

**Dr. Shadia J Ikhmayies**  
**CURRICULUM VITAE**  
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**ADDRESS**

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**PERSONAL DATA**

**Born:** May 13, 1960. **Place:** Al-A'rrub/Al-Khalil.  
**Nationality:** Jordanian.  
**Marital State:** Single.  
**Nationality Number:** 9602020403

**EDUCATION**

**B.S.C:** Physics, Faculty of Science-University of Jordan, 1983.  
**M.S:** Physics, Faculty of Science-University of Jordan, 1987.  
**Ph.D :** Physics, Faculty of Science-University of Jordan, 2002.

**TITLE OF THESES**

**M.S:** Laser Spectroscopy of NaK Molecule.  
**Ph.D:** Production and Characterization of CdS/CdTe Thin Film Photovoltaic Solar Cells of Potential Industrial Use.

**JOB HISTORY**

**1987-1997: Laboratory Instructor**, Physics Department/Faculty of Science-University of Jordan, Jordan.  
**1997-2000: Member of academic staff**, Faculty of Basic Sciences, Al-Isra University, Jordan.  
**2003, 2<sup>nd</sup> semester: Part time Lecturer**, Department of Basic Sciences- Collage of Technology Engineering-Al-Blqa' Applied University, Jordan.  
**2003-2004: Part time Lecturer**, Physics Department/Faculty of Science-University of Jordan, summer (6/7/2003-31/8/2003), 1<sup>st</sup> (21/9/2003-26/1/2004) and 2<sup>nd</sup> semesters (22/2/2004-1/6/2004), then the next summer semester semester 4/7/2004-25/8/2004, Jordan.  
**2004-2009 : Assistant professor**, Physics Department/Faculty of Basic Sciences-Applied Science University, Jordan.  
**2010-2014: Assistant professor**, Department of Basic Sciences/ Faculty of Information Technology- Al-Isra University, Jordan.  
**2014-2015 Associate professor**, Department of Basic Sciences/ Faculty of Information Technology- Al-Isra University, Jordan.  
**2015-2020: Associate professor**, Department of Physics/ Faculty of Science- Al-Isra University, Jordan.

**RANK**

**Assistant professor, Applied Science University, 23<sup>rd</sup> October 2004**

Associate professor, Isra University, 22<sup>nd</sup> January, 2014  
 Full professor, Isra University: 3 April, 2019

## TEACHING EXPERIENCE

### Undergraduate Courses:

| No. | Material             | University                 | Times taught | Text Bok   |
|-----|----------------------|----------------------------|--------------|--|
| 1.  | Thermodynamics       | Isra University            | (2 times)    | 1- Fundamentals of Thermodynamics 8 <sup>th</sup> Edition, 2013 Claus Borgnakke Richard E. Sonntag<br>2- Heat and Thermodynamics: An Intermediat Textbook , Mark W. Zemansky, and Richard H. Dittman, The McGraw-Hill Companies, Inc., Seventh Edition, 1997, Book |
| 2.  | Waves and Vibrations | Isra University            | (3 times)    | THE PHYSICS OF VIBRATIONS AND WAVES Sixth Edition H. J. Pain   |
| 3.  | Nuclear Physics      | Applied Science University | ( 1 time)    | Introductory Nuclear Physics 3rd Edition by Kenneth S. Krane   |
| 4.  | Radiation            | Isra University            | (1 time)     | Physics for Radiation Protection, By James E. Martin, Third Edition, 2013  |
| 5.  | Electronics          | Applied Science University | (1 time)     | Electronic devices : conventional current version / Thomas L.  |

|     |  |   |           |   |
|-----|--|---|-----------|---|
|     |  |   |           | Floyd.— 9th ed.   |
| 6.  | Introduction to Applied Science (1 time)<br>Laser University |   |           | Introduction to Laser Physics<br>Authors:<br>Shimoda, Koichi,<br>1986. Springer   |
| 7.  | Mathematical Physics I                                       | University of Jordan  | (1 time)  | Mathematical Methods in the Physical Sciences<br>3rd Edition<br>by Mary L. Boas   |
| 8.  | Astrophysics   | University of Jordan  | (1 time)  | An Introduction to Modern Astrophysics by<br>Bradley W. Carroll and Dale A. Ostlie.<br>Benjamin Cummings; 1st edition, 1995   |
| 9.  | Optics   | University of Jordan (2 times)<br>Isra University (3 times) | (5 times) | Introduction To Optics, Frank L. Pedrotti, and Leno S. Pedrotti,<br>3rd Edition, Prentic-Hall.                                |
| 10. | Methods in Experimental Physics                              | University of Jordan  | (1 time)  | Lectures collected from different books   |
| 11. | Energy   | Isra University   | (1 time)  | Energy Production, Conversion, Storage, Conservation, and Coupling, 2 <sup>nd</sup> edn. By: Yaşar Demirel.<br>Springer, 2015 |
| 12. | Environmental Physics  | Isra University   | (1 time)  | Principles of Environmental Physics<br>Fourth Edition, 2013. John L. Monteith and Mike H. Unsworth                            |

|     |  |   |                      |   |
|-----|--|---|----------------------|---|
| 13. | Practical Physics                                  | University of Jordan  | (1 time)             | Practical Physics<br>Squires, G. L.<br>Cambridge<br>University Press,<br>Cambridge. 1985                        |
| 14. | Science and Society (in Arabic)                    | University of Jordan  | (6 times)            | العلم والمجتمع<br>المؤلف: يوسف محمود  |
| 15. | Modern Physics                                     | Isra University   | (3 times)            | Concepts of<br>Modern Physics,<br>Arthur Beiser,<br>McGraw-Hill,<br>Sixth Edition.                              |
| 16. | General Physics 1 for Scientists and Engineers 101 | Isra University of Applied Science University Collage of Technology Engineering-Al-Blqa' Applied University | (more than 30 times) | Physics for<br>Scientists and<br>Engineers 9th<br>Edition<br>by Raymond A.<br>Serway, and John<br>W. Jewett.    |
| 17. | General Physics 2 for Scientists and Engineers 102 | Isra University of Applied Science University   | (more than 25 times) | Physics for<br>Scientists and<br>Engineers 9th<br>Edition<br>by Raymond A.<br>Serway, and John<br>W. Jewett.    |
| 18. | General Physics 103 for Medicine                   | University of Jordan  | (3 times)            | Introduction to<br>Physics in<br>Modern Medicine<br>2nd Edition,<br>Kindle Edition<br>by Suzanne<br>Amador Kane |
| 19. | Pharmacy   | Isra University Applied Science University  | (more than 20 times) | Douglas C.<br>Giancoli,<br>"Physics", sixth<br>edition, Pearson,<br>2014  |
| 20. | General Physics for Computer Science 104           | Applied Science University  | (more than 10 times) | Physics for<br>Scientists and<br>Engineers 9th<br>Edition   |

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|-----|--|--|----------------------|------------|---|
|     |  |  |                      |            | by Raymond A. Serway, and John W. Jewett. |
| 21. | Advanced Physics labs I                              | University of Jordan   | 10 times each)       | Lab Manual |   |
| 22. | Advanced Physics labs II (more than                  | University of Jordan   | 10 times each)       | Lab Manual |   |
| 23. | Electronics lab (more than 5 times)                  | University of Jordan<br>Isra University  | (more than 5 times)  | Lab Manual |   |
| 24. | Lab of Intermediate Physics                          | University of Jordan<br>Isra University<br>(1 time)  | (more than 10 times) | Lab Manual |   |
| 25. | General Physics Labs for Scientists and Engineers I  | Isra University<br>University of Jordan<br>Applied Science University  | (more than 50 times) | Lab Manual |   |
| 26. | General Physics Labs for Scientists and Engineers II | Isra University<br>University of Jordan<br>Applied Science University<br>Collage of Technology Engineering-Al-Blqa' Applied University | (more than 50 times) | Lab Manual |   |
| 27. | General Physics Labs for Medicine                    | University of Jordan   | (5 times)            | Lab Manual |   |
| 28. | General Physics Labs for Nursing and Agriculture     | Isra University<br>University of Jordan  | (more than 10 times) | Lab Manual |   |
| 29. | General Physics Labs for Pharmacy                    | Isra University  | (5 times)            | Lab Manual |   |
| 30. | General Physics Labs for Computer Science.           | Applied Science University   | (more than 10 times) | Lab Manual |   |

## RESEARCH INTERESTS:

- 1- Experimental Work: - Production and characterization of semiconducting thin films and solar cells.
  - Production and characterization of thin films and powders of metal oxides such as  $\text{SnO}_2$ ,  $\text{Cu}_2\text{O}$ , and  $\text{ZnO}$
  - Processing and characterization of Silica
- 2- Computational Work: - Structural, electronic and optical properties of Solids ( $\text{NbN}$ ,  $\text{Si}$ ,  $\text{CdS}$ ..) using Wien2k package.
  - Thermodynamic properties and phase diagrams of materials using Thermo-Calc Software.

## SCHOLARSHIPS, HONORS, AND AWARDS

1. **2020 EPD Materials Characterization Best Paper Award - First Place**
2. **TMS 2020 gift for 10+ years of consecutive attendance of TMS Meetings** (continued loyalty to TMS and the annual meeting.).
3. **TMS 2020 “Thank You Gift” for Volunteer Service to the Society and contributions to TMS.**
4. **TMS 2019 Gift:** for attending 10 successive TMS Annual Meetings without Absence.
5. **EPD Division gifts (2 Certificates)** for Chairing in TMS 2019 Annual Meeting.
6. **EPD Division gifts (3 Certificates)** for organizing in TMS 2019 Annual Meeting (Characterization of Minerals, Metals, and Materials; Green Materials Engineering: An EPD Symposium in Honor of Sergio Monteiro; and Solar Cell Silicon symposia.)
7. **CSC2018: International Computational Science Congress Award for being a plenary Speaker: A gift and a Certificate of thank you and a tree planted in my name to commemorate the Occasion.**
8. **ECRES 2018 Best Paper Award.**
9. **TMS Frank Crossley Diversity Award 2018.**
10. **PIONEERING AWARD for 2018**, World Renewable Energy Congress 2018 (WREC-18).
11. **EPD Division Award 2017** for chairing the Characterization Committee from 2015 to 2017.
12. **EPD Division gifts (2 Certificates)** for chairing two sessions in TMS 2017 Annual Meeting.
13. **EPD Division gifts (2 Certificates)** for organizing in TMS 2017 Annual Meeting (Characterization symposium and Solar Cell Silicon symposium.)
14. **EPD Division gifts (2 Certificates)** for editing proceedings (Characterization of Minerals, Metals, and Materials 2017, and Energy Technology 2017.)
15. **EPD Division gifts (2 Certificates)** for Chairing two sessions in TMS 2016 Annual Meeting (Characterization symposium).
16. **EPD Division gift (1 Certificate)** for editing proceedings of (Characterization of Minerals, Metals, and Materials 2016)
17. **TMS Materials Characterization Award (Certificate)** for the 2016 **Best Paper Award** in Characterization of Minerals, Metals, and Materials Symposium.
18. **TMS Materials Characterization Award (Certificate)** for the 2015 **Best Paper Award** in Characterization of Minerals, Metals, and Materials Symposium.

