



Curriculum Vitae

Updated September 22nd. /2022

Professor Ahmad A. Ahmad (Omari), Ph.D.
Jordan University of Science and Technology
Faculty of Sciences and Arts

Head of the Department of Applied Physics

P.O. Box 3030

Irbid-22110, Jordan

Date of Birth: July 2nd., 1959

Double Majors

Chemical & Materials Engineering + Physics of Thin Films and Nanotechnology
An Interdisciplinary Program (Double Majors)
University of Nebraska – Lincoln, 1996 - USA

Jordan University of Science and Technology

At Jordan University of Science and Technology (JUST), Irbid-22110, Jordan.

- Member of: Policy and Instrumentation Steering Committee at the Nanotechnology Institute
- Member and founder of the PhD Program in Materials Science at JUST, Jordan and Chemnitz Technical University, Germany.
- Member and founder of the PhD Program in Physics at JUST, Jordan
- Member of the Quality and Development Committees in the Department of Physics and the College of Sciences and Arts which are responsible for the ABET accreditation for the Department Physics.

On Sabbatical leave: (2018/2019):

- Academic Consultant of the University & Vice Dean of the Technical Community College ABET Accreditation Coordinator University of Hafr Al Batin, Saudi Arabia.

On Sabbatical leave: (2010- 2012):

- Consultant and Training Coordinator /Hail University Agency for Academic Development and Social Service
- Executive Counselor for Shaikh Ali Bin Mohammad Jomai'ah Center for Training and Social Service
- Consultant for the Academic Affairs at Ha'il University, leave without paid: 2012 - 2013
- Rapporteur of the Standing Committee for Academic Affairs, Hail University
- Rapporteur of the Standing Committee for Academic Programs and Study Plans, Hail University.

ADDRESS AND CONTACT

Dr. Ahmad A. Ahmad (Omari), Ph.D.

Prof. of Chemical & Electronic Materials Engineering & Physics of Thin films and Nanotechnology

Dept. of Applied Physics

Jordan University of Science and Technology

P.O. Box 3030, Irbid 22110, Jordan

Fax: +962 2 7201071 Mobile: +962 777179673

E-mails: sema@just.edu.jo & sema_just@yahoo.com

Education

B.Sc. Physics & Computer Sciences, Yarmouk University, Irbid -Jordan, 1981.

M.Sc. Physics majored in Electronics, The University of Delhi, Delhi-India, 1985.

PH.D. Electronic Materials Engineering and Physics of Condensed Matter:

(Semiconductors) (An Interdisciplinary Program of two Majors)

The University of Nebraska-Lincoln (UNL), Lincoln, Nebraska, U.S.A., 1996.

Joint Professor of Electronic Materials Engineering and Physics of Condensed Matters,
Jordan University of Science and Technology. Irbid-22110, Jordan.

M.A. Juba – Sudan, Political Science (Peace and Development Studies) 2001.

University teaching experience: since 1996 - till now

Awards & SCHOLARSHIPS

- Yarmouk University award for the non-curricula active student of the year 1981.
- Founder and first president for the Jordanian Students Union (JSU) in India, New Delhi, 1983-85
- Full Scholarship by Jordan University of Science and Technology for the Ph.D. program at the University of Nebraska-Lincoln (UNL) (1991-1996).
- Full teaching assistantship from the University of Nebraska-Lincoln, Nebraska, USA (1991-1993).
- Full research assistantship from the University of Nebraska-Lincoln, Nebraska, USA (1993-1996).

EXPERIENCE, CAREER & OTHER ACTIVITES

- Part-time Lecturer, Jordan University of Science and Technology, Department of Physics, (1988-90).
- Teacher and instructor for the courses of physics and computer sciences, Zarka National College, Jordan (1988-90).
- Full-time Lecturer of Physics, Jordan University of Science & Technology, Jordan (1990-91).
- Teaching Assistance, the Department of Physics and Astronomy, University of Nebraska-Lincoln UNL, (1991-93).
- Research Assistance, the Department of Electrical Engineering and The Center for Microelectronics and Optical Materials Research (CMOMR), UNL (1993-96).

- Part-time English-Arabic “on call” Interpreter with the city, county and district courts, Lincoln Police Department and the Department of Social Services in Lincoln, Nebraska (1993-96).
- Assistant Professor, the Department of Physics, Jordan University of Science and Technology, Jordan (1996 -2008).
- Associate Professor, The Department of Physics, Jordan University of Science and Technology, Jordan (2008-till now).
- The Middle East Consultant and Representative for John A. Woollam Inc. Co. for Development and Instrumentation (Lincoln, Nebraska, U.S.A. (1996- ...).
- Research Visiting Professor at the Center for Microelectronics and Optical Materials Research (CMOMR) and the Department of Electrical Engineering, University of Nebraska-Lincoln, U.S.A., 1998.
- University Counsel Member.
- Member for many academic committees such as, the department study plan, research and promotion, schedule, academic quality control and assurance.
- International Journals Referee (Materials Chemistry and Physics and others in Elsevier).

(Other Activities)

- Training and Continuing Education Experience:
 - The Director for Al-Hayat Center for Civil Society Development –Irbid, Jordan
 - The Manager for Al-Shahed Project: "Enhancing the awareness for the Young Jordanians in legal and judicial procedures and the mechanisms of preserving their rights as citizens", Funded by the European Union Commission in Jordan.
 - The Manager for Al-Rased Project: Observing the Parliament Members performance, Funded by National Democratic Institute of America (NDI).
 - The manager for the women’s small projects, Funded by CIDA.
 - Trainer and member in the consultant committee at the Center for Civil Society Development at Jordan University of Science and Technology.
 - Operating trainer and member of the Consultation Center Committee at Jordan University of Science and Technology.
 - Consultant for the Cultural Club at Jordan University of Science and Technology.
 - Active member in Nongovernmental Civil Society Associations and Organizations.
 - Designer and trainer for variety of training workshops for public and private sectors in the local and regional societies, such as:
 - Time Management.
 - Personal Change Management.
 - Nerve Language Programming (NLP) and Effective Communications Skills.
 - Dialogue Skills.
 - Negotiation Skills.
 - Conflicts Resolution and the Art of Negotiation.
 - Crises Management.
 - Management of Strategic Change and Development Organization.
 - Dialogue of Civilizations.
 - Promoting Peace Culture.
 - Good Governance and Rule of Law.

- Rapid Search with partnership.
- Knowledge Management.
- Enhancing Democracy.
- Training of Trainers.
- Building self- confidence.

Laboratory SKILLS

- **THIN FILMS FABRICATION TECHNIQUES**
 - An excellent experience in thin film sputtering processes with r.f. and d.c applied powers including reactive sputtering modes using (balanced and unbalanced) magnetron configurations.
 - Plasma-Enhanced Chemical Vapor Deposition technique (PECVD).
 - Electron Cyclotron Resonance (ECR) Thin Film Etching.
 - Thin Film Asher Utilizing Gas-Solid Films Interaction.
 - Thin Films Dry and Wet Cleaning.
 - Spin Coating of thin films.
 - Sol Gel deposition of thin films.
 - Electrochemical Deposition
 - Hydrothermal Processing of Nanoparticles.
 - Polymers and Nanocomposites
- **THIN FILM CHARACTERIZATION TECHNIQUES**
 - Excellent hand on Optical Characterization using Spectroscopic Ellipsometry, Spectrophotometer and Ellipsometry FTIR techniques.
 - Device characterization using the d.c. and a.c. I-V characteristics, thin film resistivity and C-V response.
 - Microstructural analyses using XRD, AFM and Raman Back Scattering and EDAX.
 - Thin film surface chemical analysis and skin depth profiling using the Auger Electron Spectroscopy (AES) technique.

