



**Ain Shams University**

**Faculty of Education**

**Physics department**

**Curriculum Vitae of a Faculty Member**

**Alaa El Din Abdel Halim Mohamed Farag**



**Personal Data:**

Name			Nationality	Place of Birth	Date of Birth	Gender	Marital Status
Frist	Middle	Family	Egyptian	Cairo	11-10-1969	Male	Married
Alaa el din	Abdel Halim	Farag					
General Specialization							
Specialization			Thin film Solar Cells				
Current Position			Professor at Ain Shams University				
Scientific Title			Professor				
Highest degree/ Date			PhD, 2002				
Orcid No.			<u>0000-0002-6526-5996</u>				
College			Faculty of Education, Ain Shams University	Department	Physics		

**Contact Data:**

E-mail address (official)		alaafaragg@edu.asu.edu.eg	
Mobile	01115078317	E-mail address (personal)	alaafaragg@gmail.com



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### **Degrees obtained:**

**PhD in Solid State Physics, Ain Shams University, Egypt, 2002.**

**MSc in Solid State Physics, Ain Shams University, Egypt, 1997.**

**Bachelor of Science and Education (Physics and Chemistry), Ain Shams University, Egypt, 1992.**

### **Professional Activities**

Supervision of 3 MSC theses and 3 PHD theses .

### **Membership of specialized committees and associations:**

- **Materials Science Committee**
- **Crystallography committee**
- **Scientists Corporation**

### **Fields of Research**

- **Thin Film Preparation and Characterization**
- **Optical properties of thin films,**
- **Electrical and dielectrical properties of semiconductors .**



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- Physical properties of organic materials thin films.
- Photovoltaic of solar cells (organic / inorganic hybrid structure).

### **Achieved Research Project**

-The applied use of solar cells as a source of renewable energy from organic compounds, Ain Shams University, 2005-2006.

-Preparation, characterization and optimization of solar cells from thin films of metal sulfide compounds, STDF, 2010-2012.

### **Publications**

Published more than 160 international articles including various topics of applied research.

### **Editorial board member:**

- Sensors and Actuators A
- Algerian Journal of Research and Technology-
- Journal of Luminescence
- Synthetic Metals
- Microelectronics Reliability



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- **Solid State Sciences**
- **Carbon**
- **Solar Energy Materials and Solar Cells**
- **Arabian Journal of Chemistry**
- **Materials Research Bulletin**
- **Results in Physics**
- **Materials Science in Semiconductor Processing**
- **Composites Part B**
- **Diamond & Related Materials**
- **Optik**
- **Optics Communications**
- **Applied Surface Science**
- **Journal of Photochemistry & Photobiology, A: Chemistry**
- **Physica B: Physics of Condensed Matter**
- **Journal of Industrial and Engineering Chemistry**
- **Organic electronics**
- **Chinese Journal of Physics**
- **Materials Science & Engineering B**
- **Polyhedron**



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- **Measurements**
- **Journal of Alloys and compounds**
- **Molecules**
- **Journal of International Hydrogen Energy**
- **Polycyclic Aromatic Compounds**

### **Journals Reviewing**

**1-Sensors and Actuators**

**2-Superlattices and Microstructures**

**3-Journal of Alloys and Compounds**

**4-Journal of International Hydrogen Energy**

**5-Materials Chemistry and Physics**

**6-Molecules**

**7-Microelectronic reliability.**

**8-Journal of Applied Physics**



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**9-Microelectronic Engineering**

**10-Ionics**

**11-Synthetic Metals**

**12-Infrared Physics & Technology**

**13-Fiber & Polymers**

**14-Materials Chemistry and Physics**

**15-Spectrochemica Acta part A**

**16-International Journal of Photoenergy**

**17- Materials Science in Semiconductor Processing**

**18-Applied Physics A**

**19-Materials Science and Engineering B**

**20-ADVANCES IN POLYMER TECHNOLOGY**

**21-Materials Research**



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**22-Nanoscience and Nanotechnology Letters**

**23-International Journal of Scientific Research in Knowledge**

**24-Journal of Polymers and the Environment**

**25- Chinese Optics Letters**

**26-Applied Organometallic Chemistry**

**27-Solid State Sciences**

**28-International Journal of Energy Engineering**

**29-Thin Solid Films**

**30 -Current Organic Synthesis**

**31- -Modern Electronic Materials**

**32- Journal: Physica E: Low-dimensional Systems and Nanostructures**

**33- Composites Part B**

**34-Modern Electronic Materials**



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**35- Journal of Inorganic and Organometallic Polymers and Materials**

