community Service Unit 2016-2017

Training and Community Service Unit 2016-2017

Training and Community Service Unit 2016-2017

Training and Community Service Unit 2016-2017

Publications

1. S.Mahmoud, A.H.Eid, and H.Omar
Fizika A6 (3), 111(1996). **ISI**
2. S.Mahmoud, and H.Omar
Renewable Energy 24, 575-580 (2001).
3. S.Mahmoud, A.H.Eid, and H.Omar **ISI**
Fizika A10 (1), 21(2001).
4. H.Omar, S.Mahmoud , and S.Van Smallen
9Jahrestagung der deutschen Gesellschft fuer Kristallographi (DGK), 12- 15 March 2001. Bayreuth Germany.
5. S.Mahmoud and H.Omar
XXIII Conference on Solid State Science and Workshop on Physics and Application potential of functional ceramic thin films, 28 September-2 October (2002), Sharm El-Sheikh: Sinai, Egypt.
6. S.Mahmoud, M.A.Kenawy, S.van Smallen, M.Wuttig and H.Omar.
The 3rd Arab Conference on Material science (ACMS-III) 5-9 October (2003), NRC, Cairo-Hurghada, Egypt.
7. S.Mahmoud, M.A.Kenawy and H.Omar
XXIV Conference on Solid State Physics and Material Science and Workshop on Photonic Materials and Optoelectronic Devices, 22-26 February (2004) Safaga, Red Sea Egypt.
8. S. Mahmoud, and H.Omar
5th International Conference on Coating on glass ICCG and INM 4 -8 /7/ (2004), Saarbrucken-Germany.
9. S.Mahmoud, and H.Omar
8th Arab international conference on polymer science and technology 27-30 November (2005), Cairo -Sharm Elshiekh, Egypt.
10. S.Mahmoud, and H. Omar
ICCG 2007, XXI international Congress on glass Strasbourg France July 2-6 (2007).
11. Siham M. Salim and H. Omar
Journal of Applied Sciences Research, 4(3): 303-310, (2008).
12. N.Y. Mostafa, H. Omar, S.A. Abo-El-Enein.
Sil. Ind., 73 (7-8), pp 117-123 (2008). **ISI**.
13. N.Y. Mostafa, Omar. H. Abd Elkader and F. M. Hassan
Sintering behavior and thermal stability of Na^+ , SiO_4^{4-} and CO_3^{2-} co-substituted hydroxyapatites, Egyptian Journal of Applied Sciences, (23(7), 101-115 ((2008). **ISI**.
14. N.Y. Mostafa, Omar. H. Abd Elkader and F. M. Hassan
Synthesis and characterization of multi-substituted hydroxyapatite powders at physiological temperature, Egyptian Journal of Applied Sciences, 23(7), 116-127 (2008).
15. N.Y. Mostafa, A.A. Shaltout, H. Omar, S.A. Abo-Elnein.
Journal of Alloys and Compounds 467 issue 1-2 7 January 332–337, (2009). **ISI** (Impact Fact 2.726) .
16. A.H. Eid, S.M. Salim, M.B. Sedik, H. Omar Abd Elkader, T. Dahy, and H.M. Abou_elkhair
" Preparation and Characterization of ZnS Thin Films" Journal of Applied Sciences Research, 6(6): 777-784, (2010).

