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Curriculum Vitae
Atef Fayez Qasrawi, Ph. D.
Professor of Physics

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Researcher Id: https://publons.com/researcher/R-4409-2019/

Scopus ID: 6603962677

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Scopus H index 20

Research Gate interest score: 715.8

Google Scholar, Citations 2298, H index 22

Personal Data:

Full Name : Atef Fayez QASRAWI
Date of Birth : 03/12/1968
Place of Birth : Jenin, Palestine
Citizenship : Palestinian
Sex : Male
Material Status : Married

Addresses:

Residence: Maslieh, Jenin, Palestine

Work: Arab-American University, Jenin, West bank, Palestine

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Education:

1990-1994 **B. Sc. in Education Physics,** Middle East Technical University, Ankara, Turkey.

1994-1997 **M.S. in Physics (January 1997),** Middle East Technical University, Ankara, Turkey. Thesis : **"**Growth and Characterization of Ge thin films"Under supervision of Prof. Dr. Ibrahim Günal.

1997-2000 **Ph. D. in Physics (June 2000)** , Middle East Technical University, Ankara, Turkey Thesis: "Structural, Electrical and Photo-Hall Characterization of InSe:Cd and InSe Thin Films". Under supervision of Prof. Dr. Ibrahim Günal , Prof. Dr. Çiğdem Erçelebi.

2000-2006 **Assistant Professor in physics (Sep 2006),** Atilim University, Ankara, Turkey.

2006- 2011 **Associate Professor in physics,** awarded by "Turkish Ministry of High Education**"** and by "Atilim University" Ankara, Turkey.

2011- **Professor in physics,** awarded by Arab-American University, jenin Palestine

Employment History:

1995-1997 **Full time teacher of physics and mathematics,** in Al-Fatih high school, Libyian embassy, Ankara, Turkey.

1997-2000 **Teaching assistant of undergraduate students** at the department of physics, Middle east technical university, Ankara, turkey.

2000-2006 **Assistant Professor in physics** at the department of electric and electronic Engineering (Sep 2006), Atilim University, Ankara, Turkey.

2006- 2007 **Associate Professor in physics,** Awarded by "Turkish Ministry of High Education" and applied by "Atilim University" Ankara, Turkey.

2000-2007 **Chairman of the physics group** at the faculty of Engineering.

2007-(2008) **Associate Professor in physics,** Al-quds Open University, palestine

(2008)- 2011 **Associate Professor in physics,** Department of Physics , Arab-American University, Palestine

2011- **Professor in physics,** Department of Physics , Arab-American University, Palestine

2006-2020 **Assoc. Professor in physics,** Group of Physics , Atilim University, Ankara, Turkey.

2020- Professor in physics, Department of electric and electronics, Istinye University, Istanbul, Turkey.

Teaching Experience in Physics:

1. General physics I (Mechanics)
2. General physics II (Electricity & Magnetism)
3. Physics for Medical students
4. Physics for Information Technology
5. Modern physics
6. Quantum mechanics I
7. Quantum Mechanics II
8. Classical Mechanics I
9. Classical Mechanics II
10. Electromagnetic theory I
11. Electromagnetic theory II
12. Optics and Waves
13. Astronomy I
14. Semiconductor physics
15. Advanced practical Physics
16. Solid State Physics I
17. Solid State Physics II
18. Optics and lasers
19. Methods of science Education
20. Living with technology
21. Advanced mathematical methods (Graduate course)
22. Advanced Research Methods (Graduate)
23. Optoelectronic devices (Graduate)
24. Nanophysics (Graduate)
25. Advanced Quantum Mechanıcs I (Graduate)
26. Advanced Quantum Mechanics II (Graduate)

27. Advanced Solid State Physics II (Graduate)

Thesis Advising

1. Ms thesis " Numerical simulation and analysis of current conduction mechanism functions in solids",Abdulfattah H. Niarat, Department of Mathematics, Arab American University, Jenin, 2014.
2. Ms thesis" Analysis and Simulation Of Variable Range Hopping Parameters Under Photoexcitation, Suha Kilany, Department of Mathematics, Arab American University, Jenin, 2014.
3. Ms thesis" Analytical Solution and Simulation of Schrödinger differential equation by the WKB Approximation for tunneling process in Nano-device Structures", Abrar Qadan, Department of Mathematics, Arab American University, Jenin, 2014.
4. Eman O. Nazzal, Impact of indium nanoslabs sandwiching on the properties of Ga2S3 thin films, department of physics, Arab American University, Jenin, 2016 (Graduated).
5. Olfat Omariya, Design and characterization of Ge/InSe/Ga2S3 heterojunction devices, department of physics, Arab American University, Jenin, 2016 (Graduated).
6. Maisam M. Abdullah, Formation and performance of (Au, Yb)/ZnS/Ge/GaSe hybrid devices, department of physics, Arab American University, Jenin, 2016 (r Graduated).
7. Tamara Abed, Effect of Ytterbium Nanosandwiching on The Physical Properties of CdS thin films, Physics department, Arab American University, Jenin, 2017 (Graduated)
8. Maram Taleb, Engineering the optical and electrical conduction parameters of ZnSe thin films via AuY alloy nanosandwiching, Arab American University, Jenin, 2017 (Graduated)
9. Ansam Mustafa Alsabaa, Structural and Optical Properties of Al doped ZnSe thin films, Physics department, Arab American University, Jenin, 2017 (Graduated)
10. Osama Husni, Design and Optical Characterization of Se/(Al, Ag)/Se Interfaces, Physics department, Arab American University, Jenin, 2017 (Graduated)
11. Hadeel Dawwas, Electrical investigations of Se/Ag/Se Interfaces, Physics department, Arab American University, Jenin, 2017(Graduated)
12. Ala Kmail, Thickness and post annealing effects on the structural, optical and dielectric properties of copper oxide thin films, Physics department, Arab American University, Jenin, 2018(Graduated)

13. Reham Kmail, Formation and characterization of the In_2Se_3/CuO heterojunctions, Physics department, Arab American University, Jenin, 2018 (Graduated)

14. Mays Rabaya, Tungsten doping effects on the properties of $Bi_{1.5}Zn_{0.92}Nb_{1.5}O_{6.92}$ (BZN) ceramics, Physics department, Arab American University, Jenin, 2018 (Graduated)

15. Tahani M. Rshaid, Investigation of the Properties of $Tl_2InGaSe_4$ Single Crystals Physics department, Arab American University, Jenin, 2018 (Graduated)

16. Nancy Yaseen, Formation and characterization of MoO_3/(ZnS, InSe) heterojunctions Physics department, Arab American University, Jenin, 2018 (Graduated)

17. Arwa Gannam, effects of In, Pb and La substrates on the structural and optical properties of CuSe films, Physics department, Arab American University, Jenin, 2018 (Graduated)

18. Fatema Abu Alrub, Copper doping effects on the optical properties of InSe thin films, Physics department, Arab American University, Jenin, Sep, 2019 (Graduated).

19. Shatha Nazeeh Abu Alrub, Design and characterization of WO_3/Ga_2S_3 heterojunctions, Physics department, Arab American University, Jenin, Sep, 2019 (Graduated).

20. Hadeel Zyood, Effect of Yb, Mn and Au transparent substrate on the structural and optical properties of phthalocyanine (ZnPC) thin films, Physics department, Arab American University, Jenin, Sep, 2019 (Graduated).

21.Tahani Beni Odeh, Effects of gold nanosandwiching on the structural and optical properties of Copper selenide thin films, Physics department, Arab American University, Jenin, Sep, 2019 (Graduated).

22. Maraim Abu Arra, Thermal annealing effects on the structural and electrical properties of Cupper doped InSe thin films, Physics department, Arab American University, Jenin, Jan 2020 (Graduated).

23. Sarah Al Najar, Growth and characterization of BaSb2 alloys, Physics department, Arab American University, Jenin, Jan 2020 (Graduated).

24. Wafa Zakarneh, : Production of LaAg alloys by high power laser welding, Physics department, Arab American University, Jenin, Jan 2020 (Graduated).

25. Amaal Wishaheh, Post annealing effects and in situ monitoring of the phase transitions in $CdBr_2$ powders, Physics department, Arab American University, Jenin, Jan 2020 (Graduated).

26. Areen Hamarsheh, Effects of SiO_2 nano layers on the performance of $CdBr_2/Ga_2S_3$ heterojunctions, Physics department, Arab American University, Jenin, Jan 2020 (Graduated).

27. Rana Daragmeh, Design and characterization of Se/WO3 Thin film transistors, Physics department, Arab American University, Jenin, March 2021 (Graduated).

28. Ahmad Toubasi, Growth and characterization of iron selenide thin films containing aluminum nanosheets, Arab American University, Jenin, March 2021 (Graduated).
29. Bayan Kmail, Methods of formation of niobium tin oxide compound and some related applications, March 2021 (Running)
30. Wala Ghannam, Design and characterization of $CdSe/MoS_2$ heterojunction devices, June 2021 (Graduated)
31. Lara Abu Samin, Formation and characterization of AlSb/CdS heterojunctions, June 2021 (Graduated)
32. Mayamen Abu AlTayip, Preparation and characterization of $AgO-As_2O_3$ thin films, March 2021 (Graduated)
33. Azhar Rabaya, Effect of Au Nano sheets thickness on the optical dynamics of Mn(O2) nano stacked layers , March 2021 (Graduated)
34. Suzen Sulyman Structural and electrical characterization of $ZnSe/SeO_2$ heterojunction devices, Sep. 2021. (Running)
35. Selsebil Imair, Optical dynamics at the Se/CdBr2 interfaces , Sep.2021 (Running)
36. Nancy Jaradat, Characterization of Arsenic doped MOS_2 powders Sep. 2021 (Running)
37. Lamia Fashafsheh, Structural and electrical properties of CdBr2 films deposited onto Ge substrates, Sep. 2021 (Running)
38. Nadia Aswad, Design and characterization of Bi2O3/ZnPc optical interfaces , Sep. 2021 (Running)

Reviewer of cited international Journals

1. 2008-Solid State Sciences (Elsevier Science)
2. 2008- Physica B (Elsevier Science)
3. 2008-Cellulose (Springer)
4. 2009-Materials Chemistry and Physics (Elsevier Science)
5. 2010- Solid State Communications (Elsevier Science)
6. 2010-Materials Science and Engineering B (Elsevier Science)

7. 2011-Ceramics International (Elsevier Science)
8. 2011-Materials Chemistry and Physics (Elsevier Science)
9. 2011-Physics B (Elsevier Science)
10. 2012-Materials Science in Semiconductor processing (Elsevier Science)
11. 2012-Journal of alloys and Compounds (Elsevier Science)
12. 2014 Materials Chemistry and Physics (Elsevier Science) Art no MATCHEMPHYS-D-11-01650R1
13. 2014 Materials Science in Semiconductor Processing (Elsevier Science)
14. 2017 IEEE Transactions of Electron Materials (IEEE)
15. 2018 Physica E
16. 2019 Materials Science in Semiconductor Processing
17. 2019 Physcia E
18. 2019 Physica B
19. 2019 Materials Science in Semiconductor Processing
20. 2019 Journal of Applied Physics
21. 2020 Physica B
22. 2021 Materials Science in Semiconductor Processing
23. 2021 Physica Status Solidi (a)
24. 2022 Sensors and Actuators
25. 2022 Physica Status Solidi (a)

Awards:

1. The best researcher award by Atilim university for the years, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012.

2. Paper Publication and Motivation award by Turkish National Research Institute (1999, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012.

