

CURRICULUM VITAE

Personal Data

Associate Professor Dr. Mohamed Rashad Shehata Ahmed

Google scholar site: <http://scholar.google.com.eg/citations?user=ycQ1aAYAAAAJ&hl=en>



Gender	: Male	Occupation	Associate Professor, Assiut Uni.,
Nationality	: Egyptian	Home Tel.	: +2 088 2355090
Date of Birth	: June 16, 1977.	Mobile	: +2 01060195885
Place of Birth	: Assiut – Egypt.	Office Fax.	: +2 088 342708
Marital Status	: Married		
E-mail	: mohamed.ahmed24@science.au.edu.eg		

Contact Address : Physics Department, Faculty of Science, Assiut University, Assiut 71516, Egypt

RESEARCH INTERESTS:

- Preparation of transition metal oxides nanoparticles.
- Characterizations of structural, optical, and thermal properties of nanocrystals.
- Preparation of multi-layers thin film using MBE.
- Thin film deposition and its characterizations.

ACADEMIC QUALIFICATIONS

- B. Sc. in Physics (1999), Grade: Very Good (Accumulative 80.1%)

Place of Graduation: Physics Dept. Assiut University, Assiut 71516, Egypt.

- M. Sc. In Experimental Physics “Thin Films” (20/6/2004);

Thesis Title: “Influence of Li Content on the Structural, Optical and Electrical Properties of ZnO Films Prepared by Chemical Bath Deposition Method’.

Place of Graduation: Physics Dept., Assiut University, Assiut 71516, Egypt.

- Ph. D. In Experimental Physics “Nano-Technology ” (26/12/2010);

Thesis Title: “Photo-induced effects in colloidal nano-crystals embedded in semiconductor films’.

Place of Graduation: Physics Dept., Assiut University, Assiut 71516, Egypt as a channel system together with university of Paderborn, Germany.

The experimental work of the PhD degree have been done at (2008-2010) in university of Paderborn, Paderborn Germany, under supervisor of Prof. Klaus Lischka, head of optoelectronic Semiconductor Group in university of Paderborn, Germany.

- **Associate Professor** of Material Science, Physics (26/1/2016-now).

Place of Graduation: Physics Dept. Assiut University, Assiut 71516, Egypt.

- **Reviewer** for some international journals (Superlattices and Microstructures, Journal of Materials Science in Semiconductor Processing, Elsevier).
- **Editor** of EDUCATUM Journal of Science, Mathematics and Technology (EJSMT)

EMPOLYMENT HISTORY

- **Demonstrator** at physics Department, Assiut University, **Egypt** (1/1/2000 - 26/6/2004).
- **Assistant Lecturer** at Physics Department, Assiut University, **Egypt** (20/7/2004 - 26/12/2010).
- **Assistance Professor** at Physics Department, Assiut University, **Egypt** (26/1/2011 - 26/1/2016).
- **Associate Professor** in material science at Physics Department, Assiut University **Egypt** (26/1/2016- now).
- **Group member** of Optoelectronic Semiconductor Group, Paderborn University, Paderborn, **Germany** (June 2008 to June 2010).
- **Member** of the faculty affiliation” with KACST-Intel Center of Excellence in Nano-manufacturing (CENA) in **Saudi Arabia** (2010 till now). <http://cena-consortium.org/egypt.html>.
- **Group member** of nanoscience lab., Tabuk University (2013 to now) **Saudi Arabia**.
- Assistant professors at Physics Department, Tabuk University, **Saudi Arabia** (August 2013 till now).

RESEARCH EXPERIENCES

- **From University of Paderborn, Germany:**
 - High Vacuum Technique
 - Molecular Beam Epitaxy (MBE)
 - High Resolution X Ray Diffraction (HRXRD)
 - Photolumensinsce (PL)
 - Micro Photolumencence
 - Preparation of multilayers of thin films by MBE
 - Colloidal nano crystals
- **From University of Assiut, Egypt:**
 - Bulk Sample Preparation
 - Thin Film Preparation
 - Optical and Electrical Measurements
 - Structure investigations of bulk and thin film specimen using X-ray diffraction and Electron Microscopy.
- **From University of Tabuk, Saudi Arabia:**
 - Preparation and characterizations of polymers
 - Preparation characterizations of metal nanoparticles

COPUTER SKILLS

- International Computer Driving Licence (ICDL)
 - Information Technology (IT).
 - Operating System.
 - Microsoft office 2000 Package
 - (Word-Excel-Power Point-Database-Presentations)
 - Information Communication (IC).