RESEARCH OF INTEREST

- Optical coatings for transparent thin solid films (such as, but not limited to, ZnO, AlN, PbI₂, Polymers, Diamond-like Carbon, Boron – doped DLC, BxC_{1-x}, GaN, AlGa_N, Amorphous, Polycrystalline and Crystalline Silicon, Iridium Oxide, ... etc) on various kinds of substrates for solar cells and energy storage, heat mirrors, encapsulate material, microelectronics applications.
- Thin film coatings (such as diamond like carbon (DLC) and boron-doped DLC on biomedical alloys (such as Titanium, Stainless steel) for good adhesion and non active biochemical interactions.
- Fabrication of thin films (Boron carbides doped with nickel and DLC doped with boron) for heterojunction and homojunction devices (such as p-n diode and FET).
- Fabrication and characterization of polymeric thin films (Polymethylmethacrylate, Azo dyes and BDK, PVA, ...) for electrical and optical applications.
- Fabrication and Characterization of PbI₂ thin films for improving biomedical imaging resolution.

- HF Surface cleaning for silicon based thin film devices.
- Spectroscopic Ellipsometry modeling and characterization for simple and complicated thin film samples and compound alloys.
- Thin film stress as a function of time and temperature (measurements and analysis). (Flexus machine).
- Electrical and optical properties of polymers.
- Characterizing Iridium Oxides thin films.

AUTHOR AND RESEARCHER

- 1- Author for more than one hundred scientific papers in different disciplines of science published in international, indexed and refereed journals. (All are listed in Ulrich, SCOPUS and Thomson ISI)
- 2- Supervisor and Co-supervisor more than 35 M.Sc. students.
- 3- Examiner and external examiner for many M.Sc. students.
- 4- Referee for many local and international journals.
- 5- Author for a book titled: "Reasoning and consequences for the displacement and refuge issue in the Palestinian conflict and the Strategic alternatives". (In Arabic language, in press).

PUBLICATION LIST Total 120 Articles 25-4-2023

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	Physicochemical Properties of Organic Molecular Ferroelectric Diisopropylammonium Chloride Thin Films AM Alsaad, QM Al-Bataineh, IA Qattan, IA Aljarrah, AA Bani-Salameh, ... Nanomaterials 13 (7), 1200		2023
	Effect of AINPs distribution on the optical and electrical properties of PANI/AINPs nanocomposite films D Sadiq, QM Al-Bataineh, A Telfah, WA Muneer, AA Ahmad, CJ Tavares, ... Physica B: Condensed Matter 651, 414587		2023
	Physicochemical characterizations of synthesized polyethylene oxide/boron carbide nanocomposite films AM Alsaad, AB Migdadi, AA Ahmad, QM Al-Bataineh, A Telfah Journal of Materials Science 58 (6), 2634-2646		2023
	Optical, electrical and morphological studies of complex composite films of rubidium bis (2-methylactato) borate monohydrate doped with iodine AA Ahmad, AB Migdadi, AM Alsaad, IA Aljarrah, AD Telfah Optik 273, 170388		2023
	Dielectric relaxation, optical and structural characterizations of complex composite films based on polyethylene oxide doped by low concentration of iodine		2023

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	A Telfah, QM Al-Bataineh, B Salameh, AA Ahmad, AM Alsaad, ... Physica B: Condensed Matter, 414649		
	Optical, structural and morphological properties of synthesized PANI-CSA-PEO-based GaN nanocomposite films for optoelectronic applications AA Ahmad, AA Bani-Salameh, QM Al-Bataineh, I Jum'h, AD Telfah Polymer Bulletin 80 (1), 809-828		2023
☐	Effect of AINPs distribution on the optical and electrical properties of PANI/AINPs nanocomposite films D Sadiq, QM Al-Bataineh, A Telfah, WA Muneer, AA Ahmad , CJ Tavares, ... Physica B: Condensed Matter, 414587		2022
☐	E/Z reversible photoisomerization of methyl orange doped polyacrylic acid-based polyelectrolyte brush films QM Al-Bataineh, AD Telfah, AA Ahmad , AA Bani-Salameh, R Abu-Zurayk, ... Journal of Applied Polymer Science 139 (46), e53138		2022
☐	Optical, electrical and morphological studies of complex composite films of rubidium bis (2-methylactato) borate monohydrate doped with iodine AA Ahmad, AB Migdadi, AM Alsaad, IA Aljarrah, AD Telfah Optik, 170388		2022
☐	Promising electrochemical catalytic steel electrodes structure coated by ZnO films for water treatment and water-splitting applications QM Al-Bataineh, WT Bani-Hani, A Ahmad, AM Alsaad, AD Telfah Journal of Materials Science: Materials in Electronics 33 (35), 26225-26235		2022
☐	Correlation of electrical, thermal, and crystal parameters of complex composite films based on polyethylene oxide (PEO) doped by copper sulfate (CuSO₄) QM Al-Bataineh, AA Ahmad, AM Alsaad, AB Migdadi, A Telfah Physica B: Condensed Matter 645, 414224	2	2022
☐	Hidden impurities in transparent conducting oxides: study of vacancies-related defects and impurities in (Cu–Ni) co-doped ZnO films QM Al-Bataineh, AA Ahmad, IA Aljarrah, AM Alsaad, A Telfah Applied Physics A 128 (11), 1-9		2022
☐	Physicochemical Properties of Sodium Bis (2-methylactato) borate Films Doped with Iodine for Photonic Applications AA Ahmad, QM Al-Bataineh, AA Bani-Salameh, AM Alsaad, A Telfah		2022

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	Journal of Electronic Materials 51 (11), 6540-6546		
☐	Characterization of As-prepared PVA-PEO/ZnO-Al₂O₃-NPs hybrid nanocomposite thin films AA Ahmad, MH Khazaleh, AM Alsaad, QM Al-Bataineh, AD Telfah Polymer Bulletin 79 (11), 9881-9905	6	2022
☐	Optical and Physical Properties of Silicone Oil Extracted from the Vitreous of Patients Who Underwent Vitrectomy for Retinal Detachment R Al-Dwairi, AA Ahmad, A Aleshawi, A Bani-Salameh, IA Aljarrah, ... Journal of Ocular Pharmacology and Therapeutics		2022
☐	Physical and chemical characterization of polyaniline (PANI)/indium tin oxide nanoparticles (ITONPs) nanocomposite films QM Al-Bataineh, AB Migdadi, A Telfah, AA Ahmad, AM Alsaad, ... Materials Chemistry and Physics 290, 126387	2	2022
☐	Optical, electrical and chemical properties of PEO: I₂ complex composite films A Telfah, QM Al-Bataineh, E Tolstik, AA Ahmad, AM Alsaad, R Ababneh, ... Polymer Bulletin, 1-15		2022
☐	Structural, chemical, morphological and optical properties of thin films based on potassium bis (2-methylactato) borate hemihydrate doped by iodine QM Al-Bataineh, A Ahmad, AM Alsaad, IA Aljarrah, AD Telfah Journal of Materials Science: Materials in Electronics 33 (26), 20778-20789		2022
☐	Effect of UV-illumination on refractive index of PMMA/metal oxide nanocomposite films IA Aljarrah, AA Bani-Salameh, AA Ahmad, QM Al-Bataineh, AM Alsaad, ... Polymer Bulletin, 1-11		2022
☐	The structural, optical, thermal, and electrical properties of synthesized PEO/GO thin films AM Alsaad, IA Aljarrah, A Ahmad, QM Al-Bataineh, A Shariah, ... Applied Physics A 128 (8), 1-11	1	2022
☐	Optical, optoelectronic, structural, and chemical characterizations of (PEO-PVA)/MWCNT nanocomposite films ADT Ahmad A. Ahmad, Qais M. Al-Bataineh, Areen A. Bani-Salameh Surfaces and Interfaces 33 (https://doi.org/10.1016/j.surfin.2022.10), 102202	1	2022
☐	Synthesis and Characterization of Thin Films Based on Azobenzene Derivative Anchored to CeO₂ Nanoparticle for Photoswitching Applications AA Ahmad, QM Al-Bataineh, AM Alsaad, DM Al-Nawafleh, ... Photochemistry and Photobiology 98 (4), 823-830		2022