3. The Zuhair Alhijawi Award, for the under graduate project " Design and characterization og Ag/TlInSe2/Ag varactor devices" July **2011**

4. Best poster Award, Haneen Jaradat, A. F. Qasrawi, A. Mergen, Growth of ZnO nano-grains through Bizmuth-Zinc-Niobium Pyrochlore ceramics via Co-doping The first international Palestinian conference on Nanotechnology for advanced materials and devices, An-Najah University, 26-28 March, Palestine, **2012**.

5. Best Poster Award, first group, Eman Nazzal, A. F. Qasrawi, Optical properties of Sm and Y doped BZN pyrochlore ceramics, The first undergraduate poster shop, Arab American University, Jenin, Palestine **2013**.

6. Best Poster Award, second group, Khaleel Abu Mouis, A. F. Qasrawi, Enhancement of BZN Microwave Resonators via Yttrium doping , The first undergraduate poster shop, Arab American University, Jenin, Palestine **2013**.

7. Best project Award, A novel MgO/Ga_4Se_3S Sensor Designed For Giga and Tera -Hertz Applications Maryam M. S. Abd-Alrazq, Renal R. Kmail, Prof. A. F. Qasrawi, Undergraduate project workshop, Arab American University, Jenin, Palestine**, 2013.**

8. Best poster award, Energy band gap and dispersion parameters in Ga2S3 Thin films, PICC 2015 conference, An-Najah National University, New Campus, Nablus, April 21-22, 2015

9. Best Researcher Award by Atilim University for the year 2016

10. Best Article at the AAUJ journal of Scientific Research 2017

11. Best ISI Article award in Palestine AAUJ, 2017

12. Best Researcher Award by Atilim University 2017.

13. Publication motivation Award, Tubitak, Turkey.

14. Best Researcher award 2021 Atilim University, Turkey 2021.

Recent Projects:

1. Atef Qasrawi: Design and charcterization of In_6S_7 Shottky diodes for photovoltaic applications, Arab American University , Cycle: 1011-01(**1st April 2011**)
2. Atef Qasrawi, Dielectric and electrical properties of Bi1.5Zn0.92Nb1.5-xCoxO6.92-x-2 (BZN) microwave ceramics. Arab American University, Cycle: 1112-01 (19 March 2012)
3. Atef Qasrawi, Fabrication of Al/MgO/C and C/MgO/InSe/C tunneling barriers for tunable negative resistance and negative capacitance applications Arab American University Cycle: 1013-01(**2013**)
3. Atef Qasrawi , H. Khanfar, I. Saadeddin, H. Jaradat, Design and Characterization of MgO/$GaSe_{0.5}S_{0.5}$ Multifunctional Resonant Microwave Optoelectronic Sensors**, Ministry of High education, project # 2/1/2013.**
4. Atef Qasrawi, Fabrication of Gallium Selenide nano-layers for optoelectronic device applications, Arab American University Cycle: 1014-01(**2014**)
5. ***Prof.*** Dr. Atef Qasrawi**, Dr. Sulyman Rabba, Optical dynamics in CdSe/InSe interface** Cycle: 1014-02(**2014**)

6. **Atef Qasrawi**, **Mechanical, optical and electrical properties of $Bi_{1.5-x}La_xZn_{0.92}Nb_{1.5}O_{6.92}$ Pyrochlore Ceramics, Cycle II 1015-02 (2015)**
7. **Sabah Alqarni, A. F. Qasrawi,** Design and Characterization of InSe(n)/ZnSe(p)/InSe(n) thin film transistors , 2014- 2016, King Abdulaziz University, Jeddah- Saudi Arabia
8. **Seham Alharbi, A. F. Qasrawi, :** Post annealing effects on the structural, compositional, optical and electrical properties of Ytterbium doped InSe nano-films, , 2014- 2016, King Abdulaziz University, Jeddah- Saudi Arabia
9. **Seham Alharbi, A. F. Qasrawi** , Characterization of the Ge/Bi2 O3 Interfaces 2018- 2019, King Abdulaziz University, Jeddah- Saudi Arabia
10. **Sabah Alqarni, A. F. Qasrawi, Exploring the optical dynamics in the ITO/As2Se3 interfaces** 2018- 2019, King Abdulaziz University, Jeddah- Saudi Arabia
11. **Sabah Alqarni, A. F. Qasrawi, Electrical performance of MoO3/Li/MoO3 nanolayers,** 2019- 2020, Jeddah University, Jeddah- Saudi Arabia
12. **Sabah Alqarni, A. F. Qasrawi, Optical dynamics at the CdO/Si/CdO interfaces,** 2019- 2020, King Abdulaziz University, Jeddah- Saudi Arabia
13. **Seham Alharbi, A. F. Qasrawi, Impedance spectroscopy in CdO/Si/CdO thin film transistors,** 2019- 2020, King Abdulaziz University, Jeddah- Saudi Arabia
14. **Seham Alharbi, A. F. Qasrawi, effect of ionic Au layers on CdO films,** 2019- 2020, King Abdulaziz University, Jeddah- Saudi Arabia
15. **Seham Alharbi, A. F. Qasrawi, Thickness effect on the optical condictivty paramters of ZnPC films,** 2019- 2020, Jeddah University, Jeddah- Saudi Arabia
16. **Seham Alharbi, A. F. Qasrawi, characterization of As2Se3/Ag/As2Se3 nanolayers**
17. Tarek Kayed, A. F. Qasrawi, characterization of MoO3/AS2Se3 heterojunction devices, 2019- 2020, Aldammam University, Aldammam- Saudi Arabia
18. Sabah Algarni, A. F. Qasrawi, pressure and temperature effects on properties of SeO2 powders,2021, University of Jeddah, Saudi Arabia
19. Seham Alharabi, A. F. Qasrawi, Effect of Au nanosheets on the properties of SeO2 thin films, 2021, University of Jeddah, Saudi Arabia
20. Reem Almoatiri , A. F. Qasrawi, Design of Si/MgSe thin film transistors as dual sensors for visible light and 5G communication technologies, 2022, King Abdulaziz University, Jeddah- Saudi Arabia

21. Reem Almoatiri , A. F. Qasrawi **Formation and characterization of MgSe by pulsed laser technique,** 2022, King Abdulaziz University, Jeddah- Saudi Arabia

Consultations

1. **S. Alqarni, A. F. Qasrawi,** , Design and characterization of MgO/Ge/BN Resonant Electronic devices for Giga Hertz frequency applications 2014-2015, King Abdulaziz University, Jeddah- Saudi Arabia
2. **S. Alqarni, A. F. Qasrawi,** Post annealing effects on the structural, compositional and optical properties of Cd doped GaSe thin films 2014-2015, King Abdulaziz University, Jeddah- Saudi Arabia
3. S. R. Alharbi, **A. F. Qasrawi**, Optical Characterization of The Boron Nitride-Indium Selenide Thin Film Hetrojunctions 2014, King Abdulaziz University, Jeddah- Saudi Arabia
4. T. S. Kayed, KH. Alsayed, **A. F. Qasrawi**, Production of Indium and Gallium Selenide nano layers for optoelectronic device applications 2014-2016, University of Dammam, Saudi Arabia
5. **S. Alqarni, A. F. Qasrawi,** , Properties of Ge/InSe/Ga2S3 heterojunctions 2015-2016, King Abdulaziz University, Jeddah- Saudi Arabia
6. S. R. Alharbi, A. F. Qasrawi, growth and characterization of YbInSe thin films 2015-2016, King Abdulaziz University, Jeddah- Saudi Arabia.
7. Latifah Hamad Khalid Alfhaid; A. F. Qasrawi; Sabah E. AlGarni, Yb/InSe/SiO_2/Au Straddling-Type Tunneling Devices Designed As Photosensors, MOS Capacitors, and Gigahertz Bandstop Filters, 2020-2021, University of Hail, Hail Saudi Arabia

Edited Books:

1. General Physics Laboratory Manual, 1st edition., T. K. Said, **A. F. Qasrawi**, O. Pehlivan., 2001, Remark, Aknara, Turkey. (ISBN 9756707-07-0. Library code QC21.2
2. **A. F. Qasrawi**, Advanced practical physics, (2013), Arab American University, Palestine
3. **A. F. Qasrawi**, Experiments in modern Physics, Arab American University, Palestine

Research Experience:

Experimental:

1. Growth and synthesis of solid materials, like growth of single crystalline layered and chain structures using the Bridgman method. (Could be found in my publications list)

2. Deposition of thin layers (5 A^{o}-2 □m thick) on various substrate types using the thermal deposition technique, spattering technique, electron beam deposition technique

3. Deposition of chain polymers using electrochemical technique.

4. Designing micro-electronic devices, like heat sensors, Schottky barriers, radiation sensors, photo-detectors, multifunction photo-chips, IR detectors and photo-resistors using the Van der Pauw method, Hall bar technique and Lithography for mask alignment.

5. Materials structural characterization using X-ray diffraction, Transmittance electron microscopy, scanning electron microscopy and X-ray florescence techniques.
6. Materials electrical characterization using the standard I-V, C-V, four point contact, Hall bar contacts and Van Der Pauw techniques.
7. Material Hall effect Characterization using Van Der Pauw and Hall bar techniques.
8. Optoelectronics design and characterization for direct applications using the open circuit and perpendicular and parallel illumination techniques. Namely, spectral analysis , illumination effects, detector –illumination response and time resolution, Temperature dependence photoconductivity, time-illumination dependent photoconductivity, photon energy dependency.
9. Photo-Hall characterizations, Namely, Illumination and temperature dependent Hall mobility, carrier concentration, and photoconductivity.

Theoretical

1. Transport phenomena in solids, like thermionic conduction, hopping of charged carriers and tunneling conduction mechanism. i. e. impurity level identification, Mott parameters evaluation, continuous and discrete (quantized) energy location identification. This part is done using pure mathematical approaches, statistical analysis, and simulating techniques.

4. Particle scattering mechanisms: using perturbation theory like carrier -phonon and phonon-phonon interactions, carrier-phonon coupling, polar and non-polar scattering, acoustic phonon scattering, ionized impurity scattering, neutral scattering and carrier-carrier scattering.
5. Band theory of solids: tight –binding calculations with extended

Hamiltonian approach, bonding and anti-bonding structures, structure deformation analysis and identification of the energy bands in materials.

6. Recombination Mechanisms: linear, sublinear, and supralinear recombination mathematical and statistical estimations. Trapping levels calculations, current storage locations …etc.

7. Particle response and spontaneous emission calculations: using numerical methods and statistical analysis through the analysis of photonic emission and absorption.
8. Single donor-single acceptor model calculations: identification of effective mass and acceptor to donor emission ratio using computational analysis methods.

