

CURRICULUM VITAE

Prof. Dr. Enas Hassan Elkhawas

Professor of Physics



PERSONAL INFORMATION

Name : Enas Hassan Elkhawas.
Date of Birth : November 12, 1960.
Nationality : Egyptian.
The Rank : Professor of Physics.
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CONTACT INFORMATION

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Scopus:

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Research Gate:

<https://www.researchgate.net/profile/E-El-Khawas>

Google Scholar:

<https://scholar.google.com/citations?user=dVA5Lv0AAAAJ&hl=ar>

TRAINING COURSES

- National Authority for Quality, Assurance and Accreditation of Education (30 May-3June 2010)
- International Publishing of Research (12-14/2/2011).
- International Training Academy of Project Management Diploma (1Jan2013).
- International Training Academy of Human Resource (1Feb 2013).
- Certification of Completion of Public Speaking (29,30March 2013).
- International Training Academy of Marketing(1 March 2013).

- Al-naser Training Academy (Mini Master of Business Administration) May 2013.
- Training Course in (Strategic Planning (28-30/5/2013)
- Training Course in (Crisis and disaster management 29/4/2014)
- Training Course in (Design and evaluation of exam paper 30/4/2014)
- Training Course in (Effective Teaching Skills 10/6/2018)
- Training Course in (Quality Standards in Teaching 14/8/2018)
- Training Course in (Use of Technology in Teaching 16/8/2018)
- Training Course in (The Credit Hour Systems 19/8/2018)

TEACHING COURSES

- Physics (1).
- Physics (2).
- Physics (C).
- Quantum Physics.
- Electronic system and circuits.

TRAINING EXPERIENCE

- Material Science lab (M.S.L), Faculty of Science, Cairo University.
- Nano materials different preparation.
- Magnetic susceptibility measurement and analysis.
- Electrical measurements, Electric field and scientific analysis in using the materials in application science and different fields of industrial application.
- Using the Magnetic and Electric field as a tool to develop the structure of the ferrite compound.
- Microstructure and Mechanical behavior associated with alloying used in electronic circuits.
- Electron microscope Scanning and Transmission.
- Quality course in intelligent learning outcome. (Higher Technological Institute (HTI)).

International research (Ain Shamise University)

EMPLOYMENT HISTORY

Acting Dean (2/4/2024 – 5/2/ 2025)	Higher Technological Institute, Six of October City, October, Giza, Egypt.
Head of Depart. (2018 – Now)	Department of Basic Science, Higher Technological Institute, Six of October City, October, Giza, Egypt.
Professor (2020 – Now)	Department of Basic Science, Higher Technological Institute, Six of October City, October, Giza, Egypt.
Associated Prof. (2014-2020)	Department of Basic Science, Higher Technological Institute, Tenth of Ramadan City, Six of October City Branch, October, Giza, Egypt.
Assist. Prof. (1998- 2014)	Department of Basic Science, Higher Technological Institute, Tenth of Ramadan City, Six of October City Branch, October, Giza, Egypt.
Assist. Prof. (2006-2007)	King Saudi University, El-Kharg, Faculty of Education.
Assist. Prof. (1999-2006)	Faculty of Education in Ryade, Saudi Arabian
Researcher (1989-1998)	Faculty of Science, Cairo University, Egypt
Bachelor of Science, 1982.	Department of physics, Faculty of Science, Cairo University, Egypt