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Photoisomerization Kinetics of Photoswitchable Thin Films Based on Nanostructure/Molecular Layers of AlN-AO7 AA Ahmad, QM Al-Bataineh, DM Al-Nawafleh, AD Telfah Photochemistry and Photobiology 98 (4), 831-842	1	2022
☐	Electrical and thermal characterizations of synthesized composite films based on polyethylene oxide (PEO) doped by aluminium chloride (AlCl ₃) AB Migdadi, AA Ahmad, AM Alsaad, QM Al-Bataineh, A Telfah Polymer Bulletin, 1-14	4	2022
☐	Optical, electronic, and structural properties of different nanostructured ZnO morphologies AA Ahmad, AM Alsaad, IA Aljarrah, QM Al-Bataineh, AD Telfah The European Physical Journal Plus 137 (6), 1-9		2022
☐	Dielectric relaxation, XPS and structural studies of polyethylene oxide/iodine complex composite films A Telfah, MA Al-Akhras, KA Al-Izzy, AA Ahmad, R Ababneh, MJA Ahmad, ... Polymer Bulletin 79 (6), 3759-3778	14	2022
☐	Investigation of the doping mechanism and electron transition bands of PEO/KMnO ₄ complex composite films QM Al-Bataineh, IA Aljarrah, AA Ahmad, AM Alsaad, A Telfah Journal of Materials Science: Materials in Electronics, 1-12	3	2022
☐	Computational Studies on the Thermodynamic and Kinetic Parameters of Unimolecular and Bimolecular Dissociation of Propylene Glycol Ethyl Ether in Binary 1-Butanol and ... ELSMN Rima Al OmariKhalidun Mohammad Al Azzam, Mansour H. Almatarneh, Asma M ... Egyptian Journal of Chemistry		2022
☐	Optical, chemical, electrical, and morphological properties of PEO–Nb-doped KMnO ₄ thin films AA Ahmad, IA Aljarrah, MD Telfah, AM Alsaad, A Telfah Journal of Materials Science: Materials in Electronics 33 (13), 10585-10595	2	2022
☐	Synthesis and characterization of as-grown doped polymerized (PMMA-PVA)/ZnO NPs hybrid thin films AM Alsaad, AR Al Dairy, AA Ahmad, AS Al-anbar, QM Al-Bataineh Polymer Bulletin 79 (4), 2019-2040	14	2022
☐	Polyethylene Oxide doped with Nano Cobalt Cerium Dioxide Nanocomposite as an antimicrobial surface A Alsaad, A Ahmad, Q Al-Bataineh Bulletin of the American Physical Society		2022

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Electrochemical degradation of methyl red in zinc hydroxide and zinc oxide thin films, physical and chemical activation AA Ahmad, QM Al-Bataineh, IA Aljarrah, AD Telfah Materials Chemistry and Physics 280, 125793	6	2022
☐	Synthesis, optoelectronic and thermal characterization of PMMA-MWCNTs nanocomposite thin films incorporated by ZrO ₂ NPs AB Migdadi, AA Ahmad, AM Alsaad, A Telfah Journal of Materials Science: Materials in Electronics 33 (8), 5087-5104	4	2022
☐	Optical, structural and morphological properties of synthesized PANI-CSA-PEO-based GaN nanocomposite films for optoelectronic applications AA Ahmad, AA Bani-Salameh, QM Al-Bataineh, I Jum'h, AD Telfah Polymer Bulletin, 1-20	8	2022
☐	Doping mechanism and optical properties of as-prepared polyvinyl chloride (PVC) doped by iodine thin films M Telfah, AA Ahmad, AM Alsaad, QM Al-Bataineh, A Telfah Polymer Bulletin, 1-20	4	2022
☐	Computational and experimental characterizations of annealed Cu ₂ ZnSnS ₄ thin films AA Ahmad, AB Migdadi, AM Alsaad, IA Qattan, QM Al-Bataineh, A Telfah Heliyon 8 (1), e08683	10	2022
☐	Optical, structural, and morphological characterizations of synthesized (Cd–Ni) co-doped ZnO thin films AA Ahmad, AB Migdadi, AM Alsaad, QM Al-Bataineh, A Telfah Applied Physics A 127 (12), 1-12	13	2021
☐	Synthesis and structural, crystallographic, electronic, chemical and optical characterizations of alpha-diisopropylammonium bromide (α -DIPAB) thin films AM Alsaad, QM Al-Bataineh, AA Bani-Salameh, AA Ahmad, BA Albiss, ... Optik 241, 167014	4	2021
☐	The Effect of Local Wind Speed for Opening in Mega Kuningan Highrise Office Tower AA Ahmad, MI Djimantoro, BA Suryawinata IOP Conference Series: Earth and Environmental Science 794 (1), 012194	1	2021
☐	Optical properties and photo-isomerization processes of PMMA–BDK–MR nanocomposite thin films doped by silica nanoparticles AM Alsaad, QM Al-Bataineh, M Telfah, AA Ahmad, Z Albataineh, A Telfah Polymer Bulletin 78 (7), 3425-3441	11	2021
☐	Synthesis of Optically Tunable and Thermally Stable PMMA–PVA/CuO NPs Hybrid Nanocomposite Thin Films	7	2021

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	AM Alsaad, AA Ahmad, IA Qattan, AR El-Ali, SAA Fawares, ... Polymers 13 (11), 1715		
☐	New extraction of the elastic scattering cross-section ratio based on a simplified phenomenological hard two-photon-exchange correction approach IA Qattan, A Alsaad, AA Ahmad Physical Review C 103 (5), 055202		2021
☐	Extraction of elastic scattering cross-section ratio from elastic scattering experimental data IA Qattan, A Alsaad, AA Ahmad Physical Review C 103 (4), 045202		2021
☐	Synthesis, Optical, Chemical and Thermal Characterizations of PMMA-PS/CeO ₂ Nanoparticles Thin Film AA Bani-Salameh, AA Ahmad, AM Alsaad, IA Qattan, IA Aljarrah Polymers 13 (7), 1158	9	2021
☐	Effect of Iodine Filler on Photoisomerization Kinetics of Photo-Switchable Thin Films Based on PEO-BDK-MR QM Al-Bataineh, AA Ahmad, AM Alsaad, IA Qattan, IA Aljarrah, AD Telfah Polymers 13 (5), 841	1	2021
☐	Synthesis and characterization of ZnO NPs-doped PMMA-BDK-MR polymer-coated thin films with UV curing for optical data storage applications AA Ahmad, AM Alsaad, QM Al-Bataineh, MAH Al-Akhras, Z Albataineh, ... Polymer Bulletin 78 (3), 1189-1211	23	2021
☐	Studies of composite films of polyethylene oxide doped with potassium hexachloroplatinate MA AL-Akhras, SE Alzoubi, AA Ahmad, R Ababneh, A Telfah Journal of Applied Polymer Science 138 (5), 49757	12	2021
☐	Characterization of As-Prepared (PMMA-PVA)/CuO-NPs Hybrid Nanocomposite Thin Films A Alsaad, A Ahmad, AR Al Dairy, IA Qattan, S Al Fawares, Q Al-Bataineh Preprints	1	2021
☐	Synthesis and Characterization of Polymeric (PMMA-PVA) Hybrid Thin Films Doped with TiO ₂ Nanoparticles Using Dip-Coating Technique A Alsaad, AR Al Dairy, A Ahmad, IA Qattan, S Al Fawares, Q Al-Bataineh Crystals 11 (2), 99	16	2021
☐	Optical characterizations of PMMA/metal oxide nanoparticles thin films: bandgap engineering using a novel derived model QM Al-Bataineh, AA Ahmad, AM Alsaad, AD Telfah	24	2021

