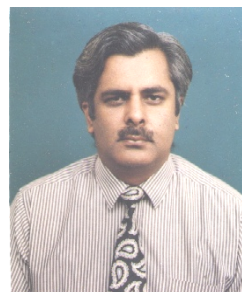


# CURRICULUM-VITAE



**Name:**

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Department of Physics, University of the Punjab, Quaid-  
e-Azam Campus, Lahore, (54590), Pakistan.

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**Positions Held:**

1. **Professor** (*with effect from 25-07-2004*). In BPS 21
2. **Associate Professor**, Department of Physics, University of the Punjab, Lahore. (*June. 2000 — 25<sup>th</sup> July 2004*)
3. **Associate Professor**, Girne American University, TRNC. (*Sep. 1997 – June2000*)
4. **Assistant Professor**, Department of Physics, University of the Punjab, Lahore. (*March 21, 1996, Nov. 2000*).
5. **Lecturer**, Department of Physics, University of the Punjab, Lahore. (**7<sup>th</sup> Sep. 1985- March 21, 1996**).
6. **Instrument Manager**, Fertilizer Research & Dev. Institute, Faisalabad, NFC of Pakistan (*June 10, 1984 to1985*).
7. **Lecturer**, University of Engineering & Tech. Lahore. (*1982 – June, 1984*).
8. **Lecturer**, Physics Department, Bahauddin Zakariya University, Multan. (*June, 09 - Sep. 07, 1981*).

**Part-time teaching:**

- (a) **M.Phil.** teaching AIOU, Lahore Campus.
- (b) **Electronics** in the Inst. of Edu. & Res. Punjab University Lahore.
- (c) **Computer Fundamentals** in the Shaikh Zayed Islamic center, PU Lahore.
- (d) **Advance Electronics**, in the Dept. Space Science, Punjab Univ. Lahore.
- (e) **VLSI Design and Network Security** in the PUCIT, Lahore.
- (f) **M.Sc.** Medical Engineering, University of Health Sciences, Lahore.

### **Teaching and Research Experience:**

More than 30 years teaching (lectures, tutorials, discussions, seminars, experimental demonstration) and research experience at University level in the field of Physics/Applied Physics. Research supervisor of more than 60 M.Sc./M.Phil./Ph.D. Students. Incharge of Material Science and Advance Electronics Lab in the Physics Dept. Punjab University. (1985 to 1997 and 2000 to-date). I established a new Physics Lab. In the School of Physical Sciences for M.phil. & Ph.D. students in 2008. We are in process of installing new PLC and communication lab. for teaching and research.

### **Research Interests:**

- (i) Bio-Physics
- (ii) Semiconductor Device Physics
- (iii) IT based Microelectronics (VLSI Design)
- (iv) Space and Satellite Communication and Instrumentation
- (v) Computer simulation and Modeling
- (vi) Semiconductor Materials Science (Solid State Physics)

### **Academic Background:**

- \* Ph.D. University of Lancaster, Lancaster, UK (1993).
- \* M.Phil. University of the Punjab, Lahore- (Pak.) 1987.
- \* M.Sc. University of Lancaster, UK (1990).
- \* M.Sc. University of the Punjab, Lahore- Pak. (1981).
- \* B.Sc. University of the Punjab, Lahore - Pak. (1977).

### **Technical Background:**

- \* Diploma **Radio Servicing** (two years) from Punjab Board of Technical Education, Lahore, Pakistan.(1977).
- \* Diploma **Refrigeration and Air conditioning Servicing** from Asian Institute of Tech. Lahore. Pakistan. (1974).
- \* Diploma **Television Servicing** from Metropolis Institute of Electronics, Lahore, Pakistan. (1978).
- \* Diploma **Programming and Computer Applications** from University of Engineering & Technology, Lahore. Pakistan. (1982).
- \* Certificate National Cadet Corps. Certificate of Service, Rank - Cadet (Sept. 1974 to Feb.1977) through Govt. College of Science, Lahore.
- \* Certificate Use of Patent Information System sponsored by World Intellectual Property Organization.