**36- Journal of Renewable and Sustainable Energy.**

**37- Surface Review and Letters (International Journal of Modern Physics B)**

**38- Journal of Physics and Chemistry of Solids**

**39-Journal of non-crystalline solids**

**40-Journal of Renewable and Sustainable Energy**

**41-Journal of Electronic Materials.**

**42-Indian journal of Physics**

**43-Current Physical Chemistry.**

**44-Materials Letters**

**45- Vacuum**

**46- European Physical Journal - Applied Physics.**

**47- Journal of inorganic and organic polymers and materials**

**48-Journal of Materials Science: Materials in Electronics**



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**49- Results in Physics**

**50-Polycyclic Aromatic Compounds**

**51- Optical Materials**

**52-Solar Energy**

**53-Optics and Laser Technology**

**54-Polycyclic Aromatic Compounds**

**55-Microelectronic Engineering**

**56-Physica Status Solidi A**

**57- Journal of Nanomaterials**

**58- New Materials, Compounds and Applications**

**59- Microelectronics International**

**60-Journal of Electronic Materials**



جامعة عين شمس  
AIN SHAMS UNIVERSITY



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### International paper reviewing

More than 420 revised international articles including various topics of research.

International publications according to Scopus

161

The screenshot shows the Scopus 'Citation overview' page for the author 'Farag, Alaa A.M.'. It includes the Scopus logo, search and navigation options, and a summary of 161 cited documents. The author's h-index is listed as 32.

### Number of citations according to Scopus:

3648



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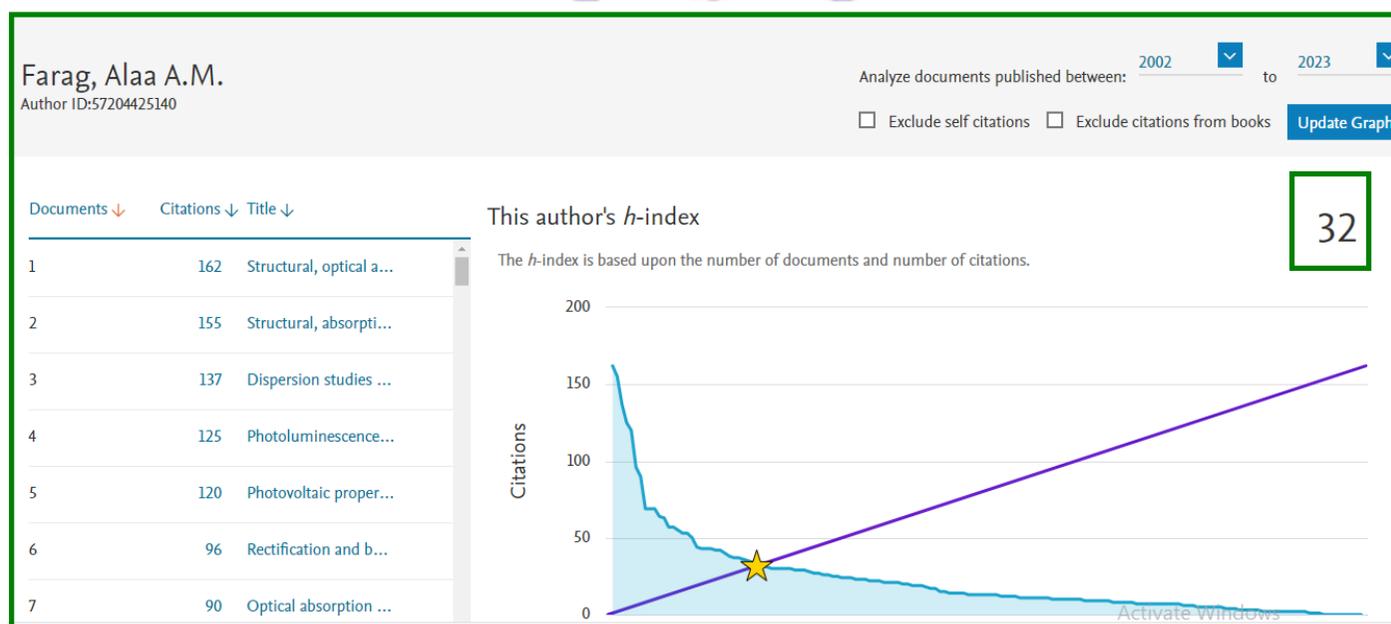
Alaa El Din Abdel Halim Mohamed Farag