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	Heliyon 7 (1), e05952		
☐	New insight on photoisomerization kinetics of photo-switchable thin films based on azobenzene/graphene hybrid additives in polyethylene oxide QM Al-Bataineh, AA Ahmad, AM Alsaad, A Telfah Polymers 12 (12), 2954	12	2020
☐	Spectroscopic characterization of optical and thermal properties of (PMMA-PVA) hybrid thin films doped with SiO ₂ nanoparticles AM Alsaad, AA Ahmad, AR Al Dairy, AS Al-anbar, QM Al-Bataineh Results in Physics 19, 103463	23	2020
☐	Theoretical and experimental overview of structural, dielectric, crystallographic, electronic, optical, and physical tensors of α -DIPAB and iodine-doped α -DIPAB molecular ... AM Alsaad, IA Qattan, AA Ahmad, QM Al-Bataineh, HI Al-Abed, ... Journal of Electronic Materials 49 (12), 7112-7132	1	2020
☐	Synthesis, Crystallography, Microstructure, Crystal Defects, Optical and Optoelectronic Properties of ZnO:CeO ₂ Mixed Oxide Thin Films QM Al-Bataineh, M Telfah, AA Ahmad, AM Alsaad, IA Qattan, H Baaziz, ... Photonics 7 (4), 112	35	2020
☐	Optical properties of hydrophobic ZnO nano-structure based on antireflective coatings of ZnO/TiO ₂ /SiO ₂ thin films QMAB Ahmad A.Ahmad, Mr, TOS Mr, KAA Miss Physica B: Condensed Matter 593, 412263	20	2020
☐	Optical Band Gap Studies and Refractive Index Dispersion Parameters of Undoped ZnO and Boron-doped ZnO Thin Films: A Novel Derived Mathematical Model from the Experimental ... AT A. M. Alsaad, Qais M. Al-Bataineh, A. A. Ahmad, Zaid Albataineh Optik 211, 164641		2020
☐	Kinematics of photoisomerization processes of PMMA-BDK-MR polymer composite thin films QM Al-Bataineh, AA Ahmad, AM Alsaad, IA Qattan, AA Bani-Salameh, ... Polymers 12 (6), 1275	8	2020
☐	A novel optical model of the experimental transmission spectra of nanocomposite PVC-PS hybrid thin films doped with silica nanoparticles QM Al-Bataineh, AM Alsaad, AA Ahmad, A Telfah Heliyon 6 (6), e04177	22	2020
☐	Optical band gap and refractive index dispersion parameters of boron-doped ZnO thin films: A novel derived mathematical model from the experimental transmission spectra AM Alsaad, QM Al-Bataineh, AA Ahmad, Z Albataineh, A Telfah	59	2020

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
	Optik 211, 164641		
☐	Measurement and <i>ab initio</i> Investigation of Structural, Electronic, Optical, and Mechanical Properties of Sputtered Aluminum Nitride Thin Films AM Alsaad, QM Al-Bataineh, IA Qattan, AA Ahmad, A Ababneh, ... Frontiers in Physics 8, 115	22	2020
☐	Optical, structural, and crystal defects characterizations of dip synthesized (Fe-Ni) Co-doped ZnO thin films AM Alsaad, AA Ahmad, QM Al-Bataineh, AA Bani-Salameh, HS Abdullah, ... Materials 13 (7), 1737	36	2020
☐	Structural, optoelectrical, linear, and nonlinear optical characterizations of dip-synthesized undoped ZnO and group III elements (B, Al, Ga, and In)-doped ZnO thin films AM Alsaad, AA Ahmad, IA Qattan, QM Al-Bataineh, Z Albataineh Crystals 10 (4), 252	41	2020
☐	Synthesis, crystallography, microstructure, crystal defects and optical properties of (fe-ni) co-doped zno thin films prepared by sol-gel technique A Alsaad, Q Al-Bataineh, A Ahmad, A Bani-Salameh, Z Albataineh, ... Bulletin of the American Physical Society 65	3	2020
☐	Structural, electronic and magnetic properties of the ordered binary FePt, MnPt, and CrPt3 alloys TO Ahmad Alsaad, Ahmad A. Ahmad Heliyon 6 (3), e03545	13	2020
☐	Optical properties of transparent PMMA-PS/ZnO NPs polymeric nanocomposite films: UV-Shielding applications AM Alsaad, QM Al-Bataineh, AA Ahmad, I Jum'h, N Alaqtash, ... Materials Research Express 6 (12), 126446	18	2020
☐	Structural, electronic and magnetic properties of the ordered binary FePt, MnPt, and CrPt3 alloys TSO A Alsaad, AA Ahmad Heliyon 6 (3), e03545	18	2020
☐	Effect of bromine deficiency on large elastic moduli of alpha-phase diisopropyl ammonium bromide (α -DIPAB) molecular crystals MAHAA Ahmad Alsaad, Nabil Alaqtash , Ali Al Kadhim , Renat F. Sabirianov ... Eur. Phys. J. B 93, 5	3*	2020
☐	Optical properties of transparent PMMA-PS/ZnO NPs polymeric nanocomposite films: UV-Shielding applications Ahmad Alsaad, Qais M. Al-Bataineh, Ahmad A. Ahmad Materials Research Express	18	2020

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Synthesis and Characterization of Transparent PMMA-PS/ZnO Nanocomposite Films for UV-Shielding Applications AABS A. M. Alsaad, Qais M. Al-Bataineh, A. A. Ahmad, Inshad Jum'h, Nabil ... Materials Research Express 6 (12)		2020
☐	Optoelectrical, Linear and Nonlinear Optical Characterizations of Dip Synthesized Undoped ZnO and Group III Elements (B, Al, Ga and In)-doped ZnO Thin Films IAQ A. M. Alsaad, A. A. Ahmad, Qais M. Al-Bataineh, Zaid Albataineh Crystals 10 (4), 252		2020
☐	Fundamental properties of scandium chalcogenides and their alloys: DFT study AA Ahmad, S Mahmoud, B Alshafaay, R Halabi, F El Haj Hassan Indian Journal of Physics 93 (9), 1129-1135	3	2019
☐	Structural, electronic and magnetic properties of MxPt1-X,(M= Co, Ni and V) binary alloys AM Alsaad, AA Ahmad, HA Qattous Heliyon 5 (9), e02433	6	2019
☐	Structural, electronic and optical characterization of ZnO thin film-seeded platforms for ZnO nanostructures: sol–gel method versus ab initio calculations QM Al-Bataineh, AM Alsaad, AA Ahmad, A Al-Sawalmih Journal of Electronic Materials 48 (8), 5028-5038	38	2019
☐	Structural, Electronic and Optical Characterization of ZnO Thin Film Seeded Platforms for ZnO Nanostructures: Sol Gel Method vs. ab-Initio Calculations AAS Qais M. Al-Bataineh, A. Ahmad, A. M. Alsaad Journal of Electronic Materials 48 (8), 5028-5038		2019
☐	First-principles calculation of physical tensors of α-Diisopropylammonium Bromide (α-DIPAB) molecular ferroelectric crystal NAA AM Alsaad, A Alsaad, IA Qattan, Z Albataineh, R Sabirianov Frontiers in Physics 7 (203)	4	2019
☐	Ahmad M. Alsaad¹, Ahmad A. Ahmad^{1, 2}, Qais M. Al-Bataineh¹, Nermeen S. Daoud¹ MH Khazaleh Open Journal of Applied Sciences 9, 181-197		2019
☐	Design and Analysis of MEMS Based Aluminum Nitride (AlN), Lithium Niobate (LiNbO₃) and Zinc Oxide (ZnO) Cantilever with Different Substrate Materials for Piezoelectric ... MHK A. M. Alsaad, A. A. Ahmad, Qais M. Al-Bataineh, Nermeen S Daoud Open Journal of Applied Sciences 9, 181-197	5	2019