19. **JOM gift for being a technical advisor/guest editor of JOM 2014 january issue (Volume 66, issue 1).**
20. **EPD Division gifts (2 Certificates)** for organizing in TMS 2015 Annual Meeting (Characterization symposium and Solar Cell symposium.)
21. **EPD Division gifts (2 Certificates)** for Chairing in TMS 2015 Annual Meeting.
22. **TMS Materials Characterization Award (Certificate)** for the 2014 **Best Paper** in Characterization of Minerals, Metals, and Materials Symposium.
23. **EPD Division gifts (2 gifts)** for editing proceedings of (Characterization of Minerals, Metals, and Materials 2015, and 2015 EPD Congress: Solar Cell Silicon.)
24. **EPD Division gifts (1 gift)** for editing proceedings of the Characterization of Minerals, Metals, and Materials 2014.
25. **EPD Division gift for being a technical advisor/guest editor of JOM 2014 january issue (Volume 66, issue 1).**
26. **EPD Division gifts (2 Certificates)** for Chairing sessions in TMS 2014 Annual Meeting.
27. **EPD Division gifts (2 Certificates)** for organizing in TMS 2014 Annual Meeting (Characterization symposium and Solar Cell symposium.)
28. **TMS Materials Characterization Award (Certificate)** for the 2013 **Best Paper** in Characterization of Advanced Materials.
29. **EPD Division Thank you gifts (2 gifts)** for Chairing sessions in TMS 2013 Annual Meeting.
30. **EPD Division gifts (2 gifts)** for organizing in TMS 2013 Annual Meeting (Characterization symposium and Solar Cell symposium.)
31. **TMS Materials Characterization Award for the 2012 (Certificate) Best Paper** in Characterization of Energy, Electronic and Optical Materials.
32. **EPD Division gifts (2 gifts)** for organizing in TMS 2012 Annual Meeting (Characterization symposium and Solar Cell symposium.)
33. **EPD Division Thank you gifts (2 gifts)** for Chairing sessions in TMS 2012 Annual Meeting.
34. **EPD Division gifts (2 gifts)** for organizing in TMS 2011 Annual Meeting (Characterization symposium and Solar Cell symposium.)
35. **EPD Division Thank you gifts (3 gifts)** for chairing sessions in TMS 2011 Annual Meeting.
36. **Guild of Jordanian Engineers-Zarqa Branch gift for the review** of two articles for their 2<sup>nd</sup> Engineering and Scientific Conference held in Zarqa, Jordan (22-23 November, 2010).
37. **EPD Division Thank you gift for Chairing sessions in TMS 2010 Annual Meeting.**
38. **University of Jordan Award for Academic Excellence** ( the 1<sup>st</sup> in the graduated set for the B.S.C. Degree, 1983).

#### **GRADUATION COMMITTEES**

| <b>No.</b> | <b>Student Name</b>                          | <b>Thesis Title</b>  |
|------------|--|--|
| 1.         | Naseem Abu-Elhaija<br>MS.C degree in Physics | Production and Characterization of Doped and Undoped ZnO Thin Films            |
| 2.         | Bashar Bino<br>MS.C degree degree in Physics | I-V and Scanning Electronic Characterization of CuInSe <sub>2</sub> thin Films |

## GRADUTION PROJECTS

| No. | Student Name  | Project's Title   |
|-----|---|---|
| 1.  | Anass Asa'ad<br>Khalaf<br>BS.C degree in<br>Physics | Diagnosis by Studying the Optical Properties of Blood<br>(Diaphanography) |

## MEMBERSHIP OF UNIVERSITY COMMITTEES

1. Chair of Scientific Research Committee-Faculty of Science at Al Isra University 2019/2020.
2. Member of the Committee of Students Affairs at Al Isra University 2019/2020.
3. Member -representing Isra University- of Scientific Research Support Fund Committee (2018/2019).
4. Member of the Faculty committee of Scientific Research (2018/2019).
5. Member of the Faculty committee of Graduate Studies (2017/2018).
6. Member of the Faculty of Science Council at Al Isra University (2015/2016, 2016/2017).
7. Member of University Library Committee, Al-Isra University 2011-2015.
8. Member of University committee of matching materials, Al-Isra University 2010- 2011.
9. Member of University Library Committee, Applied Science Private University 2005-2006
10. Member of University Library Committee, Al-Isra University 1998-2000
11. Member of the committee of verifying in students issues, Al-Isra University 1997-1998

## MEMBERSHIP OF Scientific Groups

- Energy Environment and Sustainability Research (EESR) Group
- Group of Theoretical and Computational Physics.
- Group of Solar Cells and Thin Films (Experimental).
- One of the **SESAME** scientific groups: Surface/materials science using Powder Diffraction.

## MEMBERSHIP OF SCIENTIFIC FOUNDATIONS:

- 1- The World Renewable Energy Network (WREN) in UK (2011-Present).
- 2- The Materials, Minerals and Metals Society (TMS) in USA (2009-Present)
- 3- Jordanian Renewable Energy Society (JRES), Jordan: (2009-2016)
  - Photovoltaic committee.
  - Scientific committee.
- 4- The Society of Enriching Arabic Content on the Internet (2012-2016).

## MEMBERSHIP OF CONFERENCE COMMITTEES:

- 1- Member of the International Organizing Committee of the Third International Hydrogen Energy Congress and Exhibition (3<sup>rd</sup> IHEC 2021) which was held on 14-16 June 2021 Gazi University, Ankara, TURKEY.
- 2- Member of the Scientific Committees of the International Conference on Advanced Materials Science & Engineering and High Tech Devices Applications; Exhibition (ICMATSE 2020), October 2-4, 2020, Gazi University, Ankara, TURKEY.



- 3- Past chair of the Characterization of Minerals, Metals, and Materials committee for the TMS 2018, 2019.
- 4- The chair of the Characterization of Minerals, Metals, and Materials committee for the TMS 2016-2017.
- 5- A member of the International Advisory and Program Committee for the WREC XVI conference held in Perth, Western Australia in 5-9 February 2017.
- 6- A member of the International Scientific Committee of the European Conference on Renewable Energy Systems (ECRES) (2015-present).
- 7- A member of the International organizing committee of the European Conference on Renewable Energy Systems (ECRES) (2015-present).
- 8- A member of the steering committee for the World Renewable Energy Congress: 2014-present.
- 9- A member of the Recycling and Environmental Technologies Committee: TMS, *Annual Meeting & Exhibition* (2014-present).
- 10- A member of the Materials Characterization Committee: TMS, *Annual Meeting & Exhibition* (2009-present).
- 11- Member of the organizing committee of the International Conference and Exhibition on Green Energy and Sustainability for Arid region and Mediterranean Countries. Amman, Jordan, November 10-12, ICEGES 2009.

#### **LEADING ORGANIZER OF THE FOLLOWING SYMPOSIUMS**

- 1- Characterization of Minerals, Metals, and Materials 2016, 2017: TMS, *145-146th Annual Meeting & Exhibition*).
- 2- Solar Cell Silicon Symposium: TMS, *Annual Meeting & Exhibition* (2017–present).
- 3- Mechanical Characteristics and Application Properties of Metals and Non-metals for Technology: An EPD Symposium in Honor of Donato Firrao: 2018 TMS, *147th Annual Meeting & Exhibition*.
- 4- Green Materials Engineering: An EPD Symposium in Honor of Sergio Monteiro: 2019 TMS, *148th Annual Meeting & Exhibition*.

#### **ORGANIZER OF THE FOLLOWING SYMPOSIUMS**

- 1- Characterization and Processing: An EPD Symposium in Honor of Jiann-Yang Hwang: TMS, *Annual Meeting & Exhibition 2021*.
- 2- Characterization of Minerals, Metals, and Materials Symposium: TMS, *Annual Meeting & Exhibition* (2010-present).
- 3- Solar Cell Silicon Symposium: TMS, *Annual Meeting & Exhibition* (2011-2016).

#### **REFEREE IN:**

- 1) Journal of Materials Science & Engineering B (Elsevier).

Total number of assignments: **30**

#### Articles that I reviewed:

- 1- Thermal annealing effects on Cu-Se resonant tunneling diodes fabricated by electrodeposition assisted template synthesis technique.(9/9-4/10/2007).
- 2- Synthesis of Functionalized ZnSe Nanoparticles and their Applications in the Determination of Nucleic acid base. (28/3-20/4/2008).

- 3- Surface dynamics of methylchloride on GaAs(001) surface Dynamical behavior of methylchloride on GaAs(001). (26/6-7/7/2008), (5/10-24/10/2008), (30/4-19/5/2009).
- 4- First principles calculations of electronic structure and optical properties of stressed  $\text{Mg}_2\text{Si}$ . (31/1-25/2/2009).
- 5- Photoluminescence and excitation spectra of  $\text{ZnO}:\text{Cu},\text{Ga}$  thin films obtained by  $\text{ZnS}:\text{Cu},\text{Ga}$  films oxidation in different ambient. (13/9-28/9/2009).
- 6- Preparation and Characterization of positively charged polysulfone Nano-Filtration Membranes. (18/1-2/2/2010).
- 7- Catalytic Activity of Copper-Supported Catalyst for NO Reduction in the Presence of Oxygen: Fitting of Calcination Temperature and Copper Loading. (9/3-28/3/2010), (29/4-20/5/2010), (26/5-15/6/2010).
- 8- Synthesis and Optical Properties of CdS nanorods and CdSe nanocrystals Using Oleylamine as both Solvent and Stabilizer. (1/9-28/10/2010), (17/11-4/12/2010), (12/1-9/2/2011).
- 9- Magnetic and Electric Property Evolution of Cobalt-rich Ribbons under Field Annealing and their Giant Magneto-Impedance. (5-25/11/2010).
- 10- Influence of the substrate nature on the properties of ZnO thin films. (30/3-29/4/2011), (12/6-12/7/2011), (8/3-9/2/2011). (14/9-7/10/2011)
- 11- Correlation between structural, photoluminescence properties and gettering effect of stain etched porous silicon in multi-crystalline silicon. (9/6-5/7/2011).
- 12- Characterization of multiwall carbon nanotube/nickel oxide nanocomposite thin films. (10/11-10/12/2011).
- 13- Solar absorption and thermal emission properties of multiwall carbon nanotube/nickel oxide nanocomposite thin films synthesized by sol-gel process. (13/1-3/2/2012).
- 14- Microstructural and chemical variation of  $\text{TiO}_2$  electrode in DSSCs after ethanol vapour Treatment. (4/6-4/7/2012), (10/9-24/9/2012).
- 15- Optical and structural properties of porous zinc oxide fabricated via electro-chemical etching method (10/12/2012-9/1/2013), (6/3-21/3/2013).
- 16- Large-area multi-crystalline silicon solar cells by Ag-assisted etching and sodium hydroxide treatment. (5/5-4/6/2013).
- 17- Facile preparation of  $\text{Ni}_2\text{P}/\text{ZnO}$  core/shell composites by a chemical method and its photocatalytic performance. (31/10-21/11/2015), (24/12/2015-13/1/2016).