Documents	Citations	<2017	2017	2018	2019	2020	2021	Subtotal	>2021	Total
	Total	1491	244	317	309	336	425	1631	19	3141

H-index according to Scopus :

32





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The last 3 years publications

Author Details	Journal Details	Year
A. Taha, A. A. M. Farag, O. M. I. Adly, N. Roushdy, H. M. Ahmed Synthesis and characterization of efficient photosensitive and DFT studies on 2-Benzylidene-1-(5,6-diphenyl-1,2,4-triazine-3-yl)hydrazine metal complexes	Optical Materials, Volume 85, November 2018, Pages 399-407	2018
Shimaa Abdel Halim, Magdy A. Ibrahim, N. Roushdy, A. A. M. Farag, Sara Said Spectroscopic and TD-DFT investigations of 4-[(2-amino-6-methylchromon-3-yl) methylidene]amino}-6-methyl-3-thioxo-3,4-dihydro-1,2,4-triazin-5(2H)-one, and its application for photovoltaic devices	Materials Chemistry and Physics, Volume 217, 15 September 2018, Pages 403-411	2018
G. F. Salem, E. A. A. El-Shazly, A. A. M. Farag, I. S. Yahia Spectrophotometric investigations of optical linearity and nonlinearity of pentacene/ITO nanostructure thin film	Optik, Volume 174, December 2018, Pages 221-233	2018



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Author Details	Journal Details	Year
<p>Magdy A. Ibrahim, Shimaab Abdel Halim, N. Roushdy, A. A. M. Farag, Nasser M. El-Gohary</p> <p>Synthesis, DFT study and photoelectrical characterizations of the novel 4-methoxyfuro[3',2':6,7]chromeno[2,3-e]benzo[b][1,4]diazepin-5(12H)-one</p>	<p>Optik, Volume 166, August 2018, Pages 294-306</p>	<p><b>2018</b></p>
<p>A. Ashery, M. A. Salem, A. A. M. Farag</p> <p>Optical and electrical performance of ploypyrrol thin films and its hybrid junction applications</p>	<p>Optik, Volume 172, November 2018, Pages 302-310</p>	<p><b>2018</b></p>
<p>A. A. M. Farag, Magdy A. Ibrahim, Shimaab Abdel Halim, N. Roushdy, Nasser M. El-Gohary,</p> <p>Synthesis, DFT calculations, spectroscopic and photovoltaic of the novel N'', N'''-bis[(4,9-dimethoxy-5-oxo-5H-furo[3,2-g]chromen-6-yl)methylidene] thiocarbonohydrazide (BFCMT) and its photodiode application</p>	<p>Journal of Molecular Structure, Volume 1156, 15 March 2018,</p>	<p><b>2018</b></p>



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Author Details	Journal Details	Year
	Pages 516-523	
<p>A. A. M. Farag, N. Roushdy, Shimaa Abdel Halim, Nasser M. El-Gohary, Sara Said</p> <p>Synthesis, molecular, electronic structure, linear and non-linear optical and phototransient properties of 8-methyl-1,2-dihydro-4H-chromeno[2,3-b]quinoline-4,6(3H)-dione (MDCQD): Experimental and DFT investigations</p>	<p>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,</p> <p>Volume 191,</p> <p>15 February 2018,</p> <p>Pages 478-490</p>	<b>2018</b>
<p>Nazly Hassan, A. M. Mansour, N. Roushdy, A. A. M. Farag, W. G. Osiris</p> <p>Optical sensing performance characteristics of Schottky devices diodes based nano-particle disodium 6-hydroxy-5-[(2-methoxy-5-methyl-4-sulfophenyl)azo]-2-naphthalenesulfonate thin films: A comparison study</p>	<p>Optik,</p> <p>Volume 158,</p> <p>April 2018,</p> <p>Pages 1255-1265</p>	<b>2018</b>
A. A. M. Farag, A. Ashery, M. A. Salem	Superlattices and Microstructures,	<b>2019</b>