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	First-principles calculation of physical tensors of α -Diisopropylammonium Bromide (α -DIPAB) molecular ferroelectric crystal, ZA A. Alsaad, N. Al-Aqtash, R. F. Sabirianov, A. Ahmad, Qais M. Al-Bataineh ... Frontiers in Physics 7, 203	4	2019
☐	Optical and structural investigations of dip-synthesized boron-doped ZnO-seeded platforms for ZnO nanostructures AA Ahmad, AM Alsaad, QM Al-Bataineh, MA Al-Naafa Applied Physics A 124 (6), 1-13	52	2018
☐	Modeling of lithium niobate (LiNbO ₃) and aluminum nitride (AlN) nanowires using comsol multiphysics software: the case of pressure sensor AA Ahmad, A Alsaad, QM Al-Bataineh, MA Al-Naafa IOP Conference Series: Materials Science and Engineering 305 (1), 012007	2	2018
☐	Determination of Magneto-crystalline Anisotropy Energy (MAE) Of ordered L10 CoPt and FePt nanoparticles A Alsaad, AA Ahmad, AA Shukri, OA Bani-Younes IOP Conference Series: Materials Science and Engineering 305 (1), 012017	4	2018
☐	Modeling of Square ZnO Nanomembrane with Two Types of Cavities: Vacuum Cavity and Graphene Cavity Using Comsol Multiphysics Software: The Case Study MEMS Capacitive Pressure Sensor A Alsaad, A Ahmad, Q Al-Bataineh APS March Meeting Abstracts 2018, G60. 355	1	2018
☐	Modeling of Lithium Niobate (LiNbO ₃) and Aluminum Nitride (AlN) Nanowires Using Comsol Multiphysics Software: The Case of Pressure Sensor IAQ Ahmad A. Al-Ahmad, M. Alsaad, Q. M. Al-Bataineh The 2nd International Conference on advanced Materials (ICAM-2017), IOP Conf ...		2018
☐	The correlation between indoor and in soil radon concentrations in a desert climate HM Al-Khateeb, KM Aljarrah, FY Alzoubi, MK Alqadi, AA Ahmad Radiation Physics and Chemistry 130, 142-147	13	2017
☐	Optical and electrical properties of synthesized reactive rf sputter deposited boron-rich and boron-doped diamond-like carbon thin films AA Ahmad Journal of Materials Science: Materials in Electronics 28 (2), 1695-1705	11	2017
☐	Optical and Structural Characterization of dip synthesized Al-B co-doped ZnO Seeded Platforms for ZnO Nanostructures HMAKMAAN Ahmad A. Ahmad, A. M. Alsaad, Q. M. Al-Bataineh, A. A. Bani-Salameh Jordan Journal of Physics 10 (1), 35-50	9	2017

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Optical and structural properties of sputter deposited ZnO thin films in relevance to post-annealing and substrate temperatures AA Ahmad, AM Alsaad, BA Albiss, MA Al-Akhras, HM El-Nasser, IA Qattan Thin Solid Films 606, 133-142	16	2016
☐	The UV and laser aging for pmma/bdk/azo-dye polymer blend cured by UV light beams AA Ahmad, AM Omari IOP conference series: materials science and engineering 92 (1), 012024	5	2015
☐	The effect of substrate temperature on structural and optical properties of DC sputtered ZnO thin films AA Ahmad, AM Alsaad, BA Albiss, MA Al-Akhras, HM El-Nasser, IA Qattan Physica B: Condensed Matter 470, 21-32	23	2015
☐	Structural and electronic properties of Diisopropylammonium bromide molecular ferroelectric crystal A Alsaad, IA Qattan, AA Ahmad, N Al-Aqtash, RF Sabirianov IOP Conference Series: Materials Science and Engineering 92 (1), 012017	5	2015
☐	Structural and optical properties of evaporated Ge/Al Bilayer thin films AA Structural and optical properties of evaporated Ge/Al Bilayer thin films ... INTERNATIONAL JOURNAL OF NANOELECTRONICS AND MATERIALS 4 (2), 135-143		2011
☐	Structural and magnetic properties of MnN and ScN binaries and their ScN: Mn diluted magnetic semiconductors and $Mn_xSc_{1-x}N$ alloys SRM A Alsaad, M Bani-Yassein, IA Qattan, A Ahmad Physica B: Condensed Matter 405 (5), 1408-1414	11	2010
☐	Ellipsometric characterization of PbI₂ thin film on glass A Ahmad, S Saq'an, B Lahlouh, M Hassan, A Alsaad, H El-Nasser Physica B: Condensed Matter 404 (1), 1-6	21	2009
☐	A first-principles-derived method for computing the piezoelectric coefficients of complex semiconductor $Sc_{1-x}Ga_xN$ alloys A Alsaad, A Ahmad, H Alta'ani, R Alshyab Physica B: Condensed Matter 403 (23-24), 4174-4181	11	2008
☐	Optical and piezoelectric anomalies of ordered (Sc, Ga) N and (Sc, In) N ternaries A Alsaad, A Ahmad The European Physical Journal B 65 (1), 65-77	12	2008
☐	Structural Phase Transitions induced by Compressive and Tensile Strains in Ordered $Sc_{0.5}Ga_{0.5}N$ and $Sc_{0.5}In_{0.5}N$ Alloys. A Alsaad, A Ahmad APS March Meeting Abstracts, R1. 299		2008

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Structural phase transitions and piezoelectric anomalies in ordered Sc _{0.5} Ga _{0.5} N alloys AM Alsaad, AA Ahmad Bulletin of Materials Science 30 (4), 407-413	3	2007
☐	Adhesive B-doped DLC films on biomedical alloys used for bone fixation AA Ahmad, AM Alsaad Bulletin of Materials Science 30 (4), 301-308	15	2007
☐	Piezoelectricity of ordered (Sc _x Ga _{1-x} N) alloys from first principles A Alsaad, A Ahmad The European Physical Journal B-Condensed Matter and Complex Systems 54 (2 ...	33	2006
☐	Optical properties of ZnO related to the dc sputtering power A Ahmad, A Alsaad The European Physical Journal B-Condensed Matter and Complex Systems 52 (1 ...	30	2006
☐	Eur. Phys. J. B A Alsaad, A Ahmad		2006
☐	Sound velocity and Young's modulus in plasma deposited amorphous hydrogenated carbon RO Dillon, A Ali, NJ Ianno, A Ahmad, T Furtak Journal of Vacuum Science & Technology A: Vacuum, Surfaces, and Films 19 (6 ...	12	2001
☐	<u>Low-field current transport mechanisms in rf magnetron sputter deposited boron carbide (B₅C)/p-type crystalline silicon junctions in the dark</u> MM Abdul-Gader, UA Al-Binni, AA Ahmad, MA Al-Basha, NJ Ianno International journal of electronics 88 (8), 873-901	12	2001
☐	Effect of thermal conductivity of absorber plate on the performance of a solar water heater AM Shariah, A Rousan, KK Rousan, AA Ahmad Applied Thermal Engineering 19 (7), 733-741	81	1999
☐	Sputter deposition of high resistivity boron carbide AA Ahmad, NJ Ianno, SD Hwang, PA Dowben Thin Solid Films 335 (1-2), 174-177	38	1998
☐	The incorporation of Nickel and Phosphorus dopants into Boron-Carbon alloy thin films DN McIlroy, SD Hwang, K Yang, N Remmes, PA Dowben, AA Ahmad, ... Applied Physics A 67 (3), 335-342	45	1998
☐	Fabrication of -type nickel doped BC homojunction and heterojunction diodes SD Hwang, K Yang, PA Dowben, AA Ahmad, NJ Ianno, JZ Li, JY Lin, ... Applied physics letters 70 (8), 1028-1030	86	1997

	AUTHER APPEAR AS: Ahmad A. Ahmad, Or Ahmad Ahmad, Or AA Ahmad	#	Year
☐	Fabrication of n-type nickel doped B₅ C_{1+δ} homojunction and heterojunction diodes ... SD Hwang, K Yang, PA Dowben, AA Ahmad, NJ Ianno, JZ Li, JY Lin Applied Physics 70 (8), 1028-1030		1997
☐	Optical properties of boron carbide (B₅C) thin films fabricated by plasma-enhanced chemical-vapor deposition PAD AA Ahmad, NJ Ianno, PG Snyder, D Welipitiya, D Byun Journal of applied physics 79 (11), 8643-8647	57	1996
☐	Deposition and characterization of boron carbides AA Ahmad The University of Nebraska-Lincoln	4	1996
☐	Deposition of diamond-like carbon on a titanium biomedical alloy NJ Ianno, RO Dillon, A Ali, A Ahmad Thin Solid Films 270 (1-2), 275-278	65	1995
☐	Optical and Electrochromic Analysis of (Al-B) Co-Doped and Un-Doped V₂O₅ Thin Films A Ahmad, NM Ababneh Nesreen M., Optical and Electrochromic Analysis of (Al-B) Co-Doped and Un ...		
☐	Effect of bromine deficiency on large elastic moduli of alpha-phase diisopropyl ammonium bromide (α-DIPAB) molecular crystals IAQ A Alsaad, N Alaqtash, A Al Kadhimi, RF Sabirianov, A Ahmad The European Physical Journal B 93 (1), 5		