EXPERIENCES (Training courses)

- Teaching Large Classes (FLDC)
- Research Team Management (FLDC)
- Why to compete for research fund (FLDC)
- International publications (FLDC)
- Examination systems and evaluate students (FLDC)
- Strategic Planning (FLDC)
- Credit hour system (FLDC)
- University administration (FLDC)
- Conferences organization (FLDC)
- Quality standards on teaching (FLDC)
- Student evaluation (FLDC)
- Design and conduct scientific research (FLDC)
- Professional Skills Development (Tabuk Uni. Saudi Arabia)
- Digital information sources (Tabuk Uni. Saudi Arabia)
- Moodle system (Tabuk Uni. Saudi Arabia)

(FLDC) is the Faculty and Leadership Development Center- Assiut University, Egypt.

FOREIGN LANGUGE

- English Language
 - TOEFL Local Score (403) on American AmidEast Educational & Training Services (2004)
 - TOEFL international Score (453) on American AmidEast Educational & Training Services (2007)
- German Language (2007)
 - 3rd level (Grundstuff III) (400 hours) on the international Based Test

INTERNATIONAL CONFERENCES

1. A. H. Moharram, A. Abu El-Fadl, **M. Rashad**
2007 Japan-China-Australia Cooperative Symposium on Material Science and Nanotechnology, Faculty of Engineering, University of Toyama, **Japan** 14-17th Nov. 2007 has presented on Oral presentation with title (Photo-induced absorption change in thermally evaporated Arsenic Selenides films)
2. **M. Rashad**, M. Paluga, A. Pawlis, K. Lischka, D. Schikora, M. V. Artemyev and U. Woggon
The 14th International Conference on II-VI compounds (II-VI-2009) by the Ioffe Institute of the Russian Academy of Sciences in Saint-Petersburg, **Russia**, August 23-28 (2009) has presented on Oral presentation with title (MBE overgrowth of ex-situ prepared CdSe colloidal nanocrystals).
3. **M. Rashad**, M. Paluga, A. Pawlis, D. Schikora, K. Lischka, Erick M. Laramendi, O. Schops, M. V. Artemyev and U. Woggon
Quantum Dot 2010 East Midlands Conference Centre, Nottingham, **UK** (26–30 April 2010) has presented on Oral presentation with title (Excitonic emission of colloidal nanocrystals embedded in MBE grown ZnSe)
4. J. Kampmeier, **M. Rashad**, A. Pawlis, D. Schikora, K. Lischka
Euro-MBE 2011 Conference, **France** (20–23 March 2011) has presented on Poster presentation with title (Emission of colloidal nano-crystals embedded in MBE grown ZnSe microstructures)
5. International workshop on Nanotechnology-based Economy and its Applications”
Hilton Dream, Dreamland, 6th October City 21-23 June 2011, Cairo Egypt
6. **M. Rashad**, A. H. Moharram, A. Gaber, M. A. Abdelrahim
3rd International advances in applied physics and material science congress, Antalya, **Turkey** (24–28 April 2013) has accepted on Poster presentation with title (Synthesis and characterizations of some metal oxide nanocrystals by microwave irradiation).
7. A. M. Abdel-Basset, M. A. Abdelrahim, **M. Rashad**
3rd International advances in applied physics and material science congress, Antalya, **Turkey** (24–28 April 2013) has accepted on Poster presentation with title (Reverse Monte Carlo Simulation of Se₈₀Te₂₀ and Se₈₀Te₁₅Sb₅ Glasses).

INTERNATIONAL PUBLICATIONS

2005

1. A. Abu EL-Fadl, Galal A. Mohamed, A. B. Abd El-Moiez, and **M. Rashad**
Optical constants of ZnO films prepared by chemical bath deposition technique
J. Appl. Physics Physica B 366 (2005) 44-54 (IF 1.32)
 2. Abu EL-Fadl, Galal A. Mohamed, A. B. Abd El-Moiez, and **M. Rashad**
Li-doping effects on the electrical properties of ZnO films prepared by the chemical-bath deposition method
J. Appl. Physics Physica B 370 (2005) 158–167 (IF 1.32)
-