## 2) Journal of Materials and Design (Elsevier).

Total number of assignments: **12**

### Articles that I reviewed:

- 1- Development of Carbon Fiber based Heater. (16/7-27/7/2009)
- 2- Simulation of possible polyaniline | lead-dioxide electrochemical power source characteristics. (10/10-21/10/2009)
- 3- Development and Electrical Characterization of Carbon Soot Filled Polyester Graded Composites. (24/11-8/12/2009)
- 4- Microstructures and Dielectric Properties of  $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3\text{-Zn}_2\text{TiO}_4$  Composite Ceramics with Low Sintering Temperature for Tunable Device Applications. (29/1-6/2/2010)
- 5- Effect of friction stir processing on electrical resistivity of copper. (20/5-2/6/2010)
- 6- Development of high strength, high conductivity copper by friction stir processing. (20/5-2/6/2010), (19/7-22/7/2010).

- 7- Electromagnetic absorption efficiency of polypropylene/montmorillonite/ polypyrrole nanocomposites.(25/8-4/9/2010).
- 8- Investigated optical and elastic properties of porous silicon from experimental measurements. (26/11 -9/12/2010), (6-20/1/2011), (26/1-9/2/2011).
- 9- Effect of Artificial Aging on the Electrical Conductivity of 6061 Aluminum alloy.(23/1-5/2/2012).

**3) Journal of Alloys and Compounds: (Elsevier).**

Total number of assignments: **2**

Articles that I reviewed:

- 1- Sacrificial template method for the synthesis of CdS nanosponges and their photocatalytic properties. (24/3-3/4/2010).
- 2- Solvothermally Growth of Single-Crystal CdS Nanowires. (8/8-22/8/2012)

**4) Energy Conversion and Management: (Elsevier).**

Total number of assignments: **5**

Articles that I reviewed:

- 1- The Al<sub>x</sub>Ga<sub>1-x</sub>As Window Composition Effect on the Hardness Improvement of a p<sup>+</sup>-n-n<sup>+</sup> GaAs Solar Cell Exposed to the Electron Irradiation. (6/9-30/9/2009).
- 2- PV to PEV Efficient Power Transfer for Standalone Solar Power System. (15/8-28/8/2012)
- 3- Design of an optimized photovoltaic and microturbine hybrid power system for a remote small community: Case study of Palestine. (28/3-18/4/2013), (2/5-18/5/2013).
- 4- DEVELOPMENT OF 1 A TYPICAL METEOROLOGICAL YEAR FOR PV PERFORMANCE ASSESSMENT IN FOUR NORTHERN LOCATIONS OF NIGERIA, (18/8-8/9/2014)

**5) Materials Chemistry and Physics (Elsevier):**

Total number of assignments: **3**

Articles that I reviewed:

- 1- Low resistive spray pyrolysed ZnO:Al thin film by Zero- energy post deposition process (11/7-22/7/2010).
- 2- Growth of cubic CdS films on TiO<sub>2</sub>-terminated (100) SrTiO<sub>3</sub> substrate. (12-25/4/2016).
- 3- EFFECT OF THE INCLUSION OF GALIUM IN NORMAL CADMIUM CHLORIDE TREATMENT ON ELECTRICAL PROPERTIES OF CdS/CdTe SOLAR CELL. (8-24/12/2016).

**6) Materials Science in Semiconductor Processing (Elsevier):**

Total number of assignments: **17**

Articles that I reviewed:

- 1- Synthesis, Crystal Structural and Electrical Conductivity Properties at High Temperatures of Fe Doped Zinc Oxide Powders. (10/10-11/5/2010).
- 2- Region-Dependent behavior of I-V characteristics in n-ZnO:Al/p-Si contacts. (18/12/2010-14/1/2011), (27/1-27/2/2011).
- 3- Comparison of Etch Characteristics of KOH, TMAH and EPW for Bulk Micromachining of Silicon (110). (14/3-13/4/2011).

- 4- Electrical properties and barrier modification of GaAs MIS Schottky device based on MEH-PPV organic interfacial layer. (24/7-21/8/2011).
- 5- High precision hydrogenation assisted deep micro-machined structures. (3/11-2/12/2011).
- 6- Characterization of electrodeposited CdSe and CdTe layers and fabrication of a CdTe/CdSe structure. (15/11-14/12/2011).
- 7- Etch rate of Silicon (100) in alkaline fluoride solution. (19/2-3/3/2012).
- 8- Structural, Optical and Impedance studies on pulse plated AgInSe<sub>2</sub> films. ( / 2012- /2012).
- 9- Enhancing of the hydrogen gas sensing properties of ZnO prepared by the thermal oxidation of Zn metal doped with Al.(4/7/2012-1/8/2012).
- 10- Investigation of Photocatalytic Degradation of Methyl Orange and Gas Sensing Performance by Using Nano-Sized ZnO (1-29/9/2012), (15/10-13/11/2012).
- 11- Influence of the carrier gas (iodine) operating conditions on the growth of CuInSe<sub>2</sub> thin films prepared by the close spaced vapor transport (CSV<sub>T</sub>) technique. (7/11-5/12/2012).
- 12- Synthesis of Sn doped ZnO/TiO<sub>2</sub> nanocomposite film and their application to H<sub>2</sub> gas sensing properties. (11/12-24/12/2012)
- 13- Study on Te inclusions distributions of different solid-liquid interface shapes within CdZnTe crystals growth (2/1/2015-1/2/2015)
- 14- Effect of Post Deposition Heat Treatment on Microstructure Parameters, Optical Constants and Composition of Thermally Evaporated CdTe Thin Films. (4-29/9/2016).

**7) Journal of electrostatics (Elsevier):**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Simulation Research on Charged Oil Atomization in the Electrostatic Oiler. (11/8-9/2010).

**8) Journal of Electronic Materials (Springer):**

Total number of assignments: **10**

Articles that I reviewed:

- 1- Relation between Seebeck coefficient and lattice parameters of (Ca<sub>2-y</sub>Sr<sub>y</sub>CoO<sub>3</sub>)<sub>x</sub>CoO<sub>2</sub>. (7/10-10/2011).
- 2- Effect of Co doping on the properties of ZnO bulk samples. (10/9-24/9/2012), (30/10-13/11/2012).
- 3- Investigation of Optical Nonlinearities in Bi Doped Se-Te Chalcogenide Thin Films. (3/7-15/7/2014), (14/8/2014-28/8/2014).
- 4- Low Concentration NO<sub>2</sub> gas sensor based on HfO<sub>2</sub> thin films irradiated by ultraviolet light. (26/10-4/11/2015).
- 5- Numerical Study of TCO/Silicon Solar Cells with Novel Back Surface Field. (7-17/1/2016).
- 6- Modeling and Simulation of ZnS/Cu<sub>2</sub>ZnSn(S<sub>x</sub>Se<sub>1-x</sub>)<sub>4</sub> structure for solar cell applications (30/5-12/6/2017)
- 7- The composition dependence of the band gap energy for the O-rich ZnSexO<sub>1-x</sub>. (30/5-14/6/2017), (29/9-4/10/2017), (13/11-30/11/2017).

**9) Journal of Materials Research (Cambridge Core-MRS Society)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Influence of deposition temperature on the properties of spray deposited cadmium sulphide thin films. (29/6-24/7/2012).

**10) Journal of Physical Science (Penerbit Universiti Sains Malaysia)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Estimate Theoretical Model for the Effect of Illumination on (I- V) Characteristics of CdTe/Ge Photo Detector. (1/7-31/7/2012).

**11) Journal of Crystal Growth (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Urbach Tailing controversial features in copper-doped bismuth sillenites (BSO) and germinates (BGO) crystals: A prelude to the crystal growth -related Lattice Compatibility Theory LCT. (28/7-11/8/2012).

**12) International Journal of Materials and Chemistry (Science and Academic Publishing (SAP).)**

Total number of assignments: **4**

Articles that I reviewed:

- 1- Computer Modeling and Experimental Study of Material Surface Improvement by Nano Coating Technology.
- 2- Chitin and Chitosan: Biopolymers for Wound Management. (5-12/8/2012)
- 3- Adsorption of Zinc (II) Ions by Activated Carbons Prepared from *Ulva fasciata* and Commercially Activated Carbon.
- 4- Adsorption of Zinc (II) Ions by Activated Carbons Prepared from *Ulva fasciata* and Commercially Activated Carbon

**13) Jordan Journal of Physics (Yarmouk University, Jordan).**

Total number of assignments: **2**

Articles that I reviewed:

- 1- Preparation of Dye sensitized solar cell (DSSC) and studying its structural properties (In Arabic).  
إعداد خلية شمسية محسّنة صبغيا (DSSC) ودراسة صفاتها البنيوية
- 2- Photoluminescence and nanomaterials for fingerprint visualization and imaging (13-29/8/2018).

**14) The Walailak Journal of Science and Technology (Institute of Research and Development, Walailak University, Thailand)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Oxidative Copolymerization of Aniline with p-Nitro Aniline by Ammonium Per Sulfate and Study of Optical Properties for It's.

**15) Thin Solid Films: (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1) Doped Ternary (Cd, Hg) S Thin Films: Chemical Synthesis, Characterization and Application Perspectives submitted to Thin Solid Films. (16/12/2012-6/1/2013).

**16) Solar Energy (Elsevier)**

Total number of assignments: **2**

Articles that I reviewed:

1. A simplified method to modulate colors on industrial multicrystalline silicon solar cells with reduced current losses (20/7-3/8/2013).
2. Reduction of interface traps at the amorphous-silicon/crystalline-silicon interface by hydrogen and nitrogen annealing.

**17) International Journal of Energy Engineering (Scientific & Academic Publishing, USA)**

Total number of assignments: **1**

Articles that I reviewed:

1. A Primogenius Study on c-Si Solar Cell. (18/7-1/8/2013)

**18) Journal of Luminescence (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Dependences of the structural, compositional and photoluminescent properties of electrodeposited CdS films upon annealing temperature

**19) Applied Surface Science (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- The investigation of spray pyrolysis grown CdS thin films doped with fluorine atoms. (12-20/6/2015).

**20) Journal of Minerals, Metals, and Materials JOM (Springer)**

Total number of assignments: **3**

Articles that I reviewed:

- 1- Using First Principles Calculations to Investigate the Effect of Oxidation on Graphene Spectroscopic Properties (14-18/9/2014)
- 2- Preparation and Characterization of Rubber Filler by a Composite Powder Recycled from Graphite Tailings (11-17/11/2014)
- 3- Development of CoCrFeNiVAl<sub>x</sub> high entropy alloys based on solid solution strengthening (25/6-11/7/2018), (1-10/11/2018).

**21) International Journal of Hydrogen Energy (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- DESIGN AND SIMULATION OF A UNIFIED POWER QUALITY CONDITIONER FED BY SOLAR ENERGY (15-30/1/2015)

**22) Materials Research Innovations (Taylor & Francis Group)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- Substrate temperature effect on the structural, morphological and optical properties of CdTe films (5/8-4/9/2016)

**23) Renewable Energy and Environmental Sustainability (EDP Sciences)**

Total number of assignments: **4**

Articles that I reviewed:

- 1- In situ Neutron diffraction studies of operating MGA thermal storage materials
- 2- Micro-Optical Structures for Daylighting and LED Systems
- 3- Temperature Difference with Respect to Exposure Time for Black Paint and Galena Powder-Black Paint Composite Selective Surfaces
- 4- Polymer templated nickel cobaltate for energy storage

**24) Journal of Physics and Chemistry of Solids (Elsevier)**

Total number of assignments: **1**

Articles that I reviewed:

- 1- First principles calculations of the energetic, structural, electronic, and magnetic properties of Fe/Ir(100) system (27/9-3/10/2017).