List of Publications:

no	Authors	Title	Year	Source title	Vol	Issue	Page start	Page end	DOI
1	Günal I.; Qasrawi A.F.	Temperature effects on the properties of Ge thin films	1999	Journal of Materials Science	34	20	5033	5037	10.1023/A:1004
2	Qasrawi A.F.; Günal I.; Ercelebi C.	Structural and electrical properties of Cd doped InSe thin films	2000	Crystal Research and Technology	35	9	1077	1086	10.1002/1521-4079(200009)35 CRAT1077>3.0.
3	Qasrawi A.F.; Gasanly N.M.	Crystal data, photoconductivity and carrier scattering mechanisms in CuIn5S8 single crystals	2001	Crystal Research and Technology	36	12	1399	1410	10.1002/1521-4079(200112)36 CRAT1399>3.0.
4	Qasrawi A.F.; Gasanly N.M.	Crystal data, electrical resistivity, and Hall mobility of n-type AgIn5S8 single crystals	2001	Crystal Research and Technology	36	## ##	457	464	10.1002/1521-4079(200106)36 CRAT457>3.0.C
5	Qasrawi A.F.; Parlak M.; Erçelebi Ç.; Günal I.	Characterization of p-In2Se3 thin films	2001	Journal of Materials Science: Materials in Electronics	12	8	473	476	10.1023/A:1012
6	Qasrawi A.F.; Gasanly N.M.	Carrier scattering mechanisms in GaS0.5Se0.5 layered crystals	2002	Crystal Research and Technology	37	6	587	594	10.1002/1521-4079(200206)37 CRAT587>3.0.C
7	Qasrawi A.F.; Gasanly N.M.	Investigation of localized levels in GaS0.5Se0.5 Layered crystals by means of electrical, space-charge limited current and photoconductivity measurements	2002	Physica Status Solidi (A) Applied Research	194	1	81	88	10.1002/1521-396X(200211)19 PSSA81>3.0.CO
8	Qasrawi A.F.	Cd-doping effects on the properties of polycrystalline α-In2Se3 thin films	2002	Crystal Research and Technology	37	4	378	390	10.1002/1521-4079(200204)37 CRAT378>3.0.C
9	Qasrawi A.F.; Gasanly N.M.	Photoelectronic and electrical properties of InS crystals	2002	Semiconductor Science and Technology	17	12	1288	1292	10.1088/0268-1
10	Qasrawi A.F.; Gasanly N.M.	Carrier transport properties of InS single crystals	2002	Crystal Research and Technology	37	10	1104	1112	10.1002/1521-4079(200210)37 CRAT1104>3.0.
11	Parlak M.;	Growth, electrical and structural	2003	Journal of	38	7	1507	15	10.1023/A:1022

	Qasrawi A.F.; Erçelebi Ç.	characterization of β-GaSe thin films		Materials Science				11	
12	Qasrawi A.F.; Gasanly N.M.	Photoelectronic, optical and electrical properties of TlInS2 single crystals	2003	Physica Status Solidi (A) Applied Research	199	2	277	283	10.1002/pssa.2
13	Kiralp S.; Küçükyavuz Z.; Qasrawi A.F.	Preparation and characterization of conducting polybutadiene/polythiophene composites	2003	Turkish Journal of Chemistry	27	4	417	422	
14	Qasrawi A.F.; Gasanly N.M.	Photoelectronic and electrical properties of CuIn5S8 single crystals	2003	Crystal Research and Technology	38	12	1063	1070	10.1002/crat.20
15	Qasrawi A.F.; Gasanly N.M.	Hall effect, space-charge limited current and photoconductivity measurements on TlGaSe2 layered crystals	2004	Semiconductor Science and Technology	19	3	505	509	10.1088/0268-1
16	Qasrawi A.F.; Gasanly N.M.	Electrical conductivity and Hall mobility in p-type TlGaSe2 crystals	2004	Materials Research Bulletin	39	9	1351	1357	10.1016/j.mate
17	Qasrawi A.F.; Gasanly N.M.	Investigation of carrier scattering mechanisms in TlInS2 single crystals by hall effect measurements	2004	Crystal Research and Technology	39	5	439	447	10.1002/crat.20
18	Qasrawi A.F.; Kayed T.S.; Ercan I.	Fabrication and some physical properties of AgIn5S8 thin films	2004	Materials Science and Engineering: B	113	1	73	78	10.1016/j.mseb
19	Qasrawi A.F.; Cihaner A.; Önal A.M.	Electrical, optical and photoconductive properties of Poly(dibenzo-18-crown-6)	2004	Crystal Research and Technology	39	1	56	62	10.1002/crat.20
20	Mergen A.; Kayed T.S.; Bilen M.; Qasrawi A.F.; Gürü M.	Production of anorthite from kaolinite and CaCO3 via colemanite	2004	Key Engineering Materials	264-268	II	1475	1478	
21	Qasrawi A.F.; Gasanly N.M.	Temperature effect on dark electrical conductivity, Hall coefficient, space charge limited current and photoconductivity of	2005	Semiconductor Science and Technology	20	5	446	452	10.1088/0268-1

		TlGaS2 single crystals							
22	Qasrawi A.F.	Dispersive optical constants and temperature-dependent band gap of cadmium-doped indium selenide thin films	2005	Semiconductor Science and Technology	20	8	765	769	10.1088/0268-1
23	Qasrawi A.F.; Gasanly N.M.	Optoelectronic and electrical properties of TlGaS 2 single crystal	2005	Physica Status Solidi (A) Applications and Materials Science	202	13	2501	2507	10.1002/pssa.2
24	Qasrawi A.F.; Kayed T.S.; Mergen A.; Gürü M.	Synthesis and characterization of Mg2B2O5	2005	Materials Research Bulletin	40	4	583	589	10.1016/j.mate
25	Qasrawi A.F.	Refractive index, band gap and oscillator parameters of amorphous GaSe thin films	2005	Crystal Research and Technology	40	6	610	614	10.1002/crat.20
26	Kayed T.S.; Qasrawi A.F.	Temperature and magnetic field effects on the carrier density and Hall mobility of boron-doped Tl-Ba-Ca-Cu-O superconductor	2005	Journal of Alloys and Compounds	402	## ##	5	11	10.1016/j.jallco
27	Qasrawi A.F.; Gasanly N.M.	Acoustic phonons scattering mobility and carrier effective mass in In6S7 crystals	2006	Journal of Alloys and Compounds	426	## ##	64	66	10.1016/j.jallco
28	Qasrawi A.F.	Fabrication and characterization of TO/GaSe/(Ag, Au) Schottky diodes	2006	Semiconductor Science and Technology	21	6	794	798	10.1088/0268-1
29	Qasrawi A.F.; Gasanly N.M.	Electron-phonon short-range interactions mobility and p- to n-type conversion in TlGaS2 crystals	2006	Crystal Research and Technology	41	2	174	179	10.1002/crat.20
30	Qasrawi A.F.; Gasanly N.M.	Optical properties of TlInS2 layered single crystals near the absorption edge	2006	Journal of Materials Science	41	11	3569	3572	10.1007/s10853
31	Qasrawi A.F.; Gasanly	Light illumination effect on the electrical and photovoltaic properties of In6S7 crystals	2006	Journal of Physics Condensed	18	19	4609	4614	10.1088/0953-8

	N.M.			Matter					
32	Qasrawi A.F.	Temperature dependence of the direct allowed transitions band gap and optical constants of polycrystalline α-In2Se3 thin films	2006	Thin Solid Films	514	## ##	267	271	10.1016/j.tsf.20
33	Qasrawi A.F.; Shukri Ahmad M.M.	Optoelectronical properties of polycrystalline β-GaSe thin films	2006	Crystal Research and Technology	41	4	364	370	10.1002/crat.20
34	Qasrawi A.F.; Gasanly N.M.	Study of trapping and recombination centres in Tl2InGaTe4 chain crystals by dark electrical conductivity and photoconductivity measurements	2007	Philosophical Magazine	87	36	5741	5747	10.1080/14786
35	Qasrawi A.F.; Gasanly N.M.	Refractive index, static dielectric constant, energy band gap and oscillator parameters of Ga 2SeS single crystals	2007	Physica Status Solidi (A) Applications and Materials Science	204	9	3165	3169	10.1002/pssa.20
36	Qasrawi A.F.; Gasanly N.M.	Photoelectronic and electrical properties of Tl2InGaS4 layered crystals	2007	Solid State Communications	141	3	117	121	10.1016/j.ssc.20
37	Qasrawi A.F.; Gasanly N.M.	Energy band gap and oscillator parameters of Ga4Se3S single crystals	2007	Solid State Communications	142	10	566	568	10.1016/j.ssc.20
38	Qasrawi A.F.	Temperature dependence of the band gap, refractive index and single-oscillator parameters of amorphous indium selenide thin films	2007	Optical Materials	29	12	1751	1755	10.1016/j.optm
39	Qasrawi A.F.; Gasanly N.M.	Crystal data and some physical properties of Tl2InGaTe 4 crystals	2007	Crystal Research and Technology	42	8	807	811	10.1002/crat.20
40	Qasrawi A.F.; Gasanly N.M.	Thermal lattice scattering mobility and carrier effective mass in intrinsic Tl2InGaTe4 single crystals	2007	Journal of Physics Condensed Matter	19	15			10.1088/0953-8
41	Qasrawi A.F.; Gasanly	Dispersive optical constants of Tl2InGaSe4 single crystals	2007	Physica Scripta	76	3	249	252	10.1088/0031-8

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42	Qasrawi A.F.; Gasanly N.M.	Optical properties of Tl2InGaS4 layered single crystal	2007	Optical Materials	29	12	1763	1767	10.1016/j.optm
43	Qasrawi A.F.; Gasanly N.M.	Crystal data and indirect optical transitions in Tl2InGaSe4 crystals	2008	Materials Research Bulletin	43	6	1497	1501	10.1016/j.mate
44	Qasrawi A.F.; Gasanly N.M.	Determination of carrier effective mass, impurity energy levels, and compensation ratio in Ga 4Se 3S layered crystals by Hall effect measurements	2008	Physica Status Solidi (A) Applications and Materials Science	205	7	1662	1665	10.1002/pssa.2
45	Qasrawi A.F.; Gasanly N.M.	Space-charge-limited currents and photoconductive properties of Tl 2InGaSe4 layered crystals	2008	Philosophical Magazine	88	22	2899	2906	10.1080/14786
46	Qasrawi A.F.	Annealing effects on the structural and optical properties of AgIn5S8 thin films	2008	Journal of Alloys and Compounds	455	## ##	295	297	10.1016/j.jallco
47	Qasrawi A.F.; Saleh A.A.	Structural, compositional and optical properties of gallium selenide thin films doped with cadmium	2008	Crystal Research and Technology	43	7	769	772	10.1002/crat.20
48	Qasrawi A.F.; Gasanly N.M.	Dark electrical conductivity and photoconductivity of Ga4Se 3S layered single crystals	2008	Journal of Physics and Chemistry of Solids	69	11	2719	2722	10.1016/j.jpcs.2
49	Qasrawi A.F.; Gasanly N.M.	Hopping conduction in Ga4Se3S layered single crystals	2008	Solid State Communications	148	## ##	190	193	10.1016/j.ssc.20
50	Qasrawi A.F.; Gasanly N.M.	Electron-lattice interaction scattering mobility in Tl 2InGaSe4 single crystals	2008	Journal of Physics Condensed Matter	20	15			10.1088/0953-8
51	Qasrawi A.F.	Dispersive optical constants of thermally deposited AgIn5S8 thin films	2008	Thin Solid Films	516	6	1116	1119	10.1016/j.tsf.20
52	Qasrawi A.F.; Gasanly	Optoelectronic properties of Ga4Se3S-layered single crystals	2008	Physica Scripta	78	1			10.1088/0031-8