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Author Details	Journal Details	Year
Electrical, dielectric characterizations and optoelectronic applications of epitaxially grown Co/n-CuO/p-Si heterojunctions	Volume 135, November 2019, Article 106277	
A. A. M. Farag, A. H. Ammar, M. A. Gouda, N. Roushdy, Optical absorption and dispersion properties of 2-aminoanthracene-9,10- dione thin films for photodetector applications	Optical Materials, Volume 97, November 2019, Article 109398	<b>2019</b>
N. Roushdy, A. A. M. Farag, Magdy A. Ibrahim, Shimaa Abdel Halim, Nasser M. El-Gohary, Synthesis, spectral characterization, DFT and photosensitivity studies of 1-[[4-methoxy-5-oxo-5H-furo [3,2-g]chromen-6-yl)methylidene]amino}-4,6-dimethyl-2-oxo-1,2-dihydropyridine-3-carbonitrile (MFCMP)	Optik, Volume 178, February 2019, Pages 1163-1176	<b>2019</b>



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Author Details	Journal Details	Year
A. A. M. Farag, N. Roushdy, Nasser M. El-Gohary, Shima Abdel Halim, Magdy A. Ibrahim,  Synthesis, DFT studies and photovoltaic characteristics of 2-amino-N-cyclohexyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carboxamide (ACCP)	Applied Surface Science,  Volumes 467–468,  15 February 2019,  Pages 1226-1238	<b>2019</b>
A. A. M. Farag, A. Ashery, A. H. Zaki, M. Hussein Mourad,  Structural and electrical performance of epitaxial InP based heterojunctions prepared by liquid phase epitaxy	Chinese Journal of Physics,  Volume 59,  June 2019,  Pages 83-91	<b>2019</b>
A.A.M. Farag, Magdy A. Ibrahim , Nasser M. El-Gohary , N. Roushdy  Synthesis and photoelectrical characterizations of ECPPQT for optoelectronic application	Arabian Journal of Chemistry 12(2019)3723-3731)	<b>2019</b>



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Author Details	Journal Details	Year
A. A. M. Farag, Shima Abdel Halim, N. Roushdy, Al-Shimaa Badran, Magdy A. Ibrahim  Facile synthesis and photodetection characteristics of novel nanostructured triazinyliminomethylpyrano[3,2-c]quinoline-based hybrid heterojunction	Journal of Molecular Structure December 2020.	<b>2020</b>
A. A. M. Farag, I. S. Yahia, M. S. Al-Kotb Nanostructure and enhancement of the optical properties of Tb-doped NiO for photodiode applications	Chinese Journal of Physics April 2020	<b>2020</b>
A. Ashery, A. A. M. Farag, M. A. Moussa, G. M. Turkey  Enhancement of electrical and dielectrically performance of graphene-based promise electronic devices	Synthetic Metals March 2020..	<b>2020</b>
A. Ashery, A. A. M. Farag, Mohamed M. M. Elnasharty, Mahmoud Nasr, A. A. Azab  Tailoring the electrical characterization of epitaxial CuInGaSe <sub>2</sub> thin film-based device for photodiode appliances	Superlattices and Microstructures June 2020...	<b>2020</b>



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Author Details	Journal Details	Year
<p>Nadia A. A. Elkanzi, A. A. M. Farag, N. Roushdy, A. M. Mansour</p> <p>Design, fabrication and optical characterizations of pyrimidine fused quinolone carboxylate moiety for photodiode applications</p>	<p>Optik August 2020...</p>	<p><b>2020</b></p>
<p>A. A. M. Farag, Mai S. A. Hussien, N. Roushdy</p> <p>Photoelectrical and Photodegradation Characteristics Using Zirconyl Oxychloride as an Efficient Catalyst in Various Forms: A Comparison Study</p>	<p>ChemistrySelect 2020, 5, 7808–7816</p>	<p><b>2020</b></p>
<p>Ibrahim, M.A., Halim, S.A., Roushdy, N., ...Ahmed, E.M., Farag, A.A.M.</p> <p>Fabrication, DFT modeling, and photoelectronic characterizations of novel pyridinylcarbonylquinoline for promising potential energy conversion</p>	<p>Journal of Materials Research and Technology, 2021, 14, pp. 3092–3110</p>	<p><b>2021</b></p>