**25) Journal of Energy Systems (JES) (DergiPark)**

Total number of assignments: **3**

Articles that I reviewed:

- 1- Modeling and Optimization of a Superstrate solar cell based on  $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4/\text{ZnS}$  Structure (3/9/2017)
- 2- InP based converter cells under DC plasma influence (20/12/2019)
- 3- Performance and Durability of Thin Film Solar Cells via Testing the Abrasion Resistance of Broadband Anti-reflection Coatings (25/8/2021)
- 4- Graphical Analysis of PV Panels with Solar Charge Controller System (5/3/2022)

**26) Global Conference on Renewables and Energy Efficiency for DEsert Regions, Amman – Jordan, March 31<sup>st</sup> -April 2<sup>nd</sup>, 2009.**

Articles that I reviewed:

- 1- The  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  Window Composition Effect on the Hardness Improvement of a  $\text{p}^+\text{-n-n}^+$  GaAs Solar Cell Exposed to the Electron Irradiation.
- 2- Computer Modelling of the Effect of Irradiation by Electrons on the Performance of GaAs  $\text{p}^+\text{-n-n}^+$  Solar Cells.

**27) The Second Zarga Scientific and Engineering Conference, Zarga, Jordan, 24-25/11/2010.**

Articles that I reviewed:

- 1- Improvement of nanostructured solar cell efficiency prepared by photoelectrochemical etching.
- 2- Neutral Polyethylene Oxide with a Cofactor is Recommended for Particle Flocculation.

**28) TMS 2012, 141th Annual Meeting & Exhibition** which was held at Swan and Dolphin Resort in Walt Disney World, Orlando, Florida USA from March 11-15, 2012. (Symposium: Characterization of Minerals, Metals and Materials)

Articles that I reviewed:

- 1- Thermal properties of Polyester composites incorporated with Coir fiber.

- 2- The characteristics of optical recording media affected by the accelerating aging test.
- 3- Influence of  $\text{La}_2\text{O}_3$  additive content on the phase stability, sintering and microstructure of 8 Mol%  $\text{Y}_2\text{O}_3$  stabilized cubic zirconia (8YSZ) ceramic used for solid oxide fuel cell applications.
- 4- Structure-property correlation of  $x\text{Pb}(\text{Ni}_{0.33}\text{Nb}_{0.67})\text{O}_3-(1-x)\text{Pb}(\text{Zr}_{0.31}\text{Ti}_{0.69})\text{O}_3$  based relaxor-ferroelectric ceramics synthesized via columbite precursor method.
- 5- Characterization and preparation of anti-reflection coatings in the range of 3-5  $\mu\text{m}$  for Si optical window.

**29)** TMS 2013, *141th Annual Meeting & Exhibition* which was held at Swan and Dolphin Resort in Walt Disney World, Orlando, Florida USA from March 11-15, 2012.

Articles that I reviewed (Symposium: Solar Cell Silicon :

- 1- Antireflective Silicon Nanostructures fabricated by cheap chemical etchant and coated by atomic layer deposited  $\text{Al}_2\text{O}_3$  Layer.

**30)** TMS 2014, *143th Annual Meeting & Exhibition* which was held at San Diego, California , USA from February 16-20, 2014 .

Articles that I reviewed

(Symposium: Characterization of Minerals, Metals and Materials):

- 1- Characterization Of Clay Brick Incorporated With Ash From The Incineration Of Urban Garbage
- 2- Modified Hydrotalcites as Desulfurization Adsorbents: Preparation, Characterization, and Performance Test
- 3- A kinetic analysis of a thermal curing reaction of a silicon resin in solid state
- 4- INVESTIGATION ON THE THERMAL CONDUCTIVITY OF RESIN COMPOSITE MATERIALS
- 5- OBTAINING THE POLYSTYRENE-BENTONITE NANOCOMPOSITE AS AN ALTERNATIVE TO POLYSTYRENE DISCARDED RECYCLING.
- 6- THERMAL ANALYSIS AND CHARACTERIZATION OF ELEPHANT GRASS ASH (PENNISSETUM PURUPUREUMS SHAUM) INCORPORATED INTO CLAY MATRIX
- 7- HALOGEN FREE FLAME RETARDANT FOR ABS COMPOSITE WITH OXIDES NANOPARTICLES
- 8- OBTAINING NANOCAPSULES FROM PHBEG/MMT COMPOSITE
- 9- FORMULATION AND CHARACTERIZATION OF BIOCOMPOSITES WITH NANODIAMOND FOR ORTHOPEDIC APPLICATIONS
- 10- EFFECTS OF GREEN CALCIUM CARBONATE ADDITION ON MECHANICAL AND MORPHOLOGICAL PROPERTIES OF FLEXIBLE FILMS BASED ON BIODEGRADABLE POLYMER
- 11- METHOD FOR REMOVAL OF MERCURY FROM OIL FIELD BRINE WITH CALCIUM CARBONATE CO-PRECIPIATION

(Symposium: Solar Cell Silicon):



- 1- ELECTROCHEMICAL DEPOSITION OF HIGH PURITY SILICON FROM MOLTEN FLUORIDE ELECTROLYTES.
- 2- EFFECT OF GRAIN ORIENTATION AND COOLING RATE ON STRESS DISTRIBUTION IN A SMALL SCALE SILICON INGOT.
- 3- NEW APPLICATIONS OF SHEET CASTING OF SILICON AND SILICON COMPOSITES.

**31)** TMS 2015, *143th Annual Meeting & Exhibition* which was held at Orlando, FL, USA, March 15-19, 2015.

Articles that I reviewed

(Symposium: *Characterization of Minerals, Metals and Materials*):

- 1- SHAPEMEMORY CHARACTERISTICS OF RAPIDLY SOLIDIFIED Ti-37,8Cu-18,7Ni ALLOY RIBBONS
- 2- EFFECTS OF CASTING CONDITIONS ON THE STRUCTURE AND MAGNETIC PROPERTIES OF THE Co-19 at.%Al-6 at. %W ALLOY
- 3- IMPROVED HYDROGEN STORAGE PROPERTIES OF MG(BH<sub>4</sub>)<sub>2</sub>-MG(ALH<sub>4</sub>)<sub>2</sub> COMBINED SYSTEMS
- 4- MECHANICAL PROPERTIES OF POLYPROPYLENE NANOCOMPOSITES WITH ORGANOCCLAY AND DISCARDED BOND PAPER
- 5- Study on the Recovery of Mercury and Lead from Wastewater by Sulfide Precipitation-Flotation
- 6- BIODEGRADABLE STARCH/COPOLYESTERS FILM REINFORCED WITH SILICA NANOPARTICLES – PREPARATION AND CHARACTERIZATION
- 7- STUDY OF WETTABILITY OF CLAYEY CERAMIC AND FLUORESCENT LAMP GLASS WASTE POWDERS
- 8- CYANIDATION STUDY OF SLAG RICH IN SILVER
- 9- Wear resistance of artificial stones produced with two contents of an unsaturated polyester
- 10- Characterization of the phase composition of nano sized lithium titanates synthesized by inductive thermal plasma

(Symposium: *Solar Cell Silicon*):

- 1- DIRECTIONAL GROWTH OF BULK SILICON FROM SILICON-ALUMINUM-TIN MELTS
- 2- EFFECT OF TEMPERATURE IN EXTRACTION OF HIGH PURITY AMORPHOUS SILICA FROM RICE HUSK FOR SILICON PRODUCTION.

**32)** ECRES 2015

Articles that I reviewed

- 1- Determine the dimensions of the solar field for ISCCS in Libya

**33)** TMS 2016, *145th Annual Meeting & Exhibition* which was held at Nashville, Tennessee, February 14 – 18, 2016.

Articles that I reviewed

- 1- DETERMINATION OF THE STABILITY CONSTANTS OF MIXED-LIGAND COORDINATION COMPOUNDS IN THE Zn(II)-NITRILOTRIACETIC ACID-AMMONIA SYSTEM

- 2- PROPERTIES OF CERAMIC PIGMENT  $\text{Zn}_{0.5}\text{Cu}_{0.5}\text{Cr}_2\text{O}_4$  SYNTHESIZED BY SOLUTION COMBUSTION METHOD
- 3- EFFECTS OF GRAPHENE OXIDE ADDITION ON MECHANICAL AND MORPHOLOGICAL PROPERTIES OF EVOH FILMS
- 4- EVALUATION OF THE OPTICAL PROPERTIES OF GLASS PREPARED USING OTAMIRI SAND
- 5- Green synthesis, characterization and stabilization of AgNPs with *Thuja orientalis* extract
- 6- TRIBOLOGICAL TESTING, ANALYSIS AND CHARACTERIZATION OF D.C. MAGNETRON SPUTTERED Ti-Nb-N THIN FILM COATINGS ON STAINLESS STEEL
- 7- Effects of carbon black incorporation on morphological, mechanical and thermal properties of biodegradable films
- 8- RESONANCES OF MICROWAVE POWER ABSORPTION IN ALUMINA AND SILICON CARBIDE

**34)** TMS 2017, *146th Annual Meeting & Exhibition* which was held at San Diego, California, February 27 – March 2, 2017.

Articles that I reviewed

- 1) Characterization of Minerals, Metals, and Materials 2017
  - 1- SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF  $\text{BaTiO}_3$  DOPED WITH  $\text{Gd}^{3+}$
  - 2- SYNTHESIS OF TiN NANO-COMPOSITE POWDER BY HIGH-ENERGY BALL MILLING OF  $\text{TiH}_2$  UNDER NITROGEN ATMOSPHERE
  - 3- Phase Transformation of  $\text{MnO}_2$  and  $\text{Fe}_2\text{O}_3$  Briquettes Roasted Under  $\text{CO-CO}_2$  Atmospheres
  - 4- Texture analysis and anisotropic properties of a rolled CuZn36 brass alloy
  - 5- Surface characterization of  $\text{FeS}_2$  and pulp during grinding in an inert mill.
- 2) Solar Cell Silicon
  - 1- Effect of magnesium addition on removal of impurities from silicon by hydrometallurgical treatment
  - 2- Investigation on Quartz Crucibles for Monocrystalline Silicon Ingots for Solar Cells
  - 3- Particle Separation in Silicon Ingot Casting Using AC Magnetic Field
  - 4- Study on Producing Solar Grade Silicon by Carbothermal Reduction of Andalusite Ore
  - 5- EVAORATION REMOVAL OF BORON IN MOLTEN SILICON USING REACTIVE FLUXES
  - 6- EVAORATION REMOVAL OF BORON IN MOLTEN SILICON USING REACTIVE FLUXES

**35)** TMS 2018, *147th Annual Meeting & Exhibition* which was held at Phoenix, Arizona, California,– March 11-15, 2018.