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53	Qasrawi A.F.; Gasanly N.M.	Structural, electrical and anisotropic properties of Tl4Se3S chain crystals	2009	Materials Research Bulletin	44	10	2009	2013	10.1016/j.mate
54	Qasrawi A.F.; Gasanly N.M.	Hole-polar phonon interaction scattering mobility in chain structured TlSe 0.75S 0.25 crystals	2009	Physica Status Solidi (A) Applications and Materials Science	206	7	1565	1568	10.1002/pssa.2
55	Qasrawi A.F.; Gasanly N.M.	Transport and recombination kinetics in TlGaTe 2 crystals	2009	Physica Status Solidi (A) Applications and Materials Science	206	11	2555	2558	10.1002/pssa.2
56	Qasrawi A.F.; Gasanly N.M.	Analysis of the Hall effect in TlGaTe2 single crystals	2009	Journal of Physics Condensed Matter	21	23			10.1088/0953-8
57	Qasrawi A.F.; Gasanly N.M.	Temperature- and photo-excitation effects on the electrical properties of Tl4Se3S crystals	2009	Journal of Physics Condensed Matter	21	11			10.1088/0953-8
58	Qasrawi A.F.; Gasanly N.M.	Anisotropic electrical and dispersive optical parameters in InS layered crystals	2010	Solid State Communications	150	8-Jul	325	328	10.1016/j.ssc.2
59	Qasrawi A.F.	Effects of photoexcitation on the current transport mechanism in amorphous indium selenide thin films	2010	Philosophical Magazine	90	22	3027	3035	10.1080/14786
60	Qasrawi A.F.; Mergen A.	Energy band gap and dispersive optical parameters in Bi1.5Zn0.92Nb1.5O6.92 pyrochlore ceramics	2010	Journal of Alloys and Compounds	496	###	87	90	10.1016/j.jallco
61	Qasrawi A.F.; Gasanly N.M.	Influence of photonic excitations on the electrical parameters of TlInS2 crystals	2010	Crystal Research and Technology	45	4	433	438	10.1002/crat.2
62	Qasrawi	Optoelectronic properties of	2010	Philosophica	90	29	3845	38	10.1080/14786

	A.F.; Gasanly N.M.	Tl3InSe4 single crystals		l Magazine				54	
63	Qasrawi A.F.; Kayed T.S.; Ercan S.	Photoconductivity kinetics in AgIn5S8 thin films	2010	Journal of Alloys and Compounds	508	2	380	383	10.1016/j.jallco
64	Qasrawi A.F.; Gasanly N.M.	Properties of Tl4Se3S single crystals and characterization of Ag/Tl4Se3S Schottky barrier diodes	2010	Current Applied Physics	10	2	592	595	10.1016/j.cap.2
65	Qasrawi A.F.	Temperature effects on the optoelectronic properties of AgIn 5S8 thin films	2011	Thin Solid Films	519	11	3768	3772	10.1016/j.tsf.20
66	Qasrawi A.F.; Kayed T.S.; Ercan F.	Heat treatment effects on the structural and electrical properties of thermally deposited AgIn5S8 thin films	2011	Solid State Communications	151	8	615	618	10.1016/j.ssc.20
67	Qasrawi A.F.; Gasanly N.M.	Transient and steady state photoelectronic analysis in TlInSe2 crystals	2011	Materials Research Bulletin	46	8	1227	1230	10.1016/j.mate
68	Qasrawi A.F.; Gasanly N.M.	Characterization of Ag/TlInSe 2/Ag structure	2011	Physica Status Solidi (A) Applications and Materials Science	208	7	1688	1692	10.1002/pssa.20
69	Qasrawi A.F.	Light intensity effects on electrical properties of AgIn5S 8 thin films	2011	Thin Solid Films	519	19	6583	6586	10.1016/j.tsf.20
70	Qasrawi A.F.; Gasanly N.M.	Growth and characterization of Tl3InSe4 single crystals	2011	Materials Science in Semiconductor Processing	14	2	175	178	10.1016/j.mssp
71	Qasrawi A.F.; Aljammal F.G.; Taleb N.M.; Gasanly N.M.	Design and characterization of TlInSe2 varactor devices	2011	Physica B: Condensed Matter	406	14	2740	2744	10.1016/j.physb
72	Qasrawi A.F.; Kmail	Synthesis and characterization of Bi 1.5Zn 0.92Nb 1.5-xSn xO 6.92-x/2	2012	Ceramics International	38	5	4181	4187	10.1016/j.ceran

	B.H.; Mergen A.	pyrochlore ceramics							
73	Qasrawi A.F.; Elayyat S.M.S.; Gasanly N.M.	Dynamical and passive characteristics of the Ag/TlGaSeS/Ag RF resonators	2012	Crystal Research and Technology	47	6	615	619	10.1002/crat.20
74	Qasrawi A.F.; Ilaiwi K.F.; Polimeni A.	Hydrogen implantation effects on the electrical and optical properties of InSe thin films	2012	Turkish Journal of Physics	36	3	385	391	10.3906/fiz-110
75	Qasrawi A.F.; Mergen A.	Structural, electrical and dielectric properties of Bi1.5Zn 0.92Nb1.5-xTaxO6.92 pyrochlore ceramics	2012	Ceramics International	38	1	581	587	10.1016/j.ceran
76	Qasrawi A.F.; Nazzal E.M.; Mergen A.	Structural, optical, electrical and dielectric properties of Bi 1.5Zn 0.92Nb 1.5-xNi xO 6.92-3x/2 solid solution	2012	Advances in Applied Ceramics	111	3	165	170	10.1179/17436
77	Qasrawi A.F.; Gasanly N.M.	Temperature-dependent capacitance-voltage biasing of the highly tunable TlGaTe 2 crystals	2012	Physica B: Condensed Matter	407	14	2749	2752	10.1016/j.physb
78	Qasrawi A.F.; Yaseen T.R.; Eghbariy B.; Gasanly N.M.	Photovoltaic effect and space charge limited current analysis in TlGaTe2 crystals	2012	Acta Physica Polonica A	122	1	152	155	10.12693/APhy
79	Qasrawi A.F.; Gasanly N.M.	Investigation of the electrical parameters of Ag/p-TlGaSeS/C Schottky contacts	2012	Materials Science and Engineering: B	177	12	981	985	10.1016/j.mseb
80	Qasrawi A.F.; Gasanly N.M.	Mixed conduction and anisotropic single oscillator parameters in low dimensional TlInSe2 crystals	2013	Materials Chemistry and Physics	141	1	63	68	10.1016/j.match
81	Qasrawi A.F.; Kmail S.M.; Assaf S.F.; Saleh Z.M.	Design and investigation of SST/nc-Si:H/M (M = Ag, Au, Ni) and M/nc-Si:H/M multifunctional devices	2013	Advances in OptoElectronics	2013				10.1155/2013/8
82	Qasrawi A.F.; Mergen A.	Effect of yttrium solubility on the structural and optical properties of Bi1.5-xYxZn0.92Nb1.5O 6.92 pyrochlore ceramics	2013	Ceramics International	39	8	8687	8692	10.1016/j.ceran

83	Qasrawi A.F.; Al-Balshi M.A.; Gasanly N.M.	Driving electric field effects on the space charge limited photocurrent of In6S7	2013	Optoelectronics and Advanced Materials, Rapid Communications	7	## ##	137	140	
84	Saleh Z.M.; Kmail S.M.; Assaf S.F.; Qasrawi A.F.	Recombination mechanisms in hydrogenated silicon nanocrystalline thin films	2013	Turkish Journal of Physics	37	3	283	288	10.3906/fiz-130
85	Qasrawi A.F.	Fabrication of Al/MgO/C and C/MgO/InSe/C tunneling barriers for tunable negative resistance and negative capacitance applications	2013	Materials Science and Engineering: B	178	12	851	856	10.1016/j.mseb
86	Qasrawi A.F.; Khanfar H.K.	Investigations of 2.9-GHz resonant microwave-sensitive Ag/MgO/Ge/Ag tunneling diodes	2013	Journal of Electronic Materials	42	12	3451	3457	10.1007/s11664
87	Qasrawi A.F.	Illumination effects on the capacitance spectra and signal quality factor of Al/InSe/C microwave sensors	2013	Journal of Electronic Materials	42	6	1033	1036	10.1007/s11664
88	Qasrawi A.F.; Kmail B.H.; Nazzal E.M.; Mergen A.	Investigation of the physical properties of Bi1.5-xCd xZn0.92Nb1.5O6.92-x/2 pyrochlore ceramics	2013	Journal of Electroceramics	31	## ##	61	66	10.1007/s10832
89	Qasrawi A.F.; Gasanly N.M.	Hall mobility and photoconductivity in TlGaSeS crystals	2013	Journal of Applied Physics	113	2			10.1063/1.4775
90	Qasrawi A.F.; Abu-Zaid S.F.; Ghanameh S.A.; Gasanly N.M.	Dielectric and photo-dielectric properties of TlGaSeS crystals	2014	Bulletin of Materials Science	37	3	505	509	10.1007/s12034
91	Qasrawi A.F.; Jaradat H.N.M.; Mergen A.	Cobalt Doping Effects on the Mechanical and Electrical Parameters of Bi1.5Zn0.92Nb1.5O6.92 Solid Solution	2014	Transactions of the Indian Ceramic Society	73	3	233	238	10.1080/03717
92	Qasrawi A.F.	Electrical parameters of Al/InSe/C RF sensors	2014	Physica Scripta	89	6			10.1088/0031-8

93	Qasrawi A.F.; Abd-Alrazq M.M.; Gasanly N.M.	Optical dynamics of MgO/Ga4Se3S interface	2014	Journal of Alloys and Compounds	583		180	185	10.1016/j.jallco
94	Qasrawi A.F.; Mergen A.	Dielectric dispersion and energy band gap of Bi1.5-xSm xZn0.92Nb1.5O6.92 solid solution	2014	Physica B: Condensed Matter	440		48	52	10.1016/j.physb
95	Qasrawi A.F.; Bzour F.M.; Nazzal E.O.; Mergen A.	Electrical conductivity and capacitance spectra of Bi1.37Sm 0.13Zn0.92Nb1.50O6.92 pyrochlore ceramic in the range of 0-3 GHz	2014	Functional Materials Letters	7	2			10.1142/S1793
96	Qasrawi A.F.; Muis K.O.A.; Al Rob O.H.A.; Mergen A.	Electrical characterization of Bi1.50-xYxZn 0.92Nb1.5O6.92 varactors	2014	Functional Materials Letters	7	4			10.1142/S1793
97	Qasrawi A.F.; Khanfar H.K.	Effects of laser excitation and temperature on Ag/GaSe0.5S 0.5/C microwave filters	2014	Journal of Electronic Materials	43	9	3121	3127	10.1007/s1166
98	Qasrawi A.F.; Gasanly N.M.	Energy Band Diagram and Current Transport Mechanism in p-MgO/n-Ga4Se3S	2015	IEEE Transactions on Electron Devices	62	1	102	106	10.1109/TED.20
99	Qasrawi A.F.; Omar A.; Azamtta A.M.; Gasanly N.M.	P-TlGaSeS/n-BN heterojunction as a microwave filter and as a photovoltaic device	2015	Physica Status Solidi (A) Applications and Materials Science	212	3	600	606	10.1002/pssa.2
100	Al Garni S.E.; Qasrawi A.F.	Optical analysis of Ge/MgO and Ge/BN thin layers designed for terahertz applications	2015	Materials Science in Semiconductor Processing	31		678	683	10.1016/j.mssp
101	Ziqan A.M.; Qasrawi A.F.; Mohammad A.H.; Gasanly N.M.	Thermally assisted variable range hopping in Tl4S3Se crystal	2015	Bulletin of Materials Science	38	3	593	598	10.1007/s1203