17. Nasser Y. Mostafa, Hassan M. Hassan and **Omar H. Abd Elkader**
J. Am. Ceram. Soc., 94 [5] 1584–1590 (2011). **ISI** (Impact Factor 2.428)
18. **Omar H. Abd Elkader**
'Structural and Optical Properties of Nanostructured Bismuth Sulfide - Lead Sulfide Thin Films with Variable Compositions'
International Conference on Nano and Materials Science (ICNMS 2011)
Dalian, China. August 26-27, (2011).
19. Ismail Warad, **Omar Abd-Elkader H**, Saud Al-Resayes, Ahmad Husein, Mohammed Al-Nuri, Ahmed Boshala, Nabil Al-Zaqri and Taibi Ben Hadda .
International Journal of Molecular Sciences, 13, 6279-6291, 2012 **ISI**(Impact Factor 2.339).
20. **Omar H. Abd Elkader**
Preparation and Characterization of Nanostructured Zinc Oxide Thin Films.
International Conference on Fundamental and Applied Sciences (ICFAS 2012) 12th to 14th June 2012 Kuala Lumpur, Malaysia. **ISI**
21. Nasser Y. Mustafa., Z.I. Zaki, and **Omar H. Abd Elkader**
Chemical activation of calcium aluminate cement composites cured at elevated temperature.
Cement & Concrete Composites 34 (2012) 1187–1193. **ISI** (Impact Factor 2.760)
22. Ismail Warad , **Omar H Abd-Elkader** ,Ahmed Boshala , Nabil Al-Zaqri , Belkheir Hammouti and Taibi Ben Hadda Synthesis, spectral, thermal, and a crystalline structure of complexes containing [MeC(CH₂PPh₂)₃Cu(I)] Res Chem Intermed (2013) 39:721–732.**ISI**(Impact Factor 0.880)
23. **Omar H. Abd-Elkader** and N. M. Deraz "Synthesis and Characterization of New Copper based Nanocomposite" Int. J. Electrochem. Sci., 8 (2013) 8614 – 8622. **ISI** (Impact Factor 3.729)
24. N. M. Deraz and **Omar H. Abd-Elkader** " Effects of Magnesia Content on Spinel Magnesium Ferrite Formation" Int. J. Electrochem. Sci., 8 (2013) 8632 – 8644. **ISI** (Impact Factor 3.729)
25. N. M. Deraz and **Omar H. Abd-Elkader** " Investigation of Magnesium Ferrite Spinel Solid Solution with Iron-Rich Composition." Int. J. Electrochem. Sci., 8 (2013) 9071 – 9081. **ISI** (Impact Factor 3.729)
26. N. M. Deraz and **Omar H. Abd-Elkader** " Synthesis and Characterization of Nanocrystalline Bixbyite- Hopcalite Solids ." Int. J. Electrochem. Sci., 8 (2013) 10112 -10120 **ISI** (Impact Factor 3.729)
27. **Omar H. Abd-Elkader** " Preparation and Characterization of Nanoscale Cadmium Sulfide (CdS) Thin Films." International Conference on Nanoscience and Nanotechnology. Istanbul, Turkey **June 20-21, 2013**. World Academy of Science, Engineering and Technology(78) - -1809 1806(2013).
28. N. M. Deraz and **Omar H. Abd-Elkader** " Preparation and Characterization of Nano-magnetic Ni_{0.5}Mg_{0.5}Fe₂O₄ System for Biological Applications ." Journal of Pure and Applied Microbiology, Nov. 2013. Vol. 7(Spl. Edn.), p. 333-339. **ISI** (Impact Factor 0.054)
29. N. M. Deraz and **Omar H. Abd-Elkader** " Environmentally Evaluation for Desulfurization of Gas Oil with [BMIM][FeCl₄] based on Catalytic Ionic Liquids at Room Temperature ." Journal of Pure and Applied Microbiology, Nov. 2013. Vol. 7(Spl. Edn.), p. 387-393. **ISI** (Impact Factor 0.054)
30. N. M. Deraz and **Omar H. Abd-Elkader** " Preparation and Characterization of Magnesium