Articles that I reviewed

- 1) Characterization of Minerals, Metals, and Materials 2018
  - 1- Applications of Aberration-corrected Low-energy Electron Microscopy for Metal Surfaces

- 2- THERMOGRAVIMETRIC ANALYSIS ON REDUCTION BEHAVIOR OF POWDERY DICALCIUM FERRITE
- 3- STUDY ON APPLICATION OF IRON ORE FINE IN PELLETIZING
- 4- CHARACTERIZATION OF HPGR PRE-TREATED SINTER FEED
- 5- BENDING MECHANICAL BEHAVIOR OF EPOXY MATRIX REINFORCED WITH FIQUE FABRIC
- 6- Precipitating behaviour of second phase particles in lightweight Fe-Mn-Al-C-N stainless steel

**36)** TMS 2019, *148th Annual Meeting & Exhibition* which was held at San Antonio, TX, USA- March 10-14, 2019.

Articles that I reviewed

- 1) Characterization of Minerals, Metals, and Materials 2019
  - 1- The influence of microstructure and emissivity of NiO doped Fe<sub>3</sub>O<sub>4</sub> spinel structure on near and middle infrared radiation
  - 2- Sinterability of Y-doped BaZrO<sub>3</sub> with micro and nano CaO additives and its interaction with titanium alloy
  - 3- INCORPORATION OF SILVER NANOPARTICLES IN ZINC OXIDE MATRIX INPOLYESTER THERMOPLASTIC ELASTOMER (TPE-E) AIMINGANTIBACTERIAL ACTIVITY
  - 4- THE PROPERTIES OF THE SOIL IN THE MUNICIPAL AREA OF CAMPOS DOS GOYTACAZES - RJ, BRAZIL, AND THE POSSIBILITY OF ITS USE IN THE PRODUCTION OF PRESSED BLOCKS
  - 5- A Study of the load stages by the displacement of mortars composed of ornamental stone residues by the method of squeeze flow
  - 6- Structure, phase, composition, and properties of ceramics based on AlMgB<sub>14</sub>, obtained from various powders
  - 7- Study of the electrical properties of rGO obtained by different GO reduction methods
- 2) Green Materials Engineering: An EPD Symposium in Honor of Sergio Monteiro
  - 1- Application of natural nanoparticles in polymeric blend of HMSPP/SEBS for biocide activity
  - 2- NATURAL FIBERS REINFORCED POLYMER COMPOSITES APPLIED IN BALLISTIC MULTILAYERED ARMOR FOR PERSONAL PROTECTION - AN OVERVIEW
  - 3- BALLISTIC TEST OF MULTILAYERED ARMOR WITH INTERMEDIATE POLYESTER COMPOSITE REINFORCED WITH FIQUE FABRIC
  - 4- IZOD IMPACT TEST ON EPOXY COMPOSITES REINFORCED WITH MALLOW FIBERS
  - 5- PIASSAVA FIBERS: MORPHOLOGIC AND SPECTROSCOPIC ASPECTS
  - 6- REUSE OF QUARRY WASTE IN ARTIFICIAL STONE PRODUCTION WITH USING VACUUM, COMPRESSION AND VIBRATION
  - 7- IZOD IMPACT TESTING IN COMPOSITES WITH VEGETAL POLIURETHANE MATRIX REINFORCED BY COTTON FABRIC
  - 8- Impact energy evaluation of natural castor oil polyurethane matrix composites reinforced with jute fabric

9- Study of the Incorporation of Waste from the Paper Industry in Ceramic Tiles

**37)** TMS 2020, *149th Annual Meeting & Exhibition* which will be held at San Diego, CA, USA- February 23-27, 2020.

Articles that I reviewed

- 1) Characterization of Minerals, Metals, and Materials 2020
- 1- Analysis of  $\beta'$  ( $\text{Cu}_4\text{Ti}$ ) Precipitation during Isothermal Aging of a Cu-4wt.%Ti Alloy
- 2- Removing Arsenic from the  $\text{NiSO}_4$  solution using modified D301 resin
- 3- Preparation of lithium ion battery anode materials from precipitation flotation product
- 4- Fabrication of ultra-high molecular weight polyethylene membrane with enhanced permeability and evaluation of physical characteristics for wastewater treatment.
- 5- A new method to obtain cellulose nanofiber from wood
- 6- Influence of sealing mortar in the strength of compression of the structural masonry ceramic.
- 7- Preparation of Insulating Materials from Ferronickel Slag with Addition of Fly Ash Cenosphere
- 8- Development and characterization of a luminescent coating for asphalt pavements
- 9- A bibliometric analysis on strategy and performance of the development of matrix polymers in the scenarios of Brazil and the world.
- 10- Microstructure Evolution of Additively Manufactured TiC Reinforced Graded Metal Matrix Composite
- 11- Processing and Characterization of Polyethylene-AgNPs Films – Biocide Effect

**38)** TMS 2022,

Articles that I reviewed

- 1- Application of flue gas desulfurization waste for the production of geopolymer tiles.
- 2- Characterization of mortar in fresh state with the addition of açaí fiber
- 3- Characterization and stain analysis in natural and artificial rocks
- 4- Comparative study of staining resistance for polished and resined silicatic ornamental rocks

**39)** TMS 2023,

Articles that I reviewed

- 1- Influence of the time of staining agents on ornamental rocks
- 2- Characterization of Açaí Fibers (*Euterpe Oleracea* Mart.) for Application in Cement Composites
- 3- Analysis of the properties in the hardened state of an alkali activated paste of metakaolin and flue gas desulfurization (FGD) residue
- 4- Durability of alkali activated tiles produced with residual gray from the ceramic industry
- 5- Analysis of the performance of cementitious mortars reinforced with pineapple crown leaf fiber and coconut fiber
- 6- Analysis of the properties in the fresh state of alkali activated paste of metakaolin and flue gas desulfurization waste

**FOUNDER AND EDITOR IN CHIEF OF THE BOOK SERIES**

**Advances in Materials Research and Technologies**, Springer International Publishing, 2020.  
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<https://www.springer.com/series/16426>

**Volumes:**

- 1- **Shadia Jamil Ikhmayies** (Editor). **Advances in Energy Materials**. Springer International Publishing, 2020. eBook ISBN: 978-3-030-50108-2, Hardcover ISBN: 978-3-030-50107-5, Series ISSN: 2662-4761. DOI: 10.1007/978-3-030-50108-2. <https://www.springer.com/series/16426>
- 2- **Nayak, Amit Kumar, Hasnain, Md Saquib** (Editors). **Advanced Biopolymeric Systems for Drug Delivery**. Springer International Publishing, 2020. eBook ISBN: 978-3-030-46923-8. Hardcover ISBN: 978-3-030-46922-1. Series ISSN: 2662-4761. DOI: 10.1007/978-3-030-46923-8. <https://www.springer.com/gp/book/9783030469221>
- 3- **Omran, Basma, Abdelsalam, Mohamed** (Authors). **A New Era for Microbial Corrosion Mitigation Using Nanotechnology: Biocorrosion and Nanotechnology**. Springer International Publishing, 2020. eBook ISBN: 978-3-030-49532-9. Hardcover ISBN: 978-3-030-49531-2. Series ISSN: 2662-4761. DOI: 10.1007/978-3-030-49532-9. <https://www.springer.com/gp/book/9783030495312>
- 4- **Shadia Jamil Ikhmayies** and **Hilal Kurt** (Editors). **Advances in Optoelectronic Materials**. Springer International Publishing, 2021. eBook ISBN: 978-3-030-57737-7. Hardcover ISBN: 978-3-030-57736-0. Series ISSN: 2662-4761. DOI: 10.1007/978-3-030-57737-7. <https://www.springer.com/gp/book/9783030577360>
- 5- **J. Radhakrishnan, Sunil Pathak** (Editors). **Advanced Engineering of Materials Through Lasers**. Springer Cham, 2022. Hardcover ISBN: 978-3-031-03829-7. Softcover ISBN: 978-3-031-03832-7. eBook ISBN: 978-3-031-03830-3. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-031-03830-3>
- 6- **Hasnain Md Saquib, Nayak Amit Kumar, Alkahtani Saad** (Editors). **Polymeric and Natural Composites: Materials, Manufacturing and Biomedical Applications**. Springer Cham, 2021. Hardcover ISBN: 978-3-030-70265-6. Softcover ISBN: 978-3-030-70268-7. eBook ISBN: 978-3-030-70266-3. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-030-70266-3>
- 7- **Shadia Jamil Ikhmayies** (Editor). **Advanced Nanomaterials**. Springer Cham, 2022. Hardcover ISBN: 978-3-031-11995-8. Softcover ISBN: 978-3-031-11998-9. eBook ISBN: 978-3-031-11996-5. Series ISSN: 2662-4761. DOI: 10.1007/978-3-030-70266-3. <https://link.springer.com/book/9783031119989>
- 8- **Sumanta Sahoo, Santosh Kumar Tiwari, and Ashok Kumar Das** (Editors). **Defect Engineering of Carbon Nanostructures**. Springer Cham, 2022. Hardcover ISBN: 978-3-030-94374-5. Softcover ISBN: 978-3-030-94377-6. eBook ISBN: 978-3-030-94375-2. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-030-94375-2>
- 9- **Nithyadharseni Palaniyandy, K. P. Abhilash, B. Nalini** (Editors). **Solid State Batteries: Design, Challenges and Market Demands**. Springer Cham, 2022. Hardcover ISBN: 978-3-031-12469-3. Softcover ISBN: 978-3-031-12472-3. eBook ISBN: 978-3-031-12470-9. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-031-12470-9>