102	Khanfar H.K.; Qasrawi A.F.	Performance of the Au/MgO/Ni photovoltaic devices	2015	Materials Science in Semiconductor Processing	29		183	187	10.1016/j.mssp
103	Kayed T.S.; Qasrawi A.F.; Elsayed K.A.	Optical characterization of the MgO/InSe interface	2015	Physica Status Solidi (B) Basic Research	252	3	621	625	10.1002/pssb.2
104	Khanfar H.K.; Qasrawi A.F.; Gasanly N.M.	Analysis of the junction properties of C/GaSe0.5S0.5/C back-to-back schottky-type photodetectors	2015	IEEE Sensors Journal	15	4	2269	2273	10.1109/JSEN.2
105	Kmail R.R.N.; Qasrawi A.F.	Physical Design and Dynamical Analysis of Resonant–Antiresonant Ag/MgO/GaSe/Al Optoelectronic Microwave Devices	2015	Journal of Electronic Materials	44	11	4191	4198	10.1007/s11664
106	Qasrawi A.F.; Khanfar H.K.	Design and applications of Al/InSe/BN/Ag hybrid device	2015	IEEE Sensors Journal	15	6	3603	3607	10.1109/JSEN.2
107	Al Garni S.E.; Qasrawi A.F.	Design and characterization of (Al, C)/p-Ge/p-BN/C isotype resonant electronic devices	2015	Physica Status Solidi (A) Applications and Materials Science	212	8	1845	1850	10.1002/pssa.2
108	Alharbi S.R.; Qasrawi A.F.	Spectral Dynamics of the n-InSe/p-BN Heterojunction	2015	Journal of Electronic Materials	44	8	2686	2692	10.1007/s11664
109	Qasrawi A.F.; Ziqan A.M.; Jazzar S.K.; Gasanly N.M.	Photon assisted hopping conduction mechanism in Tl2SSe crystals	2015	Physica B: Condensed Matter	458		149	154	10.1016/j.physb
110	Al Garni S.E.; Qasrawi A.F.	Post annealing effects on the structural, compositional, optical and dielectric properties of Cd doped GaSe thin films	2015	Journal of Alloys and Compounds	633		499	504	10.1016/j.jallco
111	Qasrawi A.F.; Al Garni S.E.;	Characterization of the MgO/GaSe0.5S0.5 heterojunction designed for visible light	2015	Materials Science in Semiconduct	39		377	383	10.1016/j.mssp

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112	Alharbi S.R.; Qasrawi A.F.	Optical and electrical performance of Yb/InSe interface	2016	Materials Science in Semiconductor Processing	43		60	64	10.1016/j.mssp
113	Al Garni S.E.; Qasrawi A.F.; Mergen A.	Physical properties of the Bi1.5Zn0.92−2xHfxNb1.5O6.92 solid solutions	2016	Ceramics International	42	2	3372	3379	10.1016/j.ceran
114	Kayed T.S.; Qasrawi A.F.; Elsayed K.A.	Band offsets and optical conduction in the CdSe/GaSe interface	2016	Current Applied Physics	16	7	772	776	10.1016/j.cap.2
115	Qasrawi A.F.; Kayed T.S.; Elsayed K.A.	Properties of Se/InSe Thin-Film Interface	2016	Journal of Electronic Materials	45	6	2763	2768	10.1007/s11664
116	Khanfar H.K.; Qasrawi A.A.	Polarization Sensitive Reflection and Dielectric Spectra in GaSe Thin Films	2016	Advances in OptoElectronics	2016				10.1155/2016/7
117	Qasrawi A.F.; Khanfar H.K.; Kmail R.R.N.	Optical conduction in amorphous GaSe thin films	2016	Optik	127	13	5193	5195	10.1016/j.ijleo.2
118	Al Garni S.E.; Qasrawi A.F.	Absorption and optical conduction in InSe/ZnSe/InSe thin film transistors	2016	Functional Materials Letters	9	2			10.1142/S1793
119	Alharbi S.R.; Qasrawi A.F.	Structural, optical and electrical properties of YbInSe thin films	2016	Thin Solid Films	616		808	814	10.1016/j.tsf.20
120	Qasrawi A.F.; Rabbaa S.	Optical interactions in the InSe/CdSe interface	2016	Physica Status Solidi (B) Basic Research	253	4	755	759	10.1002/pssb.2
121	Qasrawi A.F.; Khanfar H.K.	Current transport mechanism in Au-p-MgO-Ni Schottky device designed for microwave sensing	2016	Journal of Optoelectronics and Advanced Materials	18	8-Jul	639	644	
122	Qasrawi A.F.; Kmail	Mechanical and electrical properties of Bi1.5-	2016	Journal of Electrocera	37	## ##	8	14	10.1007/s10832

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123	Qasrawi A.F.; Khanfar H.K.; Gasanly N.M.	MgO/GaSe0.5S0.5 Heterojunction as Photodiodes and Microwave Resonators	2016	IEEE Sensors Journal	16	3	670	674	10.1109/JSEN.2
124	Khanfar H.K.; Qasrawi A.F.; Zakarneh Y.A.; Gasanly N.M.	Design and Applications of Yb/Ga2Se3/C Schottky Barriers	2017	IEEE Sensors Journal	17	14	4429	4434	10.1109/JSEN.2
125	Saleh A.A.; Qasrawi A.F.; Yumuşak G.; Mergen A.	Physical properties of neodymium tin oxide pyrochlore ceramics	2017	Materials Science-Poland	35	3	534	538	10.1515/msp-2
126	Al Garni S.E.; Omareye O.A.; Qasrawi A.F.	Growth and characterization of InSe/Ge/InSe interfaces	2017	Optik	144		340	347	10.1016/j.ijleo.2
127	Al Garni S.E.; Qasrawi A.F.	Design and Characterization of the Ge/Ga2S3 Heterojunction	2017	Journal of Electronic Materials	46	8	4848	4856	10.1007/s11664
128	Alharbi S.R.; Qasrawi A.F.	Design of the ZnS/Ge/GaSe pn interfaces as plasmonic, photovoltaic and microwave band stop filters	2017	Results in Physics	7		4427	4433	10.1016/j.rinp.2
129	Omareya O.A.; Qasrawi A.F.; Al Garni S.E.	Effect of Au nanosandwiching on the structural, optical and dielectric properties of the as grown and annealed InSe thin films	2017	Physica B: Condensed Matter	520		57	64	10.1016/j.physb
130	Al Garni S.E.; Qasrawi A.F.	Effect of Indium nano-sandwiching on the structural and optical performance of ZnSe films	2017	Results in Physics	7		4168	4173	10.1016/j.rinp.2
131	Alharbi S.R.; Abdallaha M.M.A.;	Structural and optical properties of the ZnS/GaSe heterojunctions	2017	Materials Research Express	4	11			10.1088/2053-1

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132	Alharbi S.R.; Qasrawi A.F.	Effect of ytterbium, gold and aluminum transparent metallic substrates on the performance of the Ga2S3 thin film devices	2017	Current Applied Physics	17	6	835	841	10.1016/j.cap.2
133	Khanfar H.K.; Qasrawi A.F.; Ghannam Y.K.	Microwave Impedance Spectroscopy and Temperature Effects on the Electrical Properties of Au/BN/C Interfaces	2017	Active and Passive Electronic Components	2017				10.1155/2017/4
134	Al Garni S.E.; Qasrawi A.F.	Impedance spectroscopic analysis of the InSe/ZnSe/InSe interface	2017	IEEE Transactions on Electron Devices	64	1	244	249	10.1109/TED.20
135	Alharbi S.R.; Qasrawi A.F.	Plasmon-electron dynamics at the Au/InSe and Y/InSe interfaces designed as dual gigahertz-terahertz filters	2017	Optik	136		524	530	10.1016/j.ijleo.2
136	Khusayfan N.M.; Qasrawi A.F.; Khanfar H.K.	Impact of Yb, In, Ag and Au thin film substrates on the crystalline nature, Schottky barrier formation and microwave trapping properties of Bi2O3 films	2017	Materials Science in Semiconductor Processing	64		63	70	10.1016/j.mssp
137	Alharbi S.R.; Qasrawi A.F.	Dielectric Dispersion in Ga2S3 Thin Films	2017	Plasmonics	12	4	1045	1049	10.1007/s11468
138	Omar A.; Qasrawi A.F.; Gasanly N.M.	Temperature effects on the structural and optical properties of the TlInSe2xS2(1−x) mixed crystals (x=0.3)	2017	Journal of Alloys and Compounds	724		98	102	10.1016/j.jallco
139	Khusayfan N.M.; Al Garni S.E.; Qasrawi A.F.	Design and performance of Yb/ZnS/C Schottky barriers	2017	Current Applied Physics	17	1	115	119	10.1016/j.cap.2
140	Al Garni S.E.; Omar A.; Qasrawi A.F.	Plasmon Interactions at the (Ag, Al)/InSe Thin-Film Interfaces Designed for Dual Terahertz/Gigahertz Applications	2017	Plasmonics	12	2	515	521	10.1007/s11468
141	Qasrawi A.F.; Kayed T.S.; Elsayed K.A.	Al/CdSe/GaSe/C resonant tunneling thin film transistors	2017	Physica E: Low-Dimensional Systems and Nanostructu	86		124	128	10.1016/j.physe

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142	Al Garni S.E.; Qasrawi A.F.	Tunable Au/Ga2S3/Yb varactor diodes designed for high frequency applications	2017	Chalcogenide Letters	14	9	381	388	
143	Nazzal E.O.; Qasrawi A.F.; Alharbi S.R.	Engineering the Optical and Dielectric Properties of the Ga2S3/In/Ga2S3 Nanosandwiches via Indium Layer Thickness	2018	Plasmonics	13	3	1049	1056	10.1007/s11468
144	Saleh A.A.; Hamamera H.Z.; Khanfar H.K.; Qasrawi A.F.; Yumusak G.	Gd and Tb doping effects on the physical properties of Nd2Sn2O7	2018	Materials Science in Semiconductor Processing	88		256	261	10.1016/j.mssp
145	Qasrawi A.F.; Atatreh A.A.M.; Gasanly N.M.	Characterization of TlInS1.8Se0.2 as advanced functional crystals	2018	Materials Science in Semiconductor Processing	87		174	180	10.1016/j.mssp
146	Abed T.Y.; Qasrawi A.F.; Al Garni S.E.	Investigation of the physical properties of the Yb nanosandwiched CdS films	2018	Journal of Alloys and Compounds	731		1022	1028	10.1016/j.jallco
147	Qasrawi A.F.	Enhancement of photoconductive performance of CdSe via Yb nanosandwiching	2018	Optik	158		225	230	10.1016/j.ijleo.2
148	Alharbi S.R.; Qasrawi A.F.	Gold and ytterbium interfacing effects on the properties of the CdSe/Yb/CdSe nanosandwiched structures	2018	Current Applied Physics	18	8	946	951	10.1016/j.cap.2
149	Alharbi S.R.; Nazzal E.O.; Qasrawi A.F.	Characterization of the nanosandwiched Ga2S3/In/Ga2S3 interfaces as microwave filters and thermally controlled electric switches	2018	Optik	156		93	98	10.1016/j.ijleo.2
150	Qasrawi A.F.; Alkarem Q.A.; Gasanly N.M.	Temperature-dependent structural transition, electronic properties and impedance spectroscopy analysis of Tl2InGaS4 crystals grown by the Bridgman method	2018	Materials Science in Semiconductor Processing	84		76	82	10.1016/j.mssp