- Ferrite/Magnetite Nanocomposite Based Antimicrobial Material ." Journal of Pure and Applied Microbiology, Nov. 2013. Vol. 7(Spl. Edn.), p. 489-494. **ISI** (Impact Factor 0.054)
31. **Omar H. Abd-Elkader** and N. M. Deraz " Preparation and Characterization of Nanostructured Lillianite Thin Films ." Life Science Journal 2013;10(4), p. 1570-1574. **ISI** (Impact Factor 0.165)
 32. Naglaa F. El-Orabi ; **Omar H. Abd-Elkader**, Dean D. Schwartz " Differential Expression of Hippocampal Genes under Heat Stress." International Journal of Pharmacology 2013; **ISI** (Impact Factor 1.202).
 33. Heiba, Z. K.; Mostafa, Nasser Y.; and **Abd-Elkader, Omar H** "Structural and magnetic properties correlated with cation distribution of Mo-substituted cobalt ferrite nanoparticles" JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 368 Pages: 246-251 Published: NOV 2014 **ISI** (Impact Factor 2.002).
 34. N. M. Deraz and **Omar H. Abd-Elkader** "Processing and characterization of nano-magnetic Co_{0.5}Ni_{0.5}Fe₂O₄ system" JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: 20 Issue: 5 Pages: 3251-3255 Published: SEP 25 2014 **ISI** (2.063).
 35. Hemeda, Mostafa, NY, **Abd Elkader, Omar H**, and Ahmed, MA "Solubility limits in Mn-Mg ferrites system under hydrothermal conditions" JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 364 Pages: 39-46 Published: SEP 2014. **ISI** (Impact Factor 2.002).
 36. Barakal, I. A. H.; Al-Himaidi, A. R.; and **Abd-Elkader, Omar. H.** " CHARACTERIZATION OF IMMATURE SHEEP OOCYTES AND ZONA PELLUCIDA MORPHOLOGY USING SCANNING ELECTRON MICROSCOPE (SEM)" INDIAN JOURNAL OF ANIMAL RESEARCH Volume: 48 Issue: 4 Pages: 370-374 Published: AUG 2014. **ISI** (Impact Factor 0.032).
 37. Deraz, NM (Deraz, N. M.) ; **Abd-Elkader, Omar H** ; Selim, MM ; El-Shafey, O ; and El-Asmy, AA " Preparation of Nano-Crystalline ZnMn₂O₄ System by Sol-Gel Route" ASIAN JOURNAL OF CHEMISTRY Volume: 26 Issue: 7 Pages: 2125-2128 Part: A Published: APR 2014. . **ISI** (Impact Factor 0.355).
 38. Deraz, N. M.; **Abd-Elkader, Omar H.** "Effects of Precursor on Preparation and Properties of Nano-Crystalline Hopcalite Particles "ASIAN JOURNAL OF CHEMISTRY Volume: 26 Issue: 7 Pages: 2133-2137 Part: A Published: APR 2014. **ISI** (Impact Factor 0.355).
 39. Deraz, N. M.; **Abd-Elkader, Omar H** " Synthesis and Characterization of FeO/Ni_{0.5}Mn_{0.5}Fe₂O₄ Nano-Composite" ASIAN JOURNAL OF CHEMISTRY Volume: 26 Issue: 7 Pages: 2141-2146 Part: A Published: APR 2014. **ISI** (Impact Factor 0.355)
 40. Mansour, L; Harrath, AH ; **Abd-Elkader, Omar H** ; Alwasel, S ; Abdel-Baki, AAS ; and Al Omar, SY " Structural and molecular characterization of Kudoa quraishii n. sp from the trunk muscle of the Indian mackerel Rastrelliger kanagurta (Perciforme, Scombridae) in Saudi Arabia coasts" PARASITOLOGY RESEARCH Volume: 113 Issue: 4 Pages: 1361-1370 Published: APR 2014. **ISI** (Impact Factor 2.327).
 41. Deraz, N. M.; **Abd-Elkader, Omar H.** "Synthesis and characterization of nanomagnetic COFe₂O₄/PEVA composites" JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS Volume: 106 Pages: 21-25 Published: MAR 2014. **ISI** (Impact Factor 3.070).

42. Deraz, N. M.; **Abd-Elkader, Omar H.** " Production and characterization of nano-magnetic Ni_{0.5}Zn_{0.5}Fe₂O₄ spinel solid solution" JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS Volume: 106 Pages: 171-176 Published: MAR 2014. ISI (Impact Factor 3.070).
43. **Abd-Elkader, Omar H.**; Deraz, N. M " Structural and Optical Properties of Nanoscale Galinobisuitite Thin Films" INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES Volume: 15 Issue: 2 Pages: 1842-1851 Published: FEB 2014. **ISI** (Impact Factor 2.339).
44. **Omar H.Abd-Elkader**, Abdallah A. Shaltout "Characterization and antibacterial capabilities of nanocrystalline CdS thin films prepared by chemical bath deposition" Materials Science in Semiconductor Processing 35(2015)132–138 **ISI** (Impact Factor 1.761)
45. Deraz, N. M.; **Abd-Elkader, Omar H.** " Structural, Morphological and Magnetic Properties of Zn_{0.5}Mg_{0.5}Fe₂O₄ as Anticorrosion Pigment" INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE Volume: 10 Issue: 9 Pages: 7138-7146 Published: SEP 2015. ISI (Impact Factor 1.70).
46. Deraz, N. M.; **Abd-Elkader, Omar H.** " Fabrication and Characterization of ZnFe₂O₄/ZnO Based Anticorrosion Pigments" INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE Volume: 10 Issue: 9 Pages: 7103-7110 Published: SEP 2015. ISI (Impact Factor 1.70).
47. Hemeda, OM ; Mostafa, NY ; **Abd Elkader, OH** ; Hemeda, DM ;Tawfik, A ; Mostafa, M " Electrical and morphological properties of magnetocaloric nano ZnNi ferrite" JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 394 Pages: 96-104 Published: NOV 15 2015. ISI (Impact Factor 2.002).
48. M. Mansour, I. Warad, G. Saffarini, R. Salghi, S. Jodeh, A. Sawafta, **O. Abd-Elkader** " Evaluation of U238 and Th232 radionuclide activities in kidney gallstone belonging to cancer patient compared with normal one by γ-ray spectrometry and EDS" J. Mater. Environ. Sci. 6 (10) (2015) 2717-2721.
49. Hessien, M. M.; Mostafa, Nasser Y.; **Abd-Elkader, Omar H** " Influence of carboxylic acid type on microstructure and magnetic properties of polymeric complex sol-gel driven NiFe₂O₄" JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 398 Pages: 109-115 Published: JAN 15 2016. ISI (Impact Factor 2.002).
50. Mohamed A Yassin,, Abdallah M Elgorban, Abd El-Rahim M A El-Samawaty, **Omar H Abd-Elkader**, Shaban R M Sayed (AN ECO-FRIENDLY APPROACH FOR FABRICATION OF SILVER NANOPARTICLES USING Aspergillus clavatus.) Fresenius Environmental Bulletin Volume 25 – No. 12a/2016, pages 5929-5934.[Q4
51. Abdallah A. Shaltout · **Omar H. Abd-Elkader** "Levels of Trace Elements in Black Teas Commercialized in Saudi Arabia Using Inductively Coupled Plasma Mass Spectrometry" DOI 10.1007/s12011-016-0728-x May 2016 · BIOLOGICAL TRACE ELEMENT RESEARCH. ISI (Impact Factor 1.748).
52. Mohamed A. Yassin, Abd El-Rahim M.A. El-Samawaty, Turki M. Dawoud ,**Omar H. Abd-Elkader**, Khalid S. Al Maary, Ashraf A. Hatamleh Abdallah M. Elgorban (Characterization and anti-Aspergillus flavus impact of nanoparticles synthesized by Penicillium citrinum) Saudi Journal of Biological Sciences (2017) 24, 1243–1248.[Q2].