- 10- Md Saquib Hasnain, Amit Kumar Nayak, Saad Alkahtani (Editors). **Polymeric and Natural Composites: Materials, Manufacturing and Biomedical Applications.** Springer Cham, 2022. Hardcover ISBN: 978-3-030-70265-6. Softcover ISBN: 978-3-030-70268-7. eBook ISBN: 978-3-030-70266-3. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-030-70266-3>
- 11- **Shadia Jamil Ikhmayies** (Editor). **Advances in Glass Research.** Springer Cham, 2023. Hardcover ISBN: 978-3-031-20265-0. Softcover ISBN: 978-3-031-20268-1. eBook ISBN: 978-3-031-20266-7. Series ISSN: 2662-4761. DOI: <https://doi.org/10.1007/978-3-031-20266-7>
- 12- Md Saquib Hasnain, Amit Kumar Nayak, Saad Alkahtani (Editors). **Carbon Nanostructures in Biomedical Applications.** Springer Cham, 2023. Hardcover ISBN: 978-3-031-28262-1. Softcover ISBN: 978-3-031-28265-2. eBook ISBN: 978-3-031-28263-8. Series ISSN: 2662-4761. <https://link.springer.com/book/9783031282621>
- 13- Meththika Vithanage, Giuseppe Lazzara, Anushka Upamali Rajapaksha (Editors). **Clay Composites: Environmental Applications.** Springer Singapore, 2023. Book ISBN: 978-981-99-2544-5. Hardcover ISBN: 978-981-99-2543-8, Softcover ISBN: 978-981-99-2546-9. Series ISSN: 2662-4761. <https://link.springer.com/book/9789819925438>
- 14- Jai Prakash, Junghyun Cho, Bruno Campos Janegitz, Shuhui Sun (Editors). **Multifunctional Hybrid Semiconductor Photocatalyst Nanomaterials: Application on Health, Energy and Environment.** Springer Cham, 2023. Hardcover ISBN: 978-3-031-39480-5, Softcover ISBN: 978-3-031-39483-6, eBook ISBN: 978-3-031-39481-2, Series ISSN: 2662-4761. <https://link.springer.com/book/9783031394805>
- 15- **Shadia Jamil Ikhmayies** (Editor). **Advanced Ceramics.** Springer Cham, 2023. Hardcover ISBN: 978-3-031-43917-9, Softcover ISBN: 978-3-031-43920-9, eBook ISBN: 978-3-031-43918-6, Series ISSN: 2662-4761. <https://link.springer.com/book/9783031439179>
- 16- **Shadia Jamil Ikhmayies** (Editor). **Advanced composites.** Springer Cham, 2023. Hardcover ISBN: 978-3-031-42730-5, Softcover ISBN: 978-3-031-42733-6, eBook ISBN: 978-3-031-42731-2. Series ISSN: 2662-4761. <https://link.springer.com/book/9783031427305>
- 17- **Shadia Jamil Ikhmayies** (Editor). **Advances in Catalysts Research,** Springer Cham, 2024. Hardcover ISBN: 978-3-031-49107-8, Softcover ISBN: 978-3-031-49110-8, eBook ISBN: 978-3-031-49108-5. Series ISSN: 2662-4761. <https://link.springer.com/book/10.1007/978-3-031-49108-5>
- 18- **Shadia Jamil Ikhmayies** (Editor). **Advances in Minerals Research.** Springer Cham, 2024. Hardcover ISBN: 978-3-031-49174-0, Softcover ISBN: 978-3-031-49177-1, eBook ISBN: 978-3-031-49175-7, Series ISSN: 2662-4761
- 19- **Shadia Jamil Ikhmayies** (Editor). **Advances in Alloys Research and Technologies.** Springer Cham, 2024. Hardcover ISBN: 978-3-031-57498-6, Softcover ISBN: 978-3-031-57501-3, eBook ISBN: 978-3-031-57499-3, Series ISSN: 2662-4761. <https://link.springer.com/book/9783031574986>
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- 21- Advanced Semiconductors
- 22- Advances in Biomaterials Research
- 23- Advances in Magnetic Materials
- 24- Advances in High Temperature Materials

- 25- Advances in Green Materials Engineering
- 26- Advanced Superconducting Materials
- 27- Advanced Environmental Materials
- 28- Advances in Piezoelectric Materials
- 29- Advanced Fibers
- 30- Advances in Surfactants Technologies
- 31- Advances in Structure Materials
- 32- Advances in Medical Materials

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1. **Shadia Jamil Ikhmayies**, Jian Li, Carlos Mauricio Vieira, Fabio de Oliveira Braga (Eds.), **Green Materials Engineering: An EPD Symposium in Honor of Sergio Monteiro**, Springer International Publishing, 2019. ISSN 2367-1181 ISSN 2367-1696 (electronic)  
The Minerals, Metals & Materials Series  
ISBN 978-3-030-10382-8 ISBN 978-3-030-10383-5 (eBook)  
<https://doi.org/10.1007/978-3-030-10383-5>
2. **Shadia Ikhmayies**, **Advances in Silicon Solar Cells**, Springer, 2018, eBook ISBN: 978-3-319-69703-1, Hardcover ISBN: 978-3-319-69702-4, DOI: 10.1007/978-3-319-69703-1
3. **Ikhmayies, S.**, Li, B., Carpenter, J.S., Li, J., Hwang, J.-Y., Monteiro, S.N., Firrao, D., Zhang, M., Peng, Z., Escobedo-Diaz, J.P., Bai, C., Kalay, Y.E., Goswami, R., Kim, J. **Characterization of Minerals, Metals, and Materials 2017**, Springer, 2017, ISBN: 3319513826, 9783319513829. DOI: 10.1007/978-3-319-51382-9
4. **Shadia Ikhmayies**, Bowen Li, John S. Carpenter, Jiann-Yang Hwang, Sergio Neves Monteiro, Jian Li, Donato Firrao, Mingming Zhang, Zhiwei Peng, J. Pablo Escobedo-Diaz, Chengguang Bai, **Characterization of Minerals, Metals, and Materials 2016**, Publisher John Wiley & Sons Inc, New York, United States, ISBN10 1119264391, ISBN13 9781119264392. DOI:10.1002/9781119263722
5. **Advances in II-VI Compounds Suitable for Solar Cell Applications**, ISBN: 978-81-308-0533-7, Signpost publisher, 2014.

#### EDITOR OF THE BOOKS:

1. Editors: Li, J., Zhang, M., Li, B., Monteiro, S.N., **Ikhmayies, S.J.**, Kalay, Y.E., Hwang, J., Escobedo-Diaz, J.P., Carpenter, J.S., Brown, A.D., Soman, R., Moser, A. (Eds.), **Characterization of Minerals, Metals, and Materials 2021**, Springer International Publishing. eBook ISBN : 978-3-030-65493-1, Hardcover ISBN: 978-3-030-65492-4, DOI: 10.1007/978-3-030-65493-1
2. Editors: Bowen Li, Baojun Zhao, Jian Li, Sergio Neves Monteiro, Zhiwei Peng, Dean Gregurek, Tao Jiang, Yong Shi, Cuiping Huang, **Shadia Ikhmayies**. **From Ideas to Practice: An EPD Symposium in Honor of Jiann-Yang Hwang** (The Minerals, Metals & Materials Series), Springer; 1st ed. 2021 edition (14 February 2021). ISBN-10 : 3030652408 , ISBN-13 : 978-3030652401.
3. Editors: Li, J., Zhang, M., Li, B., Monteiro, S.N., **Ikhmayies, S.J.**, Kalay, Y.E., Hwang, J., Escobedo-Diaz, J.P., Carpenter, J.S., Brown, A.D. (Eds.), **Characterization of Minerals, Metals, and Materials 2020**, Springer International Publishing 2020, eBook

- ISBN: 978-3-030-36628-5, Hardcover ISBN: 978-3-030-36627-8, The Minerals, Metals & Materials Series ISSN: 2367-1181. DOI: 10.1007/978-3-030-36628-5
4. Editors: Li, B., Li, J., **Ikhmayies, S.**, Zhang, M., Kalay, Y.E., Carpenter, J.S., Hwang, J.-Y., Monteiro, S.N., Bai, C., Escobedo-Diaz, J.P., Spena, P.R., Goswami, R. (Eds.), **Characterization of Minerals, Metals, and Materials 2019**, Springer International Publishing, 2019. ISSN 2367-1181 ISSN 2367-1696 (electronic), The Minerals, Metals & Materials Series, ISBN 978-3-030-05748-0 ISBN 978-3-030-05749-7. DOI: 10.1007/978-3-030-05749-7
  5. Editors: Tao Wang, Xiaobo Chen, Donna Post Guillen, Lei Zhang, Ziqi Sun, Cong Wang, Nawshad Haque, John A. Howarter, Neale R. Neelameggham, **Shadia Ikhmayies**, York R. Smith, Leili Tafaghodi, Amit Pandey. **Energy Technology 2019: Carbon Dioxide Management and Other Technologies**, Springer International Publishing, 2019. ISSN 2367-1181 ISSN 2367-1696 (electronic). The Minerals, Metals & Materials Series, ISBN 978-3-030-06208-8 ISBN 978-3-030-06209-5 (eBook). DOI: 10.1007/978-3-030-06209-5
  6. Editors: Ziqi Sun, Cong Wang, Donna Post Guillen, Neale R. Neelameggham, Lei Zhang, John A. Howarter, Tao Wang, Elsa Olivetti, Mingming Zhang, Dirk Verhulst, Xiaofei Guan, Allie Anderson, **Shadia Ikhmayies**, York R. Smith, Amit Pandey, Sarma Pisupati, Huimin Lu. **Energy Technology 2018: Carbon Dioxide Management and Other Technologies**, Springer International Publishing, 2018, ISBN: 9783319723624. DOI: 10.1007/978-3-319-72362-4
  7. **Editors:** Bowen Li, Jian Li, **Shadia Ikhmayies**, Mingming Zhang, Yunus Eren Kalay, John S. Carpenter, Jiann-Yang Hwang, Sergio Neves Monteiro, Donato Firrao, Andrew Brown, Chenguang Bai, Zhiwei Peng, Juan P. Escobedo-Diaz, Ramasis Goswami, Jeongguk Kim, **Characterization of Minerals, Metals, and Materials 2018**, Springer International Publishing, 2018, ISBN 978-3-319-72484-3. DOI: 10.1007/978-3-319-72484-3
  8. Editors: Lei Zhang, Jaroslaw Drelich, Neale R. Neelameggham, Donna Post Guillen, Nawshad Haque, Jingxi Zhu, Ziqi Sun, Tao Wang, John A Howarter, Fiseha Tesfaye, **Shadia Ikhmayies**, Elsa Olivetti, Mark William Kennedy, **Energy Technology 2017: Carbon Dioxide Management and Other Technologies**, Springer, 2017, 3319521926, 9783319521923. DOI: 10.1007/978-3-319-52192-3
  9. Editors: Carpenter, John, Bai, Chenguang, Pablo Escobedo-Diaz, J., Hwang, Jiann-Yang, **Ikhmayies, Shadia**, Li, Bowen, Li, Jian, Neves Monteiro, Sergio, Peng, Zhiwei, Zhang, Mingming, **Characterization Of Minerals, Metals, And Materials 2015**, Springer, ISBN-13: 9783319486017. DOI: 10.1007/978-3-319-48191-3
  10. Editors: Yurko James, Allanore Antoine, Bartlett Laura Lee, Jonghyun Zhang Lifeng, Tranell Gabriella, Metelewa-Fischer Yulia, **Ikhmayies, Shadia**, Budiman Arief, Tripathy Prabhat, Fredrickson, Guy, **Epd Congress 2015**, Springer, ISBN-13: 9783319486093. DOI: 10.1007/978-3-319-48214-9
  11. Editors: John S. Carpenter, Chenguang Bai, Jiann-Yang Hwang, **Shadia Ikhmayies**, Bowen Li, Sergio Neves Monteiro, Zhiwei Peng, Mingming Zhang, **Characterization of Minerals, Metals, and Materials 2014**, ISBN: 978-1-118-88786-8. DOI:10.1002/9781118888056
  12. Editors: Jiann-Yang Hwang, Chenguang Bai, John S. Carpenter, **Shadia Ikhmayies**, Bowen Li, Sergio Neves Monteiro, Zhiwei Peng, Mingming Zhang, **Characterization of Minerals, Metals, and Materials 2013**, John Wiley & Sons, 2013, ISBN: 1118659058, 9781118659052. DOI:10.1002/9781118659045



#### **AUTHOR OF THE BOOKS:**

1. **Silicon for Solar Cell Applications**, Springer, 2020 (Under Construction)
2. **Performance Optimization of CdS/CdTe Solar Cells**, Springer, 2020 (Under Construction)

#### **FOUNDER AND EDITOR IN CHIEF OF THE JOURNAL**

1. **Energy, Power, and Materials**, Springer (Proposal is under Review).