151	AbuSaa M.; Qasrawi A.F.; Shehada S.R.	Dielectric and Optoelectronic Properties of InSe/CdS/CdSe Heterojunctions	2018	Journal of Electronic Materials	47	11	6583	6590	10.1007/s11664
152	Qasrawi A.F.; Abdallah M.M.A.	Performance of Ge-Sandwiched GaSe Layers	2018	Journal of Electronic Materials	47	8	4621	4626	10.1007/s11664
153	Qasrawi A.F.; Abdallah M.M.A.	Effect of Au/Ge substrate on the properties of GaSe	2018	Optik	168		481	487	10.1016/j.ijleo.2
154	Qasrawi A.F.; Omareya O.A.	Characterization of the Al/Ge/In2Se3/Ga2S3/Al hybrid tunneling barriers designed for Gigahertz/Terahertz applications	2018	Thin Solid Films	660		276	281	10.1016/j.tsf.20
155	Al Garni S.E.; Qasrawi A.F.	Formation and negative capacitance effect in Au/Bi2O3/ZnS/Ag heterojunctions designed as microwave resonators	2018	Chalcogenide Letters	15	12	605	613	
156	Alharbi S.R.; Qasrawi A.F.	Optical dynamics in the Ag/α-Ga2S3 layer system	2018	Materials Science in Semiconductor Processing	83		102	106	10.1016/j.mssp
157	Khusayfan N.M.; Qasrawi A.F.; Khanfar H.K.	Design and characterization of Au/In4Se3/Ga2S3/C field effect transistors	2018	Results in Physics	8		1239	1244	10.1016/j.rinp.2
158	Khusayfan N.M.; Qasrawi A.F.; Khanfar H.K.	Design and electrical performance of CdS/Sb2Te3 tunneling heterojunction devices	2018	Materials Research Express	5	2			10.1088/2053-1
159	Qasrawi A.F.	Investigation of the structural and optoelectronic properties of the Se/Ga2S3 heterojunctions	2018	Journal of Alloys and Compounds	769		78	82	10.1016/j.jallco
160	Qasrawi A.F.; Shehada S.R.	Dielectric dispersion in InSe/CdS bilayers	2018	Physica E: Low-Dimensional Systems and Nanostructures	103		151	155	10.1016/j.physe

161	Al Garni S.E.; Qasrawi A.F.	Design and characterization of MoO3/CdSe heterojunctions	2019	Physica E: Low-Dimensional Systems and Nanostructures	105		162	167	10.1016/j.physe
162	Qasrawi A.F.; Omareya O.A.	Formation and Characterization of Cd 2 S 3 Polycrystalline Films onto Glass and Lanthanum Substrates	2019	Journal of Electronic Materials	48	4	2350	2355	10.1007/s11664
163	Khusayfan N.M.; Qasrawi A.F.; Khanfar H.K.	Enhancement of the performance of the Cu 2 Se band filters via Yb nanosandwiching	2019	Microwave and Optical Technology Letters	61	6	1449	1455	10.1002/mop.3
164	Qasrawi A.F.; Taleb M.F.	Effect of Y, Au and YAu nanosandwiching on the structural, optical and dielectric properties of ZnSe thin films	2019	Chalcogenide Letters	16	3	95	105	
165	Qasrawi A.F.; Omareya O.A.	In situ observations of the permanent structural modifications, phase transformations and band gap narrowing upon heating of Cu2Se/Yb/Cu2Se films	2019	Journal of Alloys and Compounds	785		1160	1165	10.1016/j.jallco
166	Alharbi S.R.; Qasrawi A.F.	Structural and Optoelectronic Properties of MoO 3 /CuSe Interfaces	2019	Physica Status Solidi (A) Applications and Materials Science	216	6			10.1002/pssa.2
167	Alharbi S.R.; Qasrawi A.F.	Effects of Ge substrate on the structural and optical conductivity parameters of Bi2O3 thin films	2019	Optik	181		714	720	10.1016/j.ijleo.2
168	Qasrawi A.F.; Aloushi H.D.	In Situ Observation of Heat-Assisted Hexagonal-Orthorhombic Phase Transitions in Se/Ag/Se Sandwiched Structures and Their Effects on Optical Properties	2019	Journal of Electronic Materials	48	12	7906	7914	10.1007/s11664
169	Qasrawi A.F.; Alsabe A.M.	ZnSe/Al/ZnSe nanosandwiched structures as dual Terahertz-Gigahertz signal receivers	2019	Materials Research Express	6	6			10.1088/2053-1
170	Kayed T.S.;	Structural, Optical, Dielectric and	2019	Journal of					10.1007/s11664

	Qasrawi A.F.; Elsayed K.A.	Electrical Properties of Al-Doped ZnSe Thin Films		Electronic Materials					
171	Khanfar H.K.; Qasrawi A.; Daraghmeh M.; Abusaa M.	Structural and electrical characterizations of the as grown and annealed Au/MoO3/In/MoO3/C bandpass filters	2019	Microwave and Optical Technology Letters	61	12	2866	2872	10.1002/mop.3
172	Qasrawi A.F.; Kmail H.K.; Abusaa M.; Khanfar H.K.	Post annealing effects on the structural and optical properties of MoO3 sandwiched with indium slabs	2019	Materials Research Express	6	11			10.1088/2053-1
173	Khanfar H.K.; Qasrawi A.F.; Shehada S.R.	Negative Capacitance Effect in Ag/α-In2Se3/CdS/CdSe/C Dual Band Stop Filters	2019	Journal of Electronic Materials	48	1	244	251	10.1007/s1166
174	Al Garni S.E.; Qasrawi A.F.	Effect of lithium nanosandwiching on the structural, optical and dielectric performance of MoO3	2019	Physica E: Low-Dimensional Systems and Nanostructures	114				10.1016/j.physe
175	Al Garni S.E.; Qasrawi A.F.	Fabrication and characterization of Yb/MoO 3 /(C,Yb) devices	2019	Current Applied Physics	19	5	639	645	10.1016/j.cap.2
176	Qasrawi A.F.; Abu Ghannam A.N.	In situ monitoring of heat assisted oxidation and its effects on the structural, dielectric and optical conductivity parameters of Pb thin films as promising terahertz transmitters	2019	Materials Research Express	6	11			10.1088/2053-1
177	Qasrawi A.F.; Alsabe A.M.	Engineering the structural, optical and dielectric properties of ZnSe thin films via aluminum nanosandwiching	2019	Optik	198				10.1016/j.ijleo.2
178	Qasrawi A.F.; Abu Al Rob O.H.	Enhancements of Light Absorbability, Optical Conductivity, and Terahertz Cutoff Frequency in Stacked Layers of Selenium via Ag Nanoslabs Sandwiching	2019	Physica Status Solidi (A) Applications and Materials Science	216	20			10.1002/pssa.2

179	Qasrawi A.F.; Aloushi H.D.	In situ monitoring of the permanent crystallization, phase transformations and the associated optical and electrical enhancements upon heating of Se thin films	2019	Physica B: Condensed Matter	569		62	67	10.1016/j.physb
180	Qasrawi A.F.; Aloushi H.D.	Formation, negative capacitance and negative conductance effects in Selenium stacked layers sandwiched with Ag nanosheets	2019	Materials Research Express	6	8			10.1088/2053-1
181	Saleh A.A.; Qasrawi A.F., Atef.qasrawi@atilim.edu.tr; Hamamera H.Z.; Khanfar H.K.; Yumusak G.	Samarium and yttrium doping induced phase transitions and their effects on the structural, optical and electrical properties of Nd2Sn2O7 ceramics	2019	Materials Research Express	6	12			10.1088/2053-1
182	Qasrawi A.F.; Sahin E.I.; Emek M.; Kartal M.; Kargin S.	Structural and dielectric performance of the Ba(Zn1/3Nb2/3-xSbx)O3 perovskite ceramics	2019	Materials Research Express	6	9			10.1088/2053-1
183	Qasrawi A.F.; Abed T.Y.	Structural and optoelectronic properties of CdS/Y/CdS thin films	2019	Thin Solid Films	679		72	78	10.1016/j.tsf.20
184	Qasrawi A.F.; Abu Al Rob O.H.	Effect of insertion of aluminum nanosheets on the structural, optical and dielectric properties of stacked layers of selenium	2019	Chalcogenide Letters	16	6	257	263	
185	Al Garni S.E.; Qasrawi A.F.	Exploring the Optical Dynamics in the ITO/As2Se3 Interfaces	2019	Journal of Electronic Materials	48	10	6319	6326	10.1007/s11664
186	Al Garni S.E.; Qasrawi A.F.	Characterization of Bi2O3/ZnS heterojunctions designed for visible light communications	2019	Materials Research Express	6	3			10.1088/2053-1
187	Alharbi S.R.; Qasrawi A.F.	Characterization of the Ge/Bi2O3 interfaces	2019	Materials Research	22	3			10.1590/1980-5
188	Qasrawi A.F.	Characterization of Au/As2Se3 Multifunctional Tunneling Devices	2020	Physica Status Solidi (A)	217	5			10.1002/pssa.20

				Applications and Materials Science					
189	AlGarni S.E.; Qasrawi A.F.	Preparation and Characterization of CdO/In6Se7 Thin Film Transistors	2020	Materials Research	23	6			10.1590/1980-5
190	Kayed T.S.; Qasrawi A.F.	Characterization of Au/As2Se3/MoO3/Ag hybrid devices designed for dual optoelectronic applications	2020	Current Applied Physics	20	1	114	121	10.1016/j.cap.2
191	Qasrawi A.F.; Omar A.	Effects of indium slabs on the structural and electrical properties of stacked layers of Cu2O	2020	Journal of Ovonic Research	16	2	83	88	
192	Alharbi S.R.; Qasrawi A.F.; Khusayfan N.M.	Thickness and annealing effects on the structural and optical conductivity parameters of zinc phthalocyanine thin films	2020	Digest Journal of Nanomaterials and Biostructures	15	2	471	482	
193	Qasrawi A.F.; Taleb M.F.	Enhancement of electrical performance of ZnSe thin films via Au nanosandwiching	2020	Materials Science-Poland	38	1	174	180	10.2478/msp-2
194	Al Garni S.E.; Qasrawi A.F.; Alharbi S.R.	Structural and electrical performance of MoO3/li/MoO3 films designed as microwave resonators	2020	Digest Journal of Nanomaterials and Biostructures	15	2	367	374	
195	AlGarni S.E.; Qasrawi A.F.	Indium slabs induced structural phase transitions and their effects on the electrical and optical properties of stacked layers of the thermally annealed Cu2O thin films	2020	Results in Physics	16				10.1016/j.rinp.2
196	Algarni S.E.; Qasrawi A.F.	Nonlinear optical performance of CdO/InSe Interfaces	2020	Physica Scripta	95	6			10.1088/1402-4
197	Kayed T.S.; Qasrawi A.F.	Pseudodielectric Dispersion in As2Se3 Thin Films	2020	Physica Status Solidi (B) Basic Research	257	3			10.1002/pssb.2
198	Abusaa M.; Qasrawi A.F.; Kmail H.K.; Khanfar H.K.	Structural, optical and dielectric performance of molybdenum trioxide thin films sandwiched with indium sheets	2020	Digest Journal of Nanomaterials and Biostructure	15	4	1107	1116	