2010

3. **M. Rashad**, M. Paluga, A. Pawlis, K. Lischka, D. Schikora, M. V. Artemyev and U. Woggon
MBE overgrowth of ex-situ prepared CdSe colloidal nanocrystals
Phys. Stat. Sol. (c) 6 (2010) 1523
 4. **M Rashad**, A Pawlis, M Paluga, D Schikora, K Lischka, O Schöps, M V Artemyev and U Woggon
Excitonic emission of colloidal nano-crystals embedded in Molecular Beam Epitaxy grown ZnSe
J. Phys., JPCS, 245 (2010) 012006.
-

2011

5. J. Kampmeier, **M. Rashad**, A. Pawlis, D. Schikora, K. Lischka
Emission of colloidal nano-crystals embedded in MBE grown ZnSe microstructures
Euro-MBE 2011 Conference (2011)

2012

6. J. Kampmeier, **M. Rashad**, U. Woggon, M. Ruth, C. Meier, D. Schikora, K. Lischka, A. Powlis
Enhanced photoluminescence of colloidal nano crystals embedded in epitaxial grown semiconductor microstructures
Phys. Rev. B 85 (2012) 155405 (IF 3.77)

2013

7. A.H. Moharram, M. Abu El-Oyoun, **M. Rashad**
Crystallization Kinetics of two overlapped Phases in $\text{As}_{40}\text{Te}_{50}\text{In}_{10}$ glass
Thermochimica Acta 555 (2013) 57– 63 (IF 2.1)
8. A. H. Moharram, S. A. Mansour, F. Al-Marzouki, Asma. A. Hendi, **M. Rashad**
Photo-induced changes in Arsenic Selenide films
Materials Science-Poland, 31(1) (2013) pp. 139-145 (IF 0.34)
9. **M. Rashad**, M. Rüsing, G. Berth, K. Lischka, and A. Pawlis
CuO and Co_3O_4 nanoparticles: synthesis, characterizations and Raman spectroscopy
Journal of Nanomaterials, volume (2013) Article ID 714853 (IF 1.7)

- 10.** **M. Rashad**, A. H. Moharram, A. Gaber, M. A. Abdelrahim, A. M. Abdel-Baset
Synthesis and characterization of some metal oxide nanocrystals by microwave
irradiation
AIP Conference Proceedings 1569, 402 (**2013**)
- 11.** A. M. Abdel-Baset, M. A. Abdelrahim, **M. Rashad**
Reverse Monte Carlo Simulation of Se80Te20and Se80Te15Sb5Glasses
AIP Conference Proceedings 1569, 3 (**2103**)
- 2014**
- 12.** A. H. Moharram, S. A. Mansour, M. A. Hussein, and **M. Rashad**
Direct Precipitation and Characterization of ZnO Nanoparticles
Journal of Nanomaterials, volume (**2014**) Article ID 716210 (IF 1.7)
- 13.** M.A.Abdel-Rahim, A.Y.Abdel-Latif, **M.Rashad**, N.M.Abdelazim
Annealing effect on structural and optical properties of Se87.5Te10Sn2.5 thin films
Materials Science in Semiconductor Processing 20(**2014**) 27–34 (IF 2.26)
- 14.** **M. Rashad**, R. Amin, M. M. Hafiz
Sn Addition on Se80Te20-xSn_x Glass Alloys, Theoretically Prediction and Experimental Optical
Properties of Thin Films
International Journal of Enhanced Research in Science Technology & Engineering, ISSN:
2319-7463 Vol. 3 Issue 4, (**2014**), pp: (1-14) (IF 1.25)
- 2015**
- 15.** **M. Rashad**, R. Amin, M. M. Hafiz
Crystallization kinetics of glassy Se–Te–Sn alloys
Canadian Journal of Physics, 93(8) (**2015**), pp.898-904 (IF 0.95)
- 16.** **M. Rashad**, R. Amin, M. M. Hafiz
Redshift in the optical band gap of amorphous nanostructure Se80Te20-xSn_x films
Chalcogenide Letters Vol. 12, No. 9, September **2015**, p. 441 - 451 (IF 1.25)
- 17.** **M. Rashad**, N. M. Shaalan, M. M. Hafiz
Enhanced photocatalytic of ZnO nanostructures via shape controlled platinum thin film
Digest Journal of Nanomaterials and Biostructures Vol. 10, No. 3, July - September 2015,
p. 823 - 830 (**2015**) (IF 1.25)
- 18.** N. M. Shaalan, **M. Rashad**, T. Yamazaki
Sensing performance of SnO₂ film fabricated by sputtering deposition
Applied Physics A 120 (**2015**) pp. 1555-1563 (IF 1.73)
- 19.** **M. Rashad**
Excitonic Emission of AlGaAs/GaAs Quantum Well Heterostructures
International Journal of Scientific & Engineering Research, Vol. 6, Issue 9, (**2015**) pp.
1450-1453. (IF 3.2).