#### **ASSOCIATE EDITOR OF THE JOURNALS:**

- 1) Peak Journal of Physical and Environmental Science Research (PJESR) (Peak Journals Publisher): January 26, 2013-2014.
- 2) Journal of Physics Express (Simplex Academic Publishers: India): September 3, 2012-31 December, 2012.

#### **GUEST (SUBJECT) EDITOR OF THE JOURNALS:**

- 1) Journal of Minerals, Metals and Materials JOM (Springer): Volume 75, issue 3, May 2023: Materials for Clean Energy Production and Storage (Invited). <https://link.springer.com/journal/11837/volumes-and-issues/75-3>
- 2) Journal of Minerals, Metals and Materials JOM (Springer): Volume 73, issue 5, May 2021: 8th European Conference on Renewable Energy Systems, (Invited). <https://link.springer.com/journal/11837/volumes-and-issues/73-5>
- 3) Journal of Minerals, Metals and Materials JOM (Springer): January 2021: Zinc oxide Nanotechnology, (Invited). <https://link.springer.com/journal/11837/volumes-and-issues/73-1>
- 4) Journal of Minerals, Metals and Materials JOM (Springer): November 2021: Silicon Production, Refining, Properties, and Photovoltaics, (Invited). <https://link.springer.com/journal/11837/volumes-and-issues/73-1>
- 5) Springer Nature of Applied Sciences (Springer): Topical Collection: Energy, Power, and Materials Modelling" (Open for Submissions). <https://www.springer.com/journal/42452/updates/17277406>
- 6) Journal of Minerals, Metals and Materials JOM (Springer): Volume 72, February issue (2), 2020, Topical Collection: 7<sup>th</sup> European Conference on Energy Systems. Energy Materials. <https://link.springer.com/journal/11837/72/2>
- 7) Journal of Minerals, Metals and Materials JOM (Springer): July issue, 2020, Recycling Silicon and Silicon Compounds.
- 8) Journal of Electronic Materials, 6th European Conference on Renewable Energy Systems. ISSN: 0361-5235 (Print) 1543-186X (Online): Topical Collection: Electronic Materials for Renewable Energy Applications 2018. (Springer). [https://link.springer.com/journal/11664/topicalCollection/AC\\_3f35de1f7a301a7cba08639633e33cc0/page/1](https://link.springer.com/journal/11664/topicalCollection/AC_3f35de1f7a301a7cba08639633e33cc0/page/1)
- 9) Journal of Minerals, Metals and Materials JOM (Springer): Volume 71, April issue (Issue 4), 2019, Energy Materials II. <https://link.springer.com/journal/11837/71/4/page/2>
- 10) Journal of Minerals, Metals and Materials JOM (Springer): Volume 71, February issue (Issue 2), 2019, Energy Materials I. <https://link.springer.com/journal/11837/71/2/page/2>

- 11) Journal of Electronic Materials: Volume 47, Issue 8, August 2018, Special Sections: 18th International Conference on II–VI Compounds and Related Materials. Guest Editors: Xinyu Liu and Aidong Shen; and 5th European Conference on Renewable Energy Systems. Guest Editors: Erol Kurt and Shadia Jamil Ikhmayies. ISSN: 0361-5235 (Print) 1543-186X (Online). <https://link.springer.com/journal/11664/47/8>
- 12) Key reader of the journal Metallurgical and Materials Transactions A, for the Characterization of Minerals, Metals, and Materials 2017, Volume 48, Topical Collection: Topical Collection: Characterization of Minerals, Metals, and Materials 2017. ISSN: 1073-5623 (Print) 1543-1940 (Online). [https://link.springer.com/journal/11661/topicalCollection/AC\\_7d24f75fd40a63d779f1a7888aaaa6ab/page/1](https://link.springer.com/journal/11661/topicalCollection/AC_7d24f75fd40a63d779f1a7888aaaa6ab/page/1)
- 13) Journal of Electronic Materials: Volume 46, Issue 7, July 2017. Special Topic on Superlattices, Nanostructures and Nanodevices. Guest Editor: Ruiqin Zhang. Special Topic on Materials Studies in Energy Systems. Guest Editors: Erol Kurt, Shadia Ikhmayies, and Ibrahim Sefa. ISSN: 0361-5235 (Print) 1543-186X (Online). <https://link.springer.com/journal/11664/46/7>
- 14) Journal of Electronic Materials: Volume 45, Issue 8, August 2016, Special Section: Third European. Conference on Renewable Energy Systems ECRES2015. (ISSN: 0361-5235 (Print) 1543-186X (Online)). <https://link.springer.com/journal/11664/45/8>
- 15) Journal of Minerals, Metals and Materials JOM (Springer): Volume 66, January Issue (Issue 1), 2014 (Characterization of Nanomaterials). <https://link.springer.com/journal/11837/66/1>

#### **MEMBER OF THE EDITORIAL BOARD OF THE JOURNALS:**

- 1) Optimum Science Journal: Member of the editorial board (Hason Publishing.). 2023, 01 December. <https://optimumscience.org/index.php/pub>
- 2) Journal of Amasya University the Institute of Sciences and Technology (DergiPark): Member of the editorial board, May 3, 2020.
- 3) Recent Patents on Materials Science: an Editorial Advisory Board Member (Bentham Science), September 7, 2018-August 28, 2019. Changed to: Current Materials Science: Editorial Board Member, August 28, 2019-Present. <https://benthamscience.com/journals/current-materials-science/editorial-board/>
- 4) Journal of Energy Systems (DergiPark): Field editor (Energy Issues in Material Engineering), 2017-Present. <https://dergipark.org.tr/en/pub/jes/board>
- 5) Journal of Physics Express (Simplex Academic Publishers): July 21, 2010- September 3, 2012.
- 6) International Journal of Materials and Chemistry (Scientific & Academic Publishing): December 5, 2011-Present. <http://www.sapub.org/journal/editorialboard.aspx?journalid=1099>

#### **POSITIONS:**

- 1) **Acting dean**, Faculty of Science, Al Isra University, June 18-25, 2017.
- 2) **Acting dean**, Faculty of Science, Al Isra University, May 2-7, 2017.
- 3) **Past chair** of the Characterization of Minerals, Metals, and Materials committee **Term:** 02/26/2017- 03/31/2019.

- 4) **Chair of Physics Department**, Faculty of Science, Al Isra University, November 1, 2016 to October 8, 2017
- 5) **Chair** for the Characterization of Minerals, Metals and Materials Committee (TMS): 2016 and 2017.
- 6) **Vice Chair** for the Characterization of Minerals, Metals and Materials Committee (TMS): 2014 and 2015.

#### **CONFERENCES WITHOUT PAPERS AND PRESENTATIONS:**

1. 10<sup>th</sup> SESAME Users' Meeting SESAME-JSPS School 7-9 November, 2012. Amman, Jordan.
2. 9<sup>th</sup> SESAME Users' Meeting SESAME-JSPS School 12-16 November, 2011. Amman, Jordan.
3. The Second Zarga Scientific and Engineering Conference, Zarga, Jordan, 24-25/11/2010.
4. 8<sup>th</sup> SESAME Users' Meeting 19-21 November, 2009. Petra, Jordan.
5. The International Conference on Materials in Jordan, 4-6 March 2009, German-Jordanian University (GJU), Amman, Jordan.
6. LINKSCEEM User Meeting, November 6, 2008, University of Jordan, Amman, Jordan.
7. Symposium on the Technology of Peaceful Nuclear Energy 14-16 October 2008, Organized by Center for Theoretical and Applied Physical Sciences (CTAPS), Yarmouk University, 211-63 Irbid-Jordan.
8. 6<sup>th</sup> SESAME Users' Meeting 17-19 November, 2007. Amman, Jordan.

#### **WORKSHOPS: (in decending chronological order)**

1. **The 8<sup>th</sup> Workshop of SESAME users**, University of Jordan, 3/5/2012.
2. **The 7<sup>th</sup> Workshop of SESAME users**, University of Jordan, 5/5/2011.
3. **ورشة تطوير الأداء المهني لأعضاء هيئة التدريس الجدد**. كلية العلوم التربوية، جامعة الإسرءاء، 2011/2/14
4. **The Workshop on Writing Papers and Proposals**, on 9<sup>th</sup> October 2010 during the 11<sup>th</sup> Eurasia conference on Chemical Sciences at the Dead Sea, Jordan 2010.
5. **The 6<sup>th</sup> Workshop of SESAME users**, University of Jordan, 6/5/2010.
6. **Jordan Environment Society (JES) Meeting**, Amman, Jordan, 27/2/2010.
7. **The National Renewable Energy Dialogue Workshop**, held in Amman, Jordan on Monday February 8<sup>th</sup>, 2010. Organized by Jordanian Renewable Energy Society (ESTEDAMA).
8. **3 Day LinkSCEEM HPC Workshop: HPC and its Usage**, 19<sup>th</sup> to 21<sup>st</sup> of January 2010, University of Jordan, Amman, Jordan.
9. **Workshop on computational physics using WIEN2K PACKAGE**, August 2<sup>nd</sup>, 2009, Organized by Center for Theoretical and Applied Physical Sciences (CTAPS).
10. **Workshop of Green Energy and Sustainability Strategy and Challenges**, held in Amman, Jordan on June 15<sup>th</sup>, 2009. Organized by Jordanian Renewable Energy Society (ESTEDAMA).
11. **The 5<sup>th</sup> Workshop of SESAME users**, Al-Zaytoonah University of Jordan, 7/5/2009.
12. **الدورة الإحصائية SPSS**، جامعة العلوم التطبيقية الخاصة، 2007/6/7 - 2007/6/3
13. **The 3<sup>rd</sup> Workshop of SESAME users**, University of Jordan, 25/4/2007.
14. **Training Course on the Application of the Internet in Education**, Applied Science Private university, Amman-Jordan, 11 February 2007.
15. **دورة تأهيل أعضاء هيئة التدريس**، جامعة العلوم التطبيقية الخاصة، 2005/10/3 - 9/2005/27
16. **MS DOS**, University of Jordan, 1992.

17. **Maintenance and Repairing of ordinary and colored Television**, University of Jordan, 1991.
18. **Advanced Training Course in Nuclear Instrumentation**, Held in Amman-Jordan from 2 June to 11 July 1990, organized by IAEA in cooperation with the Ministry of Energy and Mineral Resources, the Royal Scientific Society of Jordan and the University of Jordan.
19. **National Training Course in Nuclear Instrumentation**, Held in Amman-Jordan from 2 September to 12 October 1989, organized by IAEA in cooperation with the ministry of Energy and Mineral Resources, the Royal Scientific Society of Jordan and the University of Jordan.