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199	Al Harbi S.R.; Qasrawi A.F.	Au/As2Se3/Ag/As2Se3/Yb Schottky Barriers Designed as Multifunctional Devices	2020	IEEE Transactions on Electron Devices	67	3	1305	1309	10.1109/TED.20
200	Qasrawi A.F.; Zyoud H.M.	Optical dynamics at the Au/ZnPc interfaces	2020	Materials Research	23	3			10.1590/1980-5
201	Qasrawi A.F.; Kmail R.R.	Band Offsets, Optical Conduction, and Microwave Band Filtering Characteristics of γ-In2Se3/CuO Heterojunctions	2020	Physica Status Solidi (B) Basic Research	257	12			10.1002/pssb.2
202	Qasrawi A.F.; Zyoud H.M.	Ytterbium induced structural phase transitions and their effects on the optical and electrical properties of ZnPc thin films	2020	Optical and Quantum Electronics	52	11			10.1007/s11082
203	Qasrawi A.F.; Alharbi S.R.	Enhancing the optoelectronic performance of As2Se3 thin films via Ag slabs sandwiching	2020	Optik	219				10.1016/j.ijleo.2
204	Qasrawi A.F.; Khanfar H.K.	Al/MoO3/ZnPc/Al Broken Gap Tunneling Hybrid Devices Design for IR Laser Sensing and Microwave Filtering	2020	IEEE Sensors Journal	20	24	14772	#######	10.1109/JSEN.2
205	Qasrawi A.F.; Hamamdah A.A.	Thickness effects on the dielectric dispersion and optical conductivity parameters of CuO thin films	2020	Microwave and Optical Technology Letters	62	4	1453	1458	10.1002/mop.3
206	Abusaa M.; Qasrawi A.F.; Asaad B.M.; Khanfar H.K.	Role of au nanosheets in enhancing the performance of yb/zns/cds/au tunneling photosensors	2020	Chalcogenide Letters	17	11	565	572	
207	Qasrawi A.F.; Zyoud H.M.	Dielectric Dispersion at the Mn/ZnPc Interfaces	2020	Physica Status Solidi (B) Basic Research	257	6			10.1002/pssb.2
208	Omar A.; Qasrawi A.F.	Enhancement of Nonlinear Optical and Dielectric Properties of Cu2O Films Sandwiched with Indium Slabs	2020	Physica Status Solidi (B) Basic Research	257	5			10.1002/pssb.2
209	Qasrawi A.F.; Zyoud H.M.	Fabrication of (Au, Mn)/ZnPc/Ag Interfaces as Radiowave/Microwave Band Filters	2020	Physica Status Solidi (A) Applications	217	22			10.1002/pssa.2

				and Materials Science					
210	Qasrawi A.F.; Kmail R.R.	Hot aluminum substrate induced hexagonal-tetragonal phase transitions in InSe and performance of Al/InSe/Cu2O pn tunneling devices	2020	Microwave and Optical Technology Letters	62	12	3848	3856	10.1002/mop.3
211	Qasrawi A.F.; Yaseen N.M.A.	Design and characterization of MoO3/In2Se3heterojunctions as terahertz/gigahertz band filters suitable for visible light communications and 3G/4G technologies	2021	Physica Scripta	96	12			10.1088/1402-4
212	Algarni S.E.; Qasrawi A.F.; Khusayfan N.M.	Design and Characterization of ZnSe/GeO2 Heterojunctions as Bandstop Filters and Negative Capacitance Devices	2021	Physica Status Solidi (A) Applications and Materials Science	218	8			10.1002/pssa.2
213	Alfhaid L.H.K.; Qasrawi A.F.; Algarni S.E.	Yb/InSe/SiO/Au straddling-type tunneling devices designed as photosensors, MOS Capacitors, and gigahertz bandstop filters	2021	IEEE Transactions on Electron Devices	68	3	1093	1100	10.1109/TED.20
214	Alharbi S.R.; Qasrawi A.F.; Algarni S.E.	Effects of Ag2O Nanosheets on the Structural, Optical, and Dielectric Properties of GeO2 Stacked Layers	2021	Physica Status Solidi (B) Basic Research	258	5			10.1002/pssb.2
215	Qasrawi A.F.; Kayed T.S.	Characterization of As2Se3/MoO3 heterojunction designed for multifunctional operations	2021	Physica Scripta	96	1			10.1088/1402-4
216	Alfhaid L.H.K.; Qasrawi A.F.; Algarni S.E.	Yb/inse/sb2te3 /au broken gap heterojunction devices designed as current rectifiers, tunable mos capacitors and gigahertz microwave cavities	2021	Chalcogenide Letters	18	3	113	121	
217	Algarni S.E.; Qasrawi A.F.; Khusayfan N.M.	Effects of polycrystalline GeO2 substrates on the structural, optical and electrical properties of ZnSe thin films	2021	Physica Scripta	96	9			10.1088/1402-4
218	Harbi S.R.A.; Qasrawi A.F.	Design and Characterization of n-Si/p-CdO Broken Gap	2021	IEEE Sensors Journal	21	12	13223	#####	10.1109/JSEN.2

		Heterojunctions as High Frequency PMOSFETs and Microwave Resonators							
219	Qasrawi A.F.; Abdalghafour M.A.; Mergen A.	Structural, optical and electrical properties of Bi1.5Zn0.92Nb1.5-6x/5WxO6.92 pyrochlore ceramics	2021	Materials Research	24	2			10.1590/1980-5
220	Qasrawi A.F.; Yaseen N.M.A.	Yb/MoO3/In2Se3/Ag Sensors Designed as Tunneling Diodes, MOSFETs, Microwave Resonators, Laser Sensors, and VLC Receivers Suitable for 4G/5G and VLC Technologies	2021	IEEE Transactions on Electron Devices	68	12	6444	6450	10.1109/TED.20
221	Qasrawi A.F.; Irshaid T.M.A.; Gasanly N.M.	Observation of in situ enhanced crystallization, negative resistance effect and photosensitivity in Tl2InGaSe4 crystals	2021	Materials Science in Semiconductor Processing	122				10.1016/j.mssp
222	Qasrawi A.F.; Sahin E.İ.; Emek M.	Nickel Doping Effects on the Structural and Dielectric Properties of Ba(Zn1/3Nb2/3)O3 Perovskite Ceramics	2021	Journal of Electronic Materials	50	4	2223	2231	10.1007/s11664
223	Qasrawi A.F.; Hamarsheh A.A.	Design of Au/Cdbr2/Au as Negative Capacitance Devices and as Band Filters Suitable for 4G Technologies	2021	Materials Research	24	6			10.1590/1980-5
224	Qasrawi A.F.; Sahin E.İ.; Abed T.Y.; Emek M.	Structural and Dielectric Properties of Ba1−xLax(Zn1/3Nb2/3)O3 Solid Solutions	2021	Physica Status Solidi (B) Basic Research	258	3			10.1002/pssb.2
225	Qasrawi A.F.; Hamarsheh A.A.	Band offsets, electron affinities and optical dynamics at the CdBr2/SiO2 interfaces	2021	Optik	243				10.1016/j.ijleo.2
226	Khalid Alfhaid L.H.; Qasrawi A.F.; AlGarni S.E.	Band offsets, optical conduction, photoelectric and dielectric dispersion in InSe/Sb2Te3 heterojunctions	2021	Materials Research	24	4			10.1590/1980-5
227	Khusayfan N.M.; Qasrawi A.F.; Alharbi	Band offsets, dielectric dispersion and some applications of CdSe/GeO2 heterojunctions	2021	Optik	231				10.1016/j.ijleo.2

	S.R.; Khanfar H.K.; Kayed T.S.								
228	Qasrawi A.F.; Hamarsheh A.A.	Au/CdBr2/SiO2/Au Straddling-Type Heterojunctions Designed as Microwave Multiband Pass Filters, Negative Capacitance Transistors, and Current Rectifiers	2021	Physica Status Solidi (A) Applications and Materials Science	218	22			10.1002/pssa.2
229	Qasrawi A.F.; Abdalghafour M.A.; Mergen A.	Tungsten doped Bi1.5Zn0.92Nb1.5O6.92 ceramics designed as radio/microwave band pass/reject filters	2021	Microwave and Optical Technology Letters	63	4	1101	1105	10.1002/mop.3
230	Alharbi S.R.; Qasrawi A.F.	Effects of Au nanoslabs on the performance of CdO thin films designed for optoelectronic applications	2021	Physica E: Low-Dimensional Systems and Nanostructures	125				10.1016/j.physe
231	Al Garni S.E.; Qasrawi A.F.; Khusayfan N.M.	Ag/SeO2/C Avalanche Type Resonant Tunneling Schottky Barriers	2022	Materials Research	25				10.1590/1980-5
232	Qasrawi A.F.; Daragme R.B.	Yb/Se/WO3/Yb Thin Film Transistors as Rectifiers, N-Channel Metal Oxide Semiconductor Capacitors, Laser Sensors, and Microwave Bandstop Filters	2022	Physica Status Solidi (A) Applications and Materials Science	219	18			10.1002/pssa.2
233	Qasrawi A.F.	Plasmonic interactions at the Pb/SeO2 interfaces designed as terahertz/gigahertz optical receivers	2022	Optik	265				10.1016/j.ijleo.2
234	Alfhaid L.H.K.; Qasrawi A.F.	Characterization and applications of ITO/SeO2 interfaces	2022	Optical and Quantum Electronics	54	7			10.1007/s1108
235	Qasrawi A.F.; Daragme R.B.	Fabrication and characterization of Se/WO3 heterojunctions designed as terahertz/gigahertz dielectric resonators	2022	Optik	255				10.1016/j.ijleo.2

236	Qasrawi A.F.; Abu Ghannam A.N.	Optical and electrical dynamics at the In/CuSe interfaces	2022	Optik	252				10.1016/j.ijleo.2
237	Qasrawi A.F.; Abu Ghannam A.N.	Effect of transparent Pb substrates on the structural, optical, dielectric and electrical properties of copper selenide thin films	2022	Chalcogenide Letters	19	3	163	172	
238	Qasrawi A.F.; Ghannam W.S.	SeO2 Microwires Designed as Low-Temperature Abrupt Microelectronic Switches, Negative Resistance, and Negative Dielectric Constant Sources	2022	Physica Status Solidi (A) Applications and Materials Science	219	24			10.1002/pssa.2
239	Alharbi S.R.; Qasrawi A.F.; Algarni S.E.	Growth and characterization of (glass, Ag)/SeO2 thin films	2022	Physica B: Condensed Matter	633				10.1016/j.physb
240	Qasrawi A.F.; Omareya O.A.	Optical and dielectric dispersion in the Ge/In2Se3/Ga2S3 interfaces	2022	Chalcogenide Letters	19	5	319	327	10.15251/CL.20
241	Qasrawi A.F.; Khanfar H.K.; Alyat S.B.	Design and Characterization of Yb/ p- SiO2/(Yb, In) Thin-film Transistors for 5G Resonators	2022	Brazilian Journal of Physics	52	2			10.1007/s13538
242	Qasrawi A.F.; Daragme R.B.	Yb/WO3/Yb back to back Schottky barriers designed as voltage controlled rectifiers and as microwave resonators	2022	Journal of Ovonic Research	18	2	253	258	10.15251/jor.20
243	Qasrawi A.F.; Abu Alrub S.N.	Yb/WO3/Ga2S3/Au multifunctional electronic hybrid devices fabricated as tunneling diodes, MOSFETS, microwave resonators and 5G band pass/reject filters	2022	Chalcogenide Letters	19	4	267	276	10.15251/cl.202
244	Qasrawi A.F.; Imair S.N.N.	Enhanced structural, optical and dielectric properties of the Se/CdBr2 interfaces designed as terahertz optical receivers	2022	Optical and Quantum Electronics	54	11			10.1007/s1108
245	Qasrawi A.F.; Daragme R.B.	Design and Characterization of (Yb, Al, Cu, Au)/GeO2/C As MOS Field Effect Transistors, Negative Capacitance Effect Devices and	2022	Journal of Electronic Materials	51	5	2510	2520	10.1007/s1166