### **Honours, Awards:**

1. **Third Position** in M.Sc. Punjab University, Lahore.
2. **Merit Scholarship** holder throughout academic career.
3. Gold Medal TRNC University best teacher award 1998.

### **Author of Books:**

1. **Science Book** (for class III students) in English, Punjab Textbook Board, Lahore, Pakistan.
2. **Science Book** (for class IV students) in English, Punjab Textbook Board, Lahore, Pakistan.
3. **Science Book** (class VI) in English, Punjab Textbook Board, Lahore, Pakistan.
4. **Modern Notes on Physics** (Part I) 2003.
5. **Modern Notes on Physics** (Part II) 2004.

### **Membership of Scientific Societies:**

1. **Member**, *'Institute of Physics (UK) and IEEE'*, USA.
2. **Member**, *'The Institute of Engineers Pakistan'*.
3. **Life Member**, *"The Institute of Physics Pakistan"*
4. **Life Member**, Semiconductor Device Society, QAU, Islamabad.

### **Academic/Administrative Assignments:**

1. **Member** Board of Studies in Geology, University of the Punjab, (85-87).
2. **Member** Board of Studies in Physics, University of the Punjab, since 1987.
3. **Member** Board of Studies in Physics, University of the Balochistan, Quetta.
4. **Member** Member Dean Committee, University of the Punjab, since 1987.
5. **Member** Academic Council, University of the Punjab, since 2004.
6. **Member** Senate, University of the Punjab, since 2004.
7. **Member**, Board of Faculty of Science, University of the Punjab, Lahore.
8. **Member** of the jury team in conducting the Science Models Competition on yearly basis, held at National Museum of Science and Technology, and INTEL Lahore.
9. **Member/subject speclist** Federal Public Service commission.
10. **Member** Postdoctoral Committee, University of the Punjab, since 1998.
11. **Member** Disciplinary/Examination Committee, Physics Department, University of the Punjab.
12. **Member**, National Book Council of Pakistan.
13. **Member**, Ad-hoc Committee to recommend the B.Sc./M.Sc./M. Phil, courses of Computer Science, University of the Punjab, since 1987.
14. **Acted as External Examiner** for M.Sc. M.Phil. & Ph.D. Thesis/Theory Examination, national & international universities.

15. **Member** Curriculum Revision Committee of HEC in the subject of Physics and Electronics.
16. **Student Advisor**, Physics Dept. University of the Punjab, since 1994.
17. **Director**, co-ordination committee, Girne American University, TRNC (1997-2000).
18. **Chairman**, Electronics Department, Girne American University, TRNC (1998-2000).
19. Coordinator M.Sc. Classes, Department of Physics, University of the Punjab, Lahore.
20. **Chairman**, A & V Committee, in connection with 23rd National Science Conference, held on Jan. 1986 at Punjab University, Lahore.
21. Establish Material Characterization Lab./ XRD Lab. & Advanced Telecommunication Lab. in the Punjab University School of Physical Sciences.

#### **PRINCIPAL INVESTIGATOR OF RESEARCH PROJECTS:**

???Project sponsored through Federal Government and University Grants Commission, allocated research grants out of the budget head “Advancement of Research” Punjab University Lahore (1993-96, 2003 & 2005 to 2008) and also the research projects funded by Turkish Higher Educational Council (1998-2000). Mega Project HEC 2007 (CIL) & Electronics 4 year programe.

#### **COUNTRIES VISITED & COURSES ATTENDED:**

1. Participated in the course on **Basic Telecommunication Science** held at International Centre for Theoretical Physics, Trieste. Italy from 9th Jan. to 3rd Feb. 1989.
2. Attended the Computer Training Course of **System Management** of VAX/VMS/11/730 computer from Dec. 08 - Jan. 01, 1987 UGC Islamabad Pakistan.
3. Six months training of ‘**Industrial Instruments**’ at NFC units of Pakistan’s.
4. Participated in the “**Fourth Course On Basic VLSI Design Techniques**” held at ICTP-UNU-Microprocessor Lab. Trieste- Italy from 18th Nov. to 13th Dec. 1996.
5. Participated in the International Nathiagali Summer College on Physics and Contemporary Needs 1993 to 1996.
6. Participated and presented papers in the IBCAST, 2003 and 2004.
7. Participated and presented papers in the IEEE INMC, 2003 and 2004.
8. Participated in the 29<sup>th</sup> International Nathiagali Summer College on Information Technology 2004.