53. Abdallah M. Elgorban, Abd El Rahim M. El Samawaty, **Omar H. Abd Elkader**, Mohamed A. Yassin, Shaban R. M. Sayed, Mujeeb vKhan, Syed Farooq Adil (Bioengineered silver nanoparticles using *Curvularia pallescens* and its fungicidal activity against *Cladosporium fulvum*) Saudi Journal of Biological Sciences (2017) 24, 1522–1528. [Q2]
54. Emad M Abdlehady Ahmed and **Omar H. Abd-Elkader** (Physical Properties of Tin Base Melt Spun and Composite Solder Alloys) International Journal of Applied Engineering Research ISSN 0973-4562 Volume 12, Number 19 (2017) pp. 8817-8823.
55. Gaber A M Mersal, Nasser Y Mostafa and **Abd-Elkader H Omar** (Hydrothermal synthesis and processing of hydrogen titanate nanotubes for nicotine electrochemical sensing) Mater. Res. Express 4 (2017) 085031. [Q3].
56. Abdallah A. Shaltout , Sameh I. Ahmed , Salwa D. Abayazeed, Atef El-Taher , **Omar H. Abd-Elkader**. (Quantitative elemental analysis and natural radioactivity levels of mud and salt collected from the Dead Sea, Jordan) Microchemical Journal 133 (2017) 352–357. [Q1]
57. Mohamed A Yassin, Abd El-Rahim M A El-Samawaty, **Omar H Abd-Elkader**, Abdallah M Elgorban, Shaban R M Sayed (BIO-SYNTHESIS OF ANTIFUNGAL ACTIVE SILVER NANOPARTICLES USING SORGHUM GRAINCONTAMINANT *Phoma leveillei*) Fresenius Environmental Bulletin 2017, 1447-1452. [Q4]
58. Prabhakarn Arunachalam, Mohamed A Ghanem, Abdullah M Al-Mayouf, Matar Al-shalwi, and **Omar Hamed Abd-Elkader**. (Microwave assisted synthesis and characterization of Ni/NiO nanoparticles as electrocatalyst for methanol oxidation in alkaline solution) Mater. Res. Express 4 (2017) 025035.[Q3]
59. Shams Tabrez Khan, Merajuddin Khan, Javed Ahmad, Rizwan Wahab, **Omar H. Abd-Elkader**, Javed Musarrat, Hamad Z. Alkhathlan* and Abdulaziz A. Al-Kedhairy (Thymol and carvacrol induce autolysis, stress, growth inhibition and reduce the biofilm formation by *Streptococcus mutans*) AMB Express. 2017 Dec;7(1):49. [Q3]
60. Shams T. Khan, Ajmaluddin Malik, Rizwan Wahab, **Omar H Abd-Elkader**, Maqsood Ahmed, Javed Ahmed, Javed Musarrat, Maqsood A. Siddiqui, Abdulaziz A. Al-Kedhairy (SYNTHESIS AND CHARACTERIZATION OF SOME ABUNDANT NANOPARTICLES, THEIR ANTIMICROBIAL AND ENZYME INHIBITION ACTIVITY) Acta Microbiol Immunol Hung. 2017 Jun 1;64(2):203-216.[Q4].
- 61.

Omar Abd Elkader