LIST OF PUBLICATIONS

- 1- Tunable filter based on one-dimensional photonic crystal including nanocomposite material. Hatem H. Rashwan, Samia I. Mostafa, Enas H. El-Khawas, and Sahar A. El-Naggar THE EUROPEAN PHYSICAL JOURNAL D (2022), <https://doi.org/10.1140/epjd/s10053-022-00373-y>.
- 2- Structural, magnetic and dielectric properties of reduced graphene oxide/ $\text{La}_{0.9}\text{Bi}_{0.1}\text{FeO}_3$ nanocomposites. E.H. El-Khawas , A.A. Azab , A.M. Mansour. **Materials Chemistry and Physics** 241 (2020) 122335
- 3- Comprehensives study of structural, magnetic and dielectric properties of borate/ Fe_3O_4 glass nanocomposites. T.A. Taha, A.A. Azab, E. H. El-Khawas. **Journal of ELECTRONIC MATERIALS**, Vol. 49, No. 2, : 1161-1166, (2020)
- 4- “Enhancing the Ferroelectric Coupling of Multifunctional Spinel Perovskite Composite” A.A. Azab, E.H. EL-Khawas, M.H. Abdellatif. **Journal of ELECTRONIC MATERIALS**, (2019) Vol. 48, No. 10, 6460-6469.
- 5- “The Effect of the Interface on Magnetic Properties of Perovskite-Spinel Nanocomposites” E.H. EL-Khawas. **Arab J. Nucl. Sci. Appl.**, Vol. 52, 3, 232-241 (2019).
- 6- “Impact of Sb additives on solidification performance, microstructure enhancement and tensile characteristics of Sn-6.5Zn-0.3Cu Pb-free solder alloy”. E. A. Eid, E. H. El-Khawas, Ashraf S. Abd-Elrahman.. **Journal of Materials Science: Materials in Electronics** (2019) 30:6507–6518
- 7- Change aspects of microstructure and mechanical behavior of Bi and Zn-doped Sn-0.5Cu solders for microelectronic applications. A. A. Ibrahim¹, E. H. El-Khawas, A. A. El-Daly. **J Mater Sci: Mater Electron** (2017) 28:1060–1069.
- 8- Electrical resistivity and creep behavior of hypoeutectic Sn-0.5Cu based solders for flipchip technology E. H. El-Khawas, H. El-Hosainy & A. A. El-Dal. **J Mater Sci: Mater Electron** (2017) 28:12176-12183.

- 9- Characterization and transport properties of mixed ferrite system $Mn_{1-x}Cu_xFe_2O_4$; $0.0 \leq x \leq 0.7$ M. A. Ahmed, A. A. Azab, E. H. El-Khawas, E. Abd El Bast. *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry* (2016)46(3):376-384.
- 10- Structural, magnetic and electrical properties of Bi doped $LaFeO_3$ nanocrystals, synthesized by auto-combustion method. M. A. Ahmed, A. A. Azab, E. H. El-Khawas *J Mater Sci: Mater Electron* (2015) 26 (11):8765-8773
- 11- Structural, magnetic and electrical properties of Bi doped $LaFeO_3$ nano -crystals, synthesized by auto-combustion method. *J Mater Sci: Mater Electron*, DOI 10.1007/s10854-015-3556-4, August 2015, M. A. Ahmed, A. A. Azab, **E. H. El-Khawas**.
- 12- Characterization and transport properties of mixed ferrite system $Mn_{1-x}Cu_xFe_2O_4$; $0.0 \leq x \leq 0.7$, M. A. Ahmed, A. A. Azab, **E. H. El-Khawas** & E. Abd El Bast. April 2015,
- 13- Controlling the magnetic characters co-existing at the novel nanostructured multiferroic $PrAl_xFe_{1-x}O_3$; $0.0 \leq x \leq 0.6$ via an exchange bias interaction to open a new era of applications Rasha M. Khafagy , E. H. El-khawas. *J.Alloy.Comp.*(2014) 288-297.
- 14- Controlling the magnetic characters co-existing at the novel nanostructured multiferroic $PrAl_xFe_{1-x}O_3$; $0.0 \leq x \leq 0.6$ via an exchange bias interaction to open a new era of applications. Rasha M. Khafagy, **E. H. El-khawas**. *Journal of Alloys and Compounds* 606 (2014) 288–297.
- 15- Exchange Bias, Mössbauer and Magnetic Studies of Mixed Oxide System $(1-x) MgO + (x)TiO_2 + (2-2x)Fe_2O_3 + (0.05) Gd_2O_3$ ($0.1 \leq x \leq 0.9$), *International Journal of Scientific & Engineering Research*, Volume 4, Issue 7, July-2013 ISSN 2229-5518. E. H. El-khawas , S.I.El-Dek.
- 16- Synthesis and Magnetic anomalies of Copper Manganese ferrite $Mn_{1-x}Cu_xFe_2O_4$ ($0.0 \leq x \leq 0.7$) has been accepted based on the recommendation of two referees and will be published in Vol. 9(3) March (2013) *Journal of Applied Sciences Research (SJRS*)* 0.029) A. Azab and **E.H.El-Khawas**
- 17- Effect of annealing on the structural and optical properties of In_2S_3 films. *International Journal of Scientific & Engineering*