Total 107 Articles 25-12-2022

SELECTED CONFERENCE PAPERS

- 1- Qais M. Al-Bataineh, **A.A. Ahmad**, M-Ali H. Al-Akhras, A. M. Alsaad, Kholoud A. Alezzy, Nermeen S Daoud, Synthesis and Characterization of ZnO NPs doped PMMA-BDK-MR Coating Films with UV-Curing for Optical Data Storage Applications, Poster in The Fourth International Symposium on Dielectric Materials and Applications, (ISyDMA 4, 2-4 May 2019).
- 2- A. M. Alsaad, **Ahmad A. Al-Ahmad**, Q.M. Al-Bataineh, Zaid Albatineh, Modeling of Square ZnO Nanomembrane with Two Types of Cavities: Vacuum Cavity and Graphene Cavity Using Comsol Multiphysics Software: The Case Study MEMS Capacitive Pressure Sensor, Poster in American Physical Society, APS March Meeting 2018, March 5–9, 2018; Los Angeles, California; Abstract link: <http://meetings.aps.org/Meeting/MAR18/Session/G60.355>.
- 3- **A.A. Ahmad**, Q.M. Al-Bataineh, B. A. Al-Ananbeh, Optical and Structural Characterization of dip synthesized In-doped ZnO Seeded Platforms for ZnO Nanostructures, Poster in First International Conference on Current Nanotechnology and its Application, (ICCNA - 2018) 10 - 12 April, 2018

- 4- **A.A. Ahmad**, A. Alsaad, Q.M. Al-Bataineh, Zaid Albataineh, N.S. Daoud, T.O. Samara, Modeling of Gallium Arsenide (GaAs), Gallium Phosphide (GaP) and Gallium Antimonide (GaSb) PIN Micro-Photodiode Devices Using Comsol Multiphysics Software: The Case of Electronic Devices, Poster in First International Conference on Current Nanotechnology and its Application, (ICCNA - 2018) 10 - 12 April, 2018.
- 5- M. Al-Akhras, K. Aledealat, K. Husien, B. Albiss, **A.Ahmad**, F. Alkhatbeh Electrochemical Deposition Of Cu-Doped ZnO Nanostructures for Sensing Application, ICAM, Irbid, 2015
- 6- A. Alsaad, **A. Ahmad**, Structural Phase Transitions induced by Compressive and Tensile Strains in Ordered Sc_{0.5}Ga_{0.5}N and Sc_{0.5}In_{0.5}N Alloys. MARCH 2008 Meeting of The American Physical Society, Mark 2008.
- 7- Yemen Science Conference, Ta'ez, Yemen, 2004.
- 8- Yemen Science Conference, Ta'ez, Yemen, 2002.
- 9- Spring School on New Materials, Assute University, Egypt 2001
- 10- Petra School of Physics Jordan University, 2000.
- 11- The First Lebanese-France Conference on Materials Sciences, Byroot-Leban, 1996.
- 12- **Ahmad A. Ahmad**, Spectroscopic Ellipsometry Study to the Optical Properties of Boron Carbide Films., The 36th. Scientific Week in Halebo, Syria, 1996
- 13- **Ahmad A. Ahmad**, Spectroscopic Ellipsometry Study to the Optical Properties of Boron Carbide Films., The 36th. Scientific Week in Halebo, Syria, 1996.
- 14- Abbas Ali, R.O. Dillon, N.J. Ianno and **Ahmad A. Ahmad**, Sound Velocity in Diamond-Like Carbon Films, International Conference on Metallurgical Coatings and Thin Films, (ICMCTF, 1995).
- 15- N.J. Ianno, J.S. Hale, **Ahmad A. Ahmad**, P.G. Snyder, and J.A. Woollam, Magnetron Sputtering of Optical and Encapsulant AlN films, (Poster), 40th. Annual Conference in Orlando-Florida, 1994.
- 16- J.S. Hale, **Ahmad A. Ahmad**, N.J. Ianno and J.A. Woollam, Electrical and Optical Properties and Oxidation Resistance of Sputtered AlNs and related Multilayered Films, Annual Materials Research Society (MRS) Conference, 1993.

Selected M.Sc. THESES SUPERVISED BY ME

- 1- Majdi M. A. Alawneh. Supervised by: Dr. Hameed A. Attar (Al al-Bayt University) and Dr. **Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "Spectroscopic Ellipsometry of Optical properties of Diamond-like Carbon Thin Films". Dept. of Physics, Al al-Bayt Universtiy, Mafrak – Jordan, Jan. 2003.

- 2- Rabee M. M. Qurashi. Supervised by: Dr. Hameed A. Attar (Al al-Bayt University) and Dr. **Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "Optical properties of Sputter deposited Boron Doped Diamond-like Carbon Thin Films". Dept. of Physics, Al al-Bayt Universtiy, Mafrak – Jordan, June 2003.

- 3- Ibrahim Hussein Al-Fanatseh. Supervised by: Prof. Mousa M. Abdul-Gader Jafar (Jordan University – Amman, Jordan) and **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "Structural and Optical and properties of Zinc Oxide films prepared by the Chemical Deposition Method". Dept. of Physics, Jordan University, Amman – Jordan, Jan. 2005.

- 4- Hussein F. Al-Ta'ani. Supervised by: Dr. Ahmad M. Alsaad (Jordan University of Science and Technology) and **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "Optical and piezoelectric properties of ScN and its related alloys". Dept. of Physics, JUST, Irbid – Jordan, Aug. 2006.

- 5- Abdelalah Ali Alshanwan. Supervised by: **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology) and Prof. Mousa M. Abdul-Gader Jafar (Jordan University – Amman, Jordan): " Structural and Optical Properties of ZnO thin films deposited by Sol Gel Coating Technology ". Dept. of Physics, Jordan University of Science and Technology, Irbid – Jordan, Aug. 2006.

- 6- Nisreen Fehmi Abu-Tabanjeh. Supervised by: **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology) and Dr. Hussam El-Naser (Al al-Bayt Universtiy, Mafrak): "Structural and Optical Properties of Spin Coated Polymeric-Based (PMMA/BDK/Azo-dye) Thin Films Fabricated via Photochemical Process ". Dept. of Physics, Jordan University of Science and Technology, Irbid – Jordan, Aug. 2006.

- 7- Mohammad Anwar Ali Ibrahim. Supervised by: Dr. Hussam El-Naser (Al al-Bayt University) and **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "A Study of Optical Properties PMMA/BDK/Azo-dye Iodine Mixture Thin Films Using Spectroscopic Ellipsometry". Dept. of Physics, Al al-Bayt Universtiy, Mafrak – Jordan, Nov. 2006.

- 8- Ahmad Hussein Al-Omari. Supervised by: **Dr. Ahmad A. Ahmad (Omari)** (Jordan University of Science and Technology): "The UV and Laser Aging for PMMA/BDK/Azo-dye Polymeric-Based Blend Cured by UV and Visible Light Beams". Dept. of Physics, Jordan University of Science and Technology, Irbid – Jordan, Aug. 2007.