2016

20. N. M. Shaalan, **M. Rashad**, AH Moharram, MA Abdel-Rahim
Promising methane gas sensor synthesized by microwave-assisted Co₃O₄ nanoparticles
Materials Science in Semiconductor Processing 46, (2016) 1-5. (IF 2.26)
21. **M. Rashad**, N.M. Shaalan, AM Abd-Elnaiem
Degradation enhancement of methylene blue on ZnO nanocombs synthesized by thermal evaporation technique
Desalination and Water treatment. (2016) 1–7 (IF 1.27)
22. N. M. Shaalan, **M. Rashad** and M.A. Abdel-Rahim
Repeatability of Indium Oxide Gas Sensors for Detecting Methane at Low Temperature
Materials Science in Semiconductor Processing (2016) (IF 2.26)
23. A.A.A. Darwish, **M. Rashad**, A.E. Bekheet, M.M. El-Nahass
Linear and nonlinear optical properties of GeSe_{2-x}Sn_x ($0 \leq x \leq 0.8$) thin films for optoelectronic application.
Alloys and compound (2016) (IF 3.02)

SUPERVISION of THESIS

M. Sc. Experimental Physics “Nano-materials”

Preparation characterization of some applied nano-materials
Asmaa El sayed

M. Sc. Experimental Physics “Nano-materials”

Preparation characterization of some applied nano-materials
Emad Abdel Rahman

M. Sc. Experimental Physics “semiconductor-materials” passed 2015

Synthesis and characterizations of bulk and thin film Se Te Sn memory chalcognide alloys
Rasha Mohamed Amin

M. Sc. Experimental Physics “Nano-materials”

Preparation characterization of some applied nano-materials
Zenab

List of Reviewed Papers

Journal of Materials Science in Semiconductor Processing

L. Borkovska, A. Romanyuk, V. Strelchuk, Yu. Polishchuk, V. Kladko, A. Raevskaia, O. Stroyuk, T. Kryshtab, “Structural and optical characterization of the AgInS₂ and Zn-doped AgInS₂ nanocrystals”, (2014).

Superlattices and Microstructures

Mahnaz Ghiasi and Azim Malekzadeh, “Synthesis, characterization and photocatalytic properties of lanthanum oxy-carbonate,lanthanum oxide and lanthanum hydroxide nanoparticles”, (2015).

TEACHING EXPERIENCE

Course Titles: Optics

Teaching Frequency: 2 hours/week (Faculty of Pharmacy)

Level: first level

Course Titles: Bio-Physics

Teaching Frequency: 3 hours/week (Faculty of Science)

Level: third level

Course Titles: Bio-Physics

Teaching Frequency: 2 hours/week (faculty of Pharmacy)

Level: first level

Course Titles: Bio-Physics

Teaching Frequency: 1 hours/week (Faculty of Veterinary Medicine)

Level: first level

Course Titles: Electricity

Teaching Frequency: 2 hours/week (Faculty of Engineering)

Level: first level

Course Titles: Laser

Teaching Frequency: 2 hours/week (Faculty of Science)

Level: fourth level

REFERENCES

[1] Prof. Dr. Klaus Lischka

Head of Physics Department

Faculty of Science

Paderborn University

Paderborn, Germany

E-mail: klischka@mail.upb.de

[2] Prof. Dr. Abdel Rahem Hassan Moharram

Physics Department

Faculty of Science

Assiut University

Assiut, Egypt.

E-mail: mohar200@yahoo.com

Work tel.: +20882411360

Mobile: +20100525110

[3] Prof. Dr. Mustafa Abdelnaem

Physics Department
Faculty of Science
Assiut University
Assiut, Egypt.
E-mail: mohar200@yahoo.com
Work tel.: +20882411360
Mobile: +20100525110