- Research, volume 4,1(2012)ISSN 2229-5518. A.E. Bekheet, **E.H.El-Khawas**.
- 18- Evaluation of Radioactivity concentration in Tilapia Nilotica and Radiation Dose to Egyptian Population. Isotope And Radiation Research. Volume 43, no1, p295-307 (2011)ISSN0021-1907, Ameer,H.H, **El-Khawas,E.H**. Nabil,G.M.
 - 19- *Influence of Ti content on the structural and magnetic properties of $Li_{1-x} Ti_x La_y Fe_{2-y} O_4$ Ferrite; $0.1 \leq x \leq 0.9$ and $y=0.1$.* Egypt.J.Solids,vol(32),No.(2), (2009) **E.H. Elkhawas**.
 - 20- Dependence of Dielectric Behavior of Mn-Zn Ferrite on Sintering Temperature.J.Materials Science 36, 5031-5035(2001).M.A.Ahmed, **E.H.El-Khawas** and F.A.Radwan
 - 21- IR. Spectroscopy,Magnetic Suseptibility, |Mossbauer and ac esistivity of Co-Zn Ferrite. Indian J. Phys.No.74A (6)567-572(2000).M.A.Ahmed, **E.H.El-Khawas**, M Y.Hassan and M.El-Desoky
 - 22- Dependence of Dielectric Properties and Resistivity on the Composition of Li-Cd Ferrite, Egypt.J.of physics ,30(3),305-315(2000), M.A.Ahmed, S.T.Bishay and **E.H.El-Khawas**
 - 23- Dependence of Dielectric Properties and Resistivity on the Composition of Li-Cd Ferrite, Egypt.J.of physics ,30(3),305-315(1999), M.A.Ahmed, S.T.Bishay and **E.H.El-Khawas**
 - 24- Electrical properties of carbon-doped KNO₃ thin layers,Journal of Materials Science, Volume 24, Number 5 (1989), F. El-Kabbany, S. Taha and **E. H. El-Khawas**
 - 25- Heating rate effect on the electrical properties of $MnxZn_{1-x}Fe_2O_4$ ferrite ($x = 0.28, 0.48, 0.64$ and 0.76), Journal of Materials Science Letters, Volume 16, Number 23 (1997),M.A.Ahmed , K. A. Darwish and **E.H.El-Khawas**
 - 26- Effect of cation concentration on the relaxation phenomena of Co-Zn ferrite, Physica Scripta , Volume 55 Number 6 , 1997 , M A Ahmed, K A Darwish, H Mikhail, M Mounir and **E H El-Khawas**
 - 27- Synthesis and Magnetic Anomalies of Copper Manganese ferrite $Mn_{1-x}Cu_xFe_2O_4$ ($0.0 \leq x \leq 0.7$) J. Applied Sciences Research, Vol. 9(3) March,(2013) . A. Azab and **E.H.El-Khawas**.
 - 28- Effect of annealing on the structural and optical properties of In₂S₃films. International Journal of Scientific & Engineering Research, volume 4,1(2012) ISSN 2229-5518. A.E. Bekheet, **E.H.El-Khawas**. [I.F.= 1.4]

- 29- Influence of Ti content on the structural and magnetic properties of $\text{Li}_{1-x}\text{Ti}_x\text{La}_y\text{Fe}_{2-y}\text{O}_4$ Ferrite; $0.1 \leq x \leq 0.9$ and $y=0.1$. Egypt.J.Solids, vol(32), No.(2), (2009) **E.H. Elkhawas**.
- 30- Dependence of Dielectric Behavior of Mn-Zn Ferrite on Sintering Temperature. J.Materials Science 36, 5031-5035(2001). M.A.Ahmed, **E.H.El-Khawwas** and F.A.Radwan.
- 31- Comparison Studies of Electrical and Magnetic Behavior of Li-Cd Ferrite, J.Materials Science Letters, 19,791-794(2000). M.A.Ahmed, **E.H.El-Khawwas** and Samiha T.Bishay.
- 32- Dependence of Dielectric Properties and Resistivity on the Composition of Li-Cd Ferrite, Egypt.J.of physics ,30(3),305-315(1999), M.A.Ahmed, S.T.Bishay and **E.H.El-Khawwas**.

SUPERVISIONS (M. Sc.)

- **Name of student 1:** Hatem Hussain Rashwan, Title: Tunable filter based on one-dimensional photonic crystal including nanocomposite material. Registration (2019-2023). Faculty of engineering, Cairo University.
- **Name of student 2:** Walaa Gomaa Elfaramawy, Title: Binarized Neural Network for Remaining Useful Lifetime. Registration (2022- Now). Faculty of engineering, Cairo University.