- 9- Qais Batayneh, Supervised by: **Dr. Ahmad A. Ahmad (Omari)** and Dr. Ahmad A. Alsaad, (Jordan University of Science and Technology): Optical And Structural Characterization Of

Sol-Gel B-Zno And Zno Thin Films Used As Seeded Platform For Nanostructured Zno, Jan., 2016

- 10- Omari Bani Younes, supervised by: Dr. Ahmad A. Alsaad and **Dr. Ahmad A. Ahmad (Omari)**, (Jordan University of Science and Technology): Comparative study of structural, optical and magnetic properties of L10 –ordered FePt and CoPt nanoparticles. Graduated. May., 2016
- 11- Areej Malkawi, PMMA/PVC/Azo-dye/BDK based Polymeric thin films, under my supervision, **Dr. Ahmad A. Ahmad (Omari)**, (Jordan University of Science and Technology): Supervisor Graduated 2016
- 12- Bayan Khatatbeh, Indium-doped Zinc Oxide thin films, under my supervision, **Dr. Ahmad A. Ahmad (Omari)**, (Jordan University of Science and Technology): Graduated Jan., 2017
- 13- Furat F. Ramadan, Gallium-doped Zinc Oxide thin films, Supervisor: **Dr. Ahmad A. Ahmad (Omari)** and M.A. Al-Akras as Co-advisor, (Jordan University of Science and Technology):, Graduated Jan., 2017
- 14- Areen Bani Salameh, Fabrication and characterization of hydrophobic and hydrophilic materials: **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2019.
- 15- Tariq O. Samara, hydrophobic and hydrophilic nanomaterials, **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2019.
- 16- Asma I. Theabat, Polymeric (PMMA/PVA) based nanomaterials, **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2018.
- 17- Kholoud Al-Ezzy, compounds of semiconductors, **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2019.
- 18- Hamzeh A. Qattous, computational nanostructures of semiconductors (VASP codes), **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2020.
- 19- Tareq S. Obeidat, computational nanostructures of semiconductors (VASP codes), **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2020.
- 20- Halah Al-Abed, Working on computational nanostructures of semiconductors (VASP codes), **Dr. Ahmad A. Ahmad (Omari)**, Graduated 2019.
- 21- Mais Hani Yousuf Khaza'leh,

SELLECTED M.SC. THESES UNDER MY SUPER VISION NOW

1	128170	Ahmad Mohiieldin Musa Alsmairi	Co Advisor
2	128208	Saimaa' Ameen Yousuf Obaidat	Single Main Advisor
3	128630	Shefaa' Musa Issa Monmani	Single Main Advisor
4	128634	Rahmah Akef Soliman Mhaidat	Single Advisor
5	130454	Nesreen Mohammad Taiseer Ababneh	Single Main Advisor
6	136159	Manal Abdelrahmad Moh'd Abdelgani	Main advisor with Co-Advisor
7	142705	Ayah Turky Soliman Malkawi	Main advisor with Co-Advisor

SELLECTED M.SC. THESES EXAMINED BY ME AS EXTERNAL EXAMINOR

- 1- Taha Khader A. Al-Mawla: Dr. Hussam El-Naser (Al al-Bayt University): "Optical properties of Storage Systems PMMA/BDK/Azo-dye Using Spsectroscopic Ellipsometry". Dept. of Physics, Al al-Bayt Universtiy, Mafrak – Jordan, **May. 2005**.
- 2- Yazeed Fadel Saeed Qundos. Supervised by: Dr. Adnan M. Shariah (Jordan University of Science and Technology): "Optical properties of Crystallized Amorphous Silicon Thin Films". Dept. of Physics, Jordan University of Science and Technology, Irbid – Jordan, **May 2006**.
- 3- Ahmad Faleh Kasassbeh. Supervised by: Prof. Ismaeel Ahmad Garaibeh (Mu'tah University –Mu'tah, Jordan) "The Multiple Melting behaviour of Poly(ethylene Succinate) Crystallized from the Melt". Dept. of Physics, Mu'tah, University, Jordan, **May. 2006**.
- 4- Mahmoud S. Al-Sa'di. Supervised by: Dr. Sobhi Saq'an (Jordan University of Science and Technology): "Electrical and Optical Properties of Polycarbonate (PC)/MNCI₂ Composite". Dept. of Physics, Jordan University of Science and Technology, Irbid – Jordan, **Nov. 2006**
- 5- Khawla A. Gh. O'owadat, Suprevised by Dr. Hussam El-Naser (Al al-Bayt University): "Ellipsometric Properties of Polymethylmethacrylate (PMMA) thin films". Dept. of Physics, Al al-Bayt University, Jordan, May, 2009.
- 6- Rawan Bani Amer, Supervised by Prof. Borhan A. Elbiss, Nanomaterials, 2016

FUNDED RESEARCH

Funded Projects at JUST					
Active Projects					
No	Title	Type	Duration(months)	Amount (JOD)	End Date
2019 0291	الخصائص البصرية لأغشية خليط مبلمرات كلوريد متعدد الفينيل ومتعدد الميثيل ميثا اكريليت المشوب بالبادئ الضوئي والصبغة القلوية الحمراء	Thesis Project	18	6500	Closed
2020 0505	الرقيقة $TiO_2-Nb_2O_5$ تحضير وتشخيص أغشية المؤيّن بأيونات الليثيوم والصوديوم والبوتاسيوم المستخدمة في نبائط التلوين الكهربائية	Non-Thesis Project	12	9980	Closed
2018 0407	الخصائص البصرية والتركيبية لأغشية أكسيد الزنك المشوب بالألمنيوم المصنع بالهدرجة الحرارية المرسبة على طبقات أكسيد النيتانيوم / أكسيد السلكون المقاومة للانعكاسية والرافضة لاستقرار قطرات الماء على سطوحها	Non-Thesis Project	18	9960	Closed
2022 0346	الخصائص الضوئية والتركيبية والكهربائية لأفلام الكاديوم سلفايد المشوبة بمادتي الانديوم واليورون	Thesis Project	18	6400	Active
2021 0370	دراسة الخصائص الكيميائية والفيزيائية لزيوت السيليكون التالفة والمستخرجة من عيون المرضى بعد حقنها كبديل للسائل الزجاجي	Non-Thesis Project Joint with medicine	18	9985	Active
2021 0384	الخواص البصرية وعمليات الأيزومرة الضوئية للأغشية الرقيقة من المركبات النانوية المبنية على والمُشوب بواسطة جزيئات (PEO-BDK-MR) أكسيد السيريوم النانوية	Thesis Project	18	6500	Active
2020 0612	Title: Optical and Electrochromic Analysis of Al-B co-doped VO ₂ and undoped VO ₂ thin films التحليل الضوئي والكهروكرومي لأغشية أكسيد الفانديوم الخالص والمُشوب بمدمج اليورون والألمنيوم	Thesis Project	12	6500	Closed
2018 0347	الخصائص التركيبية والضوئية لأغشية مزيج مبلمرات المشوبة بدقائق نيترات الغاليوم (PANI-PEO) ال والمرسبة بطريقتي الصب واليرم (NPs) النانوية	Thesis Project	12	6500	Closed
2018 0360	ترسيب ودراسة أغشية مبلمرات متعدد ميثيل ميثا أكريليت/ بولسترين/ بنزيل ثنائي الميثيل كيتال / الصيغ الأحمر	Thesis Project	12	6500	Closed
2018 0246	بتقنية السائل - جلي (ZnO/TiO ₂ /SiO ₂) تصنيع وتشخيص المركبات النانوية لأوكسيد الزنك رافض للماء ومتعدد الوظائف المرسبة على طبقات الأغشية الماتعة للانعكاسية لنظافة السطوح ذاتيا	Non-Thesis Project	18	9980	Closed