9. Participated in the workshop 'Educational Development Program' P. U. Lahore (2005).
10. Participated in the 34<sup>th</sup> International Nathiagali Summer College on Advanced Materials & optoelectronics, 2009.
11. Participated in the Physics Conference, University of Karachi, Dec. 2009.
12. Participated in the NCP Conference, 1 to 6<sup>th</sup> March, 2010.

**LIST OF Ph.D/M.Phil/M.Sc STUDENTS UNDER DIRECT SUPERVISION AND THEIR RESEARCH TOPICS:**

Research Students were supervised during my stay in the **Girne American University TRNC.**

**M.Sc./<sup>♦</sup>B.Sc. (Hons. 4 years) Theses Supervised:**

**Total Number: 34**

Sr. No.	Student's Name	Thesis Title	Year
1	M. Farooq Ashraf	To design and construct 24 line I/O card interfaced with temperature sensor and study its performance.	1994
2	Kaleem Iqbal	Data communication and project study of Lahore stock-exchange.	1995
3	Adnan Nawaz	Testing and reliability of electronic cards used in digital telephone exchange.	1995
4	M. Usman Sarwar	To design and construct an efficient UPS system for computer control applications.	1996
5	M. Muaz Qazi	Programming of 24 line I/O card interfaced with pressure sensor and study errors.	1996
6	<sup>♦</sup> Erol Topuz	To design and construct 24 line i/o card interfaced with Assembly language compute programme	1997
7	<sup>♦</sup> Umut Aksoz	Internet software development using Intel's 8088 Microprocessor	1997
8	<sup>♦</sup> Fatih Tinaztepe	Study signal to noise ratio of dynamic microphone pre-amplifier.	1997
9	<sup>♦</sup> Komal Avci	Study 1/f noise in semiconductor diodes	1998
10	<sup>♦</sup> Ozhan Aktas	To design and construct subscriber line interface circuit for Turkish Telecom.	1998
11	<sup>♦</sup> Koya Kayalar	Measurement and characterization of gr noise in Silicon diodes	1998
12	<sup>♦</sup> Mustafa Avcn	To study Infra-red radiation properties changes in semiconductor material.	1999
13	<sup>♦</sup> Murat Ozerin	To design and construct Intranet in GAU campus	1999

14	♦Haitham Sanad	Architecture of synthesizable 16×16 signal multiplier	1999
15	♦Esra Deniz	Study the stability of millimeter wave generated by Gunn-mixer diode for radar communication	1999
16	Faheel Ather Hashmi	To design a program for PC based oscilloscope for 1/f noise measurement.	2000
17	Tariq Mahmood	I-V characterization & measurement of quantum efficiency of a single crystal silicon solar cell.	2000
18	Sulman Khalid	Architecture and design of WAP user agent	2000
19	Qaiser Mahmood	Study the ESA based packetiser (PTC-200) and analyse the data send to BADAR-2 satellite.	2001
20	M. Zaheer	Study the ESA based depacketiser (PTC-200) and analyse the data received from BADAR-2 satellite.	2001
21	M. Imran	Study and designing of frequency modulated transmitter within the frequency range of 88 to 108 MHz	2001
22	M. Nawaz Saleh	Design and develop measurement system for the DLTS .	2001
23	Akbar Ali	Design and construct a data acquisition system for the measurement of trap properties in semiconductor diodes.	2001
24	M. A. Jehanzeb Noorpure & Nadeem Afzal kayani (PUCIT)	Exploring Micro-controller Technology Programming, interfacing & implementation.	2001
25	Mozzam Bilal	Theoretical modeling and experimental setup for NDT using eddy current	2003
26	Muhammad Bilal	Fault finding/celebration of sweep oscillator and dielectric measurement between 8-12 GHz frequency range.	2003
27	Ansar Masood Awan	To design and develop cavity tuned microwave transistor oscillator.	2003
28	Awis Ishan	Irradiation response of electrical noise in P-channel MOSFET	2003
29	Faiz Ahmad	Fabrication & characterization of hetrojunction diode using thin film deposition method.	2004
30	♦M. Hanif	Design and fabrication of FM fiber optics direct detection digital receiver and study its efficiency.	2005
31	♦Fauzia Iqbal	Effect of routing device on the quality of voice in	2007

		digital communication network.	
32	Shazia Iqbal	The effect of Gamma-rays on the output parameters of Silicon solar cells	2008
33	Rahim Gohor	Effect of oxidant to monomer ratio on electrical conductivity of PANI Pellets and its physical characterization.	2009
34	Syed Hassan Ali	Synthesis and Characterization of Polyaniline by using different dopant	2010

#### **Ph.D. Students**

1. **Shoaib Hasan Khan**, Behaviour of Eddy Currents for Detecting Structural Defects and their Computer Modeling (Completed, June 2010).
2. **Arif Mahmood** Enviromental Radiation pollution in Pakistan (submitted for evaluation in Dec. 2010)
3. **Gulam Murtza** Ferromagnetism recognition approaches based on GaN and ZnO doped with Rare Earth Metals for Spintronics Applications (2009).
4. **Mansoor Ahmad** enrolled on (Jan. 2010)
5. **Mussrat Jabeen** enrolled on (Jan. 2010)
6. **Nisar Ali** enrolled on (Jan. 2010)

#### **M.Phil, (research thesis supervised) University of the Punjab, Lahore**

Sr. No.	Student's Name	Thesis Title	Year
1	Shazia Chaudhry	The effect of Gamma radiation on the performance of n-channel enhancement mode MOSFETs	2001
2	M. Kashif	To design & development of industrial data acquisition system in radiation environment.	2001
3	Mashkooor Ahmad	Study of mass resolving capabilities of E×B velocity filter.	2002
4	Sadaf Akbar	Fabrication and characterization of low-cost polyethylene Luneburg lens antenna.	2002
5	Umber Firdous	The effect of X-rays radiation on the performance of p-channel enhancement mode MOSFETs	2003
6	Ammara Anwar	Physical Modeling of radiation induced defects in n-channel enhancement MOSFET.	2003
7	M. Hafeez	The effect of Gamma, X-rays and ND-yag laser radiation on the performance of vertical MOSFETs.	2004
8	M. Waris	Opto-electronic properties of cadmium sulphide	2005

		thin film by thermal evaporation technique.	
9	M. Imran	To study the performance of incornal 625 alloy based on electrical resistivity	2006
10	M. Moean Akhtar	Development of barium based ferrite magnets and their characterization	2007
11	Khadija-tul-Kubra	Effect of Rare Earth Substitution on the Structural and Magnetic Properties of M-type Hexaferrites	2008
12	Hamid Ali	Characterization of Ambient air particles of Lahore	2009
13	Waseem Thair	To study the Structural and Magnetic Properties of $Ba(Ni_{(1-x)}Ti_{(x)})Fe_{16}O_{27}$ Synthesized by Conventional Ceramic Method.	2009
14	Safdar Ali	Quantum Defects and Tetragonal Distortions in Ternary Chalcopyritic Compounds	2010
15	Sheeba Ghani	The Effect of Gamma and X-rays Radiation on the Performance of Laser Diode.	2010
16	Saima Manzoor	Synthesis and Characterization of Polyaniline Emeraldine Based Films and Polyaniline Composites.	2010
17	Wafa Awais	The Effect of Gamma and X-rays Radiation on the Characteristics of Silicon Solar Cell.	2010
18	Amna Mir	Synthesis and Characterization of Nano-sized M-type Barium Hexa Ferrite by sol gel Method.	2010
19	M. Adeal Islam	Dielectric Study of Hydrated Protein at Microwave Frequencies	2011

**M.Phil./ MS students currently under supervision: 1**

**RESEARCH PROJECTS:**

Projects Title	Principal Co-Principal Investigation	Amount	Sponsoring Agency	Duration
◆ Design & Development of DLTS system in the Physics Department, Punjab Univ. Lahore.	Principle investigation	Rs. 2100,000/-	UGC	1994-96
◆ Design and Development of IT Lab. for computer engineering students. (Girne American Univ.) ▪ Development of Advance	Principle investigation	USD 100,000/-	USA Res. & Dev. Fund	1998-99



Electronics Lab. HEC , Mega Project Three more projects (in process)	Co-ordinator	200,000,000/-	HEC	2007-08
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### From University of the Punjab:

Projects Title	Principal Co-Principal Investigation	Amount	Duration
Design & Development of Eddy current measurement system	Principal	Rs. 180,000/-	2005-06
Design and Development of Magnetic Permeability measurement system.	Principle	Rs. 150,000/-	2008-09
Equipment for Physics Dept. (09106-15)	Principle	Rs. 252,000/-	2008

## RESEARCH PUBLICATIONS:

- Synthesis of metallic Zn microprisms, their growth mechanism and PL properties**  
Waheed S. Khan <sup>a</sup>, Chuanbao Cao <sup>a</sup>, Junyu Zhong <sup>a</sup>, Youyong Liu <sup>a</sup>, M. Azhar Iqbal <sup>b</sup>, Materials Letters 64 (2010) 2273–2276. **Impact Factor: 2.058, ISSN: 0167-577X.**
- The Effects of Gamma rays on p-channel MOSFET**, M.A. Iqbal, U. Firdous, Nanotech Vol. 2, Electronics Devices Fabrication, NSTI, Impact Factor: 1.417, pp. 61-64, 2010. ISBN 978-1-4398-3402-2.
- The Effects of Gamma Radiation on Silicon Solar Panels**, M.A. Iqbal, W. Awais Nanotech Vol. 3, Bio Sensors and Instruments, pp.708-11, 2010. NSTI, Impact Factor: 1.417, ISBN: 978-1-4398-3415-2.
- Synthesis and Characterizations of nano sized Barium hexa-ferrites using sol gel method**, Nanotech Vol. 1, Nanoscale Materials Characterization, pp; 103-106, 2010. NSTI, Impact Factor: 1.417, ISBN: 978-1-4398-3401-5.
- Effect of Ho<sup>3+</sup> substitutions on the structural and magnetic properties of Ba Fe<sub>12</sub>O<sub>19</sub> Hexaferrites** (G. Murtaza Rai\*, M.A. Iqbal, K.T. Kubra), Journal of Alloys and Compounds 495 (2010) 229–233. **Impact Factor: 2.135, ISSN: 0925-8388.**
- Effect of temperature and  $\gamma$  rays radiation on the electrical and optical characteristics of Quantum well structure based laser diode**, M. A. Iqbal and S. Ghani, Nanotech Vol. 2, Advanced Materials, pp; 69-72, 2010, NSTI, Impact Factor: 1.417 ISBN 978-1-4398-3402-2
- Method of enhancing polyaniline conductivity using different oxidizing agents as dopant**, Nanotech 2010 Vol. 1, Films and Composites, Chapter 1: Nanoscale Materials Characterization, pp; 83-86, 2010, Impact Factor: 1.417, ISBN 978-1-4398-3401-5.
- Investigation of high strength steel bending engineering failure analysis** (S H Khan and M A Iqbal) Elsevier, Engineering Failure Analysis 16 (2009) 128–135. **Impact Factor: 0.441, ISSN: 1350-6307.**

9. **Evaluation of ZrO<sub>2</sub>-24MgO ceramic coating by eddy current method**, (Nusair Khan, S.H. Khan, Farhad Ali and M. A. Iqbal) Computational Materials Science Vol.44, Issue. 3 (2009) 1007-1012, **Impact Factor:** 1.6, ISSN: 0927-0256.
10. **Study of precipitation behavior at moderate temperatures in 350 maraging steel by eddy current method**, (S.H. Khan, M. A. Iqbal, A. Nusair Khan), Journal of Alloys and compounds. 474 (2009) 254-256. **Impact Factor:** 2.135, ISSN: 0925-8388.
11. **Characterization of aging behavior in AISI 630 stainless steel using eddy current non-destructive testing**, S. H. Khan and M. A. Iqbal, ICASE-2009, Vol. 1 pp. 312-316, Impact factor: 0.500, ISSN 1991-8178.
12. **Pearlite determination in plain carbon steel by eddy current method**, (S.H. Khan, M. A. Iqbal, Journal of material processing technology © Vol. 200 (2008) 316-318. **Impact Factor:** 1.143, ISSN: 0924-0136.
13. **Eddy current detection of changes in stainless steel after cold reduction**, (S.H. Khan, M. A. Iqbal, A. Nusair Khan), Computational material science, Vol.43, Issue. 4 (2008) 623-628. **Impact Factor:** 1.6, ISSN: 0927-0256.
14. **Effect of routing devices on the quality of voice in digital communication networks**, (Fauzia Iqbal\* and M. A. Iqbal\*), Pakistan, NRC 29-30<sup>th</sup> June 2007.
15. **Deep Level Induce Kink Effect in GaAs FETs Characteristics** (M. A. Iqbal) J. of Sci. Res. Vol. XXIX, No. 2 (2005).
16. **Low Cost Industrial Data Acquisition System Based on Computer Aided Monitoring and Storage Unit**, M. Kashif and M. A. Iqbal, IBCAST, Volume 2, Edited by H. R. Hoorani, , pp 34-39, 2004.
17. **Calculation of Look Angle of a Satellite in Topocentric-Horizon System**. M. A. Iqbal and M. Sarfraz Iqbal. IBCAST, Volume 3, Edited by H. R. Hoorani, 2004.
18. **Fabrication and Characterization of Low- Cost Luneburg Lens Antenna for Millimeter-Wave Frequency**, Sadaf Akbar and M. A. Iqbal. IBCAST, Volume 3, Edited by H. R. Hoorani, 2004.
19. **Generation-recombination noise characteristics of GaAs MESFETs** Iqbal, M.A.; Khan, S.H, Multi Topic INMIC 2003. Dec. 2003 Page(s):192 - 196 Digital Object Identifier 10.1109/INMIC.2003.1416694
20. **The Effects of X-ray Radiation on n-channel MOSFET**. M. A. Iqbal and Shazia Choudary. J. of Pure & Applied Sciences Vol. 22, No. 2. December 2003 pp. 13-23, ISSN 0255-3643.
21. **High Efficiency Millimeter Wave Dielectric Antenna**, (M. A. Iqbal), 3222 Volume 2, Edited by H. R. Hoorani, 2003.
22. **Substrate Conduction and Backgating Effect in GaAs FET's**, M. A. Iqbal Proceeding of the IBCAST, 3201 Volume 2, Edited by H. R. Hoorani, 2003.
23. **The Kinetics and Mechanism of the PZT Solid-State formation** (M. A. Iqbal) J. of Pure & Applied Sciences, Vol. 21, No. 2, pp.85-94, Dec. 2002.
24. **Microwave Dielectric Properties of Marbles and Mineral Rocks and their applications in Microwave Remote Sensing**, (C. A. Rahim and M. A. Iqbal) J. of Sci. Res. Vol. XXVIII No. 1 & 2, pp. 64-80, April & October, 1999.
25. **Soft-Decision Trellis Decoding of Augmented Multi-Dimensional Codes**, Lami Kaya and M. A. Iqbal. 2<sup>nd</sup> Inter. Symposium Proceeding on Intelligent Manufac. Systems, IMS 98, pp 465-471, Aug. 1998. Turkey.

26. **Milli-meter Wave Harmonic Radar** (*M. A. Iqbal, Z. H. Jafri and C. A. Rahim*) J. of Natural Sci. and App. Math. Vol. 38, No. 1& 2, pp. 241-252, April & Oct. 1998.
27. **Ion Bombardment Induce Interface Mixing in the Ni-Si and Fe-Si System.** (*Z. H. Jafri and M. A. Iqbal*) J. of Natural Sci. and App. Math. Vol. 38 No. 1& 2, pp. 229- 240, April & Oct.. 1998.
28. **Performance of Higher Rate Product Codes using Trellis Decoding.**  
Lami Kaya and M. Azhar Iqbal, Wireless and Telecommunication, IEEE Proceedings IWTS, pp. 165-168, May 1998 © *IEEE* , **Impact factor:** 2.36. ISSN: 0018-9448.
29. **A comparison of the trap properties and locations within GaAs field effect transistors measured under different bias conditions**  
Azhar Iqbal, M.; Jones, B.K.;  
Electron Devices, IEEE Transactions, Volume 45, Issue 8, Aug. 1998 Page(s):1663 – 1670, **Impact factor**, 2.17, Digital Object Identifier 10.1109/16.704361.
30. **Deep Traps Deduced by the DLTS in the Ohmic Channel** (*M. A. Iqbal*) J. Sci. Res. Vol. XXVI, pp 77-92, No. 1& 2 April & Oct. 1997.
31. **Investigation of a Geometrical Model for Mixing versus Angle of Ion Incidence as a Function of Depth** (*Z. H. Jafri and M. A. Iqbal*), J. of Natural Sci. and App. Math. Vol. 37, pp 37-45, No. 1&2 October. 1997.
32. **Characterisation of hole traps in GaAs FETs by DLTS, noise and  $g_m$  dispersion methods,** (*M. A. Iqbal, B. K. Jones and L. Kaya*), Sci. International Lahore, 9(4), pp 353-356, 1997.
33. **Traps found in GaAs MESFETs: Properties location and detection** (*B. K. Jones and M.A.Iqbal*) Defects in Semiconductors, Materials Science Forum Vols. 258-263 (1997), pp 933-938 © 1997 Trans Tech Publications, *Switzerland*, **Impact Factor** 0.655.
34. **Modelling of the Time Dependent Anomalies of GaAs FETs** (*M. A. Iqbal*) J. of Sci. Res. Vol. XXV, pp 43-61, Sep. 1996.
35. **The Measurement and Analysis of 1/f Noise in GaAs FETs.** (*M. A. Abdala, M. A. Iqbal and B. K. Jones*), Solid-State Electronics Vol. 39, No. 2, (1996) pp 287-295 **Impact Factor:** 1.452, ISSN: 0038-1101.
36. **Origin of Low Frequency Transconductance Dispersion in GaAs FETs.** (*M. A. Iqbal & Z. H. Jafri*) Journal of Natural Sciences and Mathematics, Vol. 36, No. 2, pp. 141-148, 1996.
37. **Characterization of low frequency noise in GaAs FETs** (*M. A. Iqbal*), Journal of pure and Applied Sciences, Vol. 15 No 2, pp 63-71, Dec. 1996.
38. **Cluster-ions Emission from a Contaminated Laser-Plasma Target** (*A. G. Akram and M. A. Iqbal*), Sci. Int. (Lahore) 8 (4), pp 309-311, 1996.
39. **Observation of Neutral particles Emission from a Contaminated Laser-Produced Plasma Target** (*A. G. Akram and M. A. Iqbal*), J. of Sci. Res. Vol. XXIV, pp 111-119 1995.
40. **The Coherence between the Gate Current Noise and the Drain Current Noise in GaAs MESFETs.** (*M. A. Iqbal and B. K. Jones*) Semiconductor Physics, *Noise in Physical Systems and 1/f Fluctuations*, pp 541-544, Editors; V. Bareikis & R. Katilius. Pub. by World Scientific, 1995, Palanga, *Lithuania*. **Impact Factor** 0.25
41. **Photovoltage Measurement of Trap Properties** (*M. A. Iqbal and B. K. Jones*) J. of Sci. Res.1995 Vol. XXIII, No. 1 & 2, pp 143- 148, April - Oct. 1994.