#### **CHAIR OF CONFERENCE SESSIONS:**

1. TMS 2023, *152th Annual Meeting & Exhibition* which was held at San Diego, California, March 19-23, 2023. Symposium: Characterization of Minerals, Metals, and Materials 2023: Session: Advanced Characterization Methods II, Monday, 2:00-5:35 PM, 03/20/2023
2. 3<sup>rd</sup> International Hydrogen Energy Congress & Exhibitions. Gazi University, Ankara/TURKEY, 14-16 June 2021. ZOOM parallel session A. HALL MERSIN (15 June, 2021.Tuesday Afternoon).
3. TMS 2021 Virtual, *150th Annual Meeting & Exhibition*, March 15-18, 2021, Session: Characterization of Mechanical Properties, Wednesday 8:30 AM, 17/3/ 2021
4. TMS 2020, *149th Annual Meeting & Exhibition* which was held at San Diego, California, February 23-27, 2020
  - 1- Characterization of Minerals, Metals, and Materials 2020: Session: Characterization of Electronic and Magnetic Materials, Thursday 8:30 AM - 12:00 PM, 02/27/2020
  - 2- Solar Cell Silicon:
    - Session: Synthesis, Production, and Refining, Monday 8:00 AM - 11:30 AM, 02/24/2020
    - Properties, Photovoltaics, and Other Applications, Monday 2:30 PM - 6:00 PM, 02/24/2020
5. TMS 2019, *148<sup>th</sup> Annual Meeting & Exhibition* which was held at San Antonio, Texas, USA, March 10-14, 2019
  - 1- Characterization of Minerals, Metals, and Materials: Process and Characteristics of Advanced Ceramics and Glasses II. Wednesday 8:30 AM, March 13, 2019.
  - 2- Solar Cell Silicon : Properties, Impurities, and Refining. Wednesday 2:00 PM, March 13, 2019.
6. International Computational Science Congress (CSC)” which was held in Amasya (Turkey), October 26-28, 2018: Session II, 26/10/2018, Friday (15:30-17:00).
7. World Renewable Energy Congress – 18, Penrhyn Road, Kingston University, Surrey KT1 2EE, UK, 30 July – 3 August 2018: Technical Sessions-3, THURSDAY – 2 AUGUST, 2018.
8. VI. EUROPEAN CONFERENCE on RENEWABLE ENERGY SYSTEMS (ECRES 2018), which was held at , Istanbul, Turkey, 25-27 June 2018:
  - 1- Special Session 4, Energy Materials: Production and Characterization
  - 2- Parallel Session 10, MATERIAL CHARACTERIZATION.
9. TMS 2018, *147th Annual Meeting & Exhibition* which was held at Diego, California, February 26-March 2, 2017

- 1- Characterization of Minerals, Metals, and Materials 2018. Session: Analysis of Surfaces and Interfaces.
- 2- Mechanical Characteristics and Application Properties of Metals and Non-metals for Technology: An EPD Symposium in Honor of Donato Firrao. Session: Compounds and Alloys.
- 3- Solar Cell Silicon. Session: Silicon Photovoltaics.
10. 5. EUROPEAN CONFERENCE on RENEWABLE ENERGY SYSTEMS (ECRES2017), which was held at SARAJEVO/Bosnia and Herzegovina at 27-30 August 2017. Session: Material Exploration and Characterization.
11. The fourth WREN-WREC Med Green Forum, which was held at the University of Florence, 31 July – 2 August, 2017. Session: TECHNICAL Session 5.
12. TMS 2017, *146th Annual Meeting & Exhibition* which was held at San Diego, California, February 26-March 2, 2017.
  - 1- Characterization of Minerals, Metals, and Materials 2017. Session: Characterization of Electronic, Magnetic, Environmental, and Advanced Materials.
  - 2- Solar Cell Silicon Symposium. Session: Silicon Production, Crystallization, and Properties
13. TMS 2016, *145th Annual Meeting & Exhibition* which was held at Nashville, Tennessee, February 14 – 18, 2016.
 

Characterization of Minerals, Metals and Materials Committee. Session: Characterization of Electronic, Magnetic, Environmental, and Advanced Materials.
14. The Third European Conference on Renewable Energy Systems (ECRES2015). Session: Characterization of Energy Materials which was held at Antalya, TURKEY, 7-10 Oct. 2015.
15. 8<sup>th</sup> International Conference on Thermal Engineering: Theory and Applications ICTEA, May 18-21, 2015, Amman-Jordan. Session: Transport Phenomina
16. TMS 2015, *144th Annual Meeting & Exhibition* which was held at Orlando, FL, USA, March 15-19, 2015.
  - 1- Characterization of Minerals, Metals, and Materials Committee. Session: Characterization of Electronic, Magnetic, Environmental, and Advanced Materials
17. International Conference on Nuclear & Renewable Energy Resources held in Antalya, Turkey between 26-29 October 2014, Sessions:
  - 1- Bio-energy researches and policy.
  - 2- Materials modeling for energy systems
  - 3- Thermodynamic Issues in Energy.
10. TMS 2014, *143<sup>th</sup> Annual Meeting & Exhibition* which was held at San Diego, California , USA from February 16-20, 2014
  - 1- Characterization of Minerals, Metals and Materials 2014. Session: Characterization of Environmental Materials.
  - 2- Solar Cell Silicon. Thursday PM, March 6, Session: Silicon Refining.
11. The II. European Conference & Workshop on Renewable Energy Systems, 20-30 September 2013, Antalya, Türkiye. Friday PM. September 20, Session: Solar Energy Applications.
12. TMS 2013, *142th Annual Meeting & Exhibition* which was held in San Antonio, Texas, USA from March 3-7, 2013.
  - 1- Characterization of Minerals, Metals and Materials 2013. Wednesday PM, March 6, Session: Characterization of Advanced Materials.

- 2- Solar Cell Silicon. Session: Silicon Production and Refining.
13. TMS 2012, *141th Annual Meeting & Exhibition* which was held in Orlando, Florida, USA from March 11-15, 2012. Characterization of Minerals, Metals and Materials,
  - 1- Characterization of Minerals, Metals, and Materials. Session: Characterization of Environmental and Construction Materials.
14. TMS 2011, *140th Annual Meeting & Exhibition* which was held in San Diego, California, USA from February 27 to March 3, 2011:
  - 1- Symposium: Characterization of Minerals, Metals and Materials,
    - Session: Characterization of Non-Ferrous Alloys.
    - Session: Nanomaterials, Nanotechniques and Thin Films.
  - 2- Solar Cell Silicon.
    - Session: Production and Recycling.
    - Session: Silicon Production, Purification and Recycling for Photovoltaic Cells.
15. Fifth International Conference on Thermal Engineering: Theory and Application May 10-14, 2010, Marrakesh, Morocco. Session: Internal Flow and Heat transfer.
16. TMS 2010, *139th Annual Meeting & Exhibition*, 14-18 February 2010 in Washington, Symposium: Characterization of Minerals, Metals and Materials, Tuesday AM Session 4: Characterization of Grain Size, Refractive Index, and Tomography.

## PUBLICATIONS (in descending chronological order)

### a. Journal Papers

1. **Shadia J. Ikhmayies**, Fine Structured Red-Band Tail Photoluminescence (PL) Spectra of Nanocrystalline CdS:In Thin Films, *JOM*. 73, (2021) *JOM*. 73, (2021),
2. **Shadia J. Ikhmayies**, Spray-Deposited Coral-Like ZnO Micro/Nano Thin Films on Glass Substrates, *JOM*. 73, (2021), 356–363. DOI: <https://doi.org/10.1007/s11837-020-04495-9>
3. **Shadia J. Ikhmayies**, Thermo-Calc Determination of the Phase Diagram of Si-B Binary System, *JOM*. 73, (2021), 253–259. DOI: [10.1007/s11837-020-04467-z](https://doi.org/10.1007/s11837-020-04467-z)
4. **Shadia J. Ikhmayies**, Using thermo-calc software to produce the phase diagram of Zn-Te system, *Journal of Energy System*. 4(3) (2020), 88-95.
5. **Shadia J. Ikhmayies**, A study of the optical parameters of CdS thin films prepared by thermal evaporation. *Journal of Amasya University the Institute of Sciences and Technology*. (2020), 47-63. <https://dergipark.org.tr/tr/pub/jauist/issue/55760/751316>
6. **Shadia J. Ikhmayies**, Recycling Silicon and Silicon Compounds. *JOM*, 72(7) (2020), 2612-2614. DOI: [10.1007/s11837-020-04218-0](https://doi.org/10.1007/s11837-020-04218-0).
7. **Shadia J. Ikhmayies**, Production of Three-Dimensional ZnO Multilayered Structures from Self-Assembled ZnO Microdiscs. *JOM* 72, 628–634 (2020). <https://doi.org/10.1007/s11837-019-03953-3>
8. **Shadia J. Ikhmayies**, Synthesis of Flower-Like ZnO Micro/Nano Structures by the Spray Pyrolysis Technique. *JOM* 72, 621–627 (2020). <https://doi.org/10.1007/s11837-019-03952-4>
9. **Shadia J. Ikhmayies**, Spray deposited thin films of SnO<sub>2</sub>: F/CdS: In bilayers produced using different fluorine sources: NH<sub>4</sub>F and HF, *Journal of Energy Systems* 3(3), (2019), 111-122. <https://doi.org/10.30521/jes.605085>

10. **Shadia J. Ikhmayies**, Sufian Abedrabbo, Bashar Lahlouh, Influence of the Deposition Temperature on the Structure, Morphology, and Optical Properties of Thermally Evaporated CdTe Thin Films, *Journal of Electronic Materials*, (2019). <https://doi.org/10.1007/s11664-019-07205-7>
11. **Shadia J. Ikhmayies**, Optical Parameters of Nanocrystalline SnO<sub>2</sub>:F Thin Films Prepared by the Spray Pyrolysis Method, *JOM* 71(4), (2019), 1507-1512. <https://doi.org/10.1007/s11837-019-03388-w>
12. **Shadia J. Ikhmayies**, A study of the absorption Edge of CdS:In Thin Films, *International Journal of Materials and Chemistry* 8(1), (2018), 10-14. doi: 10.5923/j.ijmc.20180801.02.
13. Bashar I. Lahlouh, **Shadia J. Ikhmayies**, Hassan K. Juwhari, Structural, Optical, and Vibrational Properties of ZnO Microrods Deposited on Silicon Substrate, *Journal of Elec Materi* 47 (8) (2018), 4455–4462.
14. **Shadia J. Ikhmayies**, Properties of SnO<sub>2</sub>:F thin films prepared by using HF or NH<sub>4</sub>F after exposure to atmosphere. *Journal of Energy Systems* 1(3) (2017): 120-128.
15. **Shadia J. Ikhmayies**, Properties of the CdS<sub>x</sub>Te<sub>1-x</sub> solid solution: As a single product and as a part of the CdS/CdTe solar cell, *Journal of Energy Systems* 2017; 1(3):102-110.
16. **Shadia J. Ikhmayies**, Mohamad B. Zbib, Spray Pyrolysis synthesis of ZnO Micro/Nano Rods on Glass substrates, *Journal of Electronic Materials*, 46(10) (2017), 5629-5634.
17. **Shadia J. Ikhmayies**, Formation of Three Dimensional ZnO Micro Flowers from self Assembled ZnO Micro Discs, *Metallurgical and Materials Transactions A*, 48(8) (2017), 3625-3629.
18. **Shadia J. Ikhmayies**, , Mohamad B. Zbib, Synthesis of ZnO Hexagonal Micro Discs on Glass Substrates Using the Spray Pyrolysis Technique, *Journal of Electronic Materials* 46(7) (2017), 3982-3986.
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