		Band Pass/Reject Filters Suitable for 4G Technologies							
246	AlGarnia S.E.; Qasrawi A.F.	Effects of Si Slabs on the Performance of CdO Thin Films Designed for Optoelectronic Applications	2022	Materials Research	25				10.1590/1980-5
247	Almotiri R.A.; Qasrawi A.F.	Optoelectronic performance of n−Si/p−MgSe heterojunctions as a visible light communication component	2022	Optik	271				10.1016/j.ijleo.2
248	Qasrawi A.F.; Daragme R.B.	Transparent In/SeO2 Thin Film Transistors Designed for Gigahertz/Terahertz Technologies	2022	Journal of Electronic Materials	51	10	5617	5626	10.1007/s11664
249	Alkhamisi M.M.; Khanfar H.K.; Qasrawi A.F.; Algarni S.E.	Growth and characterization of PbSe microcrystals via the pulsed laser welding technique	2022	Applied Physics A: Materials Science and Processing	128	12			10.1007/s00339
250	Qasrawi A.F.; Baniowdah T.S.; Abu Samen L.O.	Au Nanosheets-Assisted Structural Phase Transitions, In Situ Monitoring of the Enhanced Crystallinity, and Their Effect on the Optical and Dielectric Properties of CuSe/Au/CuSe Thin Films	2022	Crystal Research and Technology	57	6			10.1002/crat.20
251	Algarni S.E.; Qasrawi A.F.; Khusayfan N.M.	Hydraulic pressure and temperature effects on the structural, morphological and electrical properties of SeO2 powders	2022	Applied Physics A: Materials Science and Processing	128	4			10.1007/s00339
252	Qasrawi A.F.; Ghannam A.N.A.	Effect of lanthanum substrates on the structural, optical and electrical properties of copper selenide thin films designed for 5G technologies	2022	Optical and Quantum Electronics	54	1			10.1007/s11082
253	Qasrawi A.F.; Alrub S.N.A.	Band Offsets, Dielectric Dispersion, Optical Conduction and Impedance Spectroscopy Analyses of WO3/Ga2S3 Heterojunctions	2022	Brazilian Journal of Physics	52	6			10.1007/s13538
254	Alfhaid L.H.K.; Qasrawi A.F.	Pt/SeO2optical receivers designed for terahertz and 5G/6G technologies	2022	Physica Scripta	97	5			10.1088/1402-4

255	Qasrawi A.F.; Sulaiman S.K.	Effects of SeO2 epilayer on the structural, morphological, optical and dielectric properties of nanocrystalline ZnSe thin films	2022	Physica B: Condensed Matter	646				10.1016/j.physb
256	Qasrawi A.F.; Hamarsheh A.A.	Structural, Optical and Electrical Properties of Band-Aligned CdBr2/Au/Ga2S3 Interfaces and Their Application As Band Filters Suitable for 5G Technologies	2022	Journal of Electronic Materials	51	7	3693	3704	10.1007/s11664
257	Qasrawi A.F.; Yaseen N.M.A.	Performance of Broken Gap MoO3/ZnS Heterojunctions as Abrupt Electronic Switches, MOSFETs, Negative Capacitance FETs and Bandpass Filters Suitable for 3G/4G Technologies	2022	Journal of Electronic Materials	51	3	1048	1060	10.1007/s11664
258	Almotiri R.A.; Qasrawi A.F.; Algarni S.E.	Ag/n-Si/p-MgSe/(Ag, C, Au, Pt) devices designed as current rectifiers, photodetectors and as ac signal filters suitable for VLC, IR and 6G technologies	2022	Physica Scripta	97	12			10.1088/1402-4
259	Qasrawi A.F.; Abu Alrub S.N.; Daragme R.B.	Amorphous WO3 thin films designed as gigahertz/terahertz dielectric lenses	2022	Optical and Quantum Electronics	54	7			10.1007/s1108
260	Khanfar H.K.; Qasrawi A.F.	Preparation and Characterization of Orthorhombic AgMn Alloys by the Pulsed Laser Welding Technique	2022	Crystal Research and Technology	57	9			10.1002/crat.20
261	Qasrawi A.F.; Toubasi A.J.	Iron Selenide Nanowire Bundles for Microwave Communication Technology	2023	Physica Status Solidi (A) Applications and Materials Science					10.1002/pssa.2
262	Aljaloud A.S.M.; Qasrawi A.F.; Alfhaid L.H.K.	Optical properties of chromium-selenide films designed for terahertz applications	2023	Optik	292				10.1016/j.ijleo.
263	Alharbi S.R.N.; Qasrawi A.F.; Algarni S.E.	High-performance n – Si/p – SeO2 /p – SiO2 heterojunction photodetectors for potential application in visible light communication technology	2023	Applied Physics A: Materials Science and Processing	129	7			10.1007/s00339

264	Alfhaid L.H.K.; Qasrawi A.F.; Khanfar H.K.	Characterization of PbWO4 thin films formed by the pulsed laser welding technique	2023	Materials Today Communications	35				10.1016/j.mtco
265	Almotiri R.A.; Qasrawi A.F.; Agha B.S.	Enhancement of the electrical properties of Au/MgSe/Au microwave resonators via pulsed laser welding of MgSe and Au nanosheets	2023	Applied Physics A: Materials Science and Processing	129	4			10.1007/s00339
266	Aljaloud A.S.M.; Qasrawi A.F.; Alfhaid L.H.K.	Effects of Pb nanosheets substrates on the optical and electrical properties CrSe thin films	2023	Physica Scripta	98	11			10.1088/1402-4
267	Alfhaid L.H.K.; Qasrawi A.F.	LaGe2 Thin Films Designed as Band Filters for 6G Communication Technology	2023	Journal of Electronic Materials	52	9	6216	6224	10.1007/s11664
268	Qasrawi A.F.; Toubasi A.J.	Enhanced crystallinity, optical conductivity and terahertz cutoff frequency of stacked layers of FeSe2 by Al nanosheets	2023	Optik	287				10.1016/j.ijleo.2
269	Alkhamisi M.M.; Qasrawi A.F.; Khanfar H.K.	Lead-tungsten oxide interfaces designed as gigahertz/terahertz filters	2023	Physica Scripta	98	4			10.1088/1402-4
270	Alkhamisi M.M.; Qasrawi A.F.; Khanfar H.K.; Algarni S.E.	Pt/PbSe optoelectronic receivers designed for 6G and terahertz communication technologies	2023	Optical and Quantum Electronics	55	2			10.1007/s11082
271	Almotiri R.A.; Qasrawi A.F.	Enhanced properties of indium thin films by stacking with platinum nanosheets designed for advanced terahertz/gigahertz applications	2023	Optical and Quantum Electronics	55	5			10.1007/s11082
272	Almotiri R.A.; Qasrawi A.F.	Formation and Characterization of MgSe Alloys by Pulsed Laser Welding Technique	2023	Crystal Research and Technology	58	8			10.1002/crat.20
273	Alkhamisi M.M.; Qasrawi	La/Ge stacked nanosheets designed as optical resonators, microwave oscillators and 5 G/6 G	2023	Optik	287				10.1016/j.ijleo.2

	A.F.; Khanfar H.K.	gigahertz receivers							
274	Aljaloud A.S.M.; Qasrawi A.F.; Alfhaid L.H.K.	Growth and characterization of chromium selenide thin films for optoelectronic applications	2023	Optical and Quantum Electronics	55	14			10.1007/s1108
275	Algarni S.E.; Qasrawi A.F.; Khusayfan N.M.	Enhanced Optical and Electrical Interactions at the Pt/MgSe Interfaces Designed for 6G Communication Technology	2023	Crystal Research and Technology	58	1			10.1002/crat.20
276	Khusayfan N.M.; Qasrawi A.F.; Khanfar H.K.; Alharbi S.R.	Lead Selenide Thin Films Designed for Laser Sensing and Visible Light Communications	2023	Silicon	15	16	6971	69 79	10.1007/s1263
277	Alfhaid L.H.K.; Qasrawi A.F.	Production of PtIn x Thin Films by the Pulsed Laser Welding Technique	2023	Journal of Electronic Materials	52	10	6741	67 48	10.1007/s1166
278	Alharbi S.R.N.; Qasrawi A.F.; Algarni S.E.	Selenium oxide based laser sensors designed for optoelectronic applications	2023	Optical and Quantum Electronics	55	8			10.1007/s1108
279	Qasrawi A.F.; Samen L.O.A.; Atari S.S.	Properties of (Glass, Pb)/MgSe Interfaces Designed as Terahertz Band Filters	2023	Brazilian Journal of Physics	53	2			10.1007/s1353
280	Alfhaid L.H.K.; Qasrawi A.F.	Synthesis of Copper Nanosheets Coatings onto Glass and Glass/CrSe2 Substrates Using Ion Coating Technique for Terahertz Technology	2023	Crystal Research and Technology					10.1002/crat.20
281	Alkhamisi M.M.; Khanfar H.K.; Qasrawi A.F.	Lead selenide microcrystals fabricated by the pulsed laser welding technique employed as 6G technology microwave resonators and as MOS capacitors	2023	Physica B: Condensed Matter	64 9				10.1016/j.physb
282	Alharbi S.R.; Qasrawi A.F.	In/MgSe Terahertz Filters with Enhanced Optical Conduction and Light Absorption	2023	Journal of Electronic Materials	52	6	3613	36 21	10.1007/s1166

283	Alkhamisi M.M.; Qasrawi A.F.; Khanfar H.K.	Growth and Characterization of Lanthanum Germanide Thin Films by the Thermal Evaporation Technique	2023	Crystal Research and Technology	58	9			10.1002/crat.20
284	Qasrawi A.F.; Aboalrub F.M.	Copper doping effects on the optical and dielectric properties of amorphous indium selenide thin films	2023	Optical and Quantum Electronics	55	12			10.1007/s1108
285	Qasrawi A.F.; Khanfar H.K.	Voltage and frequency controlled Ge/SeO2 thin film transistors designed as rectifiers, negative capacitance and negative conductance sources	2023	Chalcogenide Letters	20	3	177	186	10.15251/CL.20
286	Almotiri R.A.; Qasrawi A.F.	ITO/MgSe interfaces designed as gigahertz/terahertz filters	2023	Physica Scripta	98	4			10.1088/1402-4
287	Almotiri R.A.; Qasrawi A.F.; Al Garni S.E.	Growth and Characterization of Vacuum Evaporated MgSe Thin Films	2023	Journal of Electronic Materials	52	1	394	401	10.1007/s1166
288	Qasrawi A.F.; Abuarra M.K.N.	Electrical properties of amorphous Cu doped InSe thin films	2023	Applied Physics A: Materials Science and Processing	129	9			10.1007/s0033
289	Alfhaid L.H.K.; Qasrawi A.F.	Induced crystallization and enhanced light absorption and optical conduction in WO3 films via pulsed laser welding technique	2023	Optical and Quantum Electronics	55	5			10.1007/s1108
290	Alfhaid L.H.K.; Qasrawi A.F.	Au/CrSe stacked layers designed as optical absorbers, tunneling barriers and negative capacitance sources	2023	Materials Today Communications	37				10.1016/j.mtco
291	Qasrawi A.F.	Optically controlled n −Si/p −SeO2/p −SiO2 microwave resonators designed for 5G/6G communication technology	2023	Physica Scripta	98	9			10.1088/1402-4