2021 0430	دراسة أثر الأشعة فوق البنفسجية والضوء المرئي ودرجة الحرارة على الخواص الكيميائية والفيزيائية لزيت السيلكون في جراحات الشبكية والجسم الزجاجي.	Non-Thesis Project Joint with Medicine	18	9980	Active
2021 0442	الخصائص التركيبية الضوئية والحرارية والكهربائية لخليط مركبات الأغشية 8-hydroxyquinoline / Zinc (II) 8-Hydroxyquinoline OLED الرقيقة لتطبيقات النماط الضوئية المشعة	Non-Thesis Project	18	9980	Active
2021 0450	الخصائص التركيبية والكيميائية والبصرية والإلكترونية للأغشية المركبة المعقدة القائمة على أكسيد البولي إيثيلين المتضمن مع ثنائي كلوريد الكوبالت (ثلاثي فينيل فوسفين).	Thesis Project	12	6500	Active
2021 0454	تصنيع ودراسة خصائص الأغشية النانوية المركبة على أساس بولي (أكسيد الإيثيلين) المشوبة بجسيمات نانوية فضية مدمجة مع اليود كسطح مضاد للميكروبات	Thesis Project	12	65500	Active
2021 0016	تحضير وتشخيص أغشية رقيقة مستحدثة للمركبات المبنية على بلورات هيميهيدرات ثنائي ميثيل اللاكتات مع البوتاسيوم/صوديوم المشوب باليود .	Non-Thesis Project	18	9990	Closed
2021 0050	الرقيقة ذات التركيب النانوي المشوبة بجسيمات أكسيد (PEO-BDK-MR)/TiO ₂ -NPs التيتانيوم النانوية الخواص البصرية وآلية التفكك الضوئي لأغشية ال	Thesis Project	12	6500	Active
2020 0289	ZnO- Al ₂ O ₃ ترسيب وتحليل الأغشية الرقيقة الهجينة المبنية على كحول متعدد الفينيل وأكسيد متعدد الإيثيلين الممزوجة بدقائق لأكسيد الزنك وأكسيد الألمونم النانوية PVA - PEO NPs	Thesis Project	12	6500	Closed
2020 0490	تحضير وتشخيص أغشية TiO ₂ -Nb ₂ O ₅ الرقيقة المؤينة بأيونات الليثيوم والصوديوم والبوتاسيوم المستخدمة في مجسات السوائل والغازات	Non-Thesis Project	12	9980	Closed
2016 0177	Optical and structural characterization of Sol-Gel indium-doped ZnO and ZnO thin films used as seeded platforms for nanostructured ZnO.	Non-Thesis Project	17	7700	28-10-2017
2016 0182	Optical and structural characterization of sol-gel Ga-ZnO and ZnO thin films used as seeded platform for nanostructures ZnO.	Non-Thesis Project	17	19000	28-10-2017
2016 0166	Synthesis and characterization of PMMA/PVC/BDK/Azo dye polymeric based blend thin films	Non-Thesis Project	18	3300	14-11-2017
2015 0247	Optical and structural characterization of Sol-Gel spin coated B-ZnO and ZnO thin	M.Sc. Thesis Project	9	5175	5/6/2016

	films used as seeded platform for nanostructured ZnO				
Closed Projects					
No	Title	Type	Duration(months)	Amount (JOD)	End Date
2007-0044	The UV and laser aging of PMMA/Azo-dye polymer blend cured by UV and visible light beams.	M.Sc. Thesis Project	24	700	28-03-2009
2000-0076	Coating the biomedical titanium alloys and stainless steel by extremely thin films of diamond - like carbon (DLC) material to eliminate or highly reduce the failure of bone - based orthopedic implants	عادي Non Thesis Project	12	6600	23-04-2001
2006-0044	Structural and optical properties of ZnO thin films deposited by Sol-Gel coating technique.	M.Sc. Thesis Project	12	1300	6/4/2007
2006-0043	Structural and optical properties of spin coated polymeric-based (PMMA/BDK/Azo-dye) thin films fabricated via photochemical process.	M.Sc. Thesis Project	12	1300	6/4/2007
90-2020	Synthesis and Characterization of Hybrid Thin Films Based on PVA-PEO Incorporated with ZnO- Al ₂ O ₃ NPs	M.Sc.	18	6500	15/11/2021
274-2020	Synthesis and Characterizations TiO ₂ -Nb ₂ O ₅ Thin Films Ionized with Li, Na and K used for Electrochromic Devices and Gas/Liquid Sensors.	Faculty	18	23,500	31/05/2020
246-2018	Syntheses and characterizing hydrophobic multi-functional nano-structured ZnO based on anti-reflective ZnO/TiO ₂ /SiO ₂ coating films via Sol-Gel technique.	Sabbatical	18	00	9/9/2019
360-2018	Synthesis and characterization of Polymethylmethacrylate (PMMA)/Polystyrene (PS)/BenzylDimethylKetal (BDK)/Azo Dye (Methyl Red) (MR) polymeric based blend thin films.	M.Sc.	18	6500	

COUSES

Phys. 774 M.Sc. Thin film Technology
 Phys. 799 M.Sc. Thesis (13 – M.Sc. students)
 Phys. 793 M.Sc. Semiconductor Devices
 Phys. 791 M.Sc. Thin films: Deposition Techniques, optical and electrical characterization
 Phys. 473 Physics of Semiconductor Devices
 Phys. 471 Solid State Physics
 Phys. 334 Electronics-II (Digital Electronics Practical)
 Phys. 333 Electronics –II (Digital Electronics Theory)

Phys. 233 Electronics-I (Analogue Electronics Practical)
 Phys. 231 Electronics-I (Analogue Electronics Theory)
 Phys. 261 Thermodynamics
 Phys. 281 Vibrations and Waves
 Phys. 283 Optics
 Phys. 101 General Physics -I
 Phys. 102 General Physics-II
 Phys. 101a General Physics –I- Medical Students
 Phys. 102a General Physics –II- Medical Students
 Phys. 103 General Physics – Medical students
 Phys. 105 General Physics –I, Practical
 Phys. 106 General Physics –II, Practical
 Phys. 107 General Physics – I, Practical, Medical Students
 Phys. 002 Preparatory year Physics
 Math. 002 Preparatory year Mathematics
 University Study Skills

Committees **MEMBER** and Other Activities

- Member and working trainer in the Steering committee for the Civil Society Center for Development at JUST.
- X-Member and trainer at the Consultative Center for Science and Technology at JUST.
- Consultant for the Cultural Club at the Department of Students Affairs at JUST.
- Member and Establisher in many active Jordanian and cooperative civilian societies such as:
 - Steering Committee for the Jordanian Dialog and Interlocutions.
 - Steering Committee for Jordan University of Science and Technology Faculty Members Society.
 - Member and Founder for Jadara University for higher education in Jordan.
 - General Manager for Al-Hayat Center for Civil Society Development 2001-2002.
 - Director for many Civilian Society Development Projects at Al-Hayat Center for Civil Society Development funded by many international GO's and NGO's such as UAAIDS, CIDA, NDI, EUROPEAN COMMITTION, ...
- Trainer and training workshops designer for many variety of Civilian Society Development such as:
 - Time Management, Communication Skills, Personal Change Management, Strategic Management for Personal and Institutional Change, Neural Language Programming (NLP), Negotiation Skills, Skills for Disputation and Conflict Resolution, Crisis Management, Developmental Strategic Management in SWOT Rules, Information Management, Lopping Skills,
- Reviewer for many peer reviewed international journals in physics and materials engineering.
- Member in many international scientific societies (IEEE, AVS)
- Member of the Jordanian Scientific Research Society.
- Member and Representative for John A. Woollam Co. Inc. for Research and Development (Lincoln - Nebraska, USA) in the Middle East 1996 - 2001.
- Member of the **University Council** for the year 2001/2002
- Member and/or coordinator in several committees/JUST during 1996-2017

- Committee member in the First Conference/Third Science Day Faculty of Science & Arts. JUST Jordan, May 23, 2000
- Member in **Academic Development & Quality Assurance Center (ADQAC)** JUST.
- Member in department **Accreditation Committees**.
- Member in the **Accreditation Committee for ABET**.
- Committee member in Jordanian Physics Society.
- Member of Committee for establishing Ph.D. program at the Department of Physics.
- [Delegate member / The First Scientific Jordanian Tunisian Forum \(SJTF'1\) 29 – 31 March, Irbid 2016.](#)
- [Delegate member for establishing](#) Material science PhD program in collaboration with Technical University of Chemnitz / [Germany 12 – 16 October, Irbid 2016.](#)
- [Delegate member for establishing](#) Material science PhD program in collaboration with Technical University of Chemnitz / [Germany 22 – 26 November, Chemnitz 2016.](#)
- [Reviewer for many international peer-reviewed journals such as Vacuum and Journal of Materials Science and Engineering: Condensed Matter.](#)

REFEREES: AVAILABLE UPON YOUR REQUEST.
--