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Author Details	Journal Details	Year
Farag, A.A.M., Roushdy, N., Halim, S.A. Towards significant enhancement of structural and optoelectronic properties of porphyrin palladium(II) complex: A theoretical and experimental analysis	Journal of Molecular Structure, 2021, 1232, 129933	2021
Farag, A.A.M., Elkanzi, N.A.A., Ammar, A.H., Roushdy, N. Performance and photoresponse characterizations of pyrimidine quinolone carboxylate derivatives films-based heterojunction devices	Optik, 2021, 231, 166426	2021
Farag, A.A.M., Salem, G.F., El-Shazly, E.A.A., Guirguis, O.W. Optical characterizations and dielectric performance of 5,10,15,20-Tetrakis(pentafluorophenyl)-21H,23H-porphine palladium(II) for photodetector applications	Materials Chemistry and Physics, 2021, 258, 123989	2021
Ammar, A.H., Farag, A.A.M., Gouda, M.A., Roushdy, N. Performance of novel nanostructured thin films of 2-cyano-N-(9,10-dioxo-9,10-dihydro-anthracene-2-yl)-2-(2-phenylhydrazono)acetamide: Synthesis and optoelectronic characteristics	Optik, 2021, 226, 165967	2021



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Author Details	Journal Details	Year
Ashery, A., Farag, A.A.M., Moussa, M.A., Turkey, G.M. Electrical performance of nanocrystalline graphene oxide/SiO <sub>2</sub> -based hybrid heterojunction device	Materials Science in Semiconductor Processing, 2021, 121, 105415	2021
Farag, A.A.M., Halim, S.A., Roushdy, N., Badran, A.-S., Ibrahim, M.A. Facile synthesis and photodetection characteristics of novel nanostructured triazinyliminomethylpyrano[3,2-c]quinoline-based hybrid heterojunction	Journal of Molecular Structure, 2020, 1221, 128868	2021
N. Roushdy, Al-Shimaa Badran, Shimaa Abdel Halim, A.A.M. Farag, Magdy A. Ibrahim Production, optical characterization and DFT analysis of a nanofiber structure of a new pyridinylcarbonylquinoline: Synthesis and photovoltaic application	Journal of Molecular Structure Volume 1270, 15 December 2022, 133846	<b>2022</b>
M.S. Al-Kotb , A.A.M. Farag , I.S. Yahia M. Tailoring the optical characteristics and band-gap of BG doped PMMA/FTO nanocomposite films for laser power attenuation: New	Physica B: Condensed Matter Volume 641, 15 September 2022, 414081	<b>2022</b>



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Author Details	Journal Details	Year
Shimaa Abdel Halim · Magdy A. Ibrahim · N. Roushdy · Al-Shimaa Badran · Emad M. Ahmed · A. A. M. Farag,  Synthesis, Structure Investigation, DFT Analysis And Dielectric Characterization of Substituted Pyridinylidenepropanedinitrile (CMHQCPP) Nanostructure: Novel Approach	Journal of Inorganic and Organometallic Polymers and Materials	<b>2022</b>
B Ebraheem , M M El-Nahass , N Roushdy and A A M Farag  Nanocrystalline embedded In <sub>2</sub> Se <sub>3</sub> amorphous thin film investigation and optical enhancement characterization for photo-sensing application	Indian J Phys <a href="https://doi.org/10.1007/s12648-022-02390-4">https://doi.org/10.1007/s12648-022-02390-4</a>	<b>2022</b>
A.A.M. Farag, M.I. Mohammed, V. Ganesh, H. Elhosiny Ali, A.M. Aboaraia, Yasmin Khairy, H.H. Hegazy, V. Butova, Alexander V. Soldatov, H. Algarni, H.Y. Zahran, I.S. Yahia  <b>Investigating the influence of Eu-doping on the structural and optical characterization of cadmium oxide thin films</b>	Optik  Volume 281, June 2023, 170830	<b>2023</b>



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Author Details	Journal Details	Year
A.H. Ammar, A.A.M. Farag, M.A. Gouda , N. Roushdy Structural characterization and optical investigation of (E)-2-((9, 10-dioxo-9,10- dihydroanthracen-2-yl) amino)-2-oxo-N'-(p-tolyl) acetohydrazonoyl cyanide films for photosensor applications	Optik Volume 281, June 2023